

Royal College of General Practitioners

SAPC Heads of Teaching

LEARNING GENERAL PRACTICE

A digital textbook for clinical students, postgraduate trainees and primary care educators

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OVERVIEW

Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE

1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE

2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE

3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE

4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

FOREWORD

UK medical schools in the 21st century have embraced GP inputs to their qualifying programmes – through placements in practices, through campus-based teaching, and through supporting students in many ways. We are hugely grateful to all GPs, their patients, and their teams for their ongoing commitment and we wish to support them to achieve the highest possible impact.

But sometimes, general practice is used as a setting, or an access route to patients, rather than a speciality with its own exceptional potential. So, I am delighted to see that this resource has been created, which has taken its authors a lot of effort and energy to create – thanks to them too!

What this resource emphasises is how to introduce you, the learner to the broader context and the key components of general practice – and it offers ideas and ways to enhance your general practice experience, and demonstrates the value of integrated personal care across the lifespan. We hope that you will use this resource to enhance your understanding of general practice, to make the most of your teaching, and to be inspired by the breadth of our profession. I found it refreshing and inspiring to read and hope it will do the same for you.

With thanks again to all involved.

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OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

HOW TO USE LEARNING GENERAL PRACTICE

Learning General Practice is a digital textbook for clinical students, postgraduate trainees, and primary care educators built on three overarching themes:

- Person-centred care
- Population-centred care
- Effective delivery of care.

Each principle is introduced by a short essay. Key reading and research related to the principle is then highlighted along with a number of related learning activities and resources associated with it. The resource set can be read in any order, and can used as the basis for one-to-one or small group tutorials. The principles can be applied to the wide variety of clinical cases that are seen in general practice and has been built with medical students and their learning in mind.

We recommend using this digital textbook in conjunction with Virtual Primary Care, an innovative, general practice based educational resource offering fly on the wall access to 150 diverse, real life primary care consultations. Every consultation video has been tagged to the Learning General Practice principles and is accompanied by a summary, associated learning points, references, and suggested student activities.

We very much hope that understanding of the principles outlined in Learning General Practice will help learners at all stages get the very most out of time in general practice, at whatever stage of their careers.

Throughout the resource, icons are used to help easily identify the medium of additional reading or actions to be taken. Below is a brief explanation of icons that can be referred to whilst using the resource.


Video


Book


Article


Guidance


Clinical Papers


Exercise/Write


Case Study


Online/Website


Talk


Think


Observe


Reflect


Ask


Experiment


Sharing/Network


Follow


Read


Attend


Explore

Multiple pages navigation. Ensure you click through all the pages before moving on.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

THEME 1:

PERSON-CENTRED CARE

The discipline of general practice is fundamentally based on person-centred care. This involves caring for patients beyond their immediate condition and tailoring services to suit their individual wants and needs. It links to concepts of clinical generalism and the biopsychosocial model of health and illness.

This approach requires a specific set of knowledge and skills including consultation, physical examination, clinical reasoning, and clinical management (alongside investigation, prescribing, and referral skills).

OVERVIEW

Overview

How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE

1a. The generalist clinical method

i The role of evidence in clinical decision-making

ii Uncertainty in clinical decision-making

iii Prescribing

1b. Holistic care (the biopsychosocial model)

i The physiology of holistic care

1c. The doctor-patient relationship

i Communication with patients of all backgrounds

1d. Continuity of care

1e. Long-term conditions

i Diagnostic phase

ii Maintenance phase

iii End of life care

1f. Emergency conditions

1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE

2a. The social determinants of health

2b. Preventing disease and promoting health

2c. Quality of care

2d. Information technology

2e. Teamwork and leadership

2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE

3a. The generalist approach

3b. The history of UK general practice

3c. The current structure of UK general practice

3d. The funding of UK general practice

3e. The role of general practice in other countries

3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE

4a. Learning in primary care settings

4b. Teaching in primary care settings

4c. Research in primary care settings

CONTRIBUTORS

EPILOGUE

1A

The generalist clinical method

INTRODUCTION

General practice covers all aspects of modern medicine; diagnostics, health maintenance, disease prevention, and the holistic and compassionate care of those with illness.

To do this necessitates integrating the two main types of knowledge:

1. Subjective knowledge with no certain answers. The professional values of doctors, caring, discrimination, inequality, loss, and deprivation are critical factors in disease outcomes. Knowledge about these issues is less certain and more varied, but builds gradually through experience and reflection into something powerful.
2. Rational, scientific knowledge using statistical probabilities and mechanisms to give an element of certainty to treatments, prevention strategies, diagnostic criteria, and management guidelines.

Generalist clinical method integrates – perhaps to a unique extent in medicine – these different but complementary types of knowledge: 'cum scientia, caritas' (with science, care). This is the essence of generalism, and to do this consistently and well is emotionally and intellectually demanding work. In addition, the following factors may be at play in general practice consultations:

1. Multiple problems (an average of 2.5 per consultation)
2. Problems spanning disease and non-disease matters
3. If diseases are encountered, they may be at different stages; pre-diagnostic, diagnostic, or post-diagnostic
4. Rare and common conditions.

Generalist clinical method therefore needs to be sufficiently adaptable to cover this diversity. Finally, general practice is focussed on efficiency, meaning that any clinical method needs to be time efficient.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

RECENT HISTORY OF CLINICAL REASONING

The commonly used 'clerking method' of clinical reasoning was developed in Parisian hospitals in the 19th century to deal with acute infectious diseases. It is therefore very useful when you meet a patient once, make a diagnosis of a single illness and time efficiency is not so important. It can therefore be useful for junior students in general practice who are not routinely consulting.

The clerking method:

- PC - Presenting complaint
- HOPC - History of presenting complaint (including relevant direct questions)
- PMH - Past medical history
- DH - Drug history (current medications, etc.)
- SH - Social history
- FH - Family history
- Full clinical examination
- Formulation, differential diagnosis, and treatment.

Other communication models are taught in medical schools such as the Calgary-Cambridge model (1). However, the method that is almost universally taught by clinicians is the clerking method (2). The substantial differences between the clerking and Calgary-Cambridge methods can lead to confusion in clinical settings, particularly general practice. This is because, often, neither method is applicable to dealing with multiple conditions or non-clinical problems that are encountered in the GP setting.

Generalist clinical reasoning is based on a different approach to illness than the clerking method. Implicit in the clerking method is the assumption that diseases are always caused by something external or outside of the patient; infections are caused by external microbes, cancers by external environmental factors, and inflammation by patient activities or exposure to allergens. The direct questioning and HOPC sections of the clerking focus on this.

The generalist view of illness is slightly different. Recent advances have highlighted how internal factors such as our immune state, greatly influence the onset and the outcome of diseases. Immune function is in turn influenced by stress and other emotional states as a result of our social circumstances and environment. This approach is called the biopsychosocial approach to illness and is further explained in this section.

Illnesses can now be understood as the result of 'external' pathogens, and the internal characteristics of an individual. The patient therefore moves from a passive recipient of external processes to centre stage. The generalist clinical method takes this into account by providing a model that integrates diagnostic acumen and causality with relationship building and continuity. This is where trust develops, allowing exploration of these more personal – but vital – parts of care.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

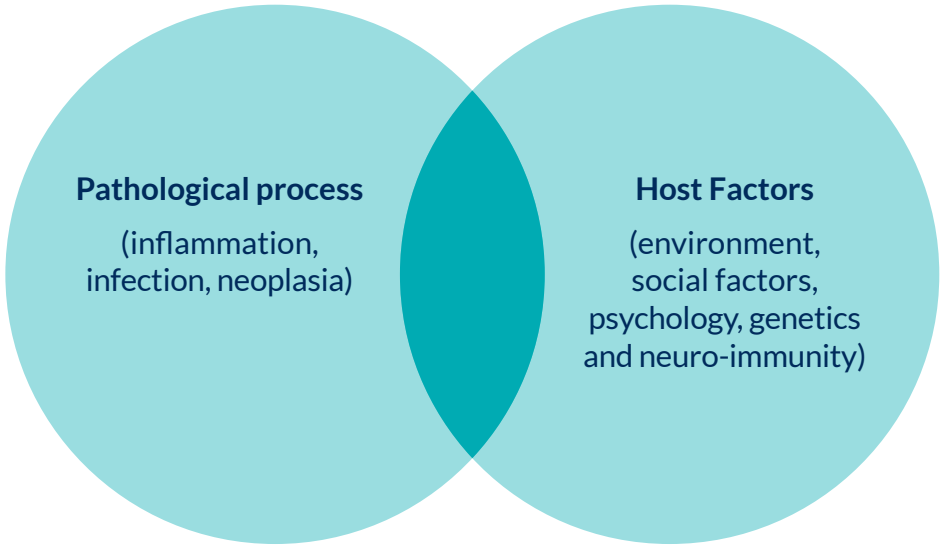
CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

The generalist approach to illness as an interaction between externally caused pathological processes and internal host factors.



Most conditions presenting to general practice can therefore be understood in terms of a process, rather than an acute event. The stages of this process are summarised:

Immune 'stressor' → Exposure to pathological agent → Interaction → Diagnosis → Treatment → Resolution /ongoing management

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

CLINICAL METHOD FOR GENERAL PRACTICE

Any clinical method in general practice needs to address a wide range of presentations in a time-efficient way and make use of appropriate technology. Several adaptations are therefore necessary to the conventional clerking model:

1. The use of 'problems' instead of 'presenting complaints'. Many patients have several issues that may not all be clinical as implied by a presenting complaint. This approach is based on a model already used in routine general practice (3).
   a. Problems explored and agreed
   b. Solutions (if applicable) discussed.
2. Patients' Ideas, Concerns and Expectations (ICE) are explored (if relevant) for each problem.
3. Extensive use is made of IT, making routine collection of some information (PMH, DH, FH, SH) at every encounter unnecessary.
4. A focussed approach to clinical examination is adopted.

These modifications are incorporated into an adapted clerking method for general practice outlined below.

The focussed clerking method:

- Presenting problem(s)
- Patient Ideas Concerns and Expectations (ICE) relating to problems
- PMH – Past medical history
- DH – Drug history (current medications etc)
- SH – Social history
- FH – Family history
- Focussed clinical examination (if necessary)
- Formulation of problem(s), differential diagnosis, and management, and follow up.

This information is normally available on computer systems.

The model can be adapted for use in the differing stages of the illness cycle encountered in general practice as outlined on the following pages.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

PRE-DIAGNOSTIC COMMUNICATION AND REASONING

Most consultations with GPs do not result either in referral or a diagnosis. Here, the general practice clinical method focusses on understanding why the patient has come. What are the patient's ideas, concerns, and expectations regarding the problems presented?

Here is an approach to structuring these types of consultation based on the principles outlined previously:

- Agreement on an appropriate problem list.
- Exploration and definition of each problem using the ideas, concerns and expectations model.

Knowledge about the relative importance of symptoms (especially new ones), is important in helping to decide what may merit further consideration. There are now some very useful resources about the relative importance of symptoms, especially concerning the earlier diagnosis of cancer:

Symptom Sorter by Keith Hopcroft and Vincent Forte; Radcliffe Books 2014

Tools will aid GPs in assessing people with possible cancer

Early diagnosis: Challenges and opportunities for GPs



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

DIAGNOSTIC COMMUNICATION AND REASONING

DIAGNOSTIC COMMUNICATION

Certain symptoms carry particular significance and may indicate potential disease. In these situations, all elements of the focussed clerking model are used:

- Agreement on problem list
- For each potentially significant symptom or problem:
  - PC and HOPC (including ICE)
  - Relevant PMH, FH, and SH gleaned from electronic record
  - Focussed exam
  - Clinical formulation and communication with patients, including management plan.

The 'problem orientation' gives a structure to communicate your findings. 'Mrs Miggins presents with two issues. Firstly, she needs to discuss the suitability of her contraception and secondly, Mrs Miggins is experiencing pelvic pain. Concerning the contraception... etc.'

'Summarising statements' that encapsulate, in three to four sentences, the essence of the case, are very helpful to start presentations with. This helps practice the day-to-day communication patterns used by clinicians.

DIAGNOSTIC REASONING

There are two main methods used in making a diagnosis:

1. PATTERN RECOGNITION

After years in practice seeing thousands of cases, patterns emerge that are associated with diagnoses. Pattern recognition is the preferred diagnostic method in 'expert' clinicians (who are often clinical teachers), who use knowledge in a different way to 'novices', such as students. For experts, knowledge, skills, and attitudes have become rolled into one type of knowledge: tacit or intuitive knowledge (4, 5). Disentangling the knowledge pieces of this cognitive jigsaw, such as relevant basic anatomy and physiology, can be difficult for senior clinicians.

This can be problematic for medical students wanting to learn clinical essentials!

2. LOGICAL THOUGHT PROCESSES

The importance of a more formal method of diagnosis, often used by clinicians in earlier stages of professional development (the novice and competent stages), involves the following stages (6).

- Recognition of 'cues' (symptoms of particular significance)
- Using clinical knowledge to reason and reach a working hypothesis
- Searching for evidence to confirm or refute a working hypothesis and modification of the hypothesis as a result. Here, the use of evidence and guidelines in formulating diagnoses can be helpful. See the section on using evidence in clinical decision-making for more about how diagnostic reasoning works.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

POST-DIAGNOSTIC COMMUNICATION AND REASONING

Many patients present to general practice with established diagnoses and again the clerking method is not relevant here. The focussed clerking model can therefore be applied to following up patients:

- Agreement on an appropriate problem list
- Exploration of each chronic problem using ICE
- Solutions offered where appropriate:
  - Whilst solutions for all patient problems may not be appropriate for medical students, there is much that a medical student can contribute to helping patients make sense of their symptoms and in giving health promotion advice.
    Here, the use of motivational techniques can be useful. This is further explored in the section on long-term condition
- Exploration of any new and/or significant symptoms, using the focussed clerking approach.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

ACTIVE LEARNING

Use the 'Virtual Primary Care' (VPC) resource (https://vpc.medicalschoolscouncil.org.uk) to see how the generalist clinical method works in practice. See if you can spot any of the material presented here being used in practice.

Try experimenting with the two different types of clinical methods outlined:

- The clerking method
- The focussed clerking method.

Observe your placement provider doing consultations. Which model is used more often?

Observe how clinical communication differs with patients that your provider knows and does not know.

How is a diagnosis made in general practice? Where diagnoses are made, ask the diagnostician to try to explain what went through their mind when making a diagnosis?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A

The generalist clinical method

RESOURCES

There are many consultation models for general practice consulting, but they are predominantly in the sphere of postgraduate study. They are usefully summarised in the book The New Consultation by Pendleton, Schofield, Tate and Havelock. Oxford University Press, 2003.

It is useful to look at three main stages of knowledge maturation in most professions; novice, competent, and expert. For more on this, try reading Michael Eraut; Developing Professional Knowledge and Competence or Donald Schon; The Reflective Practitioner.

REFERENCES

1. Kurtz S, Silverman,J., Draper,J. Teaching and Learning Communication Skills in Medicine. 2nd ed. Abingdon: Radcliffe; 2005.
2. Neville-Bonner T. Becoming a physician. Baltimore: Johns Hopkins University Press; 1995.
3. RCGP. The Future General Practitioner; Learning and Teaching. London: BMA; 1972.
4. Smith EA. The role of tacit and explicit knowledge in the workplace. Journal of Knowledge Management. 2001;5(4):311-21.
5. Nonaka I, Takeuchi H. The Knowledge-Creating Company. Oxford: Oxford University Press; 1995.
6. McWhinney IR. A Textbook of Family Medicine. Third ed. Oxford: Oxford University Press; 2009.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

INTRODUCTION

Making clinical decisions is a fundamental task for a doctor. These decisions may be about diagnoses, initial management or treatment plans, or the ongoing management of a longer-term condition.

It is essential that doctors make the best possible decisions based on current scientific evidence, taking into account the views and preferences of patients and those close to them. Doctors have to be able to make decisions in situations where there is uncertainty and where evidence or guidelines do not necessarily apply to an individual patient. This is particularly the case in general practice, where uncertainty is common, situations are often not clear cut, and investigations take time. GPs need to be able to access evidence for their particular patient and share the decision-making with them in the very short time-frame of a consultation.

Guidelines and decision-making aids can help doctors and patients to make decisions, but cannot replace accurate clinical assessment and the ability to consider the situation holistically, to critically appraise evidence and to communicate well with patients.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

EVIDENCE-BASED MEDICINE

Evidence-based medicine has been defined as the integration of best (current) research evidence with clinical expertise and patient values (1).

Sackett has described a "hierarchy of evidence" (2) and suggested that the best evidence for clinical practice is from randomised controlled trials. Evidence of this calibre exists for some management pathways and treatments, but not for all. For other treatments, evidence is less strong. It might come from different types of studies, and some treatments even have no evidence but strong historical precedent. All doctors need to be able to assess the validity and reliability of evidence and several tools exist to help them with this (3).

Practicing generalist, evidence-based medicine means being able to translate the evidence from studies relating to thousands of patients into what is right for an individual patient. This is not always easy; uncertainty arises because it is impossible to know how 'typical' the patient before us is, compared with the population which has been studied, or because there is no 'quality' evidence for the condition we are treating.

An additional problem in generalist medicine is that it deals with multiple conditions. There are very few guidelines or study evidence for the treatment of asthma, heart failure, and diabetes. In fact, if you look at the guidelines, many of the treatments suggested for one condition are contra-indicated in another condition. For example, beta-blockers are a mainstay of heart failure treatment, but not good choices for the treatment of asthma or diabetes.

Doctors must work in their patients' best interests, but what this means may be differently understood by doctors, patients, families, carers, and society. The concept of "values-based practice" (4) is helpful here. Values-based practice works alongside evidence-based practice to help clinicians to match diagnostic and treatment possibilities with the patient's individual circumstances and their values (or ideas, concerns and expectations).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

GUIDELINES

Doctors working in clinical practice must keep up to date so that they practice safely and effectively. However, most do not have time to read and critically appraise each new paper. Guidelines can help, as to produce them, individual studies are appraised and synthesised by a group of experts, followed by consultation with a wide variety of stakeholders. The aim is to present a consensus regarding the available evidence in an easily accessible format.

There are many such guidelines, and it can be a challenge to know which one to use as they may be biased, incorrect or outdated, or may be based on outcomes other than patients' needs (for example cost or wider societal considerations). Most GPs working in the UK choose guidelines produced by NICE (the National Institute for Health and Care Excellence) or SIGN (the Scottish Intercollegiate Guidelines Network).

DECISION AIDS

There are an increasing number of evidence-based decision aids and their use is becoming more widespread. They can be used:

- As a quick screening tool to identify a need for longer, more detailed assessment (such as the CAGE questionnaire where the answers may indicate alcohol misuse.
- In diagnosis, such as the Rome criteria for diagnosing irritable bowel syndrome, the Centor criteria for diagnosing a bacterial sore throat or the Wells score which indicates a need for further investigations to diagnose venous thromboembolism.
- To inform decisions about management, for example the CHA2DS2-VASC/HASBLED scoring system for the management of atrial fibrillation.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

SHARED DECISION MAKING

With both clinical guidelines and decision aids, care needs to be taken that patients are not subjected to tests and treatments which are not appropriate for them, even if their condition meets the criteria in the guidance. Over recent years, the concept of shared decision making (5) has gained much ground in the practice of medicine, as exemplified by the 'no decision about me without me' initiative (6). This King's Fund report (6) suggests tools which can help doctors and patients make decisions together that integrate evidence and patient requirements. In shared decision-making, clinicians and patients should work together to decide what to do in all situations, but especially where there is uncertainty. NICE, for example, states that its recommendations should be followed, but acknowledges that some are made with more certainty than others and that "people have the right to be involved in discussions and make informed decisions about their care".

Making decisions using NICE guidelines

In shared decision making, both the doctor and the patient have knowledge and opinions. If communication is effective, these opinions will be shared, and patients may then be more fully informed. They are then able to either give or decline consent from this position, meaning that they have true autonomy. This usually leads to better outcomes for patients and often more efficient healthcare provision.

Alongside the development of decision aids for use by clinicians, there are many which are designed for use by patients. These are sometimes intended to be completed before clinic attendance, helping to focus discussions during a consultation, especially where there are several different treatment options. Here are some examples concerning hip, knee, prostate or breast surgery and whether to take preventative medicines such as statins.

NICE; Taking a statin to reduce the risk of coronary heart disease and stroke

Shared decision-making is therefore a key part of values-based practice and applying evidence-based medicine appropriately: integrating the science with more subjective knowledges.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

TALKING ABOUT RISK

Part of sharing decision-making with patients is being able to discuss the risks of potential management plans. The best way of doing this is to talk in terms of the absolute risk. This is because many people do not understand percentages, proportions, ratios, or relative risk.

For example, the relative risk of something happening could be expressed as 1:2, or the risk increasing by a half or by 50%, all mean the same thing but may not give a clear idea of the risk involved. A doubling of the relative risk could mean an increase in risk from one in a million to two in a million (a very small increase in risk), or from four in ten, to eight in ten (a very large increase). However, using absolute risk, a change from five in 1000, to ten in 1000 is clear and easy to understand.

Discussions using the concept of prolongation of life are also helpful for patients. For example, being able to say to a 39 year old female patient that her life expectancy would be reduced by nine years if she continued to smoke is powerful.

SUMMARY

Evidence and evidence-based guidelines should support clinical decision making when making a diagnosis and planning management. Their use, along with decision aids, contribute to good decision-making and therefore patient safety However, the need remains for good clinical assessment and communication skills, and it is essential to share decision-making with patients and those close to them.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

ACTIVE LEARNING

Use the 'Virtual Primary Care' (VPC) resource (https://vpc.medicalschoolscouncil.org.uk) to see how generalist clinical decision-making works in practice. See if you can spot any of the material presented here being used in practice.

Talk with your GP tutors about the sources of evidence they use and how they incorporate them into a consultation. What are the challenges they have in doing this?

Talk with your GP tutors about the value of patient decision aids. Do they use them and, if so, how useful do they perceive them to be?

Observe how the clinicians in the practice talk with patients about risk. Do they use numbers? If so, how? How do patients respond when they do?

Try looking at some of the patient decision aids online. How useful are they? How would they help you if you had to make a decision?

Think about a few of your recent consultations. How effectively was shared decision-making employed?

What do you think patients think about shared decision-making? Does it vary between patients and, if so, which groups of patients seem to value it more?

What happens when patients bring in their own 'evidence' from the internet or other media sources? Have you observed GPs handling these discussions? What strategies do they use?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-i

The role of evidence in clinical decision making

RESOURCES

Cooper N and Frain J (Eds). ABC of Clinical Reasoning. BMJ books. 2017

Hamer S, Collinson G, editors. Achieving evidence-based practice: a handbook for practitioners. Edinburgh: Baillìere Tindall Elsevier, 2005

REFERENCES

1. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence- based medicine: what it is and what it isn't. BMJ 1996; 312:71-72
2. Sackett DL. Chest. Rules of Evidence and Clinical Recommendations on the use of antithrombotic agents. . 1999; 95(2): Supplement.
3. Greenhalgh T. How to read a Paper: the basics of evidence-based medicine. BMJ Books, 2001.
4. Fulford KWM, Peile E, Carroll H. Essential Values-Based Practice: clinical stories linking science with people. Cambridge: Cambridge University Press. 2012.
5. Elwyn G, Frosch D, Thomson R, et al. Sharing decision making: a model for clinical practice. J Gen Intern Med. 2012; 27(10): 1361–1367. Doi: 10.1007/s11606-012-2077-6
6. Coulter A, Collins A. Making shared decision making a reality: no decision about me without me. The Kings Fund. 2011. Available at https://www.kingsfund.org.uk/sites/default/files/Making-shared-decision-making-a-reality-paper-Angela-Coulter-Alf-Collins-July-2011_0.pdf

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

INTRODUCTION

Uncertainty permeates the generalist clinical method, yet as humans we seem hardwired to find uncertainty uncomfortable and so we seek certainty in our practice. We might anticipate that clinical uncertainty would have been alleviated by recent developments such as evidence-based practice and artificial intelligence, but the opposite appears to be true (1).

Uncertainty is more common in general practice due to the greater prevalence of presentations in the symptomatic, pre-diagnostic phase; delays in ordering and receiving test results; and dealing with complex psychosocial and multi-morbidity issues.

Tolerating this uncertainty can be challenging, as it asks us to balance the need for rapid diagnosis and treatment with effective use of limited resources and resultant delays. A better understanding of uncertainty can therefore better equip us in dealing with these dilemmas and easing professional discomfort.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

TYPES OF UNCERTAINTY

"Diagnosing the type of uncertainty" (2) is important and there are several helpful models:

1. UNCERTAINTY ABOUT A TASK

Danczak and Lea (3) studied the uncertainty encountered by GP trainees and proposed that uncertainty could be mapped against four key areas of task required by junior doctors (see Fig 1).

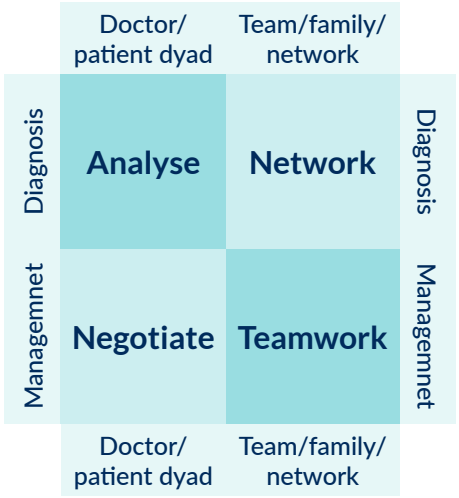


Figure 1 – Mapping Uncertainty in Medicine from Danczak & Lea. 'What do you do when you don't know what to do?' GP Associates in Training (AiT) and their experiences of uncertainty (3).

- **Analysing skills:** To elucidate diagnosis. Can you collect the correct information and interpret it correctly? That is, your clinical reasoning skills.
- **Networking skills:** For example, do you know where or whom to go to for advice on a particular issue? What are your local referral processes?
- **Negotiating skills:** How well can you negotiate clinical management plans with your patients and their families? For example, what if you want to admit a patient to hospital but they want to stay at home; how will you manage that?
- **Team working:** Do you work as part of a functioning team that has trust between team members, or do you worry that someone else may not execute their required part of the management plan? The 'team' may also be members of the patient's family.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

2. SOURCE, ISSUE, AND LOCUS OF UNCERTAINTY

Another useful model is Han's three-dimensional model which classified uncertainty based on its source, the issue, and the locus.

SOURCE

Han prompts us to consider if the reason for uncertainty is linked to:

- ***Probability***: We know there is only a 20% chance of particular treatment working
- ***Ambiguity***: Experts may disagree on how best to manage a condition
- ***Complexity***: Multimorbidity, the patient may have other medical issues which impact what drugs may be suitable to prescribe.

ISSUES

Are classified as arising at three potential levels:

- ***Scientific issues*** can relate to diagnosis, prognosis, causal explanations and treatment recommendations
- ***Practical (system-centred) issues*** may relate to structures or processes of care
- ***Personal (patient-centred) issues*** can be psychosocial or existential.

The example used in Han et al.'s paper illustrates how these different types of issues can all create uncertainty in cancer care and can be helpful in understanding how these manifest in clinical practice. It should also be remembered that there may be more than one source of uncertainty at any one time.

LOCUS

Relates to where the uncertainty exists. Is it in the mind of the doctor, the patient, both, or perhaps neither? In the latter case, the concept of meta ignorance has been described, where individuals are unaware of the uncertainty which exists.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

THE IMPORTANCE OF UNCERTAINTY

Uncertainty matters for both the welfare of patients and their doctors. Not surprisingly, diagnostic uncertainty is a leading cause of diagnostic error (4). For some doctors, diagnostic uncertainty can feel overwhelming, and they may even feel they are failing their patients by being unable to come to a conclusive diagnosis (1). This can lead to increased referrals and investigations as doctors try to bring certainty to what they perceive as challenging situations (5).

A key tenet of patient-centred practice is the principle of shared decision-making, where doctors and patients work together to agree a suitable management plan going forward. True shared decision-making requires doctors to empower their patients to make informed decisions about their care and to do this, doctors must share the clinical, therapeutic, and prognostic uncertainty with their patients. A key skill is sharing uncertainty whilst not increasing patient anxiety. To fully understand your patient, a biopsychosocial approach enables a richer understanding of the patient than a purely biomedical one. Furthermore, taking a more patient-centred approach has been shown to benefit doctors as well as patients as it can reduce stress in doctors (6).

From the doctor's perspective, uncertainty has been recognised as a contributor to burnout and stress among the medical profession. Whilst traditionally it was thought that tolerance of uncertainty was a relatively fixed trait, it is now thought that through better understanding of the sources of and responses to uncertainty, that individuals can increase their tolerance of uncertainty.

THE CONCEPT OF UNCERTAINTY TOLERANCE

Individuals vary in their response to uncertainty, and it is important for doctors to develop an awareness of their own tolerance of uncertainty. Sources of uncertainty will vary between doctors. For some, certain clinical areas provoke discomfort, whilst for others it may be particular types of patients or patient behaviours. To add complexity, patients also vary in their tolerance of uncertainty in a given situation.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

STRATEGIES FOR MANAGING UNCERTAINTY

Individuals vary in their response to uncertainty, and it is important for doctors to develop an awareness of their own tolerance of uncertainty. Sources of uncertainty will vary between doctors. For some, certain clinical areas provoke discomfort, whilst for others it may be particular types of patients or patient behaviours. To add complexity, patients also vary in their tolerance of uncertainty in a given situation.

A range of strategies have been described to help students and doctors to identify and manage uncertainty in their practice.

The first key step is to understand your 'gut reaction' to uncertainty. This reaction may have been shaped by previous experiences, the culture in which you work, societal pressures, or by the particulars of a given clinical situation. Gheihman et al. (2) prompt readers to reflect on a time when they felt uncertain, asking:

- How did that make you feel?
- What emotions arose?
- What thoughts came to mind?

For those that find questionnaires measuring attributes a useful tool to prompt reflection, the Intolerance of Uncertainty Scale can be a useful exercise. This 12-item resource may be a useful exercise to conduct with peers to prompt discussion. There is not a right or wrong score, it is merely a way to reflect on how tolerant of uncertainty you might be in comparison to others.

Starting to understand your cognitive, emotional, and behavioural reactions to uncertainty can be useful. Hillen's integrative model of Uncertainty Tolerance classifies reactions as positive and negative (7) (see Figure 2 on the next page).

On a cognitive level, some may see uncertainty as a threat, whilst others embrace this as an opportunity to learn and develop. PUNs and DENs are useful tools in this respect. In this model, doctors record where their lack of knowledge led to a patient's unmet need (PUN), or they identified a learning need of their own which may not have hindered their immediate management of the patient (Doctors Educational Need – DEN).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

What is your emotional reaction to uncertainty? Worry, fear and aversion are all negative emotional responses, whilst curiosity, courage and hope are positive. The final aspect to consider is your behavioural response to uncertainty. This can range from being paralysed by inaction and avoidance, to taking action to find more information and making a decision (try taking the questionnaire highlighted earlier to see where you are on this spectrum).

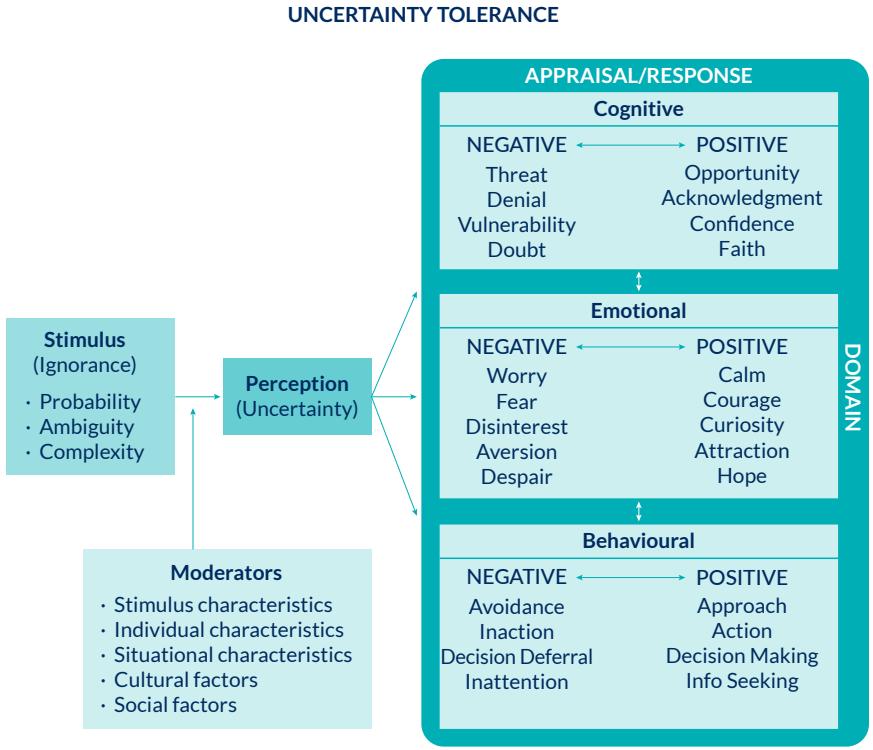


Figure 2 – Integrative model of uncertainty intolerance from Hillen et al (7).

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

UNCERTAINTY AND DIAGNOSTIC ERROR

Our desire for certainty in medicine can leave us open to cognitive biases. Many medical school exams require recognition of patterns of symptoms and presentations, and this pattern recognition is an important part of developing clinical knowledge. However, there is a risk that sole reliance on these methods can lead doctors to jump to incorrect diagnoses and it is thought that 'premature closure' (where doctors decide the diagnosis too early in a consultation) is the leading cause of misdiagnosis (8). This is seen commonly in clinical exams, where students fail to collect adequate information to exclude other possible diagnoses, or ignore important emerging information which does not fit with their assumed diagnosis. Danczuk and Lea (8) encourage learners to practice 'holding uncertainty' to allow more possibilities to remain 'in play', and increasingly, students are being taught clinical reasoning models to provide structure to this process.

To counterbalance this tendency towards premature closure, safety-netting and a clear management plan should be a key part of every consultation (9). When done well, the safety net should be attempting to address the uncertainty that exists. For example, 'if your rash spreads, then you should…' or 'if the hoarseness hasn't gone away in another two weeks, then you should come back and see me again'.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

ACTIVE LEARNING

Use the virtual primary care (VPC) resource (https://vpc.medicalschoolscouncil.org.uk) to look at online consultations. These can act as source material for the learning activities. You can also search VPC under 'uncertainty' or 'generalist clinical reasoning'.

On placement, you will hopefully have the opportunity to follow the course of patients' care, learning more about the natural history of disease and the potential benefit of time as a diagnostic tool in uncertain clinical presentations.

Sharing your uncertainty with colleagues can be helpful in a number of ways. Different colleagues may have different knowledge and expertise, that can be beneficial. Or perhaps, presenting a case, analysing and articulating where the uncertainty lies can be helpful. Most importantly, the recognition that others may be equally perplexed by a complex case can be reassuring, and your colleagues may be able to support you in identifying the best way forward.

Talk with your GP tutor about the following:

- During a surgery, focus on the safety netting undertaken by the GP. How specific were they? Was it clear to the patient?
- Identify cases from a day in practice, where understanding a patient from a biopsychosocial perspective (rather than purely a biomedical one) aided diagnosis.
- Ask your GP tutor about how they manage uncertainty. What do they find challenging and how do they try to manage this?
- Identify cases where a GP managed uncertainty without making the patient feel anxious or in doubt of their doctor's abilities. Also think about situations that may affect clinical decision-making, for example language barriers, out-of-hours work, and comorbidities in the patient. How may this affect clinical decisions?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-ii

Uncertainty in clinical decision making

RESOURCES

General practice Supervision Australia (GPSA) has produced a useful document about managing uncertainty in practice: http://gpsupervisorsaustralia.org.au/wp-content/uploads/2017/04/Guide_Managing-Uncertainty_Digital.pdf

REFERENCES

1. Armstrong K. If You Can't Beat It, Join It: Uncertainty and Trust in Medicine. Ann Intern Med [Internet]. 2018 Jun 5 [cited 2019 Jun 20];168(11):818. Available from: http://annals.org/article.aspx?doi=10.7326/M18-0445
2. Gheihman G, Johnson M, Simpkin AL. Twelve tips for thriving in the face of clinical uncertainty. Med Teach [Internet]. 2019 [cited 2019 Jun 20]; Available from: https://doi.org/10.1080/0142159X.2019.1579308
3. Danczak A, Lea A. What do you do when you don't know what to do? GP associates in training (AiT) and their experiences of uncertainty. Educ Prim Care [Internet]. 2014 [cited 2019 Jun 20];25(6):321–6. Available from: https://www.tandfonline.com/action/journalInformation?journalCode=tepc20
4. Graber ML, Kissam S, Payne VL, Meyer AND, Sorensen A, Lenfestey N, et al. Cognitive interventions to reduce diagnostic error: a narrative review. [cited 2019 Jun 19]; Available from: http://qualitysafety.bmj.com/
5. Schneider A, Löwe B, Barie S, Joos S, Engeser P, Szecsenyi J. How do primary care doctors deal with uncertainty in making diagnostic decisions? J Eval Clin Pract [Internet]. 2010 Jun [cited 2019 Jun 19];16(3):431–7. Available from: http://www.ncbi.nlm.nih.gov/pubmed/20604824
6. Evans L, Trotter DRM. Epistomology and Uncertainty in Primary Care: An Exploratory Study. Fam Med. 2009;41(5):319–26.
7. Hillen MA, Gutheil CM, Strout TD, Smets EMA, Han PKJ. Tolerance of uncertainty: Conceptual analysis, integrative model, and implications for healthcare. Social Science and Medicine. 2017.
8. Danczak A, Lea A, Murphy G. Mapping Uncertainty in Medicine: What do you do when you dont know what to do? London: RCGP; 2016.
9. Neighbour R. The Inner Consultation. Second. Boca Raton: Taylor & Francis; 2005.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

INTRODUCTION

The ability to prescribe is a fundamental privilege of our roles as doctors. It gives us the opportunity to help people with their symptoms, to cure their illnesses and to prevent illnesses they haven't even had yet. Prescriptions also can cause significant harm which is why this is not a privilege that is earned easily and why the process has a significant system of checks and regulations to support it.

The introduction of a national assessment in prescribing underlines the importance of prescribing and GP placements are the ideal place to learn about this. Throughout this chapter we will make full use of the BNF online. Try opening this essential resource and start to familiarise yourself with it.

Because prescribing is such a practical activity unlike other chapters, the placement activities and resources necessary are with each section, rather than appearing at the end.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

WHAT IS A PRESCRIPTION?

Prescribing can take the form of advice or referral to a form of therapy. More commonly though, when we refer to a prescription, we are talking about bits of green paper with unpronounceable names and abbreviated Latin on it. In secondary care settings prescriptions may be written on drug charts or on e-prescribing systems. No matter what form a prescription takes, it is essentially a form of communication. A very precise message from a prescriber, about a particular patient and the medicine suggested for that patient.

WHY PRESCRIBE?

A lot of medications are available "over the counter". This mean that a prescription is not required for a person to purchase it. Some medicines can be dispensed by a pharmacist without a prescription.

All medicines in the UK are issued their licences and regulated by the Medicines and Healthcare products Regulatory Agency (MHRA). Medicines which carry a greater risk of harm to the individual or the population can only be dispensed following a review with a health professional who is able to prescribe.

A prescription is only issued when:

> "They are necessary, and in all cases the benefit of administering the medicine should be considered in relation to the risk involved."
>
> From the NICE guidance on prescribing

Excercise

HAVE A GO AT PRESCRIBING

You are asked to go on a home visit to Mr Johnstone. He is a 60-year-old builder. He was seen two days ago and was diagnosed with cellulitis of his left foot after standing on a nail. He was prescribed oral Flucloxacillin and has been taking it for the last 48 hours. He has asked for a visit because the cellulitis has spread up to his knee and now he can't walk more than a few metres. His observations are normal, he is not systemically unwell but is in a lot of pain despite regular Paracetamol and Ibuprofen. He has no allergies and is requesting "those painkillers which really helped when I put my back out". His records show that these were Co-codamol 30/500. His recent bloods show raised inflammatory markers but are otherwise normal.

You discuss his case with the on-call Microbiologist and the Acute Care at Home Team (specialist nurses, able to give IV medications in a patient's home). You decide to prescribe IV Ceftriaxone 2g OD for 5 days and Co-codamol 30/500, 2 tablets QDS as needed, 28 tablets in total.

Click on the images to download and print a blank FP10 to write a prescription for the chemist to dispense the medicines AND a prescription for the ACAH nurse to give the Ceftriaxone. With your placement partner, practice what you need to say to the patient before giving him the prescription. Referring to the BNF may be helpful. Critically evaluate each-other, before asking a supervising GP to comment.

Link to ACAH prescription form

Link to a sample FP10

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

WHAT ARE THE COMMON PITFALLS OF PRESCRIBING?

> You are responsible for the prescriptions that you sign. You must only prescribe drugs when you have adequate knowledge of your patient's health. You must be satisfied that the drugs serve your patient's need.
>
> GMC: Good practice in prescribing and managing medicines and devices – Feb 2013.

What are the most common considerations when choosing the right drug at the right dose, for the right patient? Below is a graph from an article on prescribing errors:

WHAT ARE THE MOST COMMON CONSIDERATIONS WHEN CHOOSING THE RIGHT DRUG AT THE RIGHT DOSE, FOR THE RIGHT PATIENT?

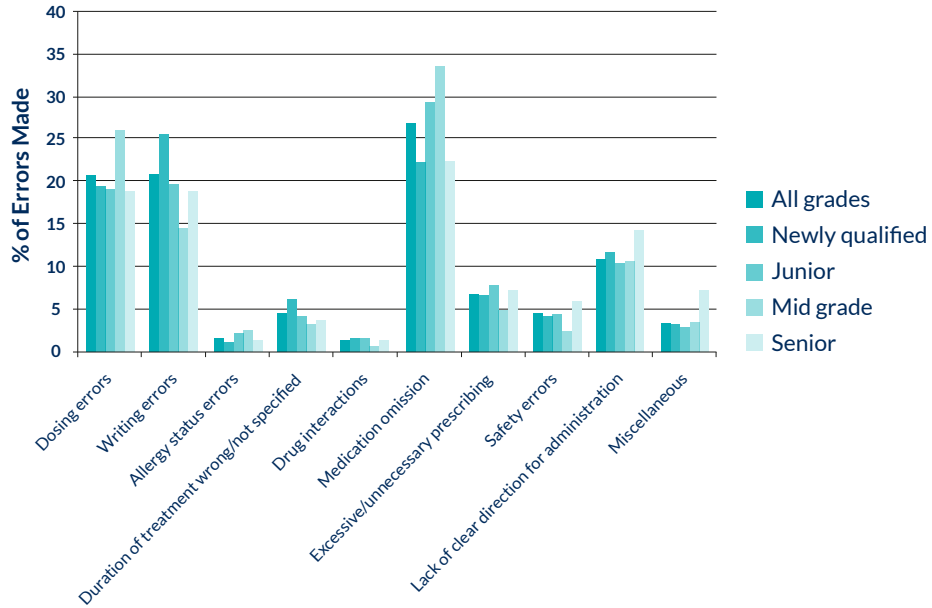


Figure 3 – Seden K, Kirkham JJ, Kennedy T, et al, Cross-sectional study of prescribing errors in patients admitted to nine hospitals across North West England, BMJ Open 2013;3:e002036. doi: 10.1136/bmjopen-2012-002036.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

POLYPHARMACY

With patients living longer, with more long-term conditions, polypharmacy has become a major issue. Interactions and reducing kidney and liver function in the elderly can make this a significant cause of morbidity and mortality. The following case illustrates many of these pitfalls:

Case study

A PATIENT WITH CHRONIC KIDNEY DISEASE (CKD)

Robert Smith is an 80-year-old, retired policeman. He is on your telephone triage screen. He tells you that he has had diarrhoea and vomiting for the past 24 hours. He feels things are settling, is feeling tired and "washed out". He denies any symptoms suggestive of a low blood pressure. He feels that this might have set off his gout as well; you note that he is prone to this in his big toe. He is asking if he can take something for this illness and wants to know if there is anything else he can do to aid his recovery.

PMH - CKD 3, T2DM, IHD (previous stent), Gout

DH - Metformin, Aspirin, Bisoprolol, Ramipril, Furosemide, Simvastatin, Allopurinol

You identify Robert as being at risk of AKI. Measures to increase the profile of AKI prevention include Stop the **DAMN** drugs! This provides an easy to remember mnemonic for commonly prescribed drugs in the community which have the potential to be nephrotoxic in overdose or during an acute illness and/or dehydration.

Diuretics
ACE inhibitors and ARBs
Metformin (accumulates in renal impairment and causes potentially fatal lactic acidosis)
Non-steroidal anti-inflammatories (NSAIDs)

Patients often benefit from pausing these drugs during an acute illness, but the risk vs benefits will vary on a case-by-case basis. What would you do in this situation?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

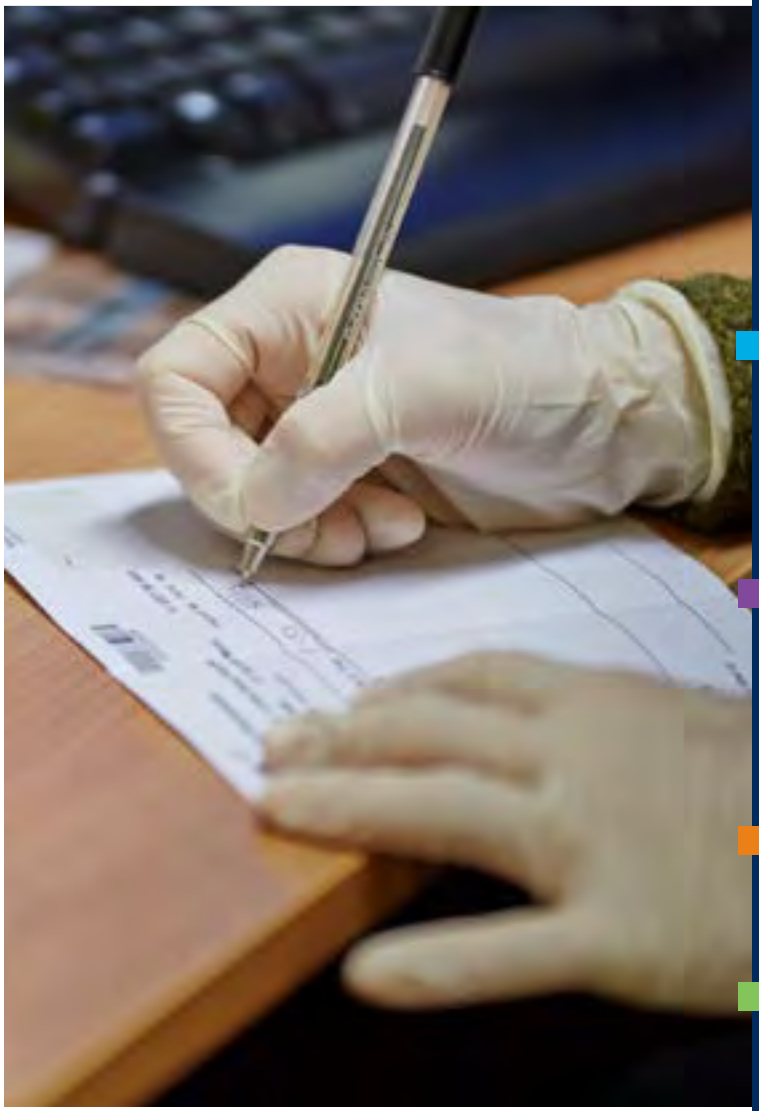
1A-iii

Prescribing

COMPLIANCE VS CONCORDANCE

There is an adage that suggests a third of patients take prescribed medications 'properly', a third improperly, and a third don't take prescriptions at all. Compliance is a term that has increasingly been replaced with concordance, to reflect increasing patient involvement in treatment decisions.

Whatever term is used, the concept is important, as many/most of our patients may not be taking medications in the way that we might assume. We do know that the quality of the doctor-patient relationship strongly influences concordance and that poor concordance can have serious consequences.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

The following case illustrates some of these points:

Concordance Case

Betty Pascoe is a 78-year-old lady with Asthma, Hypertension, OA (hands and knees) and bilateral cataracts. Her husband has called the surgery to request a home visit. Over the phone he tells you that Betty has had a tight chest and bothersome cough for months now. Nothing seems to help, but the symptoms have been variable which is why she hasn't "bothered" us with them yet. He goes on to say that they were in London at the weekend and since then the arthritis in her knees has been more bothersome. She has tried to take her usual painkillers, but they haven't helped, and she has become increasingly dizzy. Today she is struggling get out of bed with the dizziness, hence the request for the visit. A brief chat with the patient reveals that she is symptom free when lying in bed, so you decide to visit.

During the home visit you establish the following facts:

- You notice several boxes of unopened MDI inhalers and Co-Codamol 8/500 in an upturned, dusty spacer. Betty admits to stopping these months ago because the blue one didn't work and the brown one gave her a sore throat. She also didn't think she needed her medications for hypertension because the tablets had "cured it" so why did she need to keep taking them? She didn't want to upset her regular GP so had been collecting the repeat meds she was prescribed.
- Betty's records show her previous BP was 136/86, on Amlodipine and Atenolol. Today her lying BP is 110/70, P 50 regular. Within a minute of sitting on the edge of the bed she feels dizzy, with a BP of 88/58, P 56 regular.
- When asked what meds she has been taking it transpires that Betty has been taking her hypertension meds, thinking they were her painkillers. She has been struggling to read the boxes due to her cataracts. She is fearful of the prospect of surgery to her eyes.
- The Pascoes were in London in support of a political event.
    - What is the difference between compliance and concordance?
    - What might a clinician do to ensure the best possible concordance?
    - What happens to medicines when they are returned to a pharmacist? Can they be re-issued to someone else?

This case illustrates a significant waste of resources within a system of limited funds. It is not uncommon. We are also starting to appreciate the environmental consequences of such waste.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

WHAT SYSTEMS HELP TO PREVENT ERRORS?

> You should make use of electronic and other systems that can improve the safety of your prescribing, for example by highlighting interactions and allergies and by ensuring consistency and compatibility of medicines prescribed, supplied and administered.
>
> GMC: Good practice in prescribing and managing medicines and devices – Feb 2013.

Excercise

FOLLOW THE PRESCRIPTION

From the beginning of the therapeutic conversation to the point at which the drugs are dispensed, follow a patient and their prescription. Pay close attention to all the questions, conversations, computer alerts, prescribing considerations and the variety of checks carried out prior to dispensing. Ask if you can have a look at the information printed on the medication box.

Critically evaluate this process. Are there opportunities for error in this system? What about repeat medications or temporary residents, where the entire GP record might not be available?

This should be pre-agreed with your supervising GP during a clinic when you are observing them consult or where they are prescribing for a patient you have seen in your parallel clinic.

DOES 'PRESCRIBING' ALWAYS RESULT IN A MEDICATION?

There is an increasing proportion of patients presenting to healthcare settings with problems which require much more than solutions available from a prescription pad. In the section below Daisy Kirtley (Lead of the NHS England Social Prescribing Student Champion Scheme) introduces us to an exciting movement in community care which is gaining momentum.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

SOCIAL PRESCRIBING

Social prescribing represents a means of enabling GPs and other frontline healthcare professionals to refer patients to a link worker. The link worker can provide them with a face to face conversation, during which they can learn about the possibilities and design their own personalised solutions, that is 'co-produce' their 'social prescription'. This means that people with social, emotional, or practical needs are empowered to find solutions which will improve their health and well-being, often using services provided by the voluntary and community sector.

Excercise

Think of a patient that you have seen recently on placement and try and imagine an alternative management plan involving social prescribing in your local area.

For some local inspiration in Devon and Cornwall, please click here.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1A-iii

Prescribing

RESOURCES

- https://patient.info/doctor/drug-prescribing-in-renal-impairment
- https://bnf.nice.org.uk/guidance/prescribing-in-renal-impairment.html
- Compliance becomes concordance
  - BMJ 1997;314:691
- Taking medicines: concordance is not compliance
  - BMJ 1999;319:787
- NICE glossary
- UEMS Social prescribing masterclass
- Dept. of Health and social care. Social prescribing: A GP's perspective
- Dept. of Health and social care. Social prescribing: A Patient's perspective

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

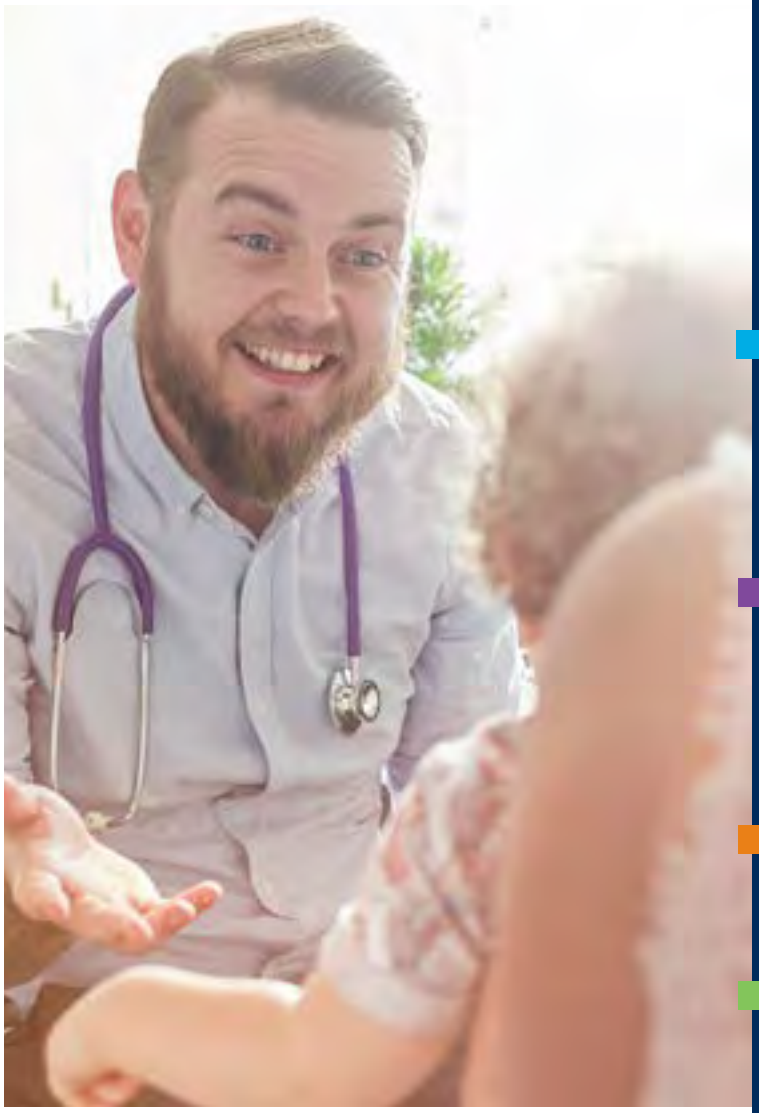
1B

Holistic care (the biopsychosocial model)

INTRODUCTION

Beginning in Iraq, Iran, India, and China approximately 10,000 years ago, civilisations have for millennia understood the workings of society, mind, and body to be interdependent – or biopsychosocial – and an imbalance in one area leads to problems in another. The underlying processes for this early biopsychosocial paradigm were poorly understood and magical/spiritual explanations predominated.

Arguably, there have been only two major shifts (paradigm changes) in medical thinking since this time. Firstly, the emergence of a biomedical paradigm; and secondly, a return to a biopsychosocial paradigm, this time with a more solid scientific background. We are currently living through this second paradigm change, making medicine an exceptionally interesting area to work in at present.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B

Holistic care (the biopsychosocial model)

THE BIOMEDICAL PARADIGM

The first paradigm changes in medical thinking took more than 9,000 years to occur. In the 18th century, people started to explain how the body worked in a new evidence-based, rational way. To do this, it was necessary to classify diseases, organisms, body systems, and treatments. A single, usually external, causal agent was assumed to cause illness.

Alongside the huge advances in our understanding because of this approach, the holistic view of the body has undoubtedly been affected.

'Functional' disorders, 'psychosomatic' problems, divisions between medical and psychological, and social and medical care are all classifications that arguably now profoundly affect healthcare efficiency, but are based on the rationale that diseases are either physical or psychological. This division between mind and body was an outcome of the new way of thinking and had not been present before.

The biomedical model focusses on diagnosing a disease and instigating treatment. However, up to 40% of presentations to GPs do not represent disease, do not have a diagnosis and do not need treatment; they are symptoms only (1). It is clear then that the biomedical model of disease does not provide a sufficiently broad model for sole use in either community or acute settings.

To address this, a second paradigm change in medicine is currently underway. Starting with philosophical changes in the 1960s, the biopsychosocial paradigm (2) has been adopted by general practice and fundamentally alters how medicine is practised. This is a way of thinking that seeks to integrate and generalise, rather than classify and specialise. Increasingly, the mechanisms underlying this way of thinking are being discovered: the field of psychoneuroimmunology.

We shall briefly examine the role of the 'psych' and 'social' parts of the model, but with an emphasis on understanding how these factors impact on the physiology of humans. In this way we hope that it is possible to reach a 'scientific' understanding of why psycho-social factors are important in treating human beings.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B

Holistic care (the biopsychosocial model)

PSYCHOLOGICAL MEDICINE

Professor Kieran Sweeney was a great GP and writer who tragically died in 2010 at the age of 58 from mesothelioma, induced by his working environment:

His experiences as a cancer patient

His obituary

Before he died, Kieran produced a paper outlining how we can treat diseases in people without forgetting that they are people as well (3). We have seen how the power of scientific, evidence-based medicine can inform decisions about care. The trouble is that some individuals may not conform to the evidence and may not want the 'best' treatment. It turns out that if we get this part wrong then the power of the treatment will be reduced considerably. If we can get it right and align treatment with the patient, then the power is considerably increased. This is traditionally called the placebo effect, which can alter efficacy by as much as 30% (4).

Thus, the power of our patients' thoughts and feelings (that is, their neuro-endocrine system) can profoundly affect their treatment. It turns out that the chemicals that mediate our thoughts and feelings have a substantial effect on our immune system, and so paying attention to our patients' thoughts and feelings (their psychology) is important in treating their physical or biological problems.

The relationship between doctor and patient is therefore of critical importance and influences the outcomes of disease through the mechanisms outlined above. We will explore this in subsequent sections.

SOCIAL DETERMINENTS OF DISEASE

Unfortunately, it is a fact that the poor and disadvantaged in our societies suffer with far more illnesses and have much poorer health outcomes (5, 6). As doctors charged with improving the health of our patients, it is vital that we know about this and can intervene where possible to improve our patient's well-being. Again, the mechanisms that underlie these facts are only just beginning to be understood, but appear to hinge on the role of neurochemicals and the stress response. For example, if you live under the flight path of a large airport, your stress response and neuro-endocrine system is triggered to a small extent every time an aircraft takes off and lands.

Over time, this can have profound effects, as we now know that adrenaline and other stress response chemicals such as steroids have a significant effect on how our immune system functions, reducing the efficacy of killer T cells and lymphocytes (1, 7). People living in social conditions that trigger stress therefore have increased rates of mortality. For example, the average age of death in the poorest part of the UK is 58 (considerably less that most emerging nations and several third-world countries), whereas the average age of death in Chelsea is 85.

Life expectancy across the UK mapped

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B

Holistic care (the biopsychosocial model)

THE BIOPSYCHOSOCIAL MODEL OF ILLNESS

Now we need to put all the above together. We know that diseases are caused by disequilibrium within our bodies. We now also know that our psychological state and our social surroundings can have a profound effect on the cause and outcomes of disease.

The GMC document 'Outcomes for Graduates' (8) is structured using this arrangement (biological, psychological, and sociological medical knowledge). It's an important document as it drives and defines all medical student assessments.

It is a heavy charge to take on responsibility to operate over such a wide range of human knowledge, but it is one that ultimately makes medicine such a fascinating career.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B

Holistic care (the biopsychosocial model)

ACTIVE LEARNING

Look up information about how the role of postcodes (by extension, deprivation) play a part in how GPs are paid (the Carr-Hill Formula). GPs are paid more to look after people from disadvantaged areas, as their use of health services is considerably increased. For example, try reading the below article in 'Pulse', a GP-oriented 'trade' magazine with a definite viewpoint.

http://www.pulsetoday.co.uk/news/hot-topics/nhs-finances/carr-hill-formula-very-unlikely-to-create-more-equitable-allocation-finds-study/20038898.article

Try and get to know a patient really well by beginning to understand how biological-psychological and social are related.

The biopsychosocial paradigm is eloquently explained in much greater detail in Ian McWhinneys outstanding 'Textbook of general practice' (1). Try reading the chapter 'philosophical and scientific foundations of family medicine'.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B

Holistic care (the biopsychosocial model)

REFERENCES

1. McWhinney IR. A Textbook of Family Medicine. Third ed. Oxford: Oxford University Press; 2009.
2. Engel CL. The clinical application of the biopsychosocial model. American Journal of Psychiatry. 1980;137:535.
3. Sweeney KG, MacAuley D, Gray DP. Personal significance: the third dimension. The Lancet. 1998;351(9096):134-6.
4. Dixon M, Sweeney K. The Human Effect in Medicine: Theory, Research and Practice. London: CRC Press; 2017.
5. Shi L, Starfield B, Politzer R, Regan J. Primary care, self-rated health, and reductions in social disparities in health. Health services research. 2002;37(3):529-50.
6. Berkman LF, Breslow L. Health and ways of living; the Alameda County study. New York: Oxford University Press; 1983.
7. Evans P, Hucklebridge F, Clow A. Mind,Immunity and Health; The Science of Psychoneuroimmunology. London: Free Association Books; 2000.
8. GMC. Outcomes for graduates (Tomorrow's Doctors). Manchester: GMC; 2015.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

INTRODUCTION

The biopsychosocial model is a useful conceptual model allowing GPs to think about patients in a holistic manner during consultations (1). We shall now examine some of the evidence supporting its efficacy.

We will also begin to explore some of the physiology underlying why this approach is so effective. The insight that underpins the approach is based on the observation that the hormones and neurotransmitters that mediate psychosocial processes profoundly influence immune system function. This is the field of psychoneuroimmunology (PNI).

Excercise

Take a moment to reflect on the importance of this finding in explaining how we are affected by our environment, and how evolution and natural selection may work.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

Work in PNI shows a two-way relationship between the neuroendocrine system (producing neurotransmitters and hormones) and our immune system (2).

Work in this field shows that white cells have specific receptors for neurotransmitters and hormones. These receptors mediate immune cell responses such as the production of antibodies and cytokines (3). Conversely, white cells produce neurotransmitters and hormones that in turn affect our psychological functioning (2). It is therefore a fallacy to suggest that the mind and body are somehow separate, as the chemicals that mediate our mind are partly produced by our immune system, which resides in many parts of our bodies.

WHAT ARE THE IMPLICATIONS OF THIS STATEMENT?

We shall now examine in more detail the mechanisms and health outcomes that underpin these statements.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

INFLUENCE OF NEGATIVE PSYCHOSOCIAL VARIABLES ON DISEASE OUTCOMES

It is well known that stress responses to adverse social and psychological events produce increased levels of adrenaline and cortisol. It has become apparent that these chemicals have inhibiting effects on immune function. These effects include reductions in antibody, interleukin, interferon, and tumour necrosis factor levels. The effects also result in reduced killer T cell function and suppression of growth hormone, which has broadly beneficial effects on immune function (4).

The immune system is not only responsible for our responses to 'external' infection but also 'internal' processes such as inflammation, neoplasia, obesity, ageing, and autoimmunity (3).

Therefore, we find that adverse psychosocial events result in immune dysfunction and produce an array of negative health outcomes. Some of the evidence is outlined below:

- Short-term stress in medical students due to exams produces reductions in Interleukin 1, reduced response to vaccinations, and a 40% reduction in wound healing (5, 6).
- Long-term stress caused by environmental (e.g., job stress, relationship problems, unemployment) and climatological changes are all associated with immune dysregulation, including reduced T-cell activity (4).
- Social isolation produces a two-to-three-fold increase in all-cause mortality (7, 8).
- Perceived stress reduces T-cell function in response to the HPV-16 virus in women with cervical dysplasia (9).
- The probability of contracting a viral illness is directly related to psychological stress (10).
- Caring for a spouse of parent with dementia produces immune dysfunction resulting in endocrine and wound healing dysfunction (4).
- The average age at death in the poorest part of the UK is 58, the age of death in the richest is 85 (3).

In short, we can see that negative psychosocial events produce negative health outcomes across a range of immune-regulated activity including cancer, viral infection, endocrine dysfunction, and wound healing. It is therefore not helpful to distinguish certain diseases as 'psychosomatic', as all health outcomes are related to social and psychological variables.

INFLUENCE OF POSITIVE PSYCHOSOCIAL VARIABLES ON DISEASE OUTCOMES

Conversely, positive social and psychological events enhance immune function and produce better health outcomes. This is through reducing the levels of stressor hormones such as cortisol and adrenaline and increasing levels of substances like growth hormone.

- Relationship continuity with a family doctor produces a statistically significant reduction in all-cause mortality (11).
- Close social ties result in increased levels of natural killer cell function in those caring for spouses with cancer (12).
- Learning mindfulness techniques can lower cortisol and inflammatory markers and increase T cells (13).
- Survival times in cancer (malignant melanoma) are significantly increased amongst those who have undergone a six-week intervention to increase their feelings of self-control and ability to problem solve (14).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

MEDICALLY UNEXPLAINED SYMPTOMS

The interplay between physical and psychological can result in some of the most interesting but difficult areas of medicine, where the combination of physical and psychological can result in symptoms that medicine at present is not fully capable of accounting for. 'Functional disorders', 'conversion disorder', and 'medically unexplained symptoms' are all terms that try to express this dynamic. We will use 'medically unexplained symptoms' (MUS).

PREVALENCE

Many research studies over the past 20 years have indicated that unexplained symptoms are very common in both primary and secondary care settings. The prevalence estimates for primary care range from 30 to 50% (15). The problem is by no means confined to primary care; a retrospective case notes review of patients seen at two London hospitals (16) revealed an average of 52% of participants across a range of medical outpatient clinics as having MUS. The highest rate of unexplained symptoms was 66% in gynaecology clinics, but neurology (62%), gastroenterology (58%), cardiology (53%), and rheumatology (45%) also had a very high prevalence of no clear organic diagnosis, three months after the initial appointment and all appropriate investigations.

COSTS

These high rates of unexplained symptoms suggest that a significant number of patients are likely to have undergone potentially avoidable referrals and investigations. This is associated with major costs, both in terms of difficulties and frustration in the relationship between patients and their clinicians, as well as the potential for harm done with invasive tests, the associated anxiety when this fail to give a clear diagnosis, and the significant accompanying financial costs.

Research indicates that the costs to the UK economy of MUS are £3bn in the year 2008-9, with wider costs to the economy in terms of absence from work and impaired quality of life of £14bn (17).

MANAGEMENT

There is evidence that good communication skills and empathy can help to reduce investigations and healthcare costs in MUS (18). Giving effective explanations for 'unexplained' symptoms, in a way which make sense to both the patient and the practitioner and help the patient to function better have been shown to be very important (19). There is some evidence that patients with unexplained physical symptoms may seek emotional support more than other patients (20). Psychosocial factors should be explored as part of any initial history, but particularly whenever cases are atypical and there is a possibility of MUS. A significant proportion of such patients (around 30 to 40%) will have significant underlying psychological or social difficulties, and physical symptoms may be their way of presenting these difficulties (21).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

CONCLUSION

A mechanism linking our outside world with our internal world has been elucidated and has profound implications for health.



The practical implications are that to reduce negative psychosocial factors, GPs may need to become agents of social change. However, this can be very time intensive. To increase positive psychosocial factors, we need to focus relentlessly on the nature of our relationships with patients, bearing in mind what a strong effect on immunity and health this can have. It is to this topic (doctor-patient relationships) that we turn to next.

A NOTE ON PSYCHONEUROIMMUNOLOGY RESEARCH

THE PNI FIELD IS IN ITS INFANCY AND HAS SEVERAL CHALLENGES:

- Large-scale studies are needed to show effects as there are many confounding factors and effects may be small or variable. Psychosocial interventions such as increasing social ties do not carry patents unlike medications. There is far less money available to do the research. There is a paradox therefore in that, despite having potentially profound effects on human health, research in PNI receives negligible funding.
- Reducing negative psychosocial variables such as improving housing, improving working conditions and engaging meaningfully in environmental improvement is difficult, costly and ideologically unpalatable to some.
- Concepts such as 'stress', 'poor housing', and 'psychosocial intervention', whilst relatively easy to visualise in a common-sense way, are far more difficult to define with sufficient clarity for trials.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

ACTIVE LEARNING

Talk with your placement provider about the contents of this theme. Do these findings resonate with their experience?

How might you construct a study in general practice to investigate the relationship between events in patients' lives and immune function?

Try to find a patient where there are medically unexplained symptoms, or the frequency of appointments is high. Look back in the notes. Are there adverse childhood experiences (ACEs)? Find out more about these and their effects on physical and psychological conditions.

Have you seen any examples of effective explanations being given to patients for their unexplained symptoms? What were the important factors in how this was done?

Try to speak to a patient with unexplained symptoms about their thoughts and what they have found helpful or otherwise in their contacts with health professionals.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

RESOURCES

Look up 'bio-psychosocial model' on 'Virtual Primary Care.
This is an online resource that your medical school has access to and will allow you to see practical demonstrations of this concept in the form of real consultations.

Try reading 'The Beautiful Cure' by Daniel Davis (2018). It's a very readable account of the field of immunology and a fascinating insight into the world of research.

Try watching 'Safe' (Julianne Moore).This film explores, amongst other issues, the relationship between emotional states and immune function.

A very readable introduction to MUS is written by the neurologist Suzanne O'Sullivan: 'It's All in Your Head; stories from the frontline of psychosomatic illness'. It was winner of the Wellcome book prize in 2016.

REFERENCES

1. Engel GL. The Clinical Application of the Biopsychosocial Model. The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine. 1981;6(2):101-24.
2. McWhinney IR. A Textbook of Family Medicine. Third ed. Oxford: Oxford University Press; 2009.
3. Davis DM. The beautiful cure; the new science of human health. London: Vintage; 2018.
4. Kiecolt-Glaser JK, McGuire L, Robles TF, Glaser R. Psychoneuroimmunology: Psychological influences on immune function and health. Journal of consulting and clinical psychology. 2002;70(3):537.
5. Marucha PT, Kiecolt-Glaser JK, Favagehi M. Mucosal wound healing is impaired by examination stress. Psychosomatic medicine. 1998;60(3):362-5.
6. Glaser R, Kiecolt-Glaser JK, Bonneau RH, Malarkey W, Kennedy S, Hughes J. Stress-induced modulation of the immune response to recombinant hepatitis B vaccine. Psychosomatic medicine. 1992;54(1):22-9.
7. Berkman LF. The role of social relations in health promotion. Psychosomatic medicine. 1995;57(3):245-54.
8. Berkman LF, Breslow L. Health and ways of living; the Alameda County study. New York: Oxford University Press; 1983.
9. Fang CY, Miller SM, Bovbjerg DH, Bergman C, Edelson MI, Rosenblum NG, et al. Perceived stress is associated with impaired T-cell response to HPV16 in women with cervical dysplasia. Annals of behavioral medicine. 2008;35(1):87-96.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1B-i

The physiology of holistic care

10. Coker S, Tyrell, D.A.J., Smith, A.P. Psychological stress and susceptability to the common cold. New England Journal of Medicine. 1991;32:606.
11. Pereira-Gray DJ, Sidaway-Lee K, White E, Thorne A, Evans PH. Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality. BMJ Open. 2018;8(6):e021161.
12. Baron RS, Cutrona CE, Hicklin D, Russell DW, Lubaroff DM. Social support and immune function among spouses of cancer patients. Journal of Personality and Social Psychology. 1990;59(2):344.
13. Black DS, Slavich GM. Mindfulness meditation and the immune system: a systematic review of randomized controlled trials. Annals of the New York Academy of Sciences. 2016;1373(1):13.psychosomatic research. 2005;59(4):255-60.
14. Fawzy FI, Fawzy NW, Hyun CS, Elashoff R, Guthrie D, Fahey JL, et al. Malignant melanoma: Effects of an early structured psychiatric intervention, coping, and affective state on recurrence and survival 6 years later. Archives of general psychiatry. 1993;50(9):681-9.
15. Haller H, Cramer H, Lauche R, Dobos G. Somatoform disorders and medically unexplained symptoms in primary care: a systematic review and meta-analysis of prevalence. Deutsches Ärzteblatt International. 2015;112(16):279.
16. Nimnuan C, Hotopf M, Wessely S. Medically unexplained symptoms: an epidemiological study in seven specialities. Journal of psychosomatic research. 2001;51(1):361-7.
17. Bermingham SL, Cohen A, Hague J, Parsonage M. The cost of somatisation among the working-age population in England for the year 2008–2009. Mental health in Family medicine. 2010;7(2):71.
18. Buszewicz MJ. Encouraging clinicians to work effectively with people with medically unexplained symptoms-is a change in underlying attitudes required? European Journal for Person Centred Healthcare. 2017;5(3):389-95.
19. Rief W, Martin A, Rauh E, Zech T, Bender A. Evaluation of general practitioners' training: how to manage patients with unexplained physical symptoms. Psychosomatics. 2006;47(4):304-11.
20. Salmon P, Ring A, Dowrick CF, Humphris GM. What do general practice patients want when they present medically unexplained symptoms, and why do their doctors feel pressurized? Journal of psychosomatic research. 2005;59(4):255-60.
21. Lamahewa K, Buszewicz M, Walters K, Marston L, Nazareth I. Persistent unexplained physical symptoms: a prospective longitudinal cohort study in UK primary care. Br J Gen Pract. 2019;69(681):e246-e53.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C

The doctor-patient relationship

INTRODUCTION

Michael Balint, in his book 'The Doctor, his Patient and the Illness' (1) introduces the idea of the doctor as a 'drug'. That is, how the doctor communicates with the patient can influence how the patient responds to their illness and treatment in the same way as a drug.

This claim is backed by a lot of evidence showing that the eventual outcomes of all diseases depend on the type of relationships that patients have with their carers. The chapter on Holistic Care outlines the evidence and mechanisms that support this claim. The relationship that doctors have with their patients is therefore at the core of being a clinician.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C

The doctor-patient relationship

Central to the therapeutic doctor-patient relationship is person-centred care, where care is personalised, enabling, and coordinated (2). Patient-centred care involves doctors being caring (3) and treating patients with dignity, compassion, and respect. Here, patients are partners who share the decision making and are supported to self-manage their own health and conditions (4).

As well as improving the outcomes from all diseases, a good doctor-patient relationship also results in improved patient satisfaction and adherence to treatment. It also benefits the doctor through better doctor satisfaction, well-being, and use of time, as well as fewer complaints from patients (5,6).

The concept of unconditional positive regard towards a patient (7), where a doctor accepts and supports their patient as they are, can be a powerful 'drug' in the therapeutic relationship. This does not mean that a doctor must always like what a patient says or does, nor put up with all behaviours. However, it does mean respect for a patient's right to self-determination and a willingness to do what is right for the patient and those around them.

Patients value being listened to and having their suffering acknowledged (8), and the power of being a witness to a patient's story cannot be underestimated. Indeed, it is sometimes all that is needed in a consultation. The further step of a doctor being thoughtfully positive and offering realistic hope during a doctor-patient interaction is often therapeutic for patients.

WHEN AND HOW TO OFFER REALISTIC HOPE IS WORTHY OF DISCUSSION WITH PEERS AND TEACHERS.

Clinical empathy is another key component of a therapeutic doctor-patient relationship, with empathy being "an experiential way of grasping another's emotional states... a perceptual activity that operates alongside logical inquiry" (9, p3). From a neuroscience perspective, empathy has evolved in the mammalian brain to form and maintain social bonds, and includes affective sharing, empathic understanding, and emotion regulation through interacting neural circuits (10).

The specific activity of emotional regulation is our ability to effectively manage and respond to emotional experiences, particularly when they feel overwhelming. The emotional labour of consulting with patients and working as a medical student and doctor cannot be underestimated. The effective regulation of emotion both reduces emotional distress and increases the possibility of empathic concern.

Strategies for emotional regulation include promoting our own well-being as medical students and doctors (rest, nutrition, exercise, etc.), developing constructive relationships and social support, and making time for reflection individually and as part of groups. Supportive learning and clinical environments are important protective factors in maintaining empathy and decreasing burnout in medical students and clinicians (11).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C

The doctor-patient relationship

Crucial to the therapeutic doctor-patient relationship is the initial 30 to 60 seconds at the beginning of the consultation. This is when the doctor and the patient have an opportunity to develop or re-establish rapport (responsiveness to signals and demonstration of understanding the patient) and trust. Roger Neighbour (12, p113-143) in his book 'The Inner Consultation', describes this first stage of the general practitioner consultation as connecting to the patient by focussing on the myriad of verbal and non-verbal cues, including what is being said, the quality of the speech, what is not being said, and body language. Furthermore, giving the patient time to talk uninterrupted in this time is not only "a matter of kindness, but also improves the diagnostic yield and efficiency of the consultation" (13, p355).



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C

The doctor-patient relationship

ACTIVE LEARNING

Use the 'Virtual Primary Care' resource (https://vpc.medicalschoolscouncil.org.uk) to gain access to consultations that demonstrate many of these concepts. You can search the resource of over 150 consultations under 'doctor-patient relationship' to find consultations that deal with these matters specifically.

Write a patient-centred history using the patient's own words and language, their perspective, and what matters to them most.

Reflect on a general practice clinic, either where you were the student doctor or where you were observing a GP, and think about the wider context of the consultations.

- What external factors supported the consultations, and what external factors challenged them? They could be, for example, to do with the environment, the general practice processes and distractions, or the emotional state of about shared decision-making? Does it vary between patients and, if so, which groups of patients seem to value it more?

Access the 'BBC Sounds' podcast on the 'Doctor-Patient relationship in general practice' (https://www.bbc.co.uk/sounds/play/m0005t8m). Listen to first 64 seconds of this 28-minute podcast. This section is on why patients see a GP.

- List the reasons, as you perceive them, that patients have for seeing their GPs.
- Listen from 1:43 to 3:00 of the podcast. This snippet is played by two actors and is based on real, anonymised interactions. One patient knows the GP well and the other patient does not.
- What does the GP do and say in the first 30 to 60 seconds of each consultation, and how does that affect the development of rapport, trust, and safety?
- What are the differences between the consultation where the patient knows the patient well and the consultation where the patient does not know the GP? What have you learnt from this exercise that you might try with your patients?
- What does your GP teacher do that addresses rapport, trust and safety when starting consultations?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C

The doctor-patient relationship

The Care Opinion website (https://www.careopinion.org.uk) is an open online platform for patient feedback and patient blogs.

- Look at the website to see what patients fed back about the care they received. You could look at this specific piece of feedback – https://www.careopinion.org.uk/opinions/662788.
- What did the GP specifically do that enabled the therapeutic doctor-patient relationship?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C

The doctor-patient relationship

RESOURCES

Reflections on the doctor-patient relationship by Moira Stewart (5)

The Inner Consultation by Roger Neighbour (12)

REFERENCES

1. Balint M. The Doctor, His Patient and the Illness. London: Pitman; 1957
2. Patients as Partners. The King's Fund. 2016. https://www.kingsfund.org.uk/publications/patients-partners. Accessed 07 July 2019.
3. Gillespie H, Kelly M, Gormley G, King N, Gilliland D, Dornan T. How can tomorrow's doctors be more caring? A phenomenological investigation. Medical Education 2018: 52: 1052–1063. doi: 10.1111/medu.13684
4. A Practical Guide to Self-Management Support. The Health Foundation. 2015. https://www.health.org.uk/sites/default/files/APracticalGuideToSelfManagementSupport.pdf. Accessed 07 July 2019.
5. Stewart M. Reflections on the doctor-patient relationship. BJGP 2005; 55: 793-801
6. Derkson F. Effectiveness of empathy in general practice: a systematic review. BJGP 2012; 63(606): e76-e84. doi.org/10.3399/bjgp13X660814
7. Rogers Carl. Client-Centred Therapy: Its Current Practice, Implications and Theory. Boston: Houghton Mifflin; 1951.
8. Dowrick C. Suffering and Hope: Helen Lester Memorial Lecture 2016. BJGP Open 2017; DOI: 10.3399/bjgpopen17X100605
9. Halpern J. What is Clinical Empathy? J. Gen. Intern. Med. 2003; 18(8): 670-674. doi: 10.1046/j.1525-1497.2003.21017.x
10. Ballant,J. And Campling,P. Intelligent kindness: reforming the culture of healthcare. Glasgow: Royal College of Psychiatrists; 2012
11. Decety J, Smith K, Norman G, Halpern J. A social neuroscience perspective on empathy. World Psychiatry 2006; 15(2): 54-58. doi.org/10.1111/j.0963-7214.2006.00406.x
12. Neighbour, R. The Inner Consultation. 2nd ed. Boca Flaton, Florida: CRC Press; 2005.
13. Donner-Banzhoff N. Solving the diagnostic challenge: a patient-centred approach. Annals of Family Medicine 2018; 16(4): 353-358. doi: 10.1370/afm.2264

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

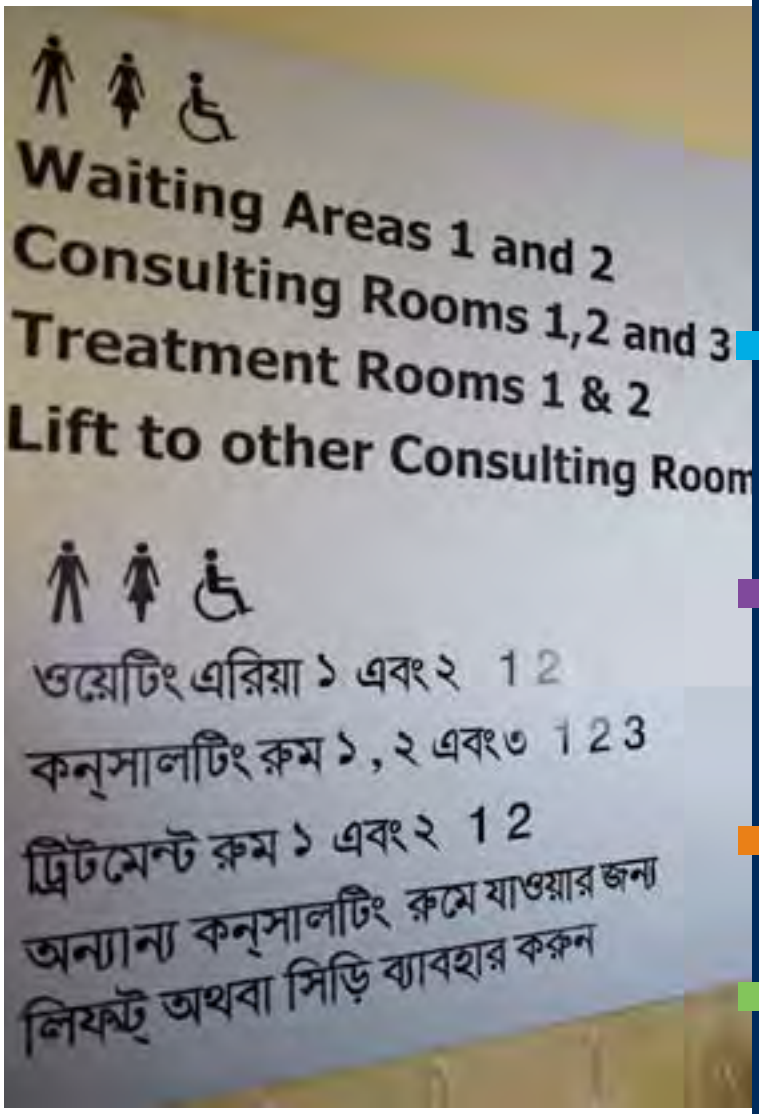
1C-i

Communication with patients of all backgrounds

INTRODUCTION

The doctor-patient relationship is at the heart of every GP consultation and the nature of that relationship has evolved over the years. In the past, patients were seen to be passive recipients of healthcare services with doctors making the key medical decisions. More recently, this relationship has evolved to one of doctors working in partnership with their patients to make the best decisions for them. Yet, in 2018, 17% of hospital inpatients did not feel they were involved in decisions about their care – a figure that has not improved in ten years (1).

Shared decision-making and collaborative co-production recognise that whilst the doctor may be the 'medical expert', the patient is the expert in their own values, preferences, circumstances, and illness experience and both are needed to support the best health outcomes for that individual patient.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

ASPECTS OF SHARED DECISION MAKING AND COLLABORATIVE CO-PRODUCTION

Shared decision making (SDM) is defined as *"a process in which clinicians and patients work together to select tests, treatments, management, or support packages, based on clinical evidence and patient's informed preferences"* (2). It appreciates that doctors and patients bring equally important expertise to the clinical encounter and acknowledges that there is an increasing expectation that people have the right to make decisions about their own healthcare (3,4).

SHARING EXPERTISE – FROM 'MAKING SHARED DECISION MAKING A REALITY: NO DECISION ABOUT ME, WITHOUT ME' (2)

Clinician's expertise	Patient's expertise
Diagnosis	Experience of illness
Disease aetiology	Social circumstances
Prognosis	Attitude to risk
Treatment options	Values
Outcome Probabilities	Preferences

SDM, DOCTORS AND PATIENTS WORK TOGETHER TO:

- Clarify goals
- Share information about options and preferred outcomes
- Reach mutual agreement on the best course of action (5).

SDM links with the concept of *collaborative coproduction* which views the outcomes of healthcare as coproduced by the patient and their healthcare team (6). For example, a patient's diabetic control can be influenced as much by the patient's actions as it is by medication and other medical interventions.

Viewing healthcare this way acknowledges that the doctor's role includes *enabling* the patient, that is, extending the scope of what they can do, rather than seeing the patient as a mere consumer of healthcare. Put simply, healthcare is something doctors do with patients and not just for them (2). Batalden et al. (6) devised a conceptual model aiming to illustrate the concept of co-production (see Figure 4).

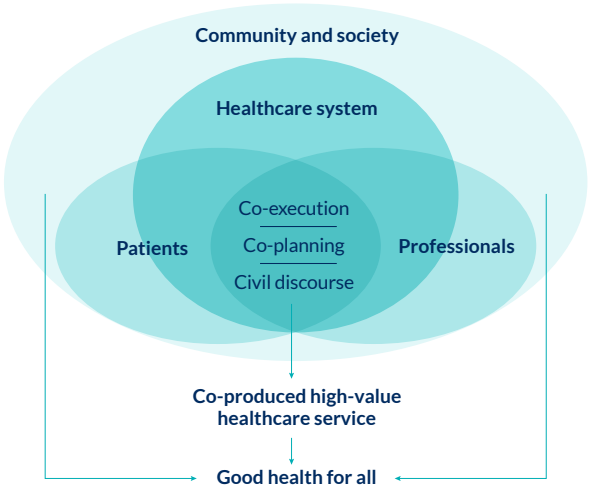


Figure 4 – Conceptual model of healthcare service coproduction – from 'Coproduction of Healthcare Service' (6).

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

In this model, the most basic level of interaction between a patient and a professional is *civil discourse*. Building on this, they can move to *co-planning* which involves establishing a deeper understanding of the expertise each brings to the interaction. NHS initiatives such as 'What matters to you?' aim to encourage such meaningful conversations between patients and those who support and are involved in their care.

At the highest level, *co-execution* emphasises the need for mutual trust as well as both parties appreciating their responsibility for the desired outcome. This relationship is then situated within the contexts of both the healthcare system and society.

THE IMPORTANCE OF SHARED DECISION MAKING AND COLLABORATIVE COPRODUCTION

Aside from the ethical imperative of patient autonomy (that is, that patients have a right to be involved in decisions about their own care), there is evidence that taking a SDM approach can have benefits for both patients and the health service.

The benefits of SDM include (7):

- Improved patient knowledge of their condition and treatment options
- Increased patient confidence to self-manage aspects of their own care
- Increased likelihood of adherence to a chosen course of treatment and participation in monitoring and prevention programmes
- Improved satisfaction with care and chosen treatment
- More accurate risk perceptions by patients
- Reduced length of hospital stays and readmission rates.

Shared decision-making is particularly beneficial for chronic health issues where self-management can make a significant difference to health outcomes (8).

FACILITATING SHARED DECISION MAKING AND COPRODUCTION

Various models and tools exist which can inform healthcare professionals' approaches to SDM. The three-talk model (see Figure 5 on the next page) identifies the key stages in the SDM process and was developed in conjunction with patients.

Medical decisions vary in their complexity. Some decisions are easy to make (such as when there is only one obvious treatment option) whilst others are more complex (less chance of success, range of options available). Therefore, it is recognised that not all stages of this process will always occur in a single clinical encounter. For more complex decisions, the strength of general practice is the rapport and trust built in an ongoing relationship between a GP and their patient as well as the ability to see patients back following their consideration of the available options.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds



Figure 5 – Three-talk model of shared decision making – from A three-talk model of shared decision making: multistage consultation process (9).

A variety of decision aids have been developed to help patients think about the different options available to them and what each might mean. There is no set format for a decision aid; it might be a leaflet or an online resource for them to work through. The key feature is that the decision aid allows the patient to access the information they want in a way that is understandable to them.

It is impossible to discuss SDM without considering the concept of health literacy. Health literacy (HL) is defined as the degree to which an individual has the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions (10). A doctor must not assume that all patients have the same level of health literacy; in fact, one study estimated that just under half of adults have inadequate health literacy (11).

Inadequate HL can affect an individual's ability to navigate healthcare, share their history, engage in self-care and understand key treatment and health concepts such as probability and risk. An individual's level of HL is shaped by several factors including the communication skills of both the doctor and the patient, culture, lay and professional knowledge of health topics, and the demands of the situation.

For example, for years it was incorrectly believed that exercise was bad for back pain. Now, we know that in, most cases, exercise can be beneficial for back pain. A skilful doctor could engage with and challenge a patient's flawed existing belief about their pain to enable them to self-manage more effectively. Communication skills teaching enabling doctors to explore patients' ideas, concerns and expectations (often referred to as ICE) is one way to starting to develop a shared understanding with patients.

FURTHER CONSIDERATIONS

THE ROLE OF TRANSLATORS

Translators help overcome certain challenges in the consultation, but can also increase the complexity. They provide a professional service which facilitates communication in the face of language barriers. They are the first to hear the patient's story and assimilate it before offering it back to you.

Professional interpreters are skilled in doing this in a way that minimises alteration to the patient's story. They should be impartial and interpret everything the patient says. They have a code of conduct which includes confidentiality.

The same is not always true of non-professional interpreters, who may include the patient's friends or family. The gender, ethnicity, and religious background (among other identities) of the interpreter may have an impact on what the patient shares or how that information is presented to you. This must

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

be borne in mind during the consultation. It is also important to remember that, if the patient is from an ethnic minority, it is possible that the interpreter could have been recruited from the same community. This makes revisiting confidentiality at the start of the consultation even more important.

Skills for managing triadic consultations can be helpful in this setting. Specific points for good practice are listed below.

Good Practice ✓

Good practice with interpreters key points

- Check the clients preferred language
- Preferred gender
- Are they literate?
- Use first person
- Address confidentiality with both parties
- Ask for everything to be interpreted and make sure patient is aware of this
- Do you understand the interpreter's English?
- Do the seating arrangements contribute to unhelpful relationship dynamics?
- Speak in small chunks, two to three sentences maximum
- Explain technical or specialist language
- If there is a misunderstanding, it is your job to explain things more simply
- Ask for clarification if there is a misunderstanding
- Summarise complex information regularly, ask the patient to tell you their understanding
- Retain responsibility for the session
- Non-verbal communication goes a long way.

CONSULTING WITH PEOPLE OF DIFFERENT CULTURAL ORIGINS AND ITS CHALLENGES AND REWARDS

Cultural diversity might also be described as 'identity diversity' (12) as it covers a multitude of factors which are woven into our understanding of ourselves and our place in the world. Best practice for consulting with people from different cultural origins is the same as for any clinical communication, as in many circumstances the consulter is likely to be different in some way to the patient. We all come with our own world view, shaped by our life experiences.

The important things to remember in terms of the consultation are the following:

- Prepare for communication – take time to familiarise yourself with the patient notes that you have. Ask yourself what your own biases might be before seeing the patient
- Create a supportive environment for the communication – use verbal and non-verbal communication skills for this, clarify how to address the patient, and ascertain what their ideas, concerns and expectations are early in the consultation (they might be different to the assumptions you have made)
- Be mindful of what you don't say – "…the non-verbal behaviour you use and your ability to pick up on and respond to the patient's cues are at least as important as your choice of words" (13)
- Encourage patient contribution
- Do not make assumptions
- Ask to understand – do not be scared to ask if you don't understand the patient's perspective
- Give information and explore the patient's understanding of this
- Share decision making.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

The challenges unique to communicating where there is diversity between practitioner and patient are:

- Making assumptions – based on our own beliefs or stereotyping
- Ignorance
- Failing to notice or interpret cues correctly
- Miscommunications
- Lack of empathy or compassion. In one study, minority patients with insufficient English were less likely to engender empathic responses from their physician, were more likely to receive less information generally, and were unlikely to be encouraged to develop partnership in decision making (14)
- Frustration (both practitioner and patient).

There are great rewards to be had from communicating well with someone else, particularly when that person holds a different view of the world to you. It improves practitioner job satisfaction as well as patient outcomes. As Ferguson et al (14). state "Effective communication skills lead to improved patient safety, symptom resolution and improvements in functional and psychological status." It can also lead to a deepening of the practitioner-patient relationship, which is central to so much of what we do in Primary Care. These conversations can enrich our own life experience by increasing our knowledge and understanding of other cultures and perspectives.

SENSORY COMMUNICATION CHALLENGES

Hearing loss is a common and invisible disability with around 1 in 6 people in the UK thought to have a degree of hearing loss.

How a person with hearing loss communicates will depend on:

- Their type of hearing loss
- Their personal history and preferences
- Whether they can use British Sign Language (BSL), lip-read, choose to wear hearing aid or a combination of these.

Even before you consult with your patient, a GP practice should be considering how accessible their surgery is to patients e.g. how easily can they book an appointment, how will they be called in from the waiting room and is an interpreter needed.

When communicating with a patient with hearing loss, they can often guide you how best to communicate them. This video from Hearing Link provides some useful points for consideration. You may also find the following tips helpful:

- Make sure your room is well lit and the patient can see you clearly
- If using an interpreter, talk directly to the patient and not the person interpreting for them (remember to consider confidentiality as discussed above)
- Make sure you have your patient's attention before starting to talk
- Maintain eye contact, using gestures and facial expressions to help explain – in particular, don't continue to speak while turning around to check something on the computer
- Speak in plain English using normal lip movement and speaking at your normal volume and speed
- Use written notes, diagrams or websites to help assist you explaining things
- Check understanding regularly.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

When a person is blind or has low vision, similar principles apply. Further specific considerations you may find helpful are listed in the table below.

Tip

Tips for communicating with patients with visual impairment

- Setting: avoid competing noise where possible. If your patient has some vision, position yourself where you can best be seen. Are there any physical obstacles that may be a risk in your environment?
- Introduction: Remember to identify yourself and your role – don't assume a person will recognise your voice. Ask first if any help is needed.
- Relax and be natural: speak naturally using everyday language continuing to use body language as this can affect the tone of your voice.
- If other people are present, make sure and introduce them.
- Indicating - don't leave a conversation without letting someone know and if giving directions be accurate and specific e.g. say 'the chair is on your right' rather than 'it's over there'

CONCLUSION

Despite policy advocating SDM for many years, it is still not universal. Some doctors perceive that they are 'already doing it' while others remain to be convinced of the value, especially for those with low health literacy (2). SDM must not just be an approach for the well-educated middle class. Many patients can be encouraged and empowered to be active partners in their own care with resultant better health outcomes.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

ACTIVE LEARNING

Watch Dr Kieran Sweeney talk about his experience as a cancer patient – highlighting the transactional and relational aspects of good medical care from a patient's point of view.

During a surgery, focus on how your GP tutor is working in partnership with patients to make key decisions:

- How applicable did you find the 3-stage model to what you are seeing in practice?
- What techniques are they using to involve patients in decision making?
- How are they empowering patients to be partners in their own healthcare?

Try putting yourself in a patient's shoes – identify some key patient decisions being made during a surgery and think what decision you might make in the same situation. What informed your decision?

Have a look at some of the decision aid resources that area available online to help doctors and patients with SDM. How useful do you think these might be? Why do you say that? What information would you want to consider? E.g.

- AF medicines to reduce risk
- Statin to prevent CV disease
- Stopping smoking

Watch the following videos to consider some of the issues around interpreted consultations and use of interpreters further:

- https://youtu.be/QNtTPHzIC2c
- https://youtu.be/74kKWrhTKbI

What were the issues? What went well?

Consider the impact of the COVID pandemic on accessibility of general practice. In particular, think about how this may have impacted consultations with patients requiring interpreters or with sensory impairment. You might want to listen to the RNIB Supporting people with sight loss podcast series to get some ideas.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

RESOURCES

- NHS England Shared Decision-Making Guide
- Realistic Medicine
- Making Shared Decision Making a Reality: No decision about me, without me
- Read up about the House of Care model in 'Delivering better services for people with long-term conditions. Building the House of Care' (15).

REFERENCES

1. NHS Patient Survey Programme 2018 Adult Inpatient Survey Statistical release [Internet]. 2019 [cited 2019 Jul 11].
2. Coulter A, Collins A. MAKING SHARED DECISION-MAKING A REALITY No decision about me, without me [Internet]. [cited 2019 Jul 8].
3. REALISTIC MEDICINE Chief Medical Officer's Annual Report 2014-15 Chief Medical Officer's Annual Report 2014-15 REALISTIC MEDICINE Letter to doctors from the Chief Medical Officer for Scotland [Internet]. [cited 2019 Jul 8].
4. Good medical practice – GMC [Internet]. 2018 [cited 2019 Jul 8].
5. Lloyd M, Bor R, Noble L. Clinical Communication Skills for Medicine. 4th ed. Edinburgh: Elsevier; 2019.
6. Batalden M, Batalden P, Margolis P, Seid M, Armstrong G, Opipari-Arrigan L, et al. Coproduction of healthcare service. BMJ Qual Saf [Internet]. 2016 [cited 2019 Jul 8];25(7):509–17.
7. CQC. Better care in my hands [Internet]. [cited 2019 Jul 11].
8. Bodenheimer T, Wagner EH, Grumbach K. Improving Primary Care for Patients With Chronic Illness. JAMA [Internet]. 2002 Oct 9 [cited 2019 Jul 10];288(14):1775.
9. Elwyn G, Durand MA, Song J, Aarts J, Barr PJ, Berger Z, et al. A three-talk model for shared decision making: multistage consultation process. BMJ [Internet]. 2017 [cited 2019 Jul 8];359:4891.
10. Nielsen-Bohlman L, Panzer AM. Health literacy: a prescription to end confusion. Choice Rev Online [Internet]. 2013 [cited 2019 Jul 10];42(07):42-4059-42–4059.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1C-i

Communication with patients of all backgrounds

11. Making it Easy – 2017 progress report [Internet]. [cited 2019 Jul 10].
12. Sayed M. Rebel Ideas: The Power of Diverse Thinking. 2019. John Murray Press. Page 14-15
13. Silverman J, Kurtz S, Draper J. Skills for Communicating with Patients. Third Edition. 2013. Page 239)
14. Ferguson WJ and Candib LM (2002). Culture, language and the doctor-patient relationship. Fam Med. 34(5):353-61
15. Coulter A, Roberts S, Dixon A. Delivering better services for people with long-term conditions Building the house of care [Internet]. 2013 [cited 2019 Jul 9].

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1D

Continuity of care

INTRODUCTION

The biopsychosocial model suggests that psychological and social factors are key elements in disease outcomes. To talk about these issues, patients must feel comfortable and trust doctors. The doctor-patient relationship is therefore crucial, and continuity is a key way in which the relationship and trust between doctor and patient can develop. Continuity means a patient seeing the same health professional repeatedly. It has been studied in detail with doctors and with current IT systems it can now easily be measured. Continuity can be a difficult concept to appreciate if you have not been a patient and it is easy to overlook if you are observing single consultations. For this reason, we encourage all students to follow a panel of patients whilst attached to GP surgeries. A 'panel patient' is one that you follow up repeatedly over perhaps a year or so. Concepts such as continuity tend to come to life through this experience.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1D

Continuity of care

TYPES OF CONTINUITY

1. **RELATIONAL CONTINUITY**

   This refers to the human relationship which develops over time between a patient and a doctor. It is difficult to measure the strength of the relationship so, in practice, proxies are used. For example, the number of times a patient and doctor have seen each other, or the proportion of time spent with a named doctor.

2. **LONGITUDINAL CONTINUITY**

   This refers to the duration of time over which a patient sees the same doctor. It can be measured simply as the duration of registration with a general practice, for example.

3. **INFORMATIONAL CONTINUITY**

   This refers to the maintenance of records over extended periods of time and subsequent communication of this information between colleagues, such as referrals.

ADVANTAGES FOR PATIENTS

Continuity is important to patients for several different reasons. Firstly, at a social level, it is easier to talk to someone you know, and patients with complicated histories or multiple conditions very much dislike repeating their story to 'strange' doctors.

However, the medical significance of continuity has recently become apparent with six major findings:

- Greater patient satisfaction (1)
- Better adherence to medical advice (2)
- Better uptake of preventative care (3)
- Lower use of accident and emergency departments (4)
- Lower emergency hospital admissions (5)
- Lower death rates (6).

The final finding - that there is a significant association between continuity and lower mortality – is a striking indication of how important continuity is, and how it must encapsulate a whole range of different factors.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1D

Continuity of care

ADVANTAGES FOR DOCTORS

Doctors also benefit substantially from continuity of care. One study reported that general practitioners gain great satisfaction form tailoring management to meet the needs of individual patients.

Of course, working with more satisfied patients is highly preferable for doctors. The fact that patients will adhere to advice and accept immunisations and cancer screening improves quality of care and makes life easier for the doctor. There are important associations with dissatisfaction and complaints so that Lings et al. (7) found that patients will forgive doctor errors if they occur within a good doctor-patient relationship. American research suggests patients are less likely to take legal action against doctors with whom they have had continuity and built a good relationship.

ORGANISATION OF CONTINUITY

Ultimately, continuity of care depends on attitude of mind in the general practice and hospital service and it is not inherently more expensive to provide. In general practice, it is more cost effective because doctors do not have to explore the record in detail if they know the patient well, and can often take decisions more quickly than they can with strange patients.

One particular management technique in general practice is called 'personal lists', in which every patient is allocated a named doctor. Practices that use these have been shown to provide greater continuity and to have patients who are significantly more satisfied.

There may be other ways to encourage continuity, such as patients seeing the same doctor for a given health episode, or for part-time doctors to have 'buddy' arrangements, so that continuity can be achieved with two doctors. Research is continuing to elucidate how different aspects of practice organisation can help or hinder continuity.

ADVERSE EFFECTS

The disadvantages of continuity include patients developing dependency on a given doctor. Also, sometimes doctors develop 'blind spots' with patients that they know well, and it takes another doctor to make the diagnosis. Some also argue that increasing patient demand, the advent of the multidisciplinary team, and limited health resources makes continuity difficult to implement in practice.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1D

Continuity of care

ACTIVE LEARNING

Use the 'Virtual Primary Care' (VPC) resource (https://vpc.medicalschoolscouncil.org.uk) and search for 'continuity of care'. There are several sequential consultations in which continuity is demonstrated..

Speak to your panel patients about their experiences of continuity. For example, do they have a doctor they see as being 'their' doctor? Is seeing this doctor the same as seeing any other GP?

If possible, think about patients you have seen more than once. Did it make things easier? Did you feel more of a connection?

Try looking at some general practice websites. Do they mention continuity of care, or that they encourage patients to see the same doctor?

Chat to some reception staff in your placement about whether they try to get patients in to see the doctor of their choice or, alternatively, the next available doctor.

At family events, get older relatives to talk about seeing the same doctor. Most have a story to tell – good or bad!

Think about the research evidence for continuity. What do you find the most interesting?

What changes would need to take place at your practice in order to offer more continuity?

Discussion point with your gp: ask your gp if they think continuity is important and why.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1D

Continuity of care

RESEARCH

1. Barker I, Steventon A, Deeny SR. Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: cross sectional study of routinely collected, person level data. BMJ. 2017; 356:j84.

   This paper looked at a large cohort of older people and found that those who had higher levels of continuity of care had fewer admissions for conditions which, in theory, could be managed in primary care. This study used the easy-to-understand Usual Provider Continuity (UPC) index, which simply measures the proportion of contacts that are with the most-seen GP. Interestingly, it also showed how continuity varied with practice size. This paper highlighted how much money might be saved through good continuity of care.

2. Pereira Gray D, Sidaway-Lee K, Thorne A, White E, Evans PH. Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality. BMJ Open 2018; 8:e021161

   This is a systematic review summarising 22 primary research studies, all published since 2010. It found that most of them showed that increased continuity was associated with lower mortality. All the studies summarised in the review are observational, so they show associations rather than causality. To solve this, many of the studies use sophisticated study designs and statistical methods to minimise confounding factors and reverse causality. There are also some interesting suggested mechanisms for the association.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1D

Continuity of care

RESOURCES

The Longest Art by Kenneth Lane, London – RCGP.

RCGP Continuity of care

Article Improving continuity: THE clinical challenge

Article Continuity of care: an essential element of modern general practice?

REFERENCES

1. Baker R, Streatfield J. What type of practice do patients prefer? Exploration of practice characteristics influencing patient satisfaction. Br J Gen Pract 1995; 45:654–659.
2. Warren JR, Falster MO, Tran B, Jorm L. Association of Continuity of Primary Care and Statin Adherence. PLoS One. 2015;10:e0140008
3. O'Malley AS, Mandelblatt J, Gold K, Cagney KA, Kerner J. Continuity of care and the use of breast and cervical cancer screening services in a multiethnic community. Arch Intern Med. 1997 14; 157:1462-70.
4. Sweeney K, Pereira Gray D. Patients who do not receive continuity of care from their general practitioner: are they are vulnerable group? BJGP 1995 45(392):133-5
5. Barker I, Steventon A, Deeny SR. Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: cross sectional study of routinely collected, person level data. BMJ. 2017; 356:j84.
6. Pereira Gray D, Sidaway-Lee K, Thorne A, White E, Evans PH. Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality. BMJ Open 2018; 8:e021161
7. Lings P, Evans P, Seamark D, Seamark C, Sweeney K, Dixon M et al. The doctor--patient relationship in US primary care. JRSM. 2003;96(4):180-184.
8. Chen C C, Tseng C H, Cheng, CH. Continuity of care, medication adherence, and health care outcomes among patients with newly diagnosed type 2 diabetes: a longitudinal analysis. Med Care. 2013; 51: 231–237.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E

Long-term conditions

INTRODUCTION

Long-term conditions (LTCs) account for the majority of presentations to both GPs and hospitals. We have already seen how important the doctor-patient relationship and continuity of care are. It is in LTCs that these principles take centre stage. In this section, we apply the principles of generalist clinical reasoning, relationship-building and continuity to the three stages of an LTC:

1. Diagnostic stage
2. Maintenance stage
3. End-stage

Throughout part of this section we highlight the key issues that patients face, together with some suggestions to help them through. There is quite a lot to get through, so each of the three stages has its own introduction, need to know, practical learning, and further learning sections.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-i

Long-term conditions: diagnostic stage

The conditions around receiving a diagnosis have a profound influence on patients and they often remember the moment for the rest of their lives.

Breaking bad news around an LTC is therefore an important skill. Here is a summary of points to remember (1):

- Prepare adequately; know the diagnosis and rationale/evidence.
- Briefly summarise where things have got to.
- Give a warning to prepare, for example, "this isn't good news I'm afraid".
- Give basic information in small 'chunks' and do not use euphemisms, for example, do not say 'growth' when it is cancer. This is because people frequently switch off in very stressful situations and blank out what has been said; see the 'denial phase' below.
- Repeat the important points.
- Pause frequently and check how the patient is feeling.
- Make sure that there is a plan. Who will the patient contact for support? What is happening next? When will the next appointment be?

After being told a diagnosis, patients can be greatly affected for a period of months or years. Some of the behaviours have been identified and can follow a pattern commonly described as the grief cycle (2).

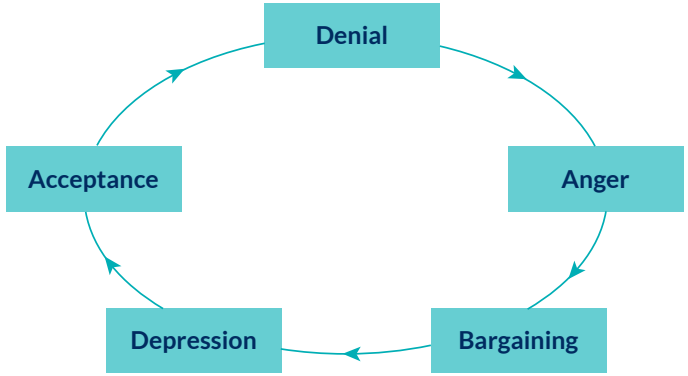


Figure 6 – The Grief Cycle (Adapted from Kubler-Ross)

For each of the following stages, we will consider what might happen to a patient who is told that they have diabetes.

DENIAL (OR NUMBNESS/SHOCK) PHASE

Patients often enter a stage of disbelief or denial. The numbness refers to the state of mind, for instance, "I still can't believe I really have diabetes – the doctor just said it was a bit of sugar".

MANAGEMENT:

- Support at this stage is crucial in forming any kind of relationship.
- Information should be kept to a minimum initially and even this may need repeating several times.
- It may be useful to specifically mention the words, 'diabetes' or 'diabetic'. This will help prevent denial setting in. Euphemisms such as "a bit of sugar in the water", "very mild sugar problem" should be avoided if possible.
- Establishing a working relationship with other family members may well be worth it at this stage. A joint appointment with the spouse/partner may be appropriate.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

1E-i

Long-term conditions: diagnostic stage

ANGER (OR HIGH EMOTION) PHASE

Patients realise that the diagnosis is irreversible and permanent. Strong feelings are associated with this stage. Anger, anxiety, and fear may all be directed outwards (for example at relatives or medical staff) or inwards at the self, leading in many cases to depressive feelings.

MANAGEMENT:

- In the weeks and months following diagnosis, ask specifically about emotions surrounding the diagnosis. The patient must be given time to express their feelings surrounding the diagnosis. Non-judgemental support is necessary, although at times this may be difficult.
- Some recommend patients write down all the changes that the diagnosis entails. This is not only therapeutic for the patient, but also may be helpful for the family adjusting to new roles that may have to be taken.

BARGAINING PHASE

There is an acceptance that 'life will be different now'. Work begins on building new roles and tackling practical diabetic problems.

MANAGEMENT:

- The patient may benefit from information about diabetic clubs, Diabetes UK, etc. Role models are important.
- A problem-solving approach (see below) may be needed. The patient may need to be encouraged to find solutions to her own problems. It may be important to avoid being didactic at this stage.
- Prolonged helplessness or dependency, together with a failure to adjust to new procedures and roles, may sign problems with resolving this stage of grieving.

ACCEPTANCE

The diabetes is now seen by the patient in context with his life. Old and new roles are integrated.

MANAGEMENT:

- The patient may need encouragement in taking up old hobbies or roles.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-i

Long-term conditions: diagnostic stage

ACTIVE LEARNING

Ask a patient with a chronic condition what it was like when they were diagnosed. Ask them to tell you the story.

From their reply, try to gauge how (if at all) the patient went through the stages of the grief cycle.
You could show the grief cycle to your patient as a prompt; does it seem to resonate with their experiences?

What do you think of the grief cycle as a concept? Do humans move seamlessly through predictable stages?
What might complicate this?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-i

Long-term conditions: diagnostic stage

RESOURCES

Try watching Steel Magnolias or The Cider-House Rules for an insight into living with chronic diseases (diabetes and asthma respectively). For the grief cycle and breaking bad news, try watching Terms of Endearment (don't forget the hankies).

Try reading Love in the Time of Cholera by Gabriel Garcia Marquez. You can buy books second-hand on Amazon for a matter of pennies, or even better, trawl a second-hand bookshop on a rainy day with a decent coffee.

REFERENCES

1. Silverman,J. Kurtz,S. and Draper,J. Skills for communicating with patients. Florida; CRC Press
2. Kubler-Ross, E. (1989). *On death and dying.* London; Routledge

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

INTRODUCTION

As we have seen, patients can be helped through different phases of the grief cycle so that they are better able to deal with the effects of the initial phase of an LTC.

However, established LTCs change, and helping people to change to adapt is therefore vital so that they feel more in control.

Three interrelated concepts can help here. Firstly, the change cycle is a very powerful conceptual tool that can help us understand the stages of change.

Secondly, a knowledge of *health beliefs* can help us understand how our patients may engage with health-related change. Finally, *a motivational, solution-focussed, or problem-solving approach* to change has been shown to be a highly-effective strategy that can be employed by health workers to facilitate change.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

HEALTH BELIEFS

Health beliefs are several factors that together have a large effect on patient behaviour regarding illness. These behaviours include:

- Seeking medical help
- Adhering to medical advice
- Ability to change health behaviours such as smoking, drinking, and other lifestyle factors.

Health beliefs can be profoundly shaped by previous experiences of illness, either personally or through seeing the effects of illness on others. It is therefore always worth asking patients about their previous experiences of illnesses.

Excercise

What words would you use to ask about this?
Write them down.
Redraft the words.
Then, practice asking patients about health beliefs.

Research has identified several variables that can be modified in attempts to alter patient behaviour regarding maladaptive health beliefs. Many of the research results are surprising, and may challenge your own beliefs.

SUSCEPTIBILITY

When trying to convince someone of the benefits of medical advice (for example, giving up smoking), it is highly effective to emphasize susceptibility to the ill effects rather than the ill effects themselves. Generations of health workers have attempted to 'scare' patients through cataloguing gruesome outcomes of diseases - to very limited effect. You should never try and scare patients like this, it is an abuse of your privileged position and highly ineffective in changing behaviour. Through the principle of 'reactance', the 'scare' approach often results in behaviours becoming more ingrained. What is more effective (and subtle) is to emphasise how susceptible an individual patient is to the ill effects of a behaviour, as many think themselves immune. For example, "because you have asthma, the research shows that you will be more susceptible to the effects of smoking".

SEVERITY

As above; although it is a factor in patient's health decisions, oddly the severity of the effects of not taking advice is a relatively unimportant factor. For example, stressing a long, painful death from lung cancer is unlikely to be effective in changing health behaviours.

BENEFITS

Stressing the benefits of following advice is far more effective than stressing the ill effects of not following advice. For example, "most smokers clear the muck after the first week and breathing tests improve after a month, and after this the blood vessels begin to get wider, allowing you to do more things".

BARRIERS

Addressing barriers to change is probably the most important part of behaviour change, once you have established that someone does want to change. What does the patient perceive as barriers to change? Often these barriers are overvalued, so working to minimise the difficulty of these barriers is highly effective.

PATIENT MOTIVATION

Here the work of Prochaska and DiClemente (1) is especially important. They identified several stages concerning motivation to change we will examine these stages in detail in the next theme.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

PATIENT INTERVIEW:

USING HEALTH BELIEFS IN MOTIVATIONAL INTERVIEWING

If you get to see a patient on placement, try enquiring about their health beliefs. A 'panel patient' for students doing longitudinal placements would be ideal. Useful areas to ask about may be their medication (do they take it regularly?), lifestyle (diet, exercise), and habits (smoking or alcohol consumption). Here we are going to use the example of smoking, but you can easily adapt this for use in any other area.

- Have you ever thought (*gauging intention*) about reducing your smoking?
  If the patient is a 'happy smoker' (*pre-contemplation stage*) tread carefully. It is very unlikely that they will want to quit after talking to you, and they may become annoyed if you persist in questioning or they perceive that you are trying to sneakily make them quit.
- How do you think smoking affects you (*susceptibility/severity*)?
- How do you think smoking might affect you in the future (*susceptibility/severity*)?
- What do you think the benefits of reducing or stopping smoking may be?
- What is stopping you (barriers) from stopping smoking right now?

For the barrier and motivation questions (remember exploring barriers and motivation are the most important areas in behaviour change), try the following structure. This is based on *motivational or solution-focussed therapy.*

- Allow the patient to talk in an unstructured way first.
- Then ask *scaling questions*, for instance "on a scale of zero (no confidence) to 10 (maximum confidence), how confident are you about giving up smoking or changing your weight?"
- A list of things may now appear about stuff that is preventing the patient from changing.
- Now ask how the patient can go up one level on the scale (e.g., from three to four). For instance, "So, you said you felt you were a 'three' regarding giving up smoking. How would you get to a 'four'? What would have to change?"
- Then start exploring each of the barriers and/or issues that the patient brings up. Each of these issues can be scaled and documented, and potential solutions can be offered and then returned to in future conversations. For example, "So, you rated your ability to say no to cigarettes at the pub as a 'five'. What would get you to a 'six'? What would have to change?"

In summary, for any given barrier or issue:

- Scale it.
- How would you progress one –point, e.g., from three to four?
- Explore what resources the patient might have to address the issue. "Who do you think might help with this? What has worked in the past?"
- How might the patient feel if it was resolved?
- Return to this issue and see how the patient has done in future meetings.

Can you see how this might give a structure to your meetings with patients regarding behaviour change?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

THE CYCLE OF BEHAVIOUR CHANGE

In the last section, we looked at health beliefs and motivational interviewing. As part of this, we considered the patient's motivation to address health-related issues. We are now going to use these insights to develop a more comprehensive approach to managing change. When going through change, people commonly experience several predictable thoughts and behaviours. Prochaska and DiClemente (1) identified a cycle of change outlining the key stages.

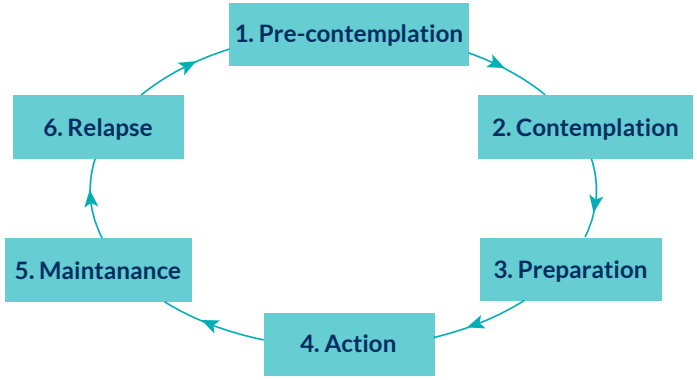


Figure 7 – The Grief Cycle (Adapted from Kubler-Ross)

Let's take a look at each of these stages:

1. **Pre-contemplation:** No health (or other) disadvantages are perceived. There is little point in trying to 'persuade' people in this stage to change behaviours. Evidence suggests that the most effective intervention at this stage is providing people with information, and most general practice IT systems have information leaflets that can be printed. A useful icebreaker with patients to gauge where they are at is to ask the question, "Have you ever thought about giving up/reducing…?"
2. **Contemplation:** Consideration is given but doubts remain. Remember, it is more effective to address barriers to change, rather than stressing the advantages of change. For example, "Can you tell me what is stopping you right now from quitting?" Look over the 'health beliefs' information as this is highly relevant here.
3. **Preparation:** A commitment to change is made. Remember 'chunking': breaking a behaviour into manageable chunks. For example, telling friends and family about intention to quit, setting a quit date, removal of smoking paraphernalia, reading 'The easy way to give up smoking' (2). If you do smoke (or even if you do not), try reading this book to see how an understanding of behaviour change can result in highly effective change strategies.
4. **Action:** Do not underestimate the power of positivity! Health professionals are held in very high regard by the public and enjoy the highest public trust ratings. Use this as a powerful tool by giving encouragement to patients. Don't be shy; remember how nice it is to be complemented.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

5. **Maintenance:** Go over situations that may lead to relapse. For example, "What will you do on your coffee break?" and "What are you going to do at the pub when your friends offer you a cigarette?"
6. **Relapse:** Above all, try not to appear judgemental. Remember your patient may be disappointed or angry. Try and stay positive and remember it takes multiple attempts to change. Gauge at what stage your patient is at and start again.

As with all theoretical models, the cycle of change does not really do justice to the 'messiness' of change in practice. Some people change behaviours overnight, whereas for others, change is a process played out over years with relapses and subsequent re-entry into the cycle of change. It is useful to remember that, on average, it takes six attempts to give up an ingrained behaviour. One of the secrets to successful behaviour change is patience and persistence.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

ACTIVE LEARNING

Focus on how GPs at your practice deal with health seeking behaviours in consultations.

Ask your GP about a patient with challenging health seeking behaviours - what do they do about it?

Begin to experiment with these approaches with your panel patients. Do they have health-related behaviours that might benefit from some of these approaches? You might be surprised at the results; often doctors and nurses simply will have not had the time to try motivational approaches and patients will appreciate your concerns.

Find out if your practice does smoking cessation or weight management clinics. If they do, you could ask to sit in on one.

If you know a patient well - for example, a panel patient on a longitudinal placement - you could try adopting a cycle of change approach to helping the patient change an aspect of their health behaviour (e.g. smoking, diet, weight).

- Identify at what 'stage of change' you patient is at.
- Once this is done, use appropriate approaches, such as using the scaling questions, to help your patient progress to the next stage.

Look out for conversations about health behaviour change and try and gauge at what stage patients are at. What would you do if you were the doctor?

Try asking your placement partner. some questions about a behaviour that they would like to change (nothing too heavy please!). Try using this motivational approach to help them change. Ask them what it was like to be asked questions in this way – you may be surprised.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-ii

Long-term conditions: maintenance phase

REFERENCES

1. PROCHASKA, J. O., DICLEMENTE, C. C., & NORCROSS, J. C., 1992. In search of how people change: Applications to addictive behaviors. American psychologist, 47, 1102.
2. Carr,A. (2015). The easy way to stop smoking. London; Penguin.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

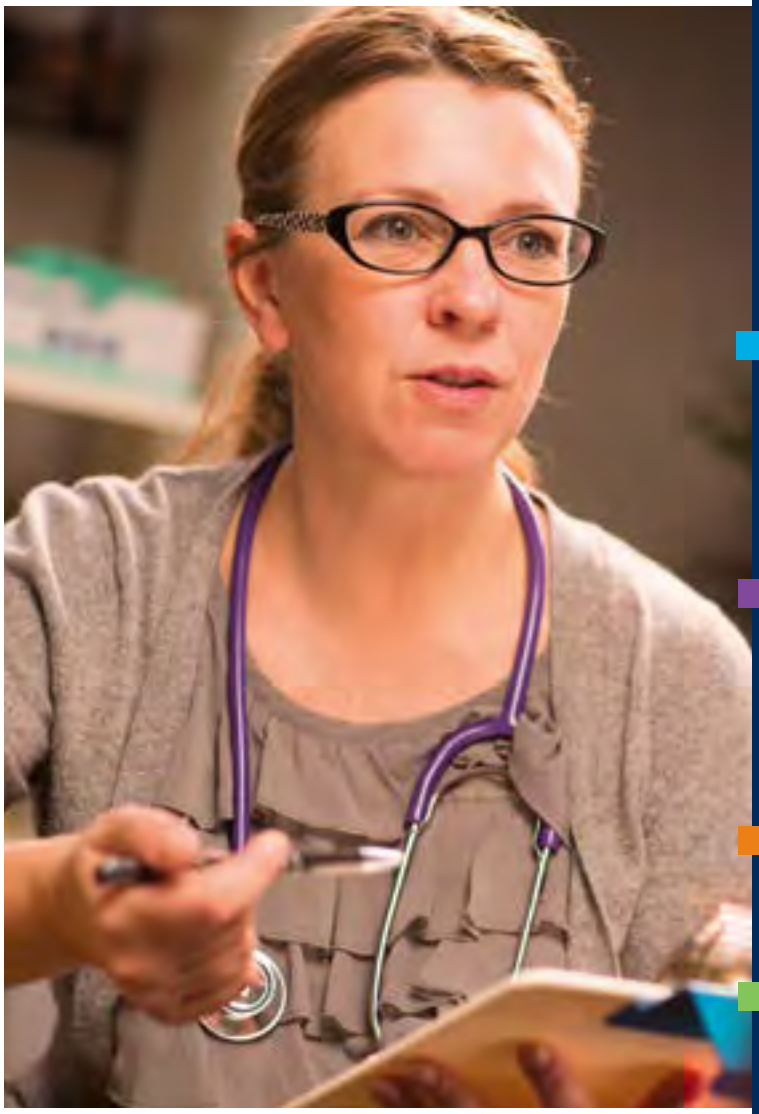
CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

INTRODUCTION

Defining the end-stage phase or palliative care can be difficult, but the key is remembering that it is not just about cancer patients, but patients with many other life-threatening conditions which have reached an end-stage point in their trajectory.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

IS THERE A DIFFERENCE BETWEEN END-OF-LIFE CARE AND PALLIATIVE CARE?

End-of-life care (EOL) care includes palliative care. If one has an illness that can not be cured, palliative care is to make one as comfortable as possible, by managing pain and other symptoms. It also involves psychological, social, and spiritual support for the patient and their carers. This holistic approach deals with the 'whole' person, not just the illness or symptoms, and so it is a patient-centred approach. Palliative care can be used early on in an illness whilst one is still receiving active therapies.

End of life care: What it involves and when it starts

Marie Curie define EOL care as involving treatment, care and support for people who are nearing the end of their life and which is an important part of palliative care.

Marie Curie: Palliative care end of life care

SYMPTOM CONTROL

Good palliative care comprises two aspects:

1. Communication control
2. Symptom control

to help facilitate what is sometimes referred to as a 'Good Death'.

The science of symptom control is the easier part, or at least it can be learnt and assessed.

CONSULTING AND TALKING TO DYING PATIENTS

Talking about dying is difficult. Freud in 1915 reflects why (1):

> Our own death is indeed unimaginable and whenever we make the attempt to imagine it we can perceive that we really survive as spectators... at bottom no one believes in his own death, or to put the same thing in another way, in the unconscious every one of us is convinced of his own immortality.

When talking to a patient about dying it reminds us both of our own mortality and so:

- Is it death we are frightened of, or not being here?
- Is it the anxiety and fear through the anticipation of dying?

Tip

Talk to the patient, gain their trust and keep talking...

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

THE TRANSITION FROM 'BEING' TO 'UN-BEING'

Author Gavin Maxwell describes 'spiritual' pain as the solitary moment of moving from 'being to un-being' when he was dying of cancer. The theme of illness as a threat to our very being is also described by Berger in his book, A Fortunate Man:

> "As soon as we are ill we fear that our illness is unique. We argue with ourselves and rationalize, but a ghost of the fear remains. And it remains for a very good reason. The illness, as an undefined force, is a potential threat to our very being."

The concept of spiritual pain or spirituality is not necessarily related to a religious faith, but also includes unresolved personal conflicts.

Tip

Don't neglect a patient's spiritual pain…

WHAT DO PATIENTS WISH TO KNOW?

In the last 60 years, there has been a change from being doctor-centred to patient-centred. In the 1960s, doctors preferred to not to tell cancer patients the truth. By the 1980s, most doctors realised that patients wanted to know and did not want to be protected by the information being withheld, and so became more open about talking to dying patients.

Psychotherapist Michael Balint wrote in 1957 about the doctor-patient relationship in his book, 'The doctor, the patient, and his illness' describing how doctors needed training to explore ideas, concerns, and expectations in a consultation.

Hopefully, they would come to a shared understanding and have an agreed negotiated management plan which can only be achieved by talking to the patient. This is now generally accepted practice of communicating with patients approaching the EOL. For more on shared decision-making, see the section on uncertainty in clinical decision-making.

DYING – WHAT WORRIES PATIENTS AND DOCTORS?

A USA paper in 2000 (1) considered the factors important at the EOL by patients and doctors through a survey.

The issues important to patients were:

- Being mentally aware
- Being at peace with God
- Not being a burden to family or society
- Being able to help others
- Prayer
- Planned funeral arrangements
- Feeling one's life is complete.

Doctors thought the following of importance:

- Pain control
- Symptom control
- Depression
- Cure.

Tip

Never make assumptions when caring for a dying patient, ask them what worries them the most…

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

PATIENTS REACHING ACCEPTANCE THAT THEY ARE DYING

Atul Gawande, an American Surgeon, in his book 'Being Mortal' writes:

> Arriving at an acceptance of one's mortality is a process, not an epiphany.

For many, death is a taboo subject. In the 1960s, Kubler-Ross, a Swiss-born psychiatrist working in the USA, described her 'five stages of grief' (see five stages of grief), where the final stages are moving to acceptance of illness. Many patients do not reach the stage of acceptance, but remain in a new stage of 'resignation'. Talking to the dying, to help them accept their fate, should take into account the personal conflicts with family and friends in enabling a person to re-order their priorities and let go.

Tip

Remember that many patients are not in acceptance of their fate, but rather resigned to it…

DO NOT ATTEMPT RESUSCITATION FORM

In many parts of the country, to help clinicians to make immediate decisions that respect the person's wishes and their clinical needs, discussions should be had with the patient to complete a ReSPECT form which includes Do Not Attempt Resuscitation form (DNAR) instructions.

TEP forms are an alternate name for these. Ask your placement provider to show you these forms.

SYRINGE DRIVERS

Inevitably, palliative care pathway patients seem to end up with a syringe driver in case of pain or perceived distress. Here the 'doctrine of the double effect' comes into place. The intention is to relieve symptoms, but the use of opiates may unintentionally hasten death. It is important to adequately communicate with the patient and relatives to make sure that they are aware and have consented to the use of a syringe driver. It is all too easy to fall into a trap, in which there is a fine dividing line about the use of a syringe driver for symptom relief of the patient and placating distressed relatives.

Tip

Dying patients do not fit guidelines and pathways. Talk to the patient, find out what they want…

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

‘CONSPIRACY OF SILENCE’

Elizabeth Kubler Ross also coined the phrase ‘conspiracy of silence’. It still happens that a patient has a very good idea of what is happening to them when they are dying, but no one is talking to them about it directly. Relatives may be well-intentioned by not wanting their loved one to suffer through such information.

Tip

Try not to exclude a patient from conversations that affect them, matter how well-intentioned, unless that is their request…

INFORMAL CARERS

Most care is done by family and this 24-hour-a-day workload can take its toll. GPs need to ensure that the health of the carer is maintained, and they involve them when talking to the patient.

Tip

Remember the needs of the informal carer…

LOOKING AFTER YOURSELF AND HANDING OVER CARE

Caring for the dying, if done well, can be exhausting. Ideally, you follow up and care for a patient from the time of diagnosis through to death. This means continuity of care, a named clinician who sees the person regularly to anticipate crises, and avoiding unnecessary emergency hospital admissions (see about the section on continuity of care). Sometimes doctors need a break. They must make sure that full details of the patient’s care be made available (that is, diagnosis, management plan, and medication) to any doctor deputising for that patient care.

BEREAVEMENT

Bereavement is an unintentionally neglected part of palliative care. See the previous section about the grief cycle for more information about this.

Tip

Palliative care does not stop with the death of a patient, but continues with the needs and care of the bereaved. It is greatly valued by those who are left…

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

ACTIVE LEARNING

In terms of symptoms, revise the Analgesic Ladder and the common medication used for:

- Pain
- Nausea & vomiting
- Constipation
- Breathlessness
- Lethargy and depression.

In addition, know how convert oral morphine into subcutaneous morphine and diamorphine.

Revise how to recognise and treat palliative care emergencies:

- Spinal cord compression
- SVC obstruction
- Hypercalcaemia
- Neutropenic sepsis.

Ask your GP supervisor to allocate you to a patient near the end of life that you can visit at home regularly, report back to the tutor, and write up a log of reflections on this. It is always upsetting when such a patient dies, and they may do so, but remember you can still follow the family up in their bereavement which they will appreciate.

Ask if you can join a specialist palliative care or Macmillan nurse, or a district nurse where palliative care patients are being visited at home.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

GENERAL INFORMATION

Try watching some of the following films;

- Terms of Endearment
- Life as a House
- Wit
- Me before You
- The Fault in our Stars
- Shadowlands

Or try reading this book about the experience of dying:

- C - because Cowards get Cancer Too (John Diamond)

RESOURCES

General information about end of life and pain control:
http://www.nhs.uk/Planners/end-of-life-care/Pages/controlling-pain-and-other-symptoms.aspx

A specialist resource; Scottish Palliative Care Guidelines:
https://www.palliativecareguidelines.scot.nhs.uk/guidelines/end-of-life-care/Care-in-the-Last-Days-of-Life.aspx

Sometimes syringe drivers are needed to deliver medication subcutaneously e.g. where a patient cannot take anything by mouth. Marie Curie have an excellent resource:
https://www.mariecurie.org.uk/professionals/palliative-care-knowledge-zone/symptom-control/syringe-drivers

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1E-iii

Long-term conditions: end of life care

RESOURCES II

Philosophy of Primary Palliative Care.
http://www.goldstandardsframework.org.uk/

Charlton, R. Meeting the challenges of achieving a 'Good Death'.
http://www.hkcfp.org.hk/Upload/HK_Practitioner/2006/hkp2006vol28may/discussion_paper.html

Charlton, R. Spiritual pain at end-of-life in a changing world.
http://www.hkcfp.org.hk/Upload/HK_Practitioner/2014/hkp2014vol36sep/discussion_paper.html

Charlton, R. Talking to patients and relatives about dying. British Journal of Hospital Medicine, April 2017, 78(4): 2-4.
https://www.magonlinelibrary.com/doi/abs/10.12968/hmed.2017.78.4.C61?journalCode=hmed

https://lra.le.ac.uk/bitstream/2381/40934/5/What%20they%20dont%20teach%20you%20at%20Medical%20School-1.11.16.pdf

Charlton, R. Empathy or Compassion?
http://www.hkcfp.org.hk/Upload/HK_Practitioner/2018/hkp2018vol40Mar/editorial.html

Charlton, R. Bereavement Protocol.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1239338/pdf/brjgenprac00017-0039.pdf

REFERENCES

1. Steinhauser, KE, et al. 2000. Factors considered important at the end of life. JAMA; 284: 2476-82)

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1F

Emergency conditions

INTRODUCTION

General practitioners and practices have a duty to respond to emergencies in both routine and extraordinary circumstances, as in 'good Samaritan' acts. Recognition of emergencies is a key skill, and assessment and treatment follow the same protocols as in secondary care. For a GP to respond to an emergency, they frequently have to not only manage a medical problem, but also get appropriate support and help in the community, be that a home visit or on the street. Additionally, they must manage the team of medical and non-medical staff to work together under time pressure.

Whilst all GPs maintain their annual Basic Life Support training (1), the majority of emergency patients are managed using peri-arrest treatment. The classic chest pain and shortness of breath symptoms jump swiftly to mind. However, GPs use a broader definition of 'emergency' to include any problem requiring swift action to preserve health or prevent harm. These may include emergency contraception, the red eye, delivery of a baby, a suicidal patient, or referral of a child to social services.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1F

Emergency conditions

RECONGITION OF EMERGENCIES

Life-threatening conditions in primary care are of low frequency during the routine day. However, emergencies of a wider type are common in primary care. These are embedded within the common presentations of chronic and minor illness, which makes recognition of any emergency of particular importance.

Often, patients are recognised as acutely unwell by reception staff or during a phone call to the duty doctor. Acutely unwell patients are also more frequent in the out of hours setting and can be particularly challenging when the patient is less well-known to the GP (2).

Whilst extreme emergencies often declare themselves quite obviously, it is worth making an active inspection of all patients to assess them. In addition to basic observations, rapid respiratory rate, sweating, confusion, and reduced level of interaction are common indicators which may indicate that the patient is in need of emergency treatment (3).

It is important to be able to shift your clinical decision-making and diagnostic approach from the conventional paradigm of history, examination, investigation, diagnosis, and treatment to the use of a comprehensive rapid assessment for these patients.

TRIAGE

Triage is the process of rapidly assessing patients in order to maximise the use of medical resources to achieve the greatest impact on a population scale. Triage is needed when demand overwhelms resources. Within the current NHS resources, this demand-to-resource mismatch is a daily issue and, as such, triage of some type occurs in most settings. This is commonly through a telephone-based duty system or patient self-triage, or sometimes though reception-led protocols. Primary care clinicians are adept at triaging patients to appropriate resources with a high degree of accuracy and safety. Many practices have a system to book urgent or emergent patients as 'extras' when there are no remaining appointments. Often, these patients may be very unwell and, as such, emergency considerations should be at the forefront of your mind during these 'extra' consultations.

MANAGEMENT OF EMERGENCIES

The Resuscitation Council for the UK offers multiple courses for management of acutely unwell patients and initial assessment for patients (4). These range from Basic Life Support (BLS) for initial treatment of an unresponsive patient; to Immediate Life Support (ILS) which adds the use of an ABCDE assessment to Advanced Life Support (ALS) (5) which includes all of the above; and the use of advanced interventions and medications for patients with a wide range of conditions, including cardiac arrest.

These algorithms align with international standards and enable healthcare practitioners, including paramedics, nurses, and doctors, to work in newly-formed teams with a shared understanding of the protocol for patient management. Again, these protocols require an adaptation of the generalist model of contemplative and reflective clinical decision-making to algorithmic sequential treatment in which an issue is recognised and treatment is initiated promptly.

PATIENT ASSESSMENT

Assuming it is safe to approach and begin treatment of an unwell patient, one should begin by checking for responsiveness. If a patient does not respond then there is rapid progress to open the airway and establish if the patient is in cardiac or pulmonary arrest, at which point, BLS is initiated whilst additional help is summoned.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1F

Emergency conditions

If the patient is alive but unwell, then a rapid ABCDE assessment is undertaken, in which the airway is treated first of all and treatment instigated, prior to moving on to breathing, circulation, disability, and exposure in turn. In the primary care setting, help should be sought as soon as possible, as this can take time to arrive.

OTHER EMERGENCIES

In addition to classic emergencies such as anaphylaxis, arrhythmias and sepsis, we see many diverse emergencies. These may include road traffic collisions or trauma, stabbings, or even acts of terrorism. In addition, there are less classic presenting issues requiring urgent management, including loss of vision; confirmation and certification of death; urinary obstruction; and emergencies in palliative care such as pain or symptomatic relief.

SKILLS IN MANAGEMENT OF EMERGENCIES

Common to the effective management of all emergencies is the ability to act fast and communicate effectively with patients, families, and colleagues. Of particular importance in primary care is the skill to summon help and then lead a multidisciplinary team to effectively treat the patient. As such, GPs need a wide range of skills in treating the diverse array of clinical presentations.

Whilst emergency response from ambulances may take only a few minutes in some locations, in much of the UK, responses may be significantly longer. In some areas, GPs have additional skills and equipment to provide a comprehensive first response and several local and national initiatives offer training, equipment, and opportunities to best serve their communities.

For example, many GPs volunteer their time as advanced first responders for the British Association for Immediate Care (BASICS), who provide training and response networks (6). In rural areas of Scotland, the Sandpiper Trust (7) provides support and equipment to improve response times for emergencies in a primary care setting.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1F

Emergency conditions

ACTIVE LEARNING

Identify where key emergency equipment is in the practice on your first day. Where is the defibrillator? Where is the emergency drug bag and what does it contain? (8,9)

Familiarise yourself with the emergency protocols of your practice. How do you get help? Who will respond? How can you help with an emergency?

Attend a BLS training session if they are happening whilst you are in practice.

If you have an acutely unwell patient alert your supervisor and if you are appropriately skilled, ask if they can support you in assessing the patient rather than taking over.

Offer to help your practice to maintain their skills in responding to emergencies by organising a moulage or emergency patient simulation in the practice. You could play a patient with acute anaphylaxis to allow the team to practice a cohesive response. In situ simulation is a useful tool for improving emergency management (10); however, you will need to work with your tutor to ensure that this is done without impact on the routine business of the practice.

Conduct an audit related to emergencies. Are all the emergency drugs in date? Do they follow the recommended list of medications, or have local variations that are appropriate?

Explore possibilities to shadow a GP providing emergency cover for events such as football matches, motorsports, or air shows.

Primary care includes pre-hospital care; see if it is possible to spend time with the local ambulance service, or a pre-hospital care team.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1F

Emergency conditions

RESOURCES

- **Resus UK Advanced Life Support Guidelines (5)**
  Whilst the BLS algorithm is sufficient for most primary care clinicians and medical students, the ALS guidelines cover this and provide interesting information about advanced management of unwell patients of relevance to pre-hospital, primary, and secondary care.
- **Royal College of General Practitioners (RCGP) resources on Emergencies in Primary Care (11)**
  The RCGP provides useful resources that address the delivery and set up of primary care for emergencies. These outline the postgraduate training needed to effectively manage acutely unwell patients.

REFERENCES

1. Resuscitation Council (UK). Quality standards for cardiopulmonary resuscitation practice and training. 2017. https://www.resus.org.uk/quality-standards/primary-care-quality-standards-for-cpr/
2. The Royal College of General Practitioners Urgent and Emergency Care Clinical Audit Toolkit. https://www.rcgp.org.uk/-/media/Files/CIRC/Urgent-and-emergency-audit/RCGP-Urgent-and-Emergency-Care-Toolkit.ashx?la=en
3. Spiers L, Singh Mohal J, Pearson-Stuttard J, et al. Recognition of the deteriorating patient. BMJ Open *Quality* 2015;4:u206777.w2734. doi: 10.1136/bmjquality.u206777.w2734
4. Resuscitation Council (UK). Cardiopulmonary Resuscitation Guidance for clinical practice and training in Primary Care. 2001 https://www.resus.org.uk/quality-standards/primary-care-quality-standards-for-cpr/
5. Resuscitation Council (UK). Adult advanced life support. 2015 https://www.resus.org.uk/resuscitation-guidelines/
6. British Association for Immediate Care. https://www.basics.org.uk/
7. The Sandpiper Trust. http://www.sandpipertrust.org/
8. Drugs for the doctor's bag: 1–adults. Drug Therapeutics Bulletin 2015;53(5):56–60.
9. Drugs for the doctor's bag: 2–children. Drug Therapeutics Bulletin 2015;53(6):69–72.
10. Lamé G, Dixon-Woods M. Using clinical simulation to study how to improve quality and safety in healthcare. BMJ Simulation and Technology Enhanced Learning. Published Online: 29 September 2018. doi: 10.1136/bmjstel-2018-000370
11. Royal College of General Practitioners. Urgent and Emergency Care. https://www.rcgp.org.uk/policy/rcgp-policy-areas/urgent-and-emergency-care.aspx Last accessed July 2019.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1G

Multi-morbidity and complexity

INTRODUCTION

Multimorbidity is defined as the presence of two or more chronic medical conditions in an individual. It is an important topic, as it is associated with decreased quality of life, functional decline, and increased healthcare utilisation, including emergency admissions (1).

Treatment burden and iatrogenesis is where the complex management of multimorbidity with drugs results in polypharmacy, and medication side effects and interactions. These patients account for 30% of the population but use 70% of NHS funds. The overall iatrogenic harm to patients in medical care settings has been calculated (from case record studies) as 12%. Of these, a half (6%) is preventable, with incidents related to drugs and other treatments accounting for the largest proportion of preventable patient harm (2).

Overdiagnosis is defined as the diagnosis of a condition that, if unrecognised, would not cause symptoms or harm a patient during their lifetime. More broadly, it refers to the related problems of overmedicalisation, and subsequent overtreatment, diagnosis creep and shifting thresholds. It is increasingly acknowledged as a consequence of screening for cancer (for example, indolent breast, prostate, thyroid, and lung cancers) and other conditions, such as chronic kidney disease, depression, and attention-deficit/hyperactivity disorder. One of its identifiers is as a 'condition' where the prevalence is rising but mortality is not. It is not a false positive result or misdiagnosis.

Underdiagnosis is defined as the failure to identify a disease that ultimately threatens a person's health.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g. Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1G

Multi-morbidity and complexity

MULTIMORBIDITY

Individual clinical care and community engagement:
Patients with multimorbidity have a high treatment burden in terms of understanding and self-managing their conditions, attending multiple appointments, and managing complex drug regimens. Depression is common (3), with the prevalence of mental health disorders increasing as the number of physical morbidities increases (4). Clinical guidelines and research tend to have a 'single disease' focus rather than the complex interventions faced by GPs in day-to-day practice.

Influencing the wider political agenda:
A large-scale Scottish study of 314 GP practices (17.5m people) in 2012 reported that 42% had more than one chronic illness, and 23.2% had more than two (4). Although prevalence increased substantially with age, in absolute terms, multi-morbidity is more prevalent in those aged <65 years and onset is 10-15 years earlier in deprived areas.

OVERDIAGNOSIS

Individual clinical care and community engagement:
Overdiagnosis can harm patients by leading to overtreatment, diagnosis-related anxiety or depression, and labelling or stigma (5). It makes people into patients unnecessarily, by identifying problems that were never going to cause harm, or by medicalising ordinary life experiences through expanded definitions of disease (6). In the USA, 17% of admissions are due to adverse drug events (7). Having patients on multiple medications is costly to the NHS: it is estimated that 50% of medicines prescribed for long-term conditions are not used (8)!

Influencing the wider political agenda - some of the drivers of over-diagnosis:

- Broadening disease definitions
- Rigid clinical guidelines - with limitations in the evidence underpinning these - that obscure the understanding of diagnostic flexibility to individual, person-centred needs
- Advanced diagnostic technology, resulting in more incidental findings
- A medical culture that encourages greater use of tests and treatments, and encouragement of public over-reliance on 'medicine' to diagnose and cure all conditions
- Managing 'uncertainty' in an environment heightened by medico-legal fear of missing something important
- A tendency to do what the clinician thinks is 'expected' of them by their seniors or hierarchy (9)
- Commercial and professional vested interests, and patient pressure groups
- Payment and performance indicators that reward overactivity (10).

It should not be forgotten that the people we serve may, rightly and entirely reasonably, take a different view to those that fuel these drivers.

As expert generalists, GPs have specific expertise in managing multi-morbidity and a holistic approach to patient-centred care, at both individual and population-level interventions.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g. Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1G

Multi-morbidity and complexity

SUMMARY

THE CHALLENGES:

- Multimorbidity is the norm and the future for people with chronic disease.
- Numbers are rising and are strongly linked to areas with health and economic deprivation, increasing demand on resources in these areas.
- The 'single-disease' framework by which most healthcare is delivered and guided (NICE) is inefficient, wastes precious resources in staff time, and diverts resources away from more clinically important goals. In some cases, it may even be unsafe for patients.
- Overdiagnosis is inherent to the modern practice of healthcare, which seeks to diagnose and mitigate disease before it is clinically evident. This results in identification of 'conditions' that may never progress or become clinically meaningful. The challenge then becomes being able to identify these, and either not test for them or ignore the findings and not treat them. The challenge is in understanding the balance of benefits and harms and aligning decisions with patients' individual values and preferences.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1G

Multi-morbidity and complexity

ACTIVE LEARNING

Practices can identify patients with multimorbidity for students to visit at home, to find out what their day-to-day life experiences are. For instance, how they view their lives, their futures, their experiences of using the NHS, their medications, the side effects, etc. How do they value continuity of care? Do they have narratives showing how their care has been fragmented? Do they see multiple health professionals? How many medications are they on, and do they know what each one is for? What functional difficulties do they have?

If the practice runs a multimorbidity clinic, see if you can sit in and try seeing some patients themselves with specific goals in mind.

If the practice has a clinical pharmacist, try to get a session learning about how to rationalise and monitor the medications of a patient with multiple morbidity, for example using the STOPP/START tools (11). A toolkit can be downloaded from Cumbria CCG website.

Find a randomised control trial based on a single disease and apply its findings to a patient who has this condition in addition to others. For instance, a 78-year-old woman with previous myocardial infarction, type 2 diabetes, osteoarthritis, COPD and depression. What drugs is she likely to be on, and what lifestyle modifications would have been discussed with her? Discuss the effects of side effects and drug interactions for the patient, the GP, and the NHS.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g. Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1G

Multi-morbidity and complexity

In small group work, discuss the case of screening for pre-diabetes as a possible scenario for overdiagnosis. Guideline panels believe that harms related to overdiagnosis are offset by the population benefits of early diagnosis (and subsequent treatment) of true disease and therefore recommend risk assessment and targeted screening. Expanding the spectrum of diabetes to include pre-diabetes promotes the false idea that untreated pre-diabetes will universally lead to diabetes. Review the criteria for population screening and discuss how limiting screening to people at the highest risk can minimise (though not eliminate) overdiagnosis while maximising benefit. Discuss the drivers to overdiagnosis.

Transparent evidence-based thresholds are essential to avoid overdiagnosis and overtreatment. At present, these thresholds are often decided by personal 'expert' opinion, as the underlying questions may not have been addressed by evidence-based medicine.

In small group work, discuss the benefits and harms of prostate cancer screening with the PSA test, and how to discuss these concepts with patients, for example using patient decision aids (5; fig 4).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g. Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

1G

Multi-morbidity and complexity

RESOURCES

Multimorbidity: clinical assessment and management. NICE Guideline (NG56). Sept 2016. https://www.nice.org.uk/guidance/ng56

Overdiagnosis: when good intentions meet vested interests - an essay by Iona Heath. BMJ 2013;347:f6361.

Role of fear in overdiagnosis and overtreatment - an essay by Iona Heath. BMJ 2014;349:g6123.

REFERENCES

1. Wallace E, Salisbury C, Guthrie B, Lewis C, Fahey T, Smith S. Managing patients with multimorbidity in primary care. BMJ 2015; 350:h176 (https://doi.org/10.1136/bmj.h176).
2. Panagioti M, Khan K, Keers RN et al. Prevalence, severity and nature of preventable patient harm across medical care settings: systematic review and meta analysis. BMJ 2019; 366:14185. (https://www.bmj.com/content/366/bmj.l4185).
3. Gunn JM, Ayton DR, Densley K, Pallant JF, Chondros P, Herrman HE et al. The association between chronic illness, multi-morbidity and depressive symptoms in an Australian primary care cohort. Soc Psychiatry Psychitr Epidemiol 2012: 47: 175-2012.
4. Barnett K, Mercer S, Norbury M, Watt G, Wyke S, Guthrie B. The epidemiology of multi-morbidity in a large cross-sectional dataset: implications for health care, research and medical education. Lancet 2012: 380: 37-43.
5. Kale MS and Korenstein D. Overdiagnosis in primary care: framing the problem and finding solutions. BM 2018; 362:k2820.doi: 10.1136/bmj.k2820.
6. Broderson J, Schwartz LM, Heneghan C, O'Sullivan JW, Aronson JK, Woloshin S. Overdiagnosis : what it is and what it isn't. BMJ Evidence-Based Medicine 2018;23: 1-3.
7. Mangin D, Heath Jamoulle M. Beyond diagnosis: rising to the multi-morbidity challenge. BMJ 2012; 344:e3526.
8. Swinglehurst D and Fudge N. The polypharmacy challenge: time for a new script? BJGP 2017; 67: 388-389.
9. Papoutsi C, Mattick K, Pearson M, Brennan N, Briscoe S and Wong G. Social and professional influences on antimicrobial prescribing for doctors-in-training: a realist review. Journal of Antimicrobial Chemotherapy 2017; 72 (9): 2418-2430.
10. Treadwell J, McCartney M. Overdiagnosis and overtreatment: generalists – it's time for a grassroots revolution. BJGP 2016. Doi: 10.3399/jbgp16X683881.
11. Multimorbidity: clinical assessment and management. NICE Guideline (NG56). Sept 2016. https://www.nice.org.uk/guidance/ng56
12. O'Mahoney D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C and Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

THEME 2:

POPULATION-CENTRED CARE

GPs work with and lead multidisciplinary teams that together provide care to their local population. To improve the health of their practice population, GPs are responsible for planning and executing health promotion, screening, and prevention of infectious and chronic diseases for large groups of people in their local communities. Groups of practices are increasingly working together in networks or federations to coordinate efficient, cost-effective, and high-quality care.

OVERVIEW

Overview

How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE

1a. The generalist clinical method

i The role of evidence in clinical decision-making

ii Uncertainty in clinical decision-making

iii Prescribing

1b. Holistic care (the biopsychosocial model)

i The physiology of holistic care

1c. The doctor-patient relationship

i Communication with patients of all backgrounds

1d. Continuity of care

1e. Long-term conditions

i Diagnostic phase

ii Maintenance phase

iii End of life care

1f. Emergency conditions

1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE

2a. The social determinants of health

2b. Preventing disease and promoting health

2c. Quality of care

2d. Information technology

2e. Teamwork and leadership

2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE

3a. The generalist approach

3b. The history of UK general practice

3c. The current structure of UK general practice

3d. The funding of UK general practice

3e. The role of general practice in other countries

3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE

4a. Learning in primary care settings

4b. Teaching in primary care settings

4c. Research in primary care settings

CONTRIBUTORS

EPILOGUE

2A

The social determinants of health

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

INTRODUCTION

> "Of all the forms of inequality, injustice in health care is the most shocking and inhumane".
>
> *Martin Luther King Jr.*
>
> "Why treat people and send them back to the conditions that made them sick?"
>
> *Michael Marmot, The Health Gap.*

We live and, as doctors, work in an unfair society within an unfair world, where unequal wealth distribution contributes to dramatic inequalities in mortality and morbidity between those who have, those who have less and those who have not. Within this nation, one baby born into deprivation will die up to 15 years sooner and spend up to 17 more years in poor health than one born into wealth (1). Each year 1.3 to 2.5 million years of life are lost to premature deaths caused by health inequalities (1). Each of these comes with emotional, social, and financial devastation for those left behind. This chapter covers health inequalities in the United Kingdom and the social determinants of health which lie behind them and explains how we, as GPs and primary care teams, can change them for the better.

The term Social Determinants of Health (SDH) refers to the conditions in which people are born, grow, work and age, and how these influence their health and wellbeing [2]. Broadly speaking, the term refers to the observation that social categories, such as income and class, consistently predict a range of different health outcomes; subgroups of the population with lower socioeconomic status and less power tend to have lower life expectancy and poorer health.

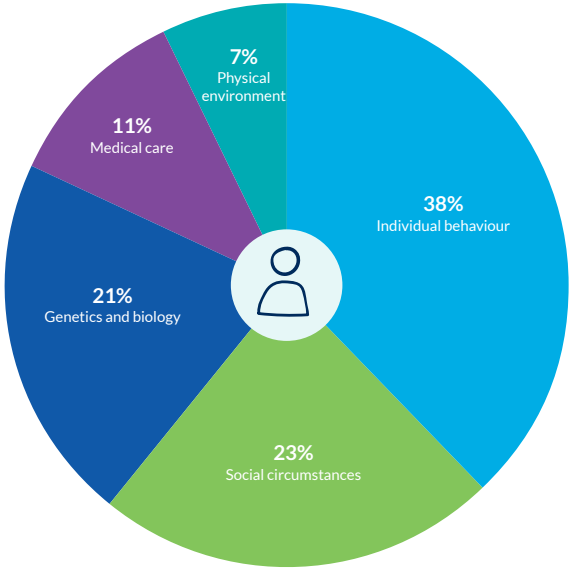


Figure 8 – Determinants of Health

In this estimate, medical care only accounts for 11% of an individual's determinants of health. 21% is due to genetics and biology, 38% to individual behaviour and lifestyle habits, and 23% to social circumstances. Other estimates put the range of medical care's influence from 15 to 43% (3). Socioeconomic factors have consistently been found to have a greater impact on health than healthcare.

When talking about SDH, some people may be referring to the persistence of health inequalities over and above individual behaviour or clinical intervention.

The World Health Organisation (WHO) summarised the key indicators of SDH as income, education, occupation, social class, gender and race/ethnicity (2). However, SDH are not about direct causal relationships but rather the various ways in which social conditions and circumstance impact on people's health.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

INTERMEDIARIES

There has been a lot of research and theorising about how social factors determine people's health. These intermediaries are often summarised as material, psychosocial, and behavioural. While there is still some debate as to whether any of these have primacy, most would agree that they are interrelated, and all play a role in the persistence of SDH and health inequalities.

1. **Material intermediaries** are the material conditions of a person's life such as their finances, food, housing or clothing. They may also include the physical conditions in which people work or the local environment where they live. There are many ways that poor material circumstances can influence a person's health, and these differ from patient to patient. Those in poverty or with economic hardship may live in damp housing, not be able to afford healthy food or be unable to travel to access healthcare services. Conversely, those with social advantage and access to material resources are better able to avoid risks to their health, leading to an accumulation of health advantage.

   Most people in poverty are in a household where at least one adult is working (4).

Case study

Jodie is a working single mother who budgets strictly. At the start of the month, she pays the rent, the bills, and buys in food. She then has no money – literally none – for the rest of the month. She says she gets by okay except that her sister is always asking her for loans. Her sister, Sophie, relies on benefits to survive. She is in damp, vermin-infested housing but too scared to raise this with the landlord in case he removes her in favour of an easier tenant. Rent takes up almost all her income and she is reliant on the food bank to eat. To meet Public Health England's recommendations for healthy eating, the poorest 10% of the country would have to spend 74% of their total income on food (5). Since the start of austerity increasing numbers of GP practices have been running food banks as their patients struggle to eat.

2. **Psychosocial** intermediaries are the stressors and aspects of emotional wellbeing that connect lived experience with health. This includes the stress caused by poor working conditions, financial instability, uncertain living conditions, and a lack of control over one's life. These stressors may lead to poorer mental health but also influence physical health through biological mechanisms. These mechanisms are primarily physiological, but also include 'epigenetics' that affect the expression of a person's DNA and pass on these toxic effects to the next generation.

   Glaswegian rapper, Darren McGarvey, describes, "…the stark reality of child abuse, the inexorable rise of crime, the ubiquity of violence, the horror of domestic abuse, the scourge of homelessness or the tragic inevitability of alcoholism or addiction…" as underlying unrelenting chronic stress in areas of deprivation. "These are the

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

issues that compound poverty-related stress. These are the problems that make people apathetic, depressed, confrontational, chronically ill and deeply unhappy" (6).

'Psychosocial' also refers to the wider underlying emotions that are by-products of an unequal and hierarchical society. The work of Richard Wilkinson has been particularly prominent in this area, linking neuroendocrine levels to feelings of shame and worthlessness experienced when people perceive themselves to be low status. Wilkinson has argued that overall, people living in countries with less inequality are more healthy (7, 8).

3. **Behavioural intermediaries** are the individual activities related to health such as eating, smoking, and alcohol consumption. Health-related behaviour depends on a person's social and cultural environment (for example, smoking being normalised) as well as the physical environment (such as the availability of healthy food).

Case study

Jeff is a heavy smoker and has been since childhood. Turning 40 and increasingly breathless, he is struggling to give up. "It chills me out, you know Doc, takes the edge off my anxiety for a minute and stops me thinking about stuff," he says. "I want to quit but there's too much going on at the moment for me to think about giving up." There is always too much going on in Jeff's life. Since being seriously assaulted as a young man he has been anxious and depressed. Separated from friends and family he self-medicates by drinking and smoking cannabis. Like many on the estate, he is in debt to drug dealers who recently fire-bombed his neighbour's house. Jeff laughs when the nurse asks him if he is worried about lung cancer; that prospect seems very distant compared to his current troubles.

When thinking about behaviours it is important to think about the reasons behind the behaviours and how much choice people really have. Around half of all children living in poverty have a parent who smokes (9). This increases the likelihood of those children smoking even if the parent gave up smoking years ago (10), as does living in deprivation, having peers who smoke, and adverse childhood experiences, alongside many other factors outside of the child's control (11).

ASSOCIATED CONCEPTS

SDH overlap with other key concepts such as *health inequalities*, *equity*, *poverty*, *fairness*, and *social justice*, all of which have different meanings.

An important distinction to make is between inequality and inequity. Their precise definitions have been explored and debated in detail; (12) however, typically, 'inequality' refers to differences within a population or (more usefully) between social groups, whilst 'inequity' refers to those differences that are unfair and avoidable (13).

When considering inequity, it is important to consider differences in exposures and diseases but also in response.

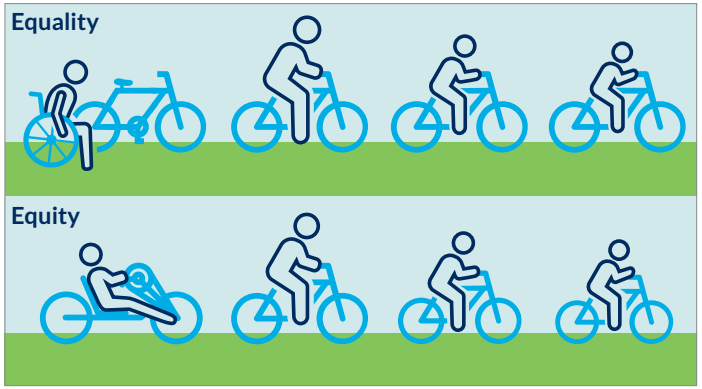


Figure 9 – Comparison between equality and equity

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

The NHS is widely regarded as a fair system because it, theoretically, offers equal access to services for all in the UK. Some people's needs for those services, however, are greater than others. Professor Michael Marmot, whose work has led the way in promoting health equity and social justice, called for 'proportionate universalism', whereby everyone has access to services, but those services are delivered proportionately to need (15). There has been growing application of the principle of proportionate universalism with grassroot solutions being created across the country to meet the needs of under-served patients and groups at the local level (16). The evidence base is growing, with mounting evidence that, where it is applied, it is effective (17).



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

GENERAL PRACTICE

With over 50,000 UK GPs, working in over 9,000 practices, having around 340 million patient contacts each year, high quality general practice and primary health care are key elements in addressing health inequalities. Medical generalists working within a community can support people in several ways. Seeing patients regularly and developing relationships over time (*continuity*) helps doctors to recognise the wider social issues and challenges which patients face and how these are affecting their health. Providing a comprehensive breadth of knowledge and skills provides the right sort of medical expertise to manage patients' complex physical and mental healthcare symptoms. *Person-centred* care is about focusing on the needs of the person, as well as guidelines, to develop the best possible support for that patient. Finally, high quality health care services need to be accessible (18) (see *Promote inclusion – Figure 10).*

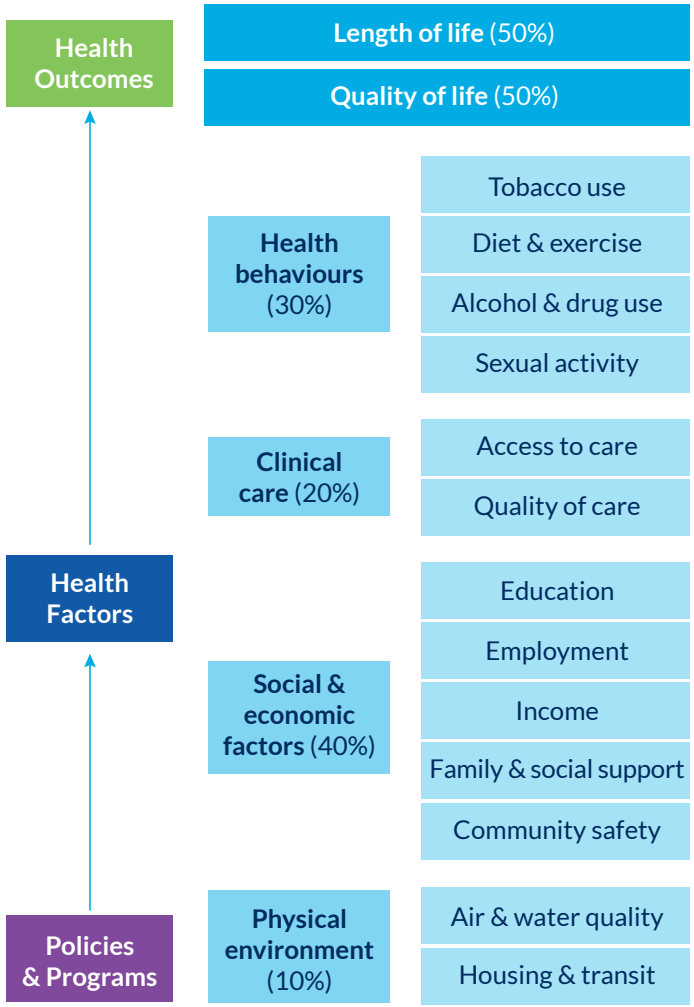


Figure 10 – Promote Inclusion Chart

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

The diagram above (19) is sometimes used to make the point that clinical care is a small contributor to health outcomes but, viewed from a different perspective, it shows how much of what we do, or could do, in primary care makes a difference.

Smoking cessation and smoking prevention are common elements of the GP consultation, as are diet and exercise and contraception. In deprivation, addressing these can be harder but the need and hence the potential benefit are also greater. There are huge amounts that can be done to help patients with addiction problems, by GPs and by bringing specialist services into practices.

Clinical care is partly about being the best doctors we can be but also about ensuring that the people with the greatest needs, often the people who struggle most to engage with services, can access the care they need. In primary care we, as GPs, are part of a team which can include people like Focused Care or Link Workers who work, holistically, with the households with the most complex needs.

We and they help people stay in education, for instance, speaking to the school of the child facing exclusion about the issues at home contributing to their unruly behaviour may make the difference between that child staying in school or being excluded and losing life opportunities as a result. We help people get back to work, through addressing the medical, psychological, and social issues that stopped them and see the health benefits as they lift themselves from poverty. To the same end, we support patients through a benefits system fraught with risks, maximising their access to benefits they are due and reducing the harm which comes from poverty. We are witnesses to the many harms of violence, exploitation, and abuse and are key members of the safeguarding teams which strive to protect vulnerable people from them.

Through advocacy, we can change people's environments, from housing quality, access to green space, even to the quality of the air people breathe, we can make a difference. Through individual interventions we can stop families becoming homeless and help the homeless become housed. Some doctors consider these interventions to be non-medical and outside their scope of practice but, when we consider that the mean age at death for a homeless woman is 43 and man 45, with much of their time spent in ill health and multiple contacts with emergency health services, there is also a strong argument against that view (20).

CARE, SUPPORT, AND ADVOCACY

Social inequalities - and their effects on health - are societal issues that persist through political decisions. Doctors and other healthcare professionals have an important role in addressing causes and consequences of both health inequalities and the social determinants of health and one way is through *advocacy*. Advocacy means speaking up for our patients.

In the face of the disease burden caused by poverty and other accompanying social determinants of health it can be easy to feel powerless, but this prevalent state of learned helplessness overlooks that when determinants of health are *social*, this means they can be changed.

> "Advocacy prevents social passivity, curtails those feelings of helplessness, and influences decision-making. It recognises that we create our culture and set our norms. We can influence resource allocation, and it is certainly within our competence and expertise to recognise, highlight, and act upon health injustices."
>
> – Jessica Lee, Medical Advocacy: The Duty of Physicians as Advocates (21).

The medical profession has a persisting legacy of respect which allows us to punch above our weight in terms of the impact we can achieve when we try. Advocacy may be a simple act taking place in the consultation such as calling a housing agency to stop a family becoming homeless or dictating a letter highlighting that a homeless person is a vulnerable adult and conferring on services an obligation to house them. It may also be grouping

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

together on a larger scale to advocate for more resources for your practices and their patient populations.

A highly successful example would be the GPs at the Deep End movement which started in Scotland, petitioning for more resources for patients and spread throughout the UK and overseas. It delivers support for patients and hard-pressed practices, freeing up doctor time for innovation, education, and research which continue the cycle of improvement.

DEPRIVATION AND ECONOMIC HARDSHIP

Healthcare professionals working in deprived areas may disproportionately encounter *alcohol* and *drug misuse, multimorbidity, mental health difficulties, polypharmacy, child protection issues, high social care needs, and self-management problems*. They may also see more excluded groups or patients, such as people who are homeless, sex workers, vulnerable migrants, or Travellers. There is an urgent need in the UK for healthcare professionals to work in deprived area and serve those most in need (22). Fulfilling this responsibility requires patience, understanding, and compassion, and can be the most rewarding aspect of healthcare.

> "General practice is busy and can be hard wherever you work. In deprived areas it can seem particularly hard due to the high prevalence of disease, especially psychiatric disease and safeguarding concerns. This morning's clinic included four people who wanted to end their lives, a parent who lost their child to cancer and another who lost two to social services. This afternoon is the methadone clinic where we see the concentrated effects of all social disadvantage on the lives of vulnerable people. They are doing okay though, turning their lives around, and we are playing a part in that. Here is where the need is greatest so here is the easiest place to make a big difference. I usually come home feeling like my day has been challenging but useful to the people and community we serve, and I am never, ever bored." – GP in Manchester

General practice, particularly in deprived areas, has seen the loss of many wonderful doctors to 'burnout', the accumulated stress of working increasingly hard against the odds. Recent years have seen the development of training, training placements, and whole training programmes dedicated to preparing doctors to meet the needs of patients suffering concentrated disadvantage and teaching them the self-care skills to enjoy happy and healthy careers working with them.

PROMOTE INCLUSION

Healthcare services can become part of the cause of health inequalities if there is unequal access to healthcare. This could be practical or geographical, or it could be due to how healthcare is organised and practised. Some patients may struggle to register with a practice because they do not have internet access or a mobile phone and some practices persist in refusing to register people without identification or proof of address despite the NHS being clear that this is not a requirement. Staff may have unconscious biases or there may be mistakes in communicating with some patients. It is important to know that doctors are responsible for providing an inclusive healthcare service and being able to communicate with people of different cultural and socioeconomic backgrounds (23, 24).

People experiencing homelessness, those in contact with the criminal justice system, those engaged in sex work, and others affected by social exclusion suffer extreme effects on their health, with high rates of complex multi-morbidity and all-cause standardised mortality rates of 7.9 for men and 11.9 for women compared with the general population (25). Many of those who are homeless or from other marginalised groups come from backgrounds of parental mental illness or addiction and experience multiple childhood traumas, often compounded by poverty (26). Inclusion health is an approach to addressing health inequity by assertively improving access to care for people who have traditionally been left out of it and treating

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

those people with kindness and respect along with quality medical treatment. It is about seeking out the people with the greatest need and giving them the best care.

IT IS NOT JUST ABOUT BEHAVIOURAL CHANGE

People living in poorer communities have been affected more by austerity and changes to the welfare state over the years (27). The usual healthcare approach that addresses common 'risk factors' through a focus on individual behaviour change, such as smoking cessation or increasing physical activity has limited impact. Such approaches may be unhelpful or even inappropriate when patients feel they have little control over the main factors (SDH) that are affecting their health (28), helping people regain a feeling of control over their lives and their health, however, can be empowering for them and their families and lead to greatly improved outcomes in medical and psychiatric health.

SUMMARY

Social determinants of health are about how social categories such as income, occupation, and employment impact on health throughout a person's life course. The ill effects of these determinants of people's health are not equally distributed and, in the UK, lead to large inequalities in almost all markers of health, especially life expectancy and healthy life expectancy, between people living in richer and poorer areas. People marginalised from society suffer even greater inequalities in health. Where risk factors for poor health outcomes are modifiable but have not been modified, there is not just inequality but inequity. These determinants are social and therefore can be changed by society and by individuals within society including you as a doctor. In primary care we have a privileged position in supporting people throughout their life course and have repeated and protracted opportunities to help people change their environments, their health and their lives for the better.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

ACTIVE LEARNING

Talk with your GP tutor about the contents of this theme and how they relate to the population of your current practice.

Try to identify a patient or family at the practice where social determinants have had a significant influence on their health. Look back through their notes and consider how social and cultural influences may have come to play.

Try and speak to patients from different backgrounds. Explore their experiences of illness and healthcare. What they have found helpful or otherwise in their contacts with health professionals?

FURTHER ACTIVITIES

Ask your GP tutor if particular SDH affect their practice population.

- Ask your GP tutor if they know of any local third sector organisations that work to alleviate some of the issues listed above. Explore these via their websites. You could even contact them and ask if you could visit to understand better what they do and how general practice helps.
- Ask your GP if this affects how they practice medicine with particular groups or individuals.

Ask the reception staff and practice manager about how people can register to join the practice.

- Do they need to offer an address?
- Do they need a phone or a form of identification?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

It is never too early in your medical career to make a difference. Can you think of ways you could help make the practice you are attached to more accessible to under-represented groups?

Look up 'social prescribing' and ask practice staff and GP tutors if this is something they do.

- For example, do they hand out food vouchers or offer support linking to welfare and housing?

Look at the websites https://fingertips.phe.org.uk or https://maps.cdrc.ac.uk/

- Pick your local practice area.
- Look at some of the different indicators such as working status, life expectancy, and percentage living with long term conditions.
- Compare these across different areas and try to determine what the SDH may be that have affected these trends.
- Often affluent areas with have the greatest health inequalities because they have pocket (rather than blanket) deprivation.
- Think about the different issues patients may present with to their GP in different areas.
- Think about how this makes working life different for GPs in different areas.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

DISCUSSION POINTS/EXERCISES

Ask your GP tutor to describe some of the most rewarding patient encounters they can recall.

- Ask yourself how many of them relate to the SDH.

Think about being a patient who cannot read. Explore the number of times you would need to be able to read to access healthcare in an equal way to someone who can.

- **Registration, checking in, call boards.**
- **Practice information to promote healthy living.**

Practices in deprived areas often have high rates of patient Did Not Attend (DNAs) at the surgery and in referrals to specialist care. .

- Think about the reasons why people do not attend their appointments and the consequences for their health this may have.
- Look at some DNAs from your practice clinic lists and explore the notes to gain an insight into the lives of some people who did not attend. What might have made them more likely to attend?
- Ask your admin team about how referrals happen, from start to finish. Consider all the barriers that stand in the way of people successfully attending appointments in secondary care.

Think about how these SDH are affecting the clinical presentations you are seeing or have seen in your various GP placements.

What ways do you think a doctor might adapt their approach to clinical practice to help address some of these issues?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

RESOURCES

https://www.fairhealth.org.uk/

Fairhealth has the aim of reducing health inequalities by influencing and delivering free education to healthcare professionals in the UK and identifying and coordinating healthcare workforce responses to inequality.

https://www.ted.com/talks/richard_wilkinson?language=en

Richard Wilkinson charts the hard data on economic inequality and shows what gets worse when rich and poor are too far apart: real effects on health, lifespan, even such basic values as trust.

https://www.youtube.com/watch?v=0TOV5Ietsdw

Professor Michael Marmot, advocate of health equity and social justice, delivers an impassioned speech to the Royal College of General Practitioners annual conference on the grim reality of health inequalities in the UK and overseas in 2019.

I Daniel Blake (2016)

This is a film by Ken Loach that starts to introduce the links between how people live, grow and age affect their health outcomes. It is a very powerful film and worth the short investment of time for enjoyment and education.

KEY RESEARCH

Marmot, M., Goldblatt, P., Allen, J. et al. Fair Society, Healthy Lives. London: Institute of Health Equity; 2010.
Known as 'The Marmot Report', this work by the Institute of Health Equity summarised health inequalities in the UK and described the evidence for how social determinants of health created them. It also offered interventions across society including healthcare, to address them. Health Equity in England: The Marmot Review 10 Years On is due publication imminently, reviewing what has changed over this decade and what has not.

O'Brien, R., Wyke, S., Guthrie, B., Watt, G., & Mercer, S. (2011). An 'endless struggle': a qualitative study of general practitioners' and practice nurses' experiences of managing multimorbidity in socio-economically deprived areas of Scotland. Chronic Illness, 7(1), 45-59.
This is a study of healthcare professionals and the difficulties they experience in trying to help patients in a deprived area. Highlights the challenge of SDH and discusses possible strategies for meeting these within primary care.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

Pickett, K. E., & Wilkinson, R. G. (2015) Income inequality and health: a causal review. Social Science & Medicine, 128, 316-326.
Pickett and Wilkinson are leading scholars in inequalities research. Their 2009 book, The Spirit Level, is accessible and includes epidemiological evidence on a range of negative impacts of inequality. This more recent paper focuses on the causal relationship between income inequality and health and wellbeing.

Taylor, L. A. et al. (2016) Leveraging the social determinants of health: what works? PLoS One, 11(8), e0160217.
Although much of this paper relates to the US healthcare system, some discussion of the need for practitioner partnerships and the 'wrong pocket' problem of investment applies to a UK context.

REFERENCES

1. Matheson, J.I.D.M. Introduction in Neilson, L. Patterson J.K. and Matheson, J.I.D.M. (eds) Addressing Causes and Consequences of Health Inequalities: A Practical Guide. London. CRC Press.
2. World Health Organisation. A conceptual framework for action on the social determinants of health. 2010.
3. Buck, D and Maguire, D. Inequalities in life expectancy: Changes over time and implications for policy. London: Kings Fund; 2015.
4. Hick, R and Lanau A. IN-WORK POVERTY IN THE UK: Problem, policy analysis and platform for action. Cardiff: Cardiff University; 2017.
5. The Food Foundation. THE BROKEN PLATE: Ten vital signs revealing the health of our food system, its impact on our lives and the remedies we must pursue. London: The Food Foundation; 2019
6. McGarvey D. 'It's time to demand more of oursleves': why politicians aren't tackling proverty. The Guardian. 22nd Jul 2018. Available from: https://www.theguardian.com/society/2018/jul/22/politicians-poverty-safari-darren-mcgarvey-extract [Accessed 19th January 2020].
7. Pickett, K.E. and R.G. Wilkinson, Income inequality and health: a causal review. Social Science & Medicine, 2015. 128: p. 316-326.
8. Wilkinson, R. and K. Pickett, The Spirit Level. Why Equality is Better for Everybody. Cambridge. London. 2010.
9. Belvin, C., Britton, J., Holmes, J. and Langley T. Parental smoking and child poverty in the UK: an analysis of national survey data. BMC Public Health. 15, 507 (2015).
10. Vuolo M and Staff J. Parent and Child Cigarette Use: A Longitudinal and Multigenerational Study. Paediatrics. 2013. 132(3): e568-e577.
11. Miah C. Smoking, Smoking-Related Harms and How to Address Smoking Cessation in Areas of Deprivation in Neilson, L. Patterson J.K. and Matheson, J.I.D.M. (eds) Addressing Causes and Consequences of Health Inequalities: A Practical Guide. London. CRC Press.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2A

The social determinants of health

12. Braveman, P. and S. Gruskin, Defining equity in health. Journal of Epidemiology & Community Health, 2003. 57(4): p. 254-258.
13. Arcaya, M.C., A.L. Arcaya, and S. Subramanian, Inequalities in health: definitions, concepts, and theories. Global Health Action, 2015. 8(1): p. 27106.
14. Robert Wood Johnson Foundation. Visualising Health Equity: One Size Does Not Fit All Infographic. Available from https://www.rwjf.org/en/library/infographics/visualizing-health-equity.html [Accessed 26th January 2010].
15. Marmot, M. and R. Bell, Fair Society, Healthy Lives. Public Health. 2012. 126: p. S4-S10.
16. Woolf, G. and Marszalek, M. Examples of Innovative GP Service Models Across The UK, Tackling Health Inequalities in Neilson, L. Patterson J.K. and Matheson, J.I.D.M. (eds) Addressing Causes and Consequences of Health Inequalities: A Practical Guide. London. CRC Press.
17. Egan, M., et al., Proportionate universalism in practice? A quasi-experimental study (GoWell) of a UK neighbourhood renewal programme's impact on health inequalities. Social Science & Medicine, 2016. 152: p. 41-49.
18. Starfield, B., Primary care: an increasingly important contributor to effectiveness, equity, and efficiency of health services. SESPAS report 2012. Gaceta Sanitaria, 2012. 26: p. 20-26.
19. University of Wisconsin Population Health Institute. County Health Rankings: Key Findings 2014. Madison: University of Wisconsin Population Health Institute; 2014.
20. Office for National Statistics. Deaths of homeless people in England and Wales: 2018. London: Office for National Statistics; 2019.
21. Lee, J. Medical Advocacy: The Duty of Physicians as Advocates in Neilson, L. Patterson J.K. and Matheson, J.I.D.M. (eds) Addressing Causes and Consequences of Health Inequalities: A Practical Guide. London. CRC Press.
22. Blane, D.N., Medical education in (and for) areas of socio-economic deprivation in the UK. 2018, Taylor & Francis.
23. Beach, M.C., et al., Cultural competency: A systematic review of health care provider educational interventions. Medical Care, 2005. 43(4): p. 356.
24. Metzl, J.M. and H. Hansen, Structural competency: Theorizing a new medical engagement with stigma and inequality. Social Science & Medicine, 2014. 103: p. 126-133.
25. Aldridge, R.W. et al. (2018) Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. The Lancet. 391: pp241–250
26. Luchenski, S. et al. (2018) What works in inclusion health: overview of effective interventions for marginalised and excluded populations. The Lancet. 391; 10117: p266-280
27. Marmot, M., An inverse care law for our time. 2018, British Medical Journal Publishing Group.
28. Andermann, A., Taking action on the social determinants of health in clinical practice: a framework for health professionals. CMAJ, 2016. 188(17-18): p. E474-E483.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

INTRODUCTION

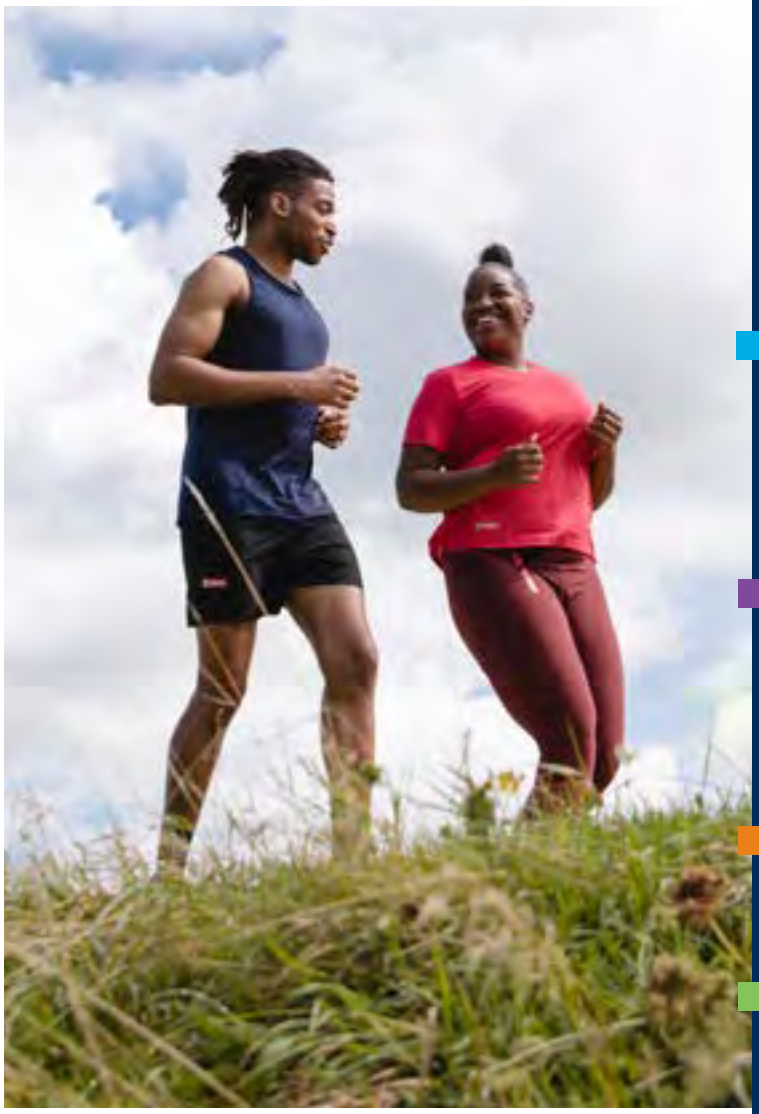
The term "prevention is better than cure" is as relevant today, as it was at the start of the NHS in 1948. GPs and their teams have a substantial role in preventive medicine, health promotion and wellbeing. Examples include health education (for example smoking cessation), immunisation, family planning services, antenatal and postnatal care, baby clinics, cervical screening, prophylactic prescribing and, more recently, social prescribing. General practice is therefore probably the best context for students to learn about preventive medicine.

Health promotion is a broader discipline than prevention including social determinants of health, the impact of demographic data and how health promotion interventions can be planned, implemented and evaluated.

Wellbeing is a newer term, subject to various definitions. A considerable literature base now exists and there is a WHO index, as well as a UK linked website:

The World Health Organisation- Five Well-Being Index

The Warwick-Edinburgh Mental Wellbeing Scales



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

PREVENTIVE MEDICINE

1. **Proactive rationale:** Public health developments have enabled clinicians to link lifestyle to many chronic diseases such as smoking and cancer (1). But how to intervene presents challenges that are clearly discussed by Rose et al. (2) including the limitations of screening (3). More recently, concerns about immunisation leading to measles outbreaks have needed to be addressed.

   It is in primary care, and with GPs and practice nurses specifically, that patients will want to discuss the risks and benefits of health interventions before giving their consent. The patients in this context are often well and may be reluctant to attend a clinic. So how they are invited matters. Students need to look at the approaches used and think carefully about how best to approach the concept of risk with patients in an informed, sensitive and enabling way.

2. **Local concerns:** Patients see GPs when they are well, when they are acutely ill, or when they need support for chronic conditions. Electronic records provide the GP with recall information about patients and alerts about risk factors, such as previous medical conditions, smoking, medication, etc. Each consultation has the potential to 'reduce risks' for patients. Being aware of the local population and their needs provides prevention opportunities. One example would be screening information for local people where English is not their first language.

3. **The national situation:** Campaigns to reduce risk and increase uptake of preventive services will usually be linked to seeing a GP or practice nurse, seeking advice, and having special seasonal provision such as influenza vaccination clinics. Practices will be given promotion material and links to resources to support these campaigns. Whatever time of year a student is on a GP placement, there is likely to be a campaign in process and some data will be required for evaluation. Getting involved in these campaigns enables students to see the links with public health, health promotion and primary care. Efficacy is often linked to how they are adapted and implemented at the local level.

HEALTH PROMOTION

1. **Defining health promotion:** The term health promotion is used in many ways. However, in order to inform theory, research and practice we need to clarify the parameters. A working definition of health promotion is "the study of the response to the modifiable determinants of health" (4). This differentiates health promotion from public health, which is complementary, and focuses on intervention and health, drawing on multiple research paradigms including medical, social, and behavioural sciences. We need to ask what causes or maintains health and explore what health means to different people. Health promotion interventions present ethical challenges. For example, are people able to make informed decisions about a healthy diet if they have limited choice or should public funds be available for smoking cessation programmes? Health promotion practice is therefore not value free.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

2. **Focus on the individual:** Raising lifestyle issues with patients in the GP consultation is where most clinical related health promotion practice takes place. Behaviour change, motivational interviewing, and advice are some of the approaches used, whether opportunistic, directly related to the patient's management, or for data contributing to local population health profiles.

   The approaches are usually based on the Stages of Change model: pre-contemplation, contemplation, preparing to change, making changes, maintaining changes, and relapse. The skills required are being able to identify where the patient is in this model, their readiness and ability to change and exploring relapse experiences positively (4). This is a patient-centred approach, facilitated by various resources such as NHS websites, goal-setting and action planning discussions, specific services such as smoking cessation, weight management, and/or local social prescribing, where appropriate.

   Recording in the patient's notes is important, as is follow up. There are many options for developing these skills, with the NCSCT online option for smoking cessation being an excellent example. There are also many courses offered by the Royal Society for Public Health. See resources section below.

3. **The local community approaches:** Individuals live and work in social contexts and change to a healthy lifestyle or maintaining one is influenced by families, the environment, habits, social constructs, resources, health equity, education, income, occupation, leisure and infrastructure as well as political agenda and priorities, and health care services. The Public Health England website is very informative about local data, and the various challenges that Local Authority Public Health Departments have. This can urther inform local intervention planning and resourcing.

The Beatie model (4) explains how all these interact and are relevant as we move to normalising social prescribing. What resources and services are available locally that can support the patient population? For example, is there a local 'walking for health' group? As well as suggesting and advising on increased physical activity, being specific about how that could be realised is important, can be recorded in the notes and some follow up about its impact is possible. This approach can create the sense of the healthy choice being the easy choice and what is good for individual health is also good for sustainability and the environment.

PROMOTION OF WELLBEING

The focus is emotional and mental wellbeing. It is about looking at factors associated with wellbeing, how we can be proactive, plan and implement interventions. The RCGP has a website for GPs which focuses on work and life balance. Dignity at work, workplace policies, and the way we treat and support each other are important factors in our wellbeing.

Wellbeing also aligns with social determinants of health. GP placements offer students opportunities to gain insights into these interlinked factors and explore what roles GPs have or could have as we gain more knowledge and research evidence for interventions.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

SOCIAL PRESCRIBING

We have seen how the promotion of health in many cases is linked to alleviating social factors, as the biopsychosocial model predicts. However, the problem for GPs has been how to find time and identify the ever-changing resources to engage with this.

It is here that the concept of 'care navigators' comes into play. They are individuals who are trained in motivational ways of engaging with patients to holistically evaluate their non-clinical needs and support them in engaging with relevant services. Different models of this community or care navigation exist, such as Impetus in Brighton. Many CCGs now employ care navigators covering groups of practices and GPs can now 'refer' patients for social prescribing.

Social prescribing tends to be organised on a local community level. Many of the organisations sit within the voluntary sector and draw on a volunteer or mixed workforce.

Age UK have an interesting scheme:
https://www.ageuk.org.uk/services/befriending-services/

MIND's Cascade Café programme:
https://www.mindcharity.co.uk/the-mind-directory/cascade-creative-recovery/

There are some initiatives whereby formal funding streams from local authorities or clinical commissioning groups support their activity (for example Impetus), and others where their funding is largely secured through charitable donations (for example Age UK). Some areas have organisations that support the coordination of, engagement with, and navigation of services in the local community. Such organisations can act as a 'hub' of knowledge regarding supporting services, as well as support patients in engaging with them.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

POSSIBLE ACTIVITIES

HEALTH PROMOTION

- Look at the local population public health data and summarise the health-related priorities.
- Explore the local environment, what is health promoting, what is accessible and affordable for patients?
- How 'health promoting' is the waiting room and the practice environment?
- What additional services and information is available in the practice about welfare, social needs, and community groups?
- What immunisations, screening, diabetes, and sexual health services are available and signposted?
- Are practice staff and patients cognisant of their carbon footprint, proactively trying to reduce it? If so, how?
- Ask your GP tutor if weight management and physical activity are routinely discussed in consultations. What are the barriers and the enablers?
- Ask about smoking cessation provision for a specific patient population. For example, pregnant women, or older patients with COPD.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

SOCIAL PRESCRIBING

Consider contacting local third-sector organisations to introduce case studies in explaining what they do, why, how, and what it achieves. Patient narrative in such cases can be an extremely powerful learning tool.

If possible, consider the possibility of a placement (core or voluntary, for example, as part of an SSC) with a community organisation, either in an observational role, engaging in volunteering opportunities, or supporting quality improvement activities.

A group activity could relate to the development of a hypothetical organisation to help meet the need of a group that students identify. What would this organisation look like? What would it do? How? Where would it draw its sources of funding from, and how would it secure those? This, incidentally, is how some exemplary models have developed, such as Laura Nielson's Hope Citadel.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

RESOURCES

HEALTH PROMOTION

A textbook of general practice 3rd edition 2011. Edited by Anne Stephenson. Chapter 11 Health Promotion in General Practice by Ann Wylie. Published Hodder Arnold

https://www.ncsct.co.uk/

https://www.rsph.org.uk/qualifications/learners/find-a-qualification.html

https://fingertips.phe.org.uk/profile/health-profiles

https://www.rcgp.org.uk/training-exams/practice/gp-wellbeing.aspx

SOCIAL PRESCRIBING

Richard Kimberlee (2013) offers a good discussion of some of the literature informing, and the complex nature of social prescribing: 'Developing a social prescribing approach for Bristol' University of the West of England, accessible via: http://eprints.uwe.ac.uk/23221/1/Social%20Prescribing%20Report-final.pdf

Drayson et al., undertook an evaluation of a social prescribing initiatives that were piloted and rolled out across a whole commissioning footprint in the North of England: 'Evaluation of the Rotherham Social Prescribing Pilot' Sheffield Hallam University, 2017. Accessible via: https://www4.shu.ac.uk/research/cresr/ourexpertise/evaluation-rotherham-social-prescribing-pilot

For a good short introduction to the field and basic research:

The Kings Fund. 'What is social prescribing?' The Kings Fund, 2015. Accessed via: https://www.kingsfund.org.uk/publications/social-prescribing

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2B

Preventing disease and promoting health

REFERENCES

1. Doll R, Peto R, Wheatley K, Gray R, Sutherland I. Mortality in relation to smoking – 40 years' observations on male British doctors. BMJ. 1994;309(6959):901-11.
2. Rose G, Khaw K-T, Marmot M. Rose's Strategy of Preventive Medicine. Oxford – Oxford University Press; 2008.
3. Raffle A, Gray M. Screening Evidence and Practice. Oxford – Oxford University Press; 2007.
4. Wylie A. Health Promotion in General Practice. In: Stephenson A, editor. A Textbook of General Practice. Third ed. London: HodderArnold; 2011.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2C

Quality of care

INTRODUCTION

As clinicians we want to provide the best quality care for our patients. Those who commission (that is, use taxpayers' money to pay for) healthcare services must also ensure that patients have access good quality care wherever they happen to live.

There is a paradox here, as GPs in the past were paid mainly according to how many patients they have on their 'list'. Quantity does not always guarantee quality, and therefore quality of care measures have been introduced over the past 20 years to ensure that the quality of services provided by GPs is both high and consistent. General practice has therefore been at the forefront of professions such as law, medicine, and politics in subjecting the quality of its output to rigorous external analysis. This can at times feel uncomfortable for GPs, as the quality of their care is now public knowledge and linked to their pay. In addition, construction of publicly available ratings and comparisons can, if mismanaged, result in reductions in professional pride, autonomy, and potentially 'gaming' of whatever is deemed representative of quality.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2C

Quality of care

NEED TO KNOW

HOW DO WE DEFINE QUALITY OF CARE?

On the basis of several definitions in the literature, the World Health Organisation's (WHO) definition of quality of care is *"the extent to which health care services provided to individuals and patient populations improve desired health outcomes. To achieve this, health care must be **safe, effective, timely, efficient, equitable and people-centred**."*

- **Safe** – Delivering health care that minimises risks and harm to service users, including avoiding preventable injuries and reducing medical errors.
- **Effective** – Providing services based on scientific knowledge and evidence-based guidelines.
- **Timely** – Reducing delays in providing and receiving health care.
- **Efficient** – Delivering healthcare in a manner that maximises resource use and avoids waste.
- **Equitable** – Delivering health care that does not differ in quality according to personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status.
- **People-centred** – Providing care that considers the preferences and aspirations of individual service users.

HOW DO WE MEASURE QUALITY OF CARE IN GENERAL PRACTICE?

There are three main ways in which the quality of general practice care is currently measured:

1. The Quality and Outcomes Framework (QOF).
   A performance related payment system for the quality of services and care provided by GPs.
2. Care Quality Commission (CQC) inspections and ratings.
3. A system of annual appraisal of all GPs linked to revalidation (of their Licence to Practice).

Through these measures, the quality of practice has arguably been transformed. However, it is also true to suggest that the profession is more managed, has lost elements of autonomy and as a result, motivation. Having a strong sense of professional identity is extremely important in maintaining motivation and resilience (1, 2).

THE ROLE OF THE CQC

The CQC is the independent regulator of health and adult social care in England. Their role is to ensure that health and social care services are providing care which is safe, effective, compassionate, and high quality.

CQC inspectors have an important role in regularly visiting every hospital, general practice and care home in England. Visits are detailed, and result in an inspection report and overall rating for the practice. In addition to inspecting GP practices, CQC inspectors also inspect out-of-hours services, walk-in centres, minor injury units, and urgent care centres.

In inspecting all these services, CQC gather and analyse information through a continual process. Inspections are pre-planned but may take place urgently in response to concerns raised by patients, health services staff, or a range of other individuals.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2C

Quality of care

CQC inspections are conducted by a lead inspector – an independent GP – and an "expert by experience", that is, a lay user of primary care services. Inspections make use of a variety of data including patient surveys, information from the NHS (such as QOF scores), patient opinion feedback, and the findings of the NHS Friends and Family Test. An inspection of a practice will take several hours or even days. Practices are provided with a report which is made public through the CQC website, and with links from the NHS website.

5 KEY QUESTIONS

The five key questions which form the basis of an inspection are:

1. Are the services safe?
2. Are they effective?
3. Are they caring?
4. Are they responsive to people's needs?
5. Are they well led?

POPULATION PARTITIONING

In addition to focusing on the five key questions, inspections will focus on some key population groups, where the inspecting team will seek specific information:

1. Older people
2. People with long-term conditions
3. Families, children, and young people
4. Working-age people, including those recently retired and students
5. People whose circumstances may make them vulnerable
6. People experiencing poor mental health, including people with dementia.

Following inspection of a service, the inspecting team give one of four ratings:

- Outstanding
- Good
- Requires improvement
- Inadequate.

'Outstanding' services are performing exceptionally well. At the other end of the scale, 'inadequate' services are performing badly, and, in the most extreme cases, sanctions may be put into place resulting in the immediate closure of the service. Such events are unusual, but CQC inspections are important and have 'teeth', you might say.

The overall ambition of the inspection process is to seek to improve standards of care and the quality of services provided to the public.

PATIENT EXPERIENCE AND CQC INSPECTIONS

The English National GP Patient Survey (GPPS) is the largest routine survey of patients' experience of primary care undertaken anywhere in the world. Since its inception in 2008, the survey has been distributed to over 25 million people and has received responses from around 18 million people.

Currently, the GPPS is distributed to around 2 million people each year, with increased targeting of those practices where patients have lower participation and/or response rates. The University of Exeter was responsible for designing the survey in conjunction with colleagues from the University of Cambridge and Ipsos MORI. The Exeter primary care researchers (APEX) have produced a whole range of papers describing the scientific basis of the survey, its design, and its potential. The GPPS feeds directly into the NHS Outcomes Framework and is used to form a substantial component of the data used by CQC inspecting teams in their visits to practices.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2C

Quality of care

ACTIVE LEARNING

Obtain a copy of your host practice most recent CQC Inspection report. This will be available here.

Obtain a copy of your practice's most recent summary in respect of GPPS data here.

Talk with one of the doctors or practice management staff about the findings of both the inspection and the GPPS summary data.

Is the practice aware of these reports? Have they felt the need to take any specific action in response to the findings of CQC inspectors or GPPS?

How do you think such quality assurance data should be presented? Does it matter at which level of analysis the data is reported, that is, at the level of individual doctor, practice, or clinical commissioning group or NHS organisation? How might the findings be applied in practice?

Have a look at your practice's QOF profile here. Pick one area of interest to you and ask your GP teacher or practice manager about what the figures mean.

How does quality of patient experience vary between and within practices? Have a look here.

What do **you** think quality of care means? In what ways is it similar or different from CQC?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2C

Quality of care

RESOURCES

Campbell, J., Smith, P., Nissen, S., Bower, P., Elliott, M. and Roland, M., 2009. The GP Patient Survey for use in primary care in the National Health Service in the UK–development and psychometric characteristics. BMC family practice, 10(1), p.57 .

Ball SJ. Performativity, privatisation, professionals and the state. In: Cunningham B, editor. Exploring Professionalism. Bedford Way Papers. London: Institute of Education; 2008. p. 50-72.

Eraut M. Developing Professional Knowledge and Competence. London: The Falmar Press; 1994.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2D

Information technology

INTRODUCTION

Effective use of digital technologies enables the NHS to provide healthcare which is:

- High quality
- Safe
- Satisfying
- Accessible
- Affordable (1).

BENEFITS OF DIGITISATION IN THE NHS

Technology has the potential to bring about a fundamental change in the relationship between patients and healthcare professionals. Effective use of technologies drives improvements in quality, efficiency, and population health, and improves patient experiences (2).

- It can improve safety and quality of care, for example by reducing the risk of avoidable errors.
- It can enable access for patient care, for example through the use of video consultations and online consultations.
- Clinicians spend less time accessing information about patients.
- It can facilitate advances in medical practice, for example through research and machine learning to support clinical decisions.
- Data can be used to improve service planning, such as aligning capacity with demand.
- It can enable people to take a more active role in their own health, by providing access to relevant information and facilitating peer support online.
- Information sharing systems can improve the delivery of care and coordination between professionals across different organisations.

This chapter introduces the use of IT in general practice including electronic note-keeping, coding, recall systems, and digital patient journeys.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2D

Information technology

NEED TO KNOW

THE LANGUAGE OF AN ELECTRONIC HEALTH RECORD

The heart of the entire digital infrastructure is its databases: the individual Electronic Health Records (EHR) for each patient. For this database to be useful, it must be searchable, and the data that is inputted has to be consistent. Therefore, a language of codes has been developed, called SNOMED CT. As someone enters data into an EHR, the information can be retained as 'free text', or preferably, converted to these codes.

SNOMED CT is a structured clinical vocabulary for use in the EHR. It is a comprehensive and precise clinical health language with over 100,000 codes. These codes cover detailed diagnoses, symptoms, signs and observations, procedures, allergies, and assessment tools.

All clinical software systems in Primary Care as well as all other healthcare providers have adopted these codes (3).

THE HISTORY OF THE USE OF IT IN PRIMARY CARE

GPs have been early adopters of IT in healthcare; from as early as 1975, it was reported that GPs had designed and implemented a full EHR. In 1980, the Royal College of General Practitioners and the British Medical Association presented a unified negotiating voice to government to facilitate uptake of the EHR in primary care. Between the late 1980s and 2004, the Department of Health increased the subsidy to GP practices for clinical software systems. By the mid-2000s, there was near-complete uptake of EHRs in GP practices.

There are currently four clinical software systems that meet the government's accreditation standards: EMIS, TPP (SystmOne), In Practice Systems, and Microtest. EMIS, and TPP are the most popular (1).

BENEFITS AND APPLICATIONS OF AN ELECTRONIC HEALTH RECORD

Using an EHR has resulted in many functional benefits in primary care:

- Improved access to information - Members of the primary care team can quickly access information, electronically search records, and view scanned documents.
- Improved documentation – Though notes may be shorter, they are more legible and complete due to the use of codes.
- Reduced time needed – In terms of filing, sorting, and accessing paper records.
- Reduced space needed – Removes the requirement to store extensive paper records.

AS WELL AS THESE DAY-TO-DAY BENEFITS, THERE ARE MANY APPLICATIONS OF AN EHR:

- **Recall systems:** There are search functions within the clinical software system to search the EHRs of all patients to build a disease register for any diagnosis. This then enables GP practices to recall patients for regular reviews, and tailor the delivery of services. For example, some GP practices will invite all patients with diabetes to a diabetic clinic; other practices will review all the conditions that a patient may have at one holistic review. Patients on different disease registers could be recalled at varying intervals appropriate for that condition, and patients with the same condition of varying severity can be recalled at varying intervals. The clinical software system can be used to contact these patients. This can be done automatically, by creating postal letters via mail merge, sending voice messages to telephones, sending SMS messages to mobile telephones, and sending emails to patients. If patients do not respond initially to invitations, further searches can be created to identify non-responders to send additional recall invitations.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2D

Information technology

- **Monitoring treatment targets:** Utilising clinical guidelines to inform treatment targets, the EHRs of all patients at a GP practice can be searched to identify where targets are met, and where they are not. For example, a search could be built to identify all patients with hypertension, who have had a recent blood pressure measurement above a certain value. This search could then be narrowed to identify a particular age group. Where treatment targets are not met, patients can be individually reviewed.
- **Public health initiatives:** The clinical software system can be used to search for uptake of public health initiatives. For example, eligible women who have engaged with the cervical screening programme can be identified; and those who have not can be reminded, and information shared with them to encourage them to engage. A similar approach can be used for other public health initiatives, such as childhood immunisations and smoking cessation services.
- **Health campaigns:** Searches can be built to identify eligible patients for specific services, and invitations for patients to attend can be automated. For example, eligible patients for the seasonal influenza vaccination can be identified and invited to attend a GP practice.
- **Risk profiling for primary prevention:** Risk calculators can be run within the clinical software system on any demographic of a patient cohort to 'batch add' a calculated value to individual EHRs. For example, a cardiovascular risk score could be added in batch to EHRs, and those patients above a certain threshold could be contacted if appropriate. A similar approach could be used to identify frail patients.
- **Identification of new population groups:** Where health services can be tailored for specific population groups, IT systems can be used to identify patients where a code does not exist in their EHR. For example, all patients at a GP practice can be sent an SMS message to ask if they are a carer. By replying, the information is directly coded into their EHR, which enables the GP practice to identify this population group and deliver specific services for them.
- **Prescribing safety:** There are many ways that a clinical software system can reduce avoidable prescribing errors. For example, when prescribing a new drug, the software automatically searches the EHR and alerts the prescriber if there is an interaction or contraindication. This can be particularly helpful in cases of polypharmacy. Similarly, searches can be run at regular intervals for all patients using certain drugs that require monitoring. For example, a patient using a disease-modifying drug that requires regular blood monitoring can be invited to attend for a blood test.
- **Prescribing efficiency:** Often supported by a practice pharmacist, drugs which are considered to be more appropriate (for example, those that are more cost-efficient) can be offered to patients, instead of those that are identified as less appropriate.
- **Research:** The EHRs are a valuable resource for medical research, as well as a means of identifying patients eligible for certain research trials. Through data sharing agreements, anonymised patient data from multiple GP practices can be collated to facilitate advancements in medical research. Where a practice is aligned with a medical research organisation, eligible patients can easily be identified to invite them to join a research trial.
- **Clinical decision tools:** Certain tools can be enabled in the clinical software systems, which can guide clinicians where appropriate during consultations. For example, a tool to guide the use of antibiotics in a certain condition can be activated. Similarly, alerts can be enabled when the software analysis of the EHR considers a patient at risk of a certain serious condition.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2D

Information technology

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

- Performance indicators. GP practices can demonstrate the performance of delivering medical services by searching the EHRs. Benchmarking performance data can be compared between different practices, as well as clinicians within a practice, so variability can be analysed and addressed.
- Portability and information sharing. Where appropriate, data sharing agreements are established to share vital information between organisations that deliver healthcare. Similarly, if a patient registers at a new GP practice, their whole EHR can be automatically transferred.

DIGITAL PATIENT JOURNEYS

Digital technology is transforming how patients and health professionals interact (4).

Online consultations (eConsults/eConsultations) allow patients to contact their GP practice via the practice's website. Online consultations enable patients to ask questions, report symptoms, and upload photos. The practice then triages the information, and responds by connecting the patient to the right person or service. Although most online consultations are asynchronous, some practices use synchronous messaging too. The eConsult tool is a popular service that GP practices embed in their website (5).

The figure below summarises the digital patient journey (4):

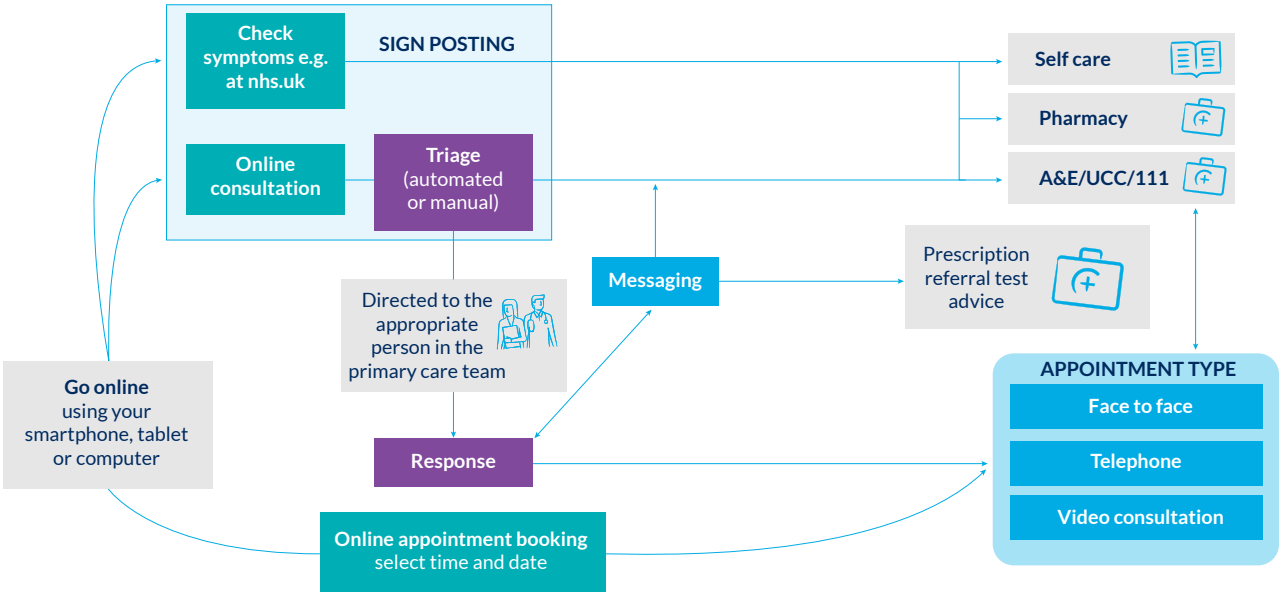


Figure 11 – digital patient journey

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

2D

Information technology

Although the NHS Long Term Plan (6) commits to digital-first primary care by 2023-24, the COVID-19 pandemic catalysed a change in the way primary care delivered patient services. As a result, most GP practices have already enabled patients to consult via video consultations. This allows healthcare professionals to see and speak with patients remotely, enabling greater interaction and remote examinations, for example, visualising a rash, or assessing respiratory function. A popular tool that many GP practices have adopted is accuRx, which enables secure **video consultations**, sending SMS text messages to patients, and allowing patients to respond (7).

LOOKING TOWARDS THE FUTURE OF THE DELIVERY OF HEALTHCARE IN PRIMARY CARE, THE USE OF IT ENABLES MANY SERVICES:

- Booking appointments and requesting repeat prescriptions is already widely available, though uptake by patients is variable.
- Similarly, patients being able to access their EHR (to varying levels of detail) is available, though uptake by patients is relatively low. If a patient has had an investigation, they could review the result as soon as it is available in their EHR online or via an app, rather than by contacting the GP practice.
- As well as viewing their EHR, patients may be able to input data into it. For example, a patient with hypertension can input their home blood pressure measurements.
- The IT infrastructure in primary care can facilitate trends of consultation styles and preferences. At present, only a small proportion of consultations take place as video consultations (8), though this may change over time with patient preferences. Online consultations could be augmented with the use of artificial intelligence.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2D

Information technology

ACTIVE LEARNING

Identify how to access information in an EHR. Become familiar with identifying diagnoses, consultation notes, investigation results, and scanned documents.

Practise adding data into an EHR. For example, a blood pressure measurement.

- Once this data has been added, review the historic blood pressure measurements (either as a list of values, or as a graph).

Ask the practice pharmacist, practice manager, or GP for support to build a search in the clinical software system. For example, identify all patients with diabetes, then identify those patients with an HbA1c above a certain value.

Identify those patients who are current smokers, who have not had recent smoking cessation advice. Consider how healthcare services could be tailored for this population group.

Speak with patients to hear their views on the data in their EHRs being shared. The sharing may be anonymised with research organisations, or not anonymised with other healthcare providers.

Consider an audit topic on primary prevention. For example, a search could be built to identify patients with a certain cardiovascular risk score who have been offered a lipid lowering drug.

Initiate a video consultation with a patient, and reflect on the similarities and differences with a face-to-face consultation.

Speak with patients to explore their preferences on consultation styles. Do they prefer to meet with a clinician face-to-face, speak via telephone, via 'live chat' online or through an app, or via video consultation.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2D

Information technology

RESOURCES

- Explore data of all prescriptions by GPs in England
- Explore the profiles of all GP practices in England
- Explore the achievement points of the Quality and Outcomes Framework (QOF) of GP practices in England

REFERENCES

1. Wachter RM. Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England. Report of the National Advisory Group on Health Information Technology in England; August 2016. Accessed 9th August 2019.
2. Honeyman M, Dunn P, McKenna H. A digital NHS? An introduction to the digital agenda and plans for implementation. The King's Fund; September 2016. [Accessed 9th August 2019].
3. SNOMED CT. NHS England, Digital Transformation, Digital Primary Care. [Accessed 9th August 2019].
4. Digital First Primary Care. NHS England, Digital First Primary Care. [Accessed 23rd December 2020].
5. eConsult. [Accessed 23rd December 2020].
6. NHS Long Term Plan. NHS. [Accessed 23rd December 2020].
7. accuRx. [Accessed 23rd December 2020].
8. Appointments in General Practice. NHS Digital. [Accessed 23rd December 2020].

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

INTRODUCTION

Teamwork, at its simplest level, can be defined as any two or more people who interact interdependently with a common purpose. Interdisciplinary teamwork between healthcare workers is a key component of general practice.

This chapter will introduce you briefly to the many different types of people who provide care to patients in general practice and primary care. Over the course of your various undergraduate GP attachments, you will see many of them at work. We also summarise some of the theory of teamwork and explore the nature and importance of leadership for any team to work well.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

WHO ARE THE PEOPLE WORKING IN A GP SURGERY?

Let's start with the doctors:

- Partners own the business (often including the premises) and keep the profits. Make decisions about what happens in the business.
- Assistants/Salaried GPs are employed in the medium-to-long term by partners to see patients.
- Retainers are commonly doctors who have young families. They are paid partly by the partners and partly by the local healthcare organisation.
- Locums are employed in the short term by partners to see patients.
- 'Out of hours' doctors see patients when surgeries close at 6pm in the evening until 8am the following day. This job used to be performed by partners at practices.
- Practice nurses are nurses who see patients for health checks and sometimes minor illnesses.
- Nurse practitioners are senior nurses who can see patients with many medical conditions and often prescribe some medications.
- District/Community nurses are no longer employed by practices but by local acute or community Trust. They see patients in their own homes who cannot get into the surgery.
- A wide range of specialised community nurses, for example midwives, health visitors, community mental health nurses, nurses specialising in particular long-term conditions.

There are also several other allied healthcare professionals working at GP practices:

- **Healthcare assistants (HCAs)** help monitor/perform investigations.
- **Phlebotomists** take blood for investigations.
- **Physiotherapists** diagnose and treat musculoskeletal problems.
- **Psychologists and counsellors** help people with mental health issues.
- **Chiropodists** help people with foot problems.
- **Osteopaths** help people by manipulating painful joints and bones.
- **Social workers** help people with social problems, for example housing, family issues.
- **Citizens Advice** workers help people with forms, paperwork and benefits.

Then there are others who glue this all together: the managers and administrative staff, including:

- **Practice manager** helps the partners run the business and carries out the strategy agreed by the partners. Many practices have deputy practice managers.
- **Receptionists** help direct patients to the most appropriate care, book appointments, organise appointments at the hospital, issue patient prescriptions, and a hundred other things!

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

A medium-sized surgery serves about 10,000 patients, usually with about three or four full-time-equivalent (FTE) GPs and about 40 employees. It turns over about £2.5m a year. The partners are responsible for the business aspects of this enterprise and meet regularly to discuss business matters. Here, partners work in close association with accountants, lawyers, bank managers, and practice managers.

A GP practice has different types of meetings so that all the business and clinical care can be coordinated. These might include partners' meetings, clinical meetings, team briefings, administrative team meetings, practice nurse meetings, and whole team meetings.

Practice meetings commonly have different themes such as 'education' or 'quality'.

TEAMWORKING

As a doctor, you will almost certainly spend your entire career working in teams made up of many different types of health workers. Small groups in medical school, clinical teams in hospitals, and clinical teams in GP practices.

Understanding how groups work is therefore essential to team working. Fortunately, there has been a lot of research in this area, and some of this is summarised in this chapter. However, we would recommend further reading and discussion in this area. See *further learning* below.

The management of teams is an essential part of being any kind of doctor, and it uses insights from the field of group dynamics. You will be learning about how groups function in your PDG groups. Take an opportunity to apply some of this thinking about groups to the practices where you have your placements. Your PDG (and other small groups) are an important vehicle for you to learn about being part of a group and therefore team working.

GROUP DYNAMICS

The following extract concentrates on the characteristics of groups that are functioning well and groups that function not so well.

EFFECTIVE GROUPS

A meeting of partners meets to decide whether to expand the practice and take on another partner. A sensible decision must be made, and to do this the group must interact effectively. Here are the characteristics of an effective group:

AIMS:

- What is exactly the group's task and aims?
- They must be clearly understood by everyone
- It must also be relevant to the needs of group members.

Stop, think!

What are the aims of the groups that you are a part of? Aims change and like all group processes will need to be readdressed from time to time. Problems are seldom sorted out once and for all in groups

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

COMMUNICATION:

- Effective communication is a prerequisite in groups.
- Communication can be verbal or non-verbal.

POWER:

- Participation in groups should be equal.
- Leadership and responsibility should be evenly shared.
- Power should be based on expertise, ability and access to information, not on who makes the most contributions or shouts loudest. Quieter members of any group often have huge amounts to offer.
- Coalitions will form within groups these should be noted and explored.

DECISIONS:

- Appropriate decision-making methods must be used. A popular formal method is SWOT analysis: listing Strengths, Weaknesses, Opportunities and Threats of the various relevant factors involved in a decision.
- The group should have a system by which group decisions should be made, and an appropriate amount of time agreed in which to come to a decision.

CONFLICT AND CONTROVERSY:

- *"Since the general or prevailing opinion on any subject is rarely or never the whole truth, it is only by the collision of adverse opinion that the remainder of the truth has any chance of being supplied."*

  John Stuart Mill

- *"When two men in business always agree, one of them is unnecessary."*

  William Wrigley

The two words have slightly differing meanings:

- Controversy implies a difference in beliefs between people who work to seek an agreement.
- Conflict implies a difference in opinion, but the aim here is to reach a compromise through negotiation rather than agreement.

In both however, there is a strong emphasis on maintaining a positive approach and reaching an acceptable solution. There are other ways to reach decisions when people disagree, for example *debating*. Here the aim is to 'win', the winner being decided by a vote (for instance, the Houses of Commons and Lords in the UK) or judge (for instance, the law courts). Conflict can seem threatening and is often avoided. There are many ways that we might avoid conflict:

- Deny controversy exists
- Withdraw yourself from the controversy
- Give in to the opposing view
- Rationalise, for example thinking the issue is not important, you do not hold an opposing opinion, you have no expertise, etc.
- Overpower those that disagree
- Intellectualise so that all feelings and emotions are hidden
- Join in with other group members to smooth over the cracks of uncomfortable conflicts.

COHESION:

- Effective groups have high cohesion. This is based on:
- Physical proximity and social integration
- High costs associated with leaving
- High commitment to group's goals
- Honesty.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g. Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

This *cohesion* concept is highly valued in Japan, where professional groups spend much time socialising – and indeed, arriving at decisions - outside the formal confines of their groups.

Lack of honesty is perhaps the most potent destructor of group cohesion. As groups mature, discrepancies between individuals' spoken intentions and their actual behaviour assume ever greater importance. Sometimes this discrepancy is unknown to the individual - it is part of the individual unknown to himself – but often known or appreciated by others. These are our *Johari's Windows*.

Groups can be effectively used to balance up these discrepancies in ourselves. *'The Trial'* by Franz Kafka demonstrates this well. Conscious discrepancies in spoken intent and actual behaviour are known as hidden agendas and can be extremely destructive, whilst being glaringly obvious within established groups.

In general, effective groups must have the following three properties:

- Ability to accomplish aims, that is, good problem solving
- Ability to maintain good relationships
- Ability to adapt to change.

SUMMARY OF EFFECTIVE GROUP CHARACTERISTICS

In analysing the effectiveness of any group, think of the following. Choosing and discussing one of these areas is an interesting exercise for an afternoon!

- Aims
- Communication
- Power distribution
- Decision making ability
- Management of conflict
- Group cohesion.

INEFFECTIVE GROUPS

In the analysis of medical errors and sub-standard care, the common factor is always that clinical teams have been very dysfunctional. Learning to spot dysfunctional group characteristics is therefore very important. A lack of the six preceding signs of effective groups will often be evident. However, certain types of behaviour are also indicative of ineffective groups, some examples are:

- **Free rider effect:** Decreasing amounts of effort are expended by group members. 'Going through the motions' becomes the norm.
- **Sucker effect:** High-ability members of the group are saddled with more than their fair share of responsibility.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

- **Rich get richer:** As a consequence of the sucker effect, the more able members spend more time explaining, and this correlates highly with the amount learned. Other less able members flounder as 'captive' audiences.
- **Self-induced helplessness.**
- **Overdependence on leader.**
- **Ganging up against tasks.**
- **Destructive conflict and arguments.**
- **Joking and horseplay in inappropriate amounts:** Effective groups have been shown to make better, more efficient decisions than individuals. The members are also psychologically healthier. The increasing incidence of neurotic disorders in the face of a consistent incidence of psychotic disorders has often been attributed to the breakdown of effective supportive groups, such as family and friends. This in turn may be due to greater social mobility and more competitive environments. The re-emergence of small groups such as family and community may be one of the central themes of politics and social organisation in the future.

LEADERSHIP IN GENERAL PRACTICE

Leadership is crucial, so that things can get done. Conversely, lack of leadership can have disastrous clinical consequences. Many of the serious healthcare failings in recent years can be traced back to a lack of leadership by doctors (1). We all have a duty to assume leadership roles when the situation arises, and this is recognised by the GMC (2).

Many of you will already have a leadership role. This may include organising a study group, leading a session on a clinical topic, supporting students in earlier years, organising outside activities with friends, or for an organisation such as a sports club.

- *Take a moment to consider what 'leadership roles' you have, both clinical and non-clinical.*
- *What things work for you in these roles and what things do not?*

LEADERSHIP CHARACTERISTICS

Leadership is a process of influence, in which a person can enlist the aid and support of others in the accomplishment of a common task. It is different from 'management', which concentrates on the delivery of the vision; that is, ensuring that timelines are met, risks identified and mitigated, and resources appropriately allocated.

Styles of leadership vary, and the skill of a good leader is to be able to vary their style according to the task involved and the people they are working with. Autocratic leadership might be most appropriate when leading a cardiac arrest team, but a more democratic leadership style might be better for a group of GPs working on a service development project. Take a few minutes to read about different leadership styles.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

LEADING CHANGE

Leaders tend to have characteristics that match the stages involved in leading change (3,4):

1. Creating and communicating a vision for change, together with an explanation why that change is needed, and is needed now. (Vision)
2. Motivating and inspiring people to engage with that vision. (Human relations)
3. Translating the vision into a process that has the right people in the right roles. (Operational)
4. The resilience to deal with uncertainty, messiness, complaints, and setbacks that typify change management.

In summary, leadership brings together four key skills needed to complete four key tasks:

1. Vision
2. Human relations
3. Operations (the ability to translate vision to achievable actions)
4. Resilience.

Very few people have all these skills, and therefore one of the key aspects of leadership is 'self-knowledge': the ability to identify our own strengths and weaknesses and to find the right people to fill the gaps.

DISTRIBUTED LEADERSHIP AND FOLLOWERSHIP

It is important to recognise that people with a nominal position of leadership may not actually be 'the leader' of a team for a task. For example, it may be the registrar leading the daily ward round, rather than the consultant. The leader may also vary from task to task. The value of this distribution of leadership in a complex system such as healthcare is that everyone can use their varying leadership skills to develop different tasks, rather than all the responsibility resting on one person whose style may not suit the variety of work (5). This model of 'distributed leadership' also emphasises the value of 'followership': not everyone can be a leader, but to be effective they need 'followers'. There is a well-known video that summarises this (6).

MOTIVATIONS TO LEAD – A WARNING!

Despite the theory, some people in senior leadership positions display few of the above characteristics and are frequently driven by motivations to prove themselves or to dominate. Many failings in healthcare have been due to poor senior leadership remaining unchallenged (1).

- *Consider what your actions might be if you had to work with such people and had concerns.*

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

ACTIVE LEARNING

Try to make a list of the healthcare professionals that you come across.

Whenever you meet a different professional, ask them about their role and what their typical day is like. Ideally over a cup of tea!

Consider the attributes of effective and ineffective groups. Can you see any of these at work in groups that you are part of?

If you can see positive attributes in a group, how could you encourage the group to do more? If you can see negative attributes, how would you go about addressing these?

Take a moment to observe how verbal and non-verbal communications match in a group.

Think about what kind of roles you like to play or feel you do best in a team. Similarly, what roles do you not like to take, or feel you need to learn to do better?

Think about how you deal with conflict and controversy.

Can you see any of the avoidance tactics above at work in your placement?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

LEADERSHIP

Who are the effective leaders on your placements? Are they in leadership roles?

What makes them an effective leader?

What have you seen them do that makes them effective? How do they achieve 'vision', 'human relations', and 'operations'? What can you learn from them?

What sort of 'leader' are you? What are your skills? What do you think you need to develop to become a more 'effective' leader?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2E

Teamwork and leadership

RESOURCES

Look at this link offering some down-to-earth advice about team-working.

Also, this report from the King's Fund on teamwork in general practice.

REFERENCES

1. Smith R. All changed, changed utterly: British medicine will be transformed by the Bristol case. BMJ: British Medical Journal. 1998;316(7149):1917.#
2. GMC Generic Professional Capability Framework: https://www.gmc-uk.org/-/media/documents/generic-professional-capabilities-framework--0817_pdf-70417127.pdf#page=20
3. Kotter JP. Leading change: Why transformation efforts fail. Harvard business review. 1995;73(2):59-67.
4. RCGP Leadership Strategy: http://www.rcgp.org.uk/policy/rcgp-policy-areas/rcgp-leadership-strategy
5. Richard Bolden: Distributed Leadership 0702 Business School: https://business-school.exeter.ac.uk/documents/papers/management/2007/0702.pdf
6. Dancing Man - there is no movement without a follower! https://www.youtube.com/watch?v=a8UgoP1PFdY
7. Developing medical leadership - a toolkit for doctors in postgraduate training Faculty of Medical Leadership and management/Health Education England: https://www.fmlm.ac.uk/sites/default/files/content/resources/attachments/Developing%20medical%20leadership%20toolkit.pdf

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

INTRODUCTION

> "Lives are on the line. Our decisions and omissions are therefore moral in nature."
>
> Better - Atul Gawande

Ethics is a very old field of study concerning thinking about and doing the right thing, often culminating in sets of principles that can guide us in trying to do the right (or good) thing.

In medicine, high expectations for the professional behaviour of doctors go back more than 2,000 years to the Hippocratic Oath, and in current times enshrined in the GMC publication Good Medical Practice (GMP) (1). Despite these guidelines, the 'right thing to do' can be far from clear, as often there are conflicting ethical principles promoting different or even opposing ends.

For instance, 'continuity' (ongoing personal care by a particular doctor) sits in tension with 'ease of access' (the ability to see a doctor quickly when a problem arises). Generally, the easier it is for a patient to get an appointment, the less likely it is that this consultation will be with a particular doctor, such as their own doctor.

In addition to patients, a GP has responsibilities to a wide range of other parties such as to patient's families and to wider society. Trying to meet the needs of these different parties at the same time gives rise to interesting dilemmas.

For instance, a patient may disclose an alcohol addiction and admit to regularly driving under the influence. The GP has loyalty to their patient (the ethical principle of beneficence - doing good for our patients), but also the health of other road users, most of whom are not their patients (the principle of justice – the good of the many).

Despite the lack of certainty in this field, by learning to recognise ethical problems in practice, decipher the basis of conflicts and balance competing demands, you will be more likely make well considered clinical decisions. Ethics is a good example therefore of where being able to use inductive or relative thinking is very important.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

KEY CONCEPTS OF MEDICAL ETHICS

Here is a reminder of a few of the more important concepts in medical ethics that come up regularly in practice. The BMA's Ethics Toolkit for Students is a free online handbook which covers these and other issues in an accessible format (2). One very useful framework covered in this toolkit is the *four pillars approach:* four key ethical concepts often at play in medical cases:

1. **Respect for Autonomy:** Autonomy can be defined as the ability of the person to make his or her own decisions regarding care, or participation in research. Related concepts concerned with autonomy are:
   - **Informed Consent:** The need for patients to understand and specifically agree to undergoing a medical treatment. Consent can be formal or implicit.
   - **Mental capacity:** This is the ability of a patient to understand the nature of their medical needs and planned interventions, and therefore to give informed consent.
   - **Confidentiality:** Dating back to the Hippocratic Oath, this is the obligation on doctors to keep secret certain types of information disclosed in clinical settings. Students may be asked to sign confidentiality agreements when on GP attachments.
2. **Beneficence:** A doctor should always try and do the best for patients. It sounds simple, but carrying this out in every consultation?
3. **Non-maleficence:** 'First do no harm'. It is possible to see straight away that beneficence and non-maleficence are often simultaneously at play and in tension in medicine. The decision to commence any investigation or treatment for the good of the patient, must be balanced against potential harms. Judgement is called for.
4. **Justice (fairness or equity):** People should be treated fairly – people with equal needs should be given equal consideration - and should not be discriminated against in the provision of health services. This is an obligation of a publicly funded service like the NHS.

CORE VALUES IN PRIMARY CARE

Values are the things we hold dear that motivate for actions. The values of primary care arise from a blend of ethics (such as truthfulness), traditions (such as comprehensiveness), and more modern imperatives (such as being evidence-based) (3).

Many of the core values in general practice are addressed in this resource. They include principles such as a holistic approach to patients (the biopsychosocial approach), the centrality of relationships, continuity, accessibility and evidence-based practice. These values seem incontestable when viewed singly, but again can easily fall into conflict with each other.

THE RESPONSIBILITIES OF THE GP

So far, we have covered ethical principles and professional values. There are also several responsibilities that GPs have. One might imagine that patients are the GP's primary responsibility, and this is certainly the emphasis of GMP. However, there are many other – often competing – responsibilities, such the below.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

PARTNERS AND FAMILIES

Often a problem presents that has major implications for those immediately connected to an individual patient. A good example is the needs of carers. If a GP refers a dependent patient for surgery, she must think of how to meet the increased burden upon that patient's carer during the convalescence period.

THE PRACTICE POPULATION

GPs are often thinking about how best to organise their appointment system, improving access for special groups (such as teenagers), and improving their prescribing systems. As we shall see, sometimes the needs of the practice population can conflict with the needs of individual patients.

THE WIDER PUBLIC

GPs are often now involved in commissioning services for a geographical region. Though most GPs are not 'commissioners' they are all responsible for spending large amounts of the public purse and most GPs consider they have a responsibility not to waste public resources on unnecessary interventions.

THE ENVIRONMENT

Healthcare uses a lot of resources and creates a lot of waste. Some medical waste creates environmental hazards, for instance hormone medications that enter the water supply can disrupt endocrine systems in animals. Many doctors feel it is part of the duty of the doctor to protect the global environment from iatrogenic harm as much as possible (4).

TEACHING OTHERS

The word 'doctor' is derived from the Latin docere meaning to teach. This implies that doctors have always been thought of as teachers - especially to those learning the profession - and this is again reflected in the Hippocratic Oath. Teaching is an explicit expectation of GMP (1 para. 39).

Good teaching placements require considerable time and energy to organise, implement and review and this can impact on patient care by reducing doctor availability.

SELF-CARE

Being a GP is a demanding occupation. Many of us rather like the sense of being busy, but at times this can get too intense and our enjoyment and effectiveness can suffer. GPs have a duty to themselves therefore to avoid getting over-stressed through taking adequate leave and having lives outside of work, all of which takes them away from being accessible to patients. This can create ethical tensions.

OTHER DOCTORS

Within existing GP partnerships, each partner is responsible for the success of the practice and being willing to fairly share the workload. GP income is not fixed but depends on the communal efforts of the practice and hence GPs have financial responsibilities to each other. Many GPs are employees, rather than partners, but share many of the same obligations.

STAFF

A GP practice of, for example, 8,000 patients might employ 30 or more people including doctors, nurses, health care assistants, managers, administrators, receptionists, cleaners etc. The GP partners therefore have major responsibilities as an employer for things such as creating a safe and pleasant work environment and ensuring sustainable long-term employment.

Meeting these diverse duties brings a lot of variety and satisfaction to our work and creates interesting tensions. The ability to be aware of these competing tensions and to use judgement in considering all the relevant principles is therefore a key attribute of professional practice. Having some approaches to thinking about this can be useful.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

A PRACTICAL APPROACH TO ETHICS

You can develop awareness of the ethics of everyday practice by observing consultations and also when you are conducting your own consultations under supervision. A challenge is that only the starkest issues may be flagged up by your trainer as overtly 'ethical' due to time constraints. However, as we shall see, ethical issues lurk in many guises. Below are some strategies for approaching them.

BE OPEN TO THE ETHICAL DIMENSION

Pay attention to any sense of *dissonance* you feel in a consultation. By dissonance, we mean a mismatch between what you sense is right and what is unfolding in the consultation. For instance, a 10-year-old child translating the health problems of a non-English speaking parent somehow feels wrong. Where feasible, ask clarifying questions within the consultation. Record an ethical issue for later consideration, otherwise they will easily get lost in the mayhem of clinical life.

A good way to develop ethical sensitivity is to keep a place for the humanities in your personal life. Good art, novels, and films distil the essence of an ethical situation and through exposure to these sources we become better at appreciating them in the clinic. The University of Bristol has an online collection of art, much of which tackles ethical issues.

DISCUSS ETHICAL ISSUES WITH COLLEAGUES

It is very difficult to develop a nuanced ethical understanding on one's own. We seem to need to voice various perspectives in coming to a mature one. Most tutors will enjoy exploring ethical issues with students. When discussing with other students, be sure to scrupulously protect the anonymity of all parties.

AIM FOR CLARITY ON THE ETHICAL ISSUES AT STAKE

You will now be familiar with the *four principles* approach to identifying what is at stake in any given predicament. Try and apply these principles consistently to ethical scenarios. However, beware that these four principles focus mainly on care of individual patients and, as we have seen, the GP is called on to consider a wider constituency.

CONSULT FORMAL GUIDELINES

These exist for many common presentations. For instance, the Fraser Guidelines aid good practice in the provision of contraception services to under-16s without parental consent. Students should also be aware of some key legislation including the Mental Capacity Act (2005) and the Equality Act (2010) that have direct implications for medical practice.

FIND REASONED RESOLUTIONS

There is no 'right' response to a dilemma, but there can be a reasoned one. This often involves a recognition of the principles and parties at odds (for example, maintaining confidentiality versus fulfilling duties to family members at risk) and striving for a reasonable compromise, or explaining why a certain position is an absolute that should not be compromised. For instance, you might argue that it is important to be both truthful and compassionate and thus hold back certain information that, whilst true, would be unnecessarily distressing. But you might also argue it is always wrong to lie to a patient when they ask you a direct (and clearly answerable) question about their health.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

ACTIVE LEARNING

Try thinking about an ethical question. For example, 'What is a good life?' How would you go about thinking about this?

Sit in on a surgery and try to spot the ethical principles and dilemmas at play by using this resource.
Ask your tutor for help in flagging ethical dimensions as they arise.

Before that, practise by trying some of our cases first.

Read the case presentations below and try (with or without your placement partners) to identify the ethical principles and professional values at play and where they may be tensions. These are quite complex cases but could happen and do raise important principles and questions. There are various, non-specialist, resources to help you approach ethical issues including those written for students, and those specific to primary care (5,6,7).

When you have done this, look at the analysis and potential resolutions. What do you think of the analysis and resolution? Have you anything more to add?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

Case study One

Presentation

A female patient is aggrieved because you revealed personal information in a letter to the Council asking you to judge the patient's suitability to become a foster carer. Two years previously the patient was having difficulties in their marriage and you had recorded "couple rowing a lot at present". The patient says she "will never tell a doctor anything personal again".

Analysis

Here the conflict is between the doctor's duties to the patient and to wider society and children who might be fostered by your patient. The patient feels what was said in private has been revealed out of context (her marriage, she says, is now fine). The defensiveness of the patient rings some alarm bells. Confidentiality of medical records is relative but not absolute.

Resolution

The doctor must fairly report the medical record and not edit it at the request of the patient. The conflict can be mitigated by ensuring that the patient has a chance to see any report before it is sent, gaining the opportunity to offer clarifications (this is standard practice). Patients should know that the doctor is required to make a record of consultations - but can show discretion. Patient and doctor should trust the fairness of the fostering assessment process; historical rows alone would not prevent fostering.

Case study Two

Presentation

A male GP is consulted when 'duty doctor' by a female patient with a complex query over her contraceptive medication. The GP advises the patient but with a sense of dissonance – he knows he is not fully up to date with the latest contraceptive guidelines.

Analysis

Here the imperative of competence is in tension with the values of accessibility, comprehensiveness, and continuity. All practices offer urgent care. Any GP sees any problem. Some practices, which place value on continuity of care, operate 'personal lists', where the patient sees the same doctor for routine problems. Especially with 'gendered' health problems, GPs can become deskilled in certain areas.

Resolution

GMP requires GPs to be familiar with the latest guidelines. A good GP will keep a running list of topics they need to brush up on, by reading or going on a course. Here the GP could check the guidelines after the clinic or discuss informally with a GP colleague. If an error has been made the GP should contact the patient promptly, explain the error, apologise, and put matters right.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

Case study Three

Presentation

A GP tutor is planning her teaching during the COVID-19 pandemic. She has a pair of final-year students coming the following week. Normally, students would go with her on any scheduled home visits, always to patients who are either normally house bound or too ill to get to the practice. What does she need to take into account?

Analysis

This is a complex dilemma that has been faced by many GP colleagues in the pandemic period. The ethic of "do no harm" looms large. It goes against all instinct to expose our patients to risk of infection unwittingly carried by a student. On the other hand, the GP has an obligation to the learning of the students who will, soon, be assessing patients as F1 doctors and who need experience with sick patients. As a general rule, medical students on GP placements – especially in the later years – should be treated as health professionals and part of the practice's clinical team.

Resolution

As usual there is no one correct answer but there are some important mitigations. It is best for only one student to attend. The GP should have a sense that a given visit will offer learning opportunities. The susceptibility of the index patient should be reviewed. Verbal informed consent for the student to attend should be obtained prior to the actual visit. We are reassured that PPE can protect both ourselves and those for whom we care. Use of Level 2 PPE is mandatory. Social distancing of >2m would not typically be possible in a patient's home but the GP and her student should aim for "as socially distanced as practically possible" and the duration of the visit kept to a safe minimum. At the time of writing, lateral flow tests and COVID-19 vaccination (of patients and students) are easing this type of dilemma.

This paper is based on the chapter "The everyday ethics of primary care" by the same author in the book Essential Primary Care, edited by Andrew Blythe and Jessica Buchan. Wiley-Blackwell 2016.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

2F

Medical ethics

RESOURCES

Medicine is awash with philosophical and ethical issues - further information can be found in:

Sophie's World by Jostein Gaarder. A beguiling story that also introduced readers to basic philosophical concepts at the same time. The world's bestselling book in 1995.

Philosophy made simple - Richard Popkin and Avrum Stroll. Made Simple Books, 1981. Simple explanations of a range of philosophical ideas including ethics.

Philosophy for Medicine: Applications in a clinical context. Martyn Evans, Pekka Louhiala and Raimo Puustinen. Radcliffe, Abingdon, 2004. Applies philosophical principles to medicine (including ethics).

REFERENCES

1. General Medical Council. Good Medical Practice. 2013.
2. BMA - Ethics tool kit for students [cited 2015 Apr 7].
3. Pringle M, editor. Core Values in Primary Care. First Edition. New York: Wiley-Blackwell; 1998. 128 p.
4. Schroeder K, Thompson T, Frith K, Pencheon D. Sustainable Healthcare. Wiley-Blackwell; 2012. 280 p.
5. Approaching ethical dilemmas [cited 2015 Apr 7].
6. Bowman D, Spicer J, editors. Primary Care Ethics. 1st New edition. Oxford; New York: Radcliffe Publishing Ltd; 2007. 208 p.
7. Sugarman J. 20 Common Problems: Ethics in Primary Care. New York: McGraw-Hill Medical; 2000. 279 p.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

THEME 3:

EFFECTIVE DELIVERY OF CARE

General practices in the UK operate as independent businesses that contract with the NHS. They provide approximately 90% of healthcare episodes for less than 10% of the NHS budget. Countries with well-developed primary healthcare systems are known to have better health outcomes than countries that do not. GPs are well placed to combine medical expertise, local community awareness, and understanding of cost-effective practice to provide highly effective and efficient delivery of care

OVERVIEW

Overview

How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE

1a. The generalist clinical method

i The role of evidence in clinical decision-making

ii Uncertainty in clinical decision-making

iii Prescribing

1b. Holistic care (the biopsychosocial model)

i The physiology of holistic care

1c. The doctor-patient relationship

i Communication with patients of all backgrounds

1d. Continuity of care

1e. Long-term conditions

i Diagnostic phase

ii Maintenance phase

iii End of life care

1f. Emergency conditions

1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE

2a. The social determinants of health

2b. Preventing disease and promoting health

2c. Quality of care

2d. Information technology

2e. Teamwork and leadership

2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE

3a. The generalist approach

3b. The history of UK general practice

3c. The current structure of UK general practice

3d. The funding of UK general practice

3e. The role of general practice in other countries

3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE

4a. Learning in primary care settings

4b. Teaching in primary care settings

4c. Research in primary care settings

CONTRIBUTORS

EPILOGUE

3A

The generalist approach

INTRODUCTION

Tell someone you are training to be a doctor, and the response is often, "what will you specialise in?" Many doctors specialise in the management of specific conditions (such as diabetes or cancer) or of organ systems (such as cardiology or urology). But growing proportions of patients have problems that do not fit neatly into these biomedically defined categories or have multiple morbidities that interact in complex ways.



Which is why we also need doctors who specialise in whole person medicine. These are doctors with the distinct skills and expertise of medical generalism (1). Skills that enable them to safely construct robust, individually-tailored, whole-person explanations of illness experience, and so, implement person-centred healthcare designed to enhance health-related capacity for daily living (2).

The NHS Long Term Plan (3) recognises that changes in our population - including growing numbers of older people living with (often multiple) chronic illness - mean we need to expand our capacity for medical generalist practice within modern healthcare, both in hospital and primary care settings.

So, what is medical generalism? What does the medical generalist do? What skills do they use to practice? And what do you need to know if you are interested in working as a medical generalist?

This chapter offers an introduction to how you can use your medical training to find out more about this most intellectually stimulating area of medical practice.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

MEDICAL GENERALISM

A PRIORITY FOR PATIENTS, PROFESSIONALS AND POLICY MAKERS

> "The good physician treats the disease, the great physician treats the person with the disease."
>
> Osler, 1849-1919

The importance of person-centred medical care has long been recognised by the medical profession (4). Recent years have seen an international call for a revitalisation of medical generalist practice. One of the key drivers for this comes from the expressed need of patients. You will no doubt have met a patient like Elsie.

Case study

MEET ELSIE...

Elsie is in her 70s and has multiple health problems – diabetes, hypertension, arthritis, anxiety. She finds it hard to manage her daily routine – to keep active so she doesn't stiffen up, eat the right meals at the right time, manage to take her 15 tablets a day at the right times, and stay calm about it all. Especially when she is also caring for her husband with dementia, looking after her grandchildren, running the household, getting the shopping in, paying her bills. Some days Elsie feels overwhelmed by the volume and range of tasks she must do every day just to keep life ticking over. When things get too much, she sometimes misses some of her tablets or hospital appointments. But then feels worried that she may make herself unwell.

(Elsie is a fictitious patient)

There are a growing number of people like Elsie (5) who live with the daily challenge of looking after their home and family (6), whilst also managing multiple long-term conditions, including dealing with the healthcare (medicines, etc.) that is intended to help (6-8). Some of them tell us that the healthcare we offer has become more of a problem (a burden) than a help (6-8). People like Elsie want us to tailor their care to their individual circumstances (9). They want generalist medical care. Many cannot remember all the specialists they have seen in the past 12 months, or the medications they take and why they take them.

Aging populations living longer with multiple long-term conditions mean governments and policy makers have also realised that we need more capacity for medical generalist expertise (1,2, 10-12). Expanding generalist capacity is an international healthcare priority.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

MEDICAL GENERALISM: SCIENTIFIC METHOD FOR A DISTINCT FORM OF CLINICAL PRACTICE

Practising medicine requires us to have both knowledge about health and illness, and the wisdom to use that knowledge to help our patients. Anyone with a smart phone and access to the internet can know medical facts. The wisdom of medical practice comes not from what you know, but how you use what you know to help your patient (13). Specialist and generalist medical practice use knowledge differently to answer different questions.

The scientific reasoning of specialist practice addresses questions such as: what is the likelihood that this person has a given condition; what is the probability that a given treatment will benefit/harm this person? It is grounded in the scientific practice of hypothetico-deductive reasoning: the systematic collection of data through the clinical consultation supporting the objective assessment of (statistical) likelihood of a given outcome (14,15). The clinician considers the individual patient against the standard of externally-derived biomedical scientific evidence to decide if this patient has a defined condition and is likely to benefit from an evidence-based intervention. Much of it is based on randomised clinical trials, the 'gold standard' of researched, evidence-based practice. But this type of data is based on standardised patients, often with only one medical condition and from one ethnic background and age group. It does not necessarily apply well to people like Elsie.

There is no such external evidence-base for a given individual - someone like Elsie, a 'whole person' living in their individual context. The scientific reasoning for whole-person, generalist practice must therefore differ. To understand an individual – a whole person – we must draw on evidence and data from a range of sources to help us gain a whole picture view of what is happening. This form of clinical practice is grounded in the scientific principles of inductive reasoning, which aims to construct a trustworthy interpretation or explanation of an illness phenomenon. This form of practice places an emphasis not on estimating statistical certainty, but on the robustness of the interpretive process, and the utility of the explanation in addressing the healthcare needs of the individual (2). This is explored further in the section on generalist clinical reasoning.

Let us return to Elsie to illustrate the difference between the two approaches. In Elsie's case, hypothetico-deductive reasoning can help us work out the reduced risk of a stroke if she were to improve the control of her diabetic sugars. But it cannot tell us if the burden of taking extra diabetic medication (for instance, adding insulin) will be adequately balanced by the (potential) improvement in her overall health as a resource Elsie needs, and uses, to live her daily life (6). To understand this broader picture, we must draw on our consultation skills to hear Elsie's full story; our biomedical knowledge of the science of diabetes; our wider scientific knowledge of the personal experiences of living with chronic illness; our understanding of the ethics and principles of good health care, amongst others. Ultimately, the decision about whether to treat or not is an interpretation of this complex data set. This is inductive reasoning: a data-driven form of practice in which multiple elements (all believed to be robust) are combined to infer an explanation or conclusion. Inductive reasoning produces explanations that are plausible, reasonable, justified – but never certain. The use of inductive reasoning highlights the need for follow-up in generalist medical practice to appraise and (re) assess the conclusions reached.

Both specialist and generalist reasoning produce new knowledge about a patient. But the insights from these two approaches may differ. Judging between competing knowledge is a branch of scientific practice in its own right – the area of practice known as epistemology. Epistemology asks questions about how we know what we know, and how can we trust what we know. These are questions that scientists openly grapple with every day. For clinicians, this work is often less visible. Nonetheless, clinical epistemology is a key principle of generalist practice.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

MEDICAL GENERALISM IN ACTION: DESCRIBING THE STEPS FOR PRACTICE

It is important to start by noting that the skills of medical generalism are used by many different types of doctors working in a range of settings (1, 16, 17). Generalist medicine is a set of skills that GPs commonly use in their daily work, but it is not synonymous with general practice (16-18). Indeed, GPs use both specialist and generalist skills in their daily work. However, much of the scholarship to describe this form of practice has been done in general practice.

Gabby and le May (19) observed GPs in practice over a long period and described how they are able to flexibly use and apply data and evidence in context (what they described as "contextual adroitness") to generate new "knowledge-in-practice-in-context". They recognise generalist practitioners robustly analysing data (including 'traditional' scientific evidence), in the context of a consultation, to generate new, individualised understanding of a personal illness experience (2,20).

Donner-Banzhoff et al. (21) also observed GPs at work and found that hypothetico-deductive reasoning was not the most common model of practice. Instead, they saw doctors collecting data, through a patient-led exploration of the illness to infer (deduce) an explanation of illness. They described this as 'inductive foraging'.

In 2015, Reeve described the School for Advancing Generalist Expertise (SAGE) consultation model (22). By adapting established scientific method for generating robust, trustworthy interpretations through inductive reasoning, five key necessary elements for a 'whole person' (generalist) consultation were described (2,20,22):

- The clinician's 'lens': The clinician must seek to understand the presented illness from the patient perspective (6).
- Multi-source data: The clinician must collect and consider the full range of data needed to understand this illness experience (2).
- Exploration and explanation: The clinician explores the data set with the patient (2,18,22), combining the data with an understanding of context (19) to analyse the illness problem. They employ explanatory reasoning (14) to make sense of the patient's problem (2); and so, deliver robust, judicious, context-specific decisions (16).
- Safety netting: The clinician checks with the patient, themselves, and potentially a wider team whether they have 'missed something' (2,22).
- Impact review: The clinician follows up the patient to evaluate the impact of the explanation and decision (2,22).

MEDICAL GENERALISM IS NOT A NEW IDEA, BUT IT NEEDS UPDATING FOR MODERN PRACTICE

With recognition of an urgent and growing need for expert generalist capacity, we have seen new accounts of generalist practice from around the globe. This includes Gunn and Palmer's review in Australia (10), Stange's work in the US (11), the Canadian College of Family Medicine (12), the UK RCGP report (1), and most recently, an international consensus statement describing quality standards for generalist practice (20).

Our understanding of, and literature about, generalist medicine is rapidly being updated for emerging 21st century healthcare systems. It is characterised by evidence-based practice, guideline care, and the emerging technologies associated with artificial intelligence, personalised medicine, and genomic medicine, along with complex patients and healthcare needs. There is exciting new educational research and practice to support professionals in understanding and delivering care (23,24); new research examining enablers and barriers to generalist practice to inform new models of care (7,8); and new thinking on health systems design (25). On a day-to-day basis, the profession – the doctors you meet in your clinical attachments - are working to make sense of how to be a generalist in the new healthcare context. You are both witnessing, and becoming part of, an emerging new world.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

There has never been a more important time to be talking with your tutors, as well as the clinicians and patients you meet on a daily basis, about what generalist medicine means to them. In this way, you can contribute to shaping future medical practice.

IN CONCLUSION

Generalist practice is increasingly recognised as a key ability for all doctors in cost-limited healthcare systems where patient needs and satisfaction are considered important and are accounted for. An over-reliance of specialist approaches to medicine can result in patients being referred to different specialists for each condition – a reality in many countries. This can lead to increased costs for the patient, increased investigations and poorer overall healthcare outcomes due to no one taking ultimate responsibility for the person and a feeling of not being treated as a whole. Generalist thinking is therefore a critical factor in determining the efficiency of healthcare systems. However, generalist practice demands the simultaneous use of both inductive and deductive methods of reasoning and is therefore intellectually demanding.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

ACTIVE LEARNING

TALK TO A PATIENT: Next time you meet a patient living with chronic illness, take the time not only to practice your Calgary-Cambridge medical consultation skills, but also to talk with the person about their lived experience of their illness. Ask them about the daily work of living (6), and how both their illness and medical care impact on that. Ask them what they need most from healthcare to help with that daily work, and consider how their answers impact on the decisions you are considering about their care. Share your reflections and learning with your peers and your trainers, and perhaps consider writing up your findings. Don't forget to get permission from any patients you consider including in your case studies!

MAKING GENERALIST EXPERTISE VISIBLE: Generalist expertise is used in practice every day, but often not discussed and described. We have a language to discuss specialist care, but less so for generalist care. Generalist expertise has been referred to as the tacit knowledge or professional wisdom (phronesis) of practice (27). As we have highlighted, the writing on generalist expertise that exists needs updating. We invite you to be part of making that happen.

- Observe what the doctors you meet in daily practice are doing.
- Ask yourself – and them – why did they do that? What data were they using? What was their reasoning?
- Apply the Montreal statement (20) and/or the SAGE consultation model (22) to what you have seen and ask yourself, what went well? What could the doctor have done differently?
- Consider why the doctor wasn't using generalist expertise in this consultation. Perhaps the patient's problem wasn't suitable for a generalist approach? Perhaps the clinician's expertise lies in specialist reasoning? Or perhaps there are contextual factors that prevented the clinician from offering a person-centred approach? (26,28)
- Reflect on the implications for your own practice and training. You might want to think about writing up your thoughts in a paper or for a blog.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

TRUSTWORTHY CLINICAL DECISIONS - THE QUALITY OF MY GENERALIST PRACTICE: Review your own clinical practice by applying the quality criteria described in the Montreal statement (20) and consider the implications for your future practice.

Next time you take an extended history from a patient, review your history against the criteria in the Montreal statement. Ask yourself, what elements did I explore? What could I have also considered?

Reflect on your thoughts with others. Are there any changes you want to make to your 'consultation model' – to the way you take a history?

Look at the flipped consultation model described by Lucassen (29) - does this offer you ideas for your future history taking?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

RESOURCES

Try reading Range; How Generalists Triumph in a Specialized World by David Epstein..

Medical Generalism: expertise in whole person medical care by the Royal College of General Practitioners (1).

The Gentle Radical by Hanford and Hennen (17).

Professional virtues in modern medicine
Which of these virtues do you recognise in yourself, in your tutors, in your fellow students? Do you agree with Professor Cassam's argument?

Generalist expertise in other professions Which of the attributes of the generalist referred to here apply to medicine? Are there any you disagree with?

The WISE GP (@TheWiseGP) GP Scholarship: The Wise GP Programme Explores generalism in more detail, in a joint venture between The Society for Academic Primary Care (www.sapc.ac.uk) and the RCGP. Explores the wider skills needed for generalist practice especially the ability to gather and interpret data in the clinical context, produce robust decisions and act on the findings to support patient needs (26).

Choosing to be 'a jack of all trades'.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

REFERENCES

1. Royal College of General Practitioners. Medical Generalism: why expertise in whole person medicine matters. 2012.
2. Reeve J. Interpretive Medicine. Supporting generalism in a changing primary care world. Occas Pap R Coll Gen Pract, 2010: 88.
3. NHS England. The NHS Long Term Plan. 2019.
4. Osler W. The Principles and Practice of Medicine. 1892.
5. Barnett K, Mercer SW, Norbury M et al. Epidemiology of multimorbidity and implications for healthcare, research and medical education: a cross-sectional study. The Lancet 2013; 380: 37-43.
6. Reeve J. Unlocking the creative self. Chapter in Person-Centred Primary Care: recovering the self. Dowrick C (ed). CRC Press, Taylor & Francis group, 2018.
7. May C, Montori VM, Mair FS. We need minimally disruptive medicine. BMJ 2009, 339: b2803
8. May CR, Eton DT, Boehmer K et al. Rethinking the patient: using Burden of Treatment theory to understand the changing dynamics of illness. BMC Health Services Research 14; 281 (2014).
9. The Health Policy Partnership. The state of play in person-centred care. 2015.
10. Gunn J, Palmer V, Naccerella L et al. The promise and pitfalls of generalism in achieving the Amla-Ata vision of health for all. Med J Aust 208; 189(2):110-112.
11. Stange KC. The generalist approach. Annals of Family Medicine 2009; 7(3): 198-203.
12. Royal College of Physicians and Surgeons of Canada. Report of the Generalism and Generalist Task Force. 2013.
13. Wenzel RP. Medical education in an era of alternative facts. N Engl J Med 2017;377(7): 607-609.
14. Reeve J. 2018 Time to retire Evidence Based Medicine? Generalist care needs Scholarship Based Medicine. B J Gen Pract 2018 88; 390-391.
15. Sackett D, Haynes TB, Tugwell P et al. Clinical epidemiology: a basic science for clinical medicine. Lippincott Williams and Wilkins. 2nd edition. 1991.
16. Wass V, Gregory S, Pettie-Saphon K. By choice not by chance. 2016.
17. Handford C, Hennen B. The gentle radical. Ten reflections on McWhinney, generalism and family medicine today. Can Fam Physician 2014; 60(1): 20–23.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3A

The generalist approach

18. McWhinney IR. General practice as an academic discipline: reflections after a visit to the United States. Lancet 1966;1: 419-423.
19. Gabbay J, le May A. Practice-based evidence for healthcare. Clinical Mindlines Routledge. 2010.
20. Reeve J, Beaulieu M, Freeman T et al. Revitalising generalist practice: the Montreal Statement. Annals of Family Medicine 200816(4) 371-373.
21. Donner-Banzhoff N, Hertwig R. Inductive Foraging: improving the diagnostic yield of primary care consultations. Eur J Gen Pract 2014; 20: 69-73.
22. Reeve J. Supporting Expert Generalist Practice: the SAGE consultation model, B J Gen Pract 2015; 35:207-208.
23. Park S, Berlin A.. Divided we fail: understanding inter-relations and the role of the generalist. Br J Gen Pract 2012; 62: 596-598.
24. Mylopoulos M, Kulasegaram K, Woods NN. Developing the experts we need: fostering adaptive expertise through education. Journal of Evaluation in Clinical Practice 2018; 24(3): 674-677.
25. Reeve J, Byng R. 2017. Realising the full potential of primary care: uniting the 'two faces' of generalism. British Journal of General Practice; 67: 292-293.
26. Reeve J, Firth A. 2017 Revitalising General Practice: unleashing our Inner Scholar. British Journal of General Practice; 67: 266.
27. Hilton S. Education and the changing face of medical professionalism: from priest to mountain guide? B J Gen Pract 2008; 58:353-361.
28. Reeve J, Fleming J, Britten N et al. Identifying enablers and barriers to individually tailored (expert generalist) prescribing: a survey of English health care professionals. BMC Family Practice 2018 19(1): 17. https://bmcfampract.biomedcentral.com/articles/10.1186/s12875-017-0705-2.
29. Lucassen P, Reeve J, Postma S et al. Feeling blue, sad or depressed: how to manage these patients? B J Gen Pract 2018 68, 330-331.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3B

A brief history of general practice

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

INTRODUCTION

> "If you know your history, then you will know where you're coming from.
> Then you wouldn't have to ask me 'who the hell do I think I am?'"
>
> Marley, B. and Williams, M. (1983), Buffalo Soldier

Exploring the development of general practice can shed light on many of the values that underpin practice today. It can also help us understand some of the challenges within the discipline and its interface with other healthcare specialties and wider society.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3B

A brief history of general practice

ASPECTS OF HISTORY & DEVELOPMENT OF GENERAL PRACTICE

1. THE ORIGIN AND EDUCATION OF COMMUNITY PHYSICIANS

Community-based medicine was practised for centuries by apothecaries with knowledge passing down generations via apprenticeships lasting usually for five years. This learning arrangement was formalised in 1563 through legislation (The Statute of Artificers) and was the route through which the vast majority of doctors entered practice. There were no regulatory bodies, final exams, medical schools, or hospitals (as we know them).

The Rose Case in the 1700s established that members of the Society of Apothecaries could both prescribe and dispense medicines, although this had been challenged by the Royal College of Physicians who wished to restrict prescribing rights to their members.

The nineteenth century saw new technologies such as the stethoscope, microscope, and, staining techniques. In turn, these facilitated the connection between medical symptoms and pathological causes of disease, resulting in the development of a clinical method. This involved eliciting symptoms by questioning and examining the patient, testing of specimens and finally, diagnosis and treatment. This diagnostic model of clinical reasoning (the clerking), continues to be taught to medical students today. The introduction of a clinical method, together with technological advances and an increasing population, produced a need for larger hospitals staffed by full-time doctors.

The Medical Registration Act of 1858 reflected the increasing influence of hospitals and formally ended the community-based apprenticeship route to medical practice. The Act recommended a hospital-based placement of six to twelve months that replaced apprenticeship. On these placements, groups of medical students were encouraged to attend timetabled ward rounds and clinics, and also to learn 'off-timetable' by searching for patients to practise the new diagnostic process on.

The Medical Act of 1958 established regulation of the profession by introducing mandatory exams overseen by a new regulatory body - the GMC (1). This was a big drive in formalising medical education through the university-based degree programme structure we have today.

2. GENERAL PRACTICE AS A DISTINCT DISCIPLINE

With different training and settings of work, also came different challenges: responding to the needs of the community, as well as to individuals, and - significantly - funding. Initially, doctors working on a private basis in communities would provide care for a fee. Sometimes this fee was covered, or subsidised, by local philanthropic, labour, or local government arrangements.

For a fascinating insight into the realities of everyday practice at this time consider reading the fictionalised autobiography The Citadel by AJ Cronin. This book clearly describes the links between social conditions and disease in the South Wales Valleys in the years before the introduction of the NHS. It also explains how the original ideas for the NHS evolved; Aneurin Bevan was born and worked in South Wales.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3B

A brief history of general practice

The National Insurance Act came into play in 1911, which afforded provision of primary healthcare to working men within communities. This was expanded by the rollout of the nationalised health service on 5 July 1948 (2). The leaflet that fell through everyone's letterboxes states on the first page:

> *The arrangements for general medical practice are the most important part of the proposals for a National Health Service. The family doctor is the first line of defence in the fight for good health.* – (From the National Archives)

This placed general practice at the forefront of health promotion and illness prevention, and became the first port of call for patients seeking help. This would inherently focus the practice of the speciality on undifferentiated illness, whilst simultaneously managing the ongoing relationship-based care for chronic conditions for all age groups, 'from cradle to grave'.

From the outset, this was a speciality that was over-stretched, and standards of practice varied greatly. Influence from dissatisfied clinicians, and international reports (3) eventually led to the formation of what became the Royal College of General Practitioners (RCGP) in 1952, as a body that would set professional standards, influence and improve the quality of patient care, and advocate for the need for patients to have access to well-resourced primary care.

Again, the formation of the RCGP was opposed by some other members of the profession, with the initial meetings being held in secret. The first President of the College - a Yorkshire GP called William Pickles - is the subject of a fascinating book about General Practice in the years up to and after the formation of the NHS (4).

3. MODERN GENERAL PRACTICE

Since the inception of the NHS (opposed at the time by almost all doctors), general practice in the UK has remained a comprehensive, free at point of contact service. As we shall see, these two key characteristics underpin some of the efficiency of general practice when compared to the models of primary healthcare that exist in other countries. A potentially significant change to this arrangement came in 2012 with the Health and Social Care Act. This legislation put GPs at the heart of the NHS, as leaders of Clinical Commissioning Groups (CCGs). These groups are responsible for commissioning (and decommissioning) care contracts from both hospitals and GPs. This is done within tightly regulated budgets, meaning that different CCGs are increasingly making rationing decisions that mean that national coverage of some services is no longer applicable. The Act also makes it easier for other, non-NHS healthcare providers to bid for contracts. This may lead to efficiencies through competition but also risks further fragmentation of the 'National' part of the NHS.

What are your own views on the role of politics within the health system?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3B

A brief history of general practice

IMPORTANCE OF HISTORY & DEVELOPMENT OF GP

4. **Evolving issues**

Major factors that will underpin the development of the organisation of general practice going forward will be the relationships that different organisations have with each other; the makeup of the teams that work together to provide patient care; and the relationship that patients have with individuals within these teams.

Examples already taking shape include:

- The clustering of practices together to form Primary Care Networks in England (5).
- Drawing on increasingly diverse skill mixes of new types of health providers within practice teams to manage specific workloads, such as advanced clinical practitioners to manage on-the-day demand (6).
- Increasingly working with hospitals and other healthcare providers to provide more seamless care. For example, some hospitals now own general practice premises and GPs (in the form of CCGs) now increasingly influence what happens in hospitals.

These developments will continue to draw on the fundamental ability to adapt, lead and innovate that are so inherent and valued in general practitioners.

SUMMARY

Viewed through an historical lens the role of general practitioners in service provision and education has much changed over time. Initially, almost all doctors were GPs and learned through a community-based apprenticeship. Only a small number of 'physicians' graduated from universities. GPs historically practised individually on a fee-for-service basis, but seismic changes occurred in 1948 with a unified, free at point of contact service responsible for prevention and treatment of disease and maintenance of health. Large changes had by this time occurred in medical education, with most of medical education being carried out in hospitals, under the aegis of universities.

Today GPs practice in increasingly large and diverse teams, often from purpose-built premises using highly sophisticated IT. Individual practices are increasingly amalgamating to form 'federations' or networks. Today, the role of GPs in training future doctors is increasingly recognised with medical students again spending time learning medicine in community settings.

Looked at in this way, the roles of both hospitals and primary care in provision of healthcare and education can be seen as arising out of differing traditions and fulfilling differing functions that have changed radically over the years. Inevitably, tensions arise through the process of constant and increasing rates of change. However, it is through awareness and acknowledgment of differences and then working through these differences that the NHS benefits from the creative tensions between these two increasingly intertwined sectors.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3B

A brief history of general practice

ACTIVE LEARNING

Ask your GP tutor or discuss in your group the top three most impactful changes that have been seen or rolled out in general practice in the last decade..

Explore with patients their perception of change in general practice. What is the impact on their care and access to healthcare?

Explore with patients what 'their GP' means to them. How long have they known their current GP? How did they select them? What qualities does their GP have that makes them return to see them? What sort of problems would they take to their GP?

Consider paintings that represent general practice in history, such as Sir Luke Fildes' (1891) The Doctor (https://www.tate.org.uk/art/artworks/fildes-the-doctor-n01522). Explore how pictures may embody some stereotypes that wider society and the medical profession has moved on from, but also draw on the intimate relationship: a doctor in the very heart of a family's home at a most distressing and vulnerable moment.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3B

A brief history of general practice

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

RESOURCES

The King's Fund have undertaken a number of enquiries into aspects of general practice, from workforce modelling, to quality of care, and to models of commissioning and funding. The details of these reports are likely to be beyond the scope of undergraduate medical teaching, but offer some useful insights and illustrative figures and examples:

- Addicott R and Ham C. 'Joining up services in the community: GPs leading the way' The Kings Fund, 2016.
- Baird B, Charles A, Honeyman M, Maguire D and Das P. 'Understanding the pressures in general practice' The Kings Fund, 2016.
- Goodwin N, Dixon A, Poole T, and Raleigh V. 'Improving the quality of care in general practice' The Kings Fund, 2011.
- Robertson R, Holder H, Ross S, Naylor C, and Machaqueiro S. 'Clinical commissioning: GPs in charge?' The Kings Fund, 2016.

REFERENCES

1. Clarke E. History of British Medical Education. Medical Education, 1966; 1: 7-15.
2. Tait I. Royal College of General Practitioners: the history of the college. RCGP, 2002
3. Collings J. General practice in England today: a reconnaissance. Lancet,1950; i: 555-85.
4. Pemberton, J. Will Pickles of Wensleydale; the life of a country doctor. RCGP; Exeter. 1984
5. Fisher R, Thorlby R, and Alderwick H. 'Understanding primary care networks: context, benefits and risks.' The Health Foundation, 2019.
6. Primary Care Workforce Commission. 'The future of primary care: creating teams for tomorrow'. Health Education England, 2015.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3C

The current structure of UK general practice

INTRODUCTION

When the National Health Service (NHS) was first formed in the UK in 1948, most GPs continued to work, as they had before the NHS, in small single doctor practices - often from their own homes - providing 24-hour care for their registered patients. Over subsequent decades NHS primary care has evolved from essentially a cottage industry into a complex web of different organisational models, with a wide variety of locations, workforce arrangements, and funding streams.

As practices have gradually become larger with GPs tending to work in groups of varying sizes, most consultations have continued to take place 'in the surgery'. But GPs have also always seen patients in a range of other settings as well as their own surgeries. These have included patients' own homes, residential homes, nursing homes, cottage hospitals, and a variety of clinics (for example, family planning, hospital outpatients or accident, and emergency departments). Whilst use of remote consultation (online, telephone, and video) has already been growing steadily over time the COVID-19 pandemic has had a dramatic impact with GP consultations in the UK now being delivered remotely by default.

Successive administrations have tried to tackle the twin challenges of increasing demand and limited resources through introducing different forms of community-based care. Some have endured and some faded, resulting in a complex array of primary care services in different parts of the country. Although this sounds (and sometimes feels!) chaotic, the constant experimentation has resulted in a system that has adapted to the varying needs of different communities in a process that might be described as organisational natural selection. Some services prioritise ease of access (for instance, walk-in centres), and some attend to needs of specific groups of patients (such as community services for frail elderly patients with complex needs).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3C

The current structure of UK general practice

DIFFERENT GP SETTINGS

Here are just some examples of various settings where patients may consult with GPs in the NHS:

- **Surgeries at a doctor's residence:** Usually long-established, single-handed or two-doctor practices. Still found, mainly in some rural areas, but becoming rare, especially in cities.
- **'Lock-up' surgeries:** Small 'shop front' premises owned or rented by one or two doctors, usually in inner cities. Premises only open during surgery hours. Such surgeries have been gradually phased out and are now rarely seen.
- **Adapted premises:** Residential buildings in suburban areas (for instance, family houses), often owned by one or more of the doctors and converted for use as practice premises for multi-doctor practice. Open 'in-hours' only.
- **Purpose built group practice premises:** Usually built for and owned or leased by a medium-to-large group practice (four to eight GPs) with adequate accommodation for employed and attached ancillary staff.
- **Health Centres:** Usually large purpose-built premises, provided by the NHS with surgery suites for GPs (six to twelve, or more) who may be practising in groups, in pairs, or occasionally single-handed within the Health Centre. Health Centres may also include other community-based NHS staff and/or clinics.
- **Community Health Clinics:** Serving a geographical catchment area; usually a base for NHS employed staff. For example, these include community nurses, midwives, health visitors, school, dental and medical services, speech therapy, audiometry, chiropody and other local services, ante-natal clinics, baby clinics, family planning, and well woman clinics.
- **Polyclinics:** Forerunners of 'super surgeries', this was the first attempt in the early 2000s to extend the range of services offered by some general practices in order to move care out of relatively expensive hospitals to more cost-effective primary care settings.
- **Hubs:** A relatively new way of managing workload across a number of practices and their respective patient lists, enabling practices to work together, particularly in order to organise the delivery of same-day appointments. The aim is that patients, when needed, can be seen urgently without placing additional - and potentially unsafe - pressure on over-stretched practices.
- **Urgent Treatment Centres:** Urgent Care/Treatment Centres exist in some areas as an option for people to attend if they feel they have an urgent (but not life-threatening) medical problem. These units may be located in hospitals or in the community, and may have a variety of names (such as walk-in centres, urgent care centres or minor injury units). The current trend is to rename them all as Urgent Treatment Centres. They are usually GP-led and open for at least 12 hours a day every day of the week, including bank holidays. They are equipped to diagnose and treat many of the most common ailments people go to A&E for. Patients may be referred to an urgent treatment centre by NHS 111, or can just walk in during opening hours.
- **Emergency (A&E) Departments:** Some hospital emergency departments now employ GPs to see patients presenting with urgent problems. Whilst there is evidence that GPs working in A&E see patients faster, use fewer investigations, and admit them less often, there is concern that every GP working in A&E is one fewer to work in local practices. This may reduce capacity where these patients would more appropriately be managed.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3C

The current structure of UK general practice

- **NHS 111:** A free-to-call, non-emergency medical helpline operating in England, Scotland, and parts of Wales. The 111 phone service has, since 2014, replaced NHS Direct. The service is available 24 hours a day, every day of the year, and is intended for 'urgent but not life-threatening' health issues. It complements the long-established 999 emergency telephone number for more serious matters, although 111 operators in England are able to dispatch ambulances when appropriate. When a patient calls 111, a health advisor will assess the caller's symptoms using a clinical tool called 'NHS Pathways'. At the end of the assessment, the caller will be directed to the service deemed most appropriate for their symptoms or, if appropriate, will be given self-management advice. For callers whose symptoms indicate the need for a referral to a GP outside of their normal GP surgery opening hours, their call will result in a referral to their local out-of-hours GP service, to be seen at an out-of-hours centre, or visited at home if necessary. The out-of-hours period is from 1830 to 0800 on weekdays, and all day at weekends and on bank holidays.
- **Digital First Primary Care:** The NHS England Long Term Plan (1) promotes primary care moving towards a digital first approach, where patients can easily access the advice, support, and treatment they need using digital and online tools. Probably the best-known example at present is 'Babylon GP at Hand'. This is an NHS practice in North West London which has implemented a 'digital first' service through the use of a mobile app which is provided by Babylon Health. The practice also provides in-person services should patients require them at sites in and outside of its local catchment area. Since the COVID-19 pandemic, all GP practices are offering online and remote access to services.
- **GPs with extended roles (GPwERs):** A GPwER is a GP who undertakes, in addition to their core general practice, a role that is beyond the scope of standard GP training and requires further training and experience. Extended roles are not necessarily only clinical. They may also, for example, be teaching, research, or management related. However, in the context of clinical extended roles the general idea is that patients from the same or local practices may be referred to a GPwER in order to provide specialist advice that does not necessarily need the full panoply of hospital. GPwER specialties and organisational arrangements vary in different areas but more common examples might be in the fields of dermatology, rheumatology, ENT, and minor surgery.

The list above is not exhaustive. For a detailed exploration of innovative models of general practice see the 2018 King's Fund report by Beccy Baird et al (2).

IS THIS EXPANSION OF GP SETTINGS A GOOD THING?

Whilst increased health care availability in the community must surely be a good thing, caution has been expressed in some quarters. There may be a risk that something will be lost as doctors and patients are reallocated to these new services, especially those focused on immediate access. The traditional model of general practice involves GPs getting to know their patients' medical history, personal, social and family background, coordinating their care and developing a trusting relationship over time. If general practice becomes too fragmented, this accumulated knowledge and continuity of care may be lost. Prioritising access at the expense of

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

3C

The current structure of UK general practice

other core attributes of general practice such as continuity, coordination and person-centred holistic care may have unintended consequences. This could impact on decisions as to when medical treatment is needed, and less ability to manage uncertainty safely outside of hospitals.

These arguments are explored further in Rebecca Rosen's 2018 report for the Nuffield Trust "Divided we fall: getting the best out of general practice" which goes on to consider what GPs and national NHS bodies can do to get the best of both traditional and innovative models of general practice (3).

Rosen summarises her report with the following key points:

> Policies designed to segment general practice often emphasise faster access to quick, transactional, 'see and treat' encounters. The rapid growth of these services is pulling GPs away from the expert 'medical generalist' role of general practice that is a defining characteristic of list-based primary care.

> Medical generalism involves using deep contextual knowledge of patients and their family and social situation to understand and interpret symptoms and problems. It enables GPs to hold clinical risk in the community without onward referral to other services. For around a quarter of patients, it can help to 'de-medicalise' problems for which medicine may be unable to find an answer.

> Health systems like the NHS, which feature strong primary care with GP-registered lists and a gatekeeper function, generally have better health outcomes at lower cost. Evidence suggests that GPs contribute to this by requesting fewer tests and procedures and, where there is continuity with a lead GP, they refer to hospitals less. These approaches are characteristic of the medical generalist role.

> At a time when staff and money are in short supply, it is essential to clarify what we want from general practice and the role we want it to play in the wider NHS. There are opportunity costs associated with the current emphasis on timely and convenient access because fewer resources are left to deliver medical generalist and multi-disciplinary care.

> Focusing too much attention on using technology to improve access may exacerbate supply-induced demand and distract us from thinking more broadly about where technology adds value (for example in long-term conditions surveillance or risk factor monitoring) and where it adds extra layers of work with limited benefit to patients.

> It is important to distinguish patients who will achieve good outcomes from the transactional encounters of access services from those who will benefit from medical generalist or multi-disciplinary care and research is needed to work out how to do this. Software that analyses clinical data and patterns of service use can help to identify who falls into which category in order to steer them to the type of clinical encounter that will deliver the greatest overall value.

> Traditional general practice has not always delivered good medical generalist care, especially with growing numbers of part-time doctors. Working with nurses and other professionals to provide 'team-based continuity' could provide an answer, and medical training should change to teach aspiring GPs how to do this.

> Comparisons are needed of the overall outcomes and costs of care for specific conditions for people treated in different forms of segmented primary care.

> Future models of general practice should aim to offer enhanced access and medical generalist care, within a single integrated organisation and supported by systems to steer patients seamlessly between different forms of clinical encounter according to need.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3C

The current structure of UK general practice

ACTIVE LEARNING

When consulting with a patient remotely, ask them if they feel this approach generally meets their needs. Do they prefer it to traditional face to face consulting? In what circumstances might they prefer one or the other?

Ask doctors, nurses, and receptionists where else their patients sometimes access GP advice. Do they feel these alternative sources of advice are generally helpful? Do they think there are any disadvantages?

If a patient tells you they have consulted about a problem elsewhere (e.g. out-of-hours doctor or A&E department), ask them why they chose to seek advice in that way, how it worked for them and why they have now come back to their usual GP practice.

Take an hour out to read over the two key documents referenced below. Both are readily available online.

If you get the chance, try to visit another local GP service near your placement practice (e.g. a HUB or Urgent treatment Centre).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3C

The current structure of UK general practice

REFERENCES

1. The NHS Long Term Plan. NHS 2019.
2. Baird B, Reeve H, Ross S, et al. (2018) Innovative models of general practice.
3. Rosen R (2018). Divided we fall – getting the best out of general practice. Research report, Nuffield Trust.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

INTRODUCTION

At present, we live in a very money-orientated society. Money from people who work hard and pay up to 50% of their salary in tax pays for healthcare and health education. As healthcare providers, we therefore have a duty to ensure that this money is spent wisely. A knowledge of how money is spent in healthcare and education is therefore important.

The UK health service (the NHS) is among the most efficient in the world in terms of health outcomes per pound spent (1). This is in no small part due to comprehensive and cohesive coverage of the entire population by a primary care service (1). We have seen how the clinical approach in general practice contributes towards this efficiency - taking a holistic approach to patient care and seeing patients in a time-efficient manner.

A second contributory factor to overall efficiency is that each general practice is responsible for deploying its own budget. This means that spending decisions are made 'close to the ground' with the priorities of particular practice populations upmost in practitioners' minds. It also saves a whole layer of NHS management that would otherwise be employed in managing these funds. GPs are therefore independent clinical contractors, sitting halfway between being employees of the state and independent businesses. Different approaches to certain aspects of NHS funding may also exist across England, Scotland, Wales and Northern Ireland. This hybrid model (private/state, central/local) is highly unusual, conforming neither to conventional corporate nor governmental management structures. However, as we have seen, it returns outstanding outcomes.

- What are your views on private and public ownership of health services?
- What are your views on this hybrid (public-private and central/local) model?
- What are the main funding differences in the devolved nations (Scotland, Wales, Northern Ireland)?



Government	NHS England	CCGs	General Practices
• Department of Health	• Divided into regions • e.g. NHS England – South	• Approximately 200 • e.g. Devon CCG (Budget £1bn)	• Approximately 10,000 • e.g. St Leonards Practice, Exeter

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

COMMISSIONING IN ENGLAND

Clinical Commissioning Groups (CCGs) hold budgets for both GPs and hospitals and commission care from them.

This is supposed to allow inefficient or substandard care to be phased out and more efficient or more innovative models to be introduced in response to local demand. This arrangement provides a mechanism for private providers to play a part in healthcare introducing 'competition' into healthcare. However, criticisms of this policy include 'top slicing' of easy and profitable care by private providers, and the dissolution of a comprehensive service that increases inefficiency and decreases health outcomes. CCGs are increasingly dealing with federations of practices, each with approximately 30-50,000 patients. Practices are therefore working far more collaboratively with each other.

- Should the NHS continue to be a systematic healthcare system with a single management system, or should more competition be introduced with the risk of fragmentation?

PRACTICE FINANCE

Practices receive income from three main sources:

1. NHS
2. CCGS
3. PUBLIC HEALTH BODIES.

These bodies pay money to practices for the following services:

- General care of patients registered at the practice – the practice list. This money is called the global sum. This is paid per patient, according to a formula taking into account factors such as the age of each patient and where they live. This formula is known as the Carr-Hill formula. Criticisms of this formula centre on the fact that it may not adequately recompense GPs for the effects of deprivation and therefore morbidity and demand on services. Follow this debate here. The global sum accounts for about 75% of most practice's income.
- Enhanced prevention services (immunisations and screening).
- Enhanced services, to address national priorities (for example, improving quit rates for smoking).
- Enhanced services to address local priorities (such as incentives for GPs in a locality to work more closely together in federations).
- Quality of care offered to certain groups of patients (QOF).
- Reimbursement of expenses such as rates, rent, etc.

Other sources of income for practices derive from 'extras' such as teaching, research, and work for private organisations (such as providing insurance reports etc.). Practices may also derive income from the property (see the section below on property finance).

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

Over time, the payment mechanisms have changed. Initially, practices received a single 'global sum' from one central source. This has changed to a more complicated system:

- Centralised/Government funding for maintaining a list.
- Payment according to locality (CCG) priorities (often known as 'enhanced' services).
- Payment reflecting individual practice innovation, including money from private providers.

This hybrid of centralised, locality and individual funding, makes general practice funding very responsive to changing healthcare needs at all levels. The drawback is that this system is complex to administer at practice level.

Against this income are balanced expenses:

- Staff costs (usually between 60-70% of overall costs).
- Premises expenses, repairs, and upkeep.
- Heating, lighting, stationary, and postage.

What is left at the end is the wage that the GP partners take home. As the amounts vary each year for all the above variables, GP pay is not static but tends to alter year on year. GPs are fortunate in earning more than 90% of the population: the average wage for a full-time GP being about £130,000 per year.

- What are your views on inequality of wages?
- Is this kind of inequality justified (the average wage is £30,000; the wage of a city trader is frequently over £1,000,000)?

PRACTICE PROPERTY FINANCE

GP premises can be owned by a variety of organisations:

- The partners at the surgery
- The health authority (CCG)
- Private companies who buy the property from GPs and then charge rent to the remaining GPs.

For GP-owned premises, the landscape has changed considerably. These GPs take out mortgages from banks to pay for the premises, splitting the costs between themselves. Traditionally, the government has paid for most of the interest on these loans and the banks historically have not asked for any of the original loan money back. Since the banking crisis of 2007, banks have asked for the loan money back to recoup their losses. GPs therefore pay more money to banks. At present, there is reduced incentive to take up partnerships and this in turn has led to many GP premises being sold off to the private sector or handed back to the NHS.

- Should government 'back' general practice or apply free-market thinking, allowing 'inefficient' practices to fail?
- Like some banks, is UK general practice too big to fail?
- Managing finances can increase autonomy to make decisions based on patient need; however, it is an extra responsibility. What do you think?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

Stop, think!

An 'average' practice in the UK has about 8500 patients and 2-3 full time GPs - each covering about 2,500 patients each - and receives an average of about £1,000,000. This means an 'average' patient costs about £100/year.

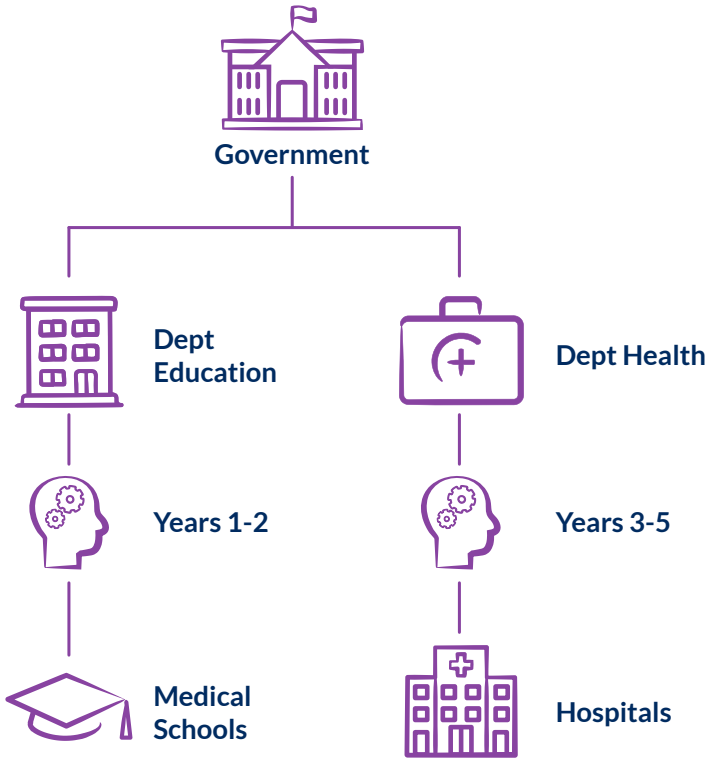
Source: AISMA

FINANCING MEDICAL SCHOOLS AND MEDICAL EDUCATION

There are now around 7,500 medical students entering medicine each year, servicing a population of approximately 65 million. The numbers of doctors per person in the UK is therefore one of the lowest in Western and Eastern Europe (2).

Education of medical staff within the NHS (in England) is the responsibility of an organisation known as Health Education England (HEE), a branch of the NHS, with its own budget. Paying for medical student training costs approximately £1bn (or 1% of the NHS budget). All medical schools in England (arrangements are different in devolved nations) are now paid a tariff of approximately £2,000 per student per year for preclinical teaching ("HEFCE" funding), and £35,000 per year per student for clinical teaching ("SIFT" or "Tariff" funding), and each medical student pays an additional £9,000.

This makes medical student teaching in the UK amongst the most expensive in the world. For comparison, a US medical student pays about $35,000 per year with little or no state funding. Medical schools receive extra money from the Higher Education Funding Council for England (HEFCE) for the quality of the research they carry out. The quality of research is assessed every five years in a major exercise known as the Research Excellence Framework (REF). Similar performance related payments are now being introduced for teaching via the Teaching Excellence Framework (TEF). Simple arithmetic therefore shows that most medical schools deal with an annual turnover of tens or hundreds of millions of pounds. The way in which this income is used has been the subject of considerable debate (2). An overview of the distribution process is summarised below:

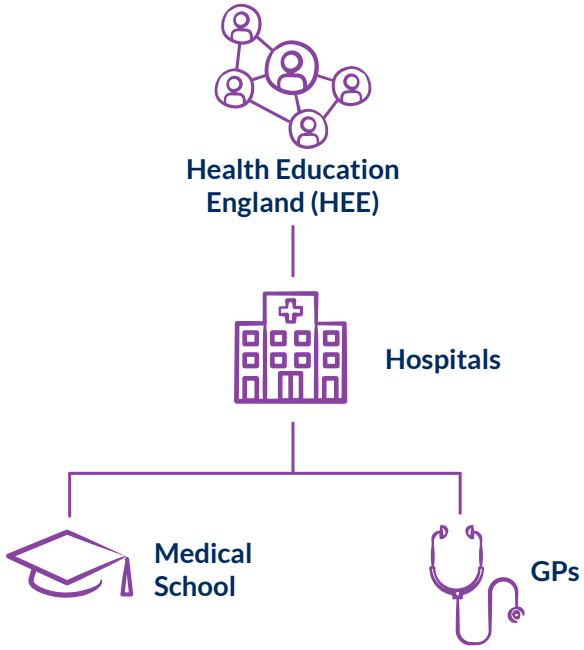


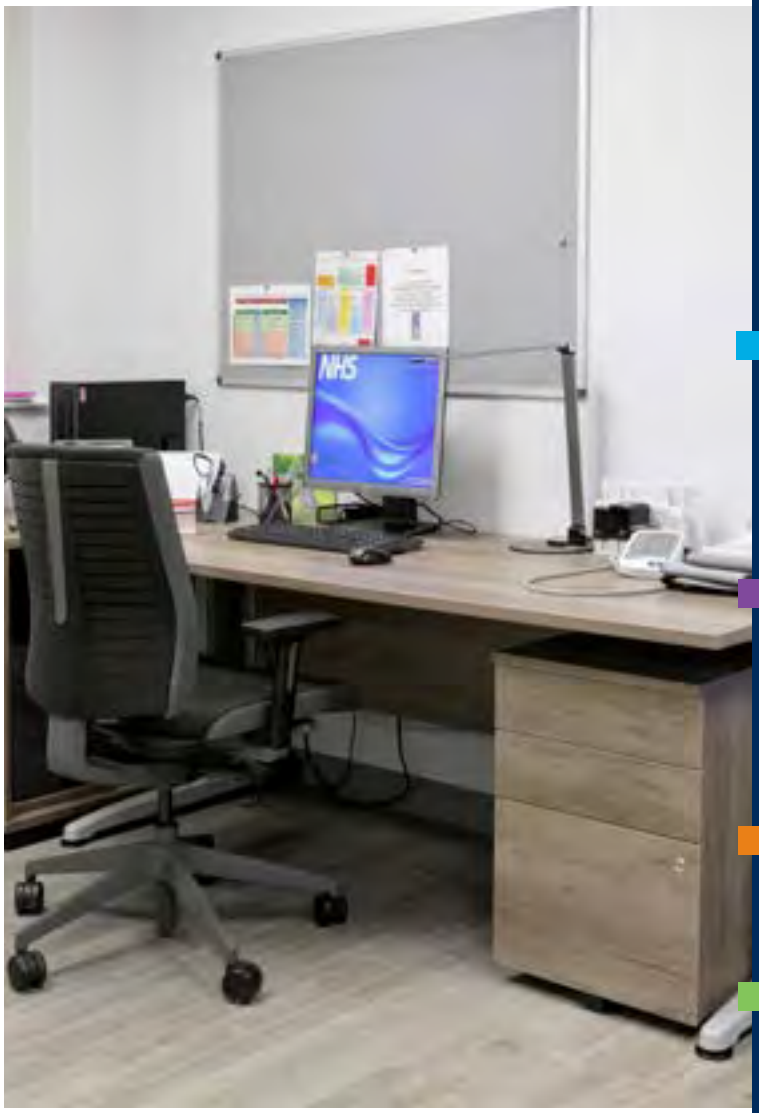
OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

Funding for preclinical and clinical teaching therefore comes from two different sources. This makes mixing the funding to provide gradual progression from preclinical to clinical training difficult. The money for clinical teaching is usually paid direct to the hospital associated with a medical school. The medical school then claims money from the hospital, and then distributes this money to GPs and other non-hospital teachers. There is a large variation in mechanisms for how this process takes place. However, it can make it difficult for medical schools that wish to alter funding allocations between primary and secondary care, as paradoxically medical schools have little influence over this process. This process is summarised below:





OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

ACTIVE LEARNING

Debate with your placement partner or in your small groups, the issues raised in the text.

How do you think medicine should be funded in the UK? What role do you think private enterprise and competition should play?

What are your views on the funding for your medical education?

What would you do if you wanted to change it?

Ask your placement provider or practice manager about their views on how the practice is paid by the NHS.

If possible, ask your practice manager to explain some of the finance regarding the practice you are at. Who is involved?

To what extent should clinicians be involved in cost-related decisions about clinical care? What are the ethical implications of this?

You are the clinical lead of a large CCG (some of you will be in the future). You have been tasked with reviewing the payment mechanism for local GPs. Based on the information above, what would be your three overarching 'principles of change'? Try discussing with your placement provider.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3D

The funding of UK general practice

INTRODUCTION | NEED TO KNOW | ACTIVE LEARNING | FURTHER LEARNING

RESOURCES

https://www.bma.org.uk/advice/employment/contracts/general-practice-funding

https://digital.nhs.uk/data-and-information/publications/statistical/nhs-payments-to-general-practice/nhs-payments-to-general-practice-england-2016-17

REFERENCES

1. Starfield B. Is primary care essential? The Lancet. 1994;344(8930):1129-33.
2. WHO. Global Health Workforce statistics database Accessed: 5 May 2021.
3. Clack GB, Baty M, Perrin A, Eddleston ALWF. The development of a more equitable approach to resource allocation and manpower planning for undergraduate teaching in a UK medical school. Medical Education. 2001;35(2):102-9.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

INTRODUCTION

BEFORE WE BEGIN – A BRIEF NOTE

'General practice' is not a term widely used in other countries – so here is a list of the other terms and definitions:

- 'Primary care' refers to provision of community-based healthcare by a team of people (doctors, nurses etc).
- 'General practice' (often called family medicine/practice abroad) refers to the provision of healthcare in community settings by specialised doctors in that discipline (GPs/Family Practitioners).

There are almost as many healthcare systems as there are countries, and no system is perfect. The NHS in the UK is seen by many to be an exemplar of health service to a nation, with primary care holding a key place in the system that aims to meet the needs of everyone, is free at the point of contact and is based on clinical need, not ability to pay. To explore the variety of different attempts at implementing primary care services, it is necessary to explore the aims of primary health care.

In 1978, the Declaration of Alma-Ata was adopted at the International Conference on Primary Health Care. It called on governments, health and development workers, and the world community to protect and promote the health of all people, emphasising, for the first time, the importance of primary healthcare (1). The declaration was endorsed by many countries attempting to achieve the World Health Organisation's goal of universal health coverage and accessible primary care for all (2).

The Alma-Ata declaration defined Primary Care as,

> "the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work and constituting the first element of a continuing health care process (1

Furthermore, it was expected to address major health problems through promotive, preventive, curative, and rehabilitative care.

In October 2018, The Astana Declaration (3) was issued at the Global Conference on Primary Health Care, organised by WHO, UNICEF, and the Government of Kazakhstan, in Astana, Kazakhstan. In it, governments, non-governmental organisations, health practitioners, and researchers recognised that all people are entitled to the highest possible standard of health and wellbeing. The Declaration pledges the development of primary health care systems that are "high quality, safe, comprehensive, integrated, accessible, available, and affordable for everyone and everywhere".

Barbara Starfield's wealth of evidence demonstrates those health systems with strong primary care foundations produce better population health outcomes at lower costs (4-6) and the primary care systems of Cuba and the USA bookend a spectrum of different approaches to these challenges. It is impossible to give an overview on every global system, but through the examples of Cuba, Israel, South Africa, China, and the USA we will examine different examples of primary care approaches and highlight the challenges facing effective implementation of such services.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

TYPES OF PRIMARY HEALTHCARE PROVISION

There are three main ways in which primary healthcare (and other healthcare) systems work. However, it is important to remember that for millions of people there is very little coordinated healthcare.

Stop, think!

- What role do you think you should play in the WHOs stated plan of 'health for all'?
- What might be the benefits of engaging in efforts to strengthen healthcare systems abroad?
- What might be the risks?

The main types of healthcare systems are summarised in the table to the right.

Type	Pros	Cons
State funded and coordinated	• Relatively good value with good healthcare outcomes. • Free at point of contact. • Reduces health and social inequality.	• Increased burden on taxpayer. • Can be abused/ overused by some.
Insurance scheme	• Upfront payment often necessary – may reduce 'inappropriate' overuse.	• Intermediate value and health outcomes. • Incomplete population coverage.
Private	• Reduced burden on taxpayer/state. • Profits possible on certain populations. • Market may find solutions if left alone.	• Relatively poor value and health outcomes.
Little/no coordinated care	• Local solutions provided by local manpower.	• Often very poor health outcomes. • Prone to intervention by countries/ organisations with motives other than healthcare.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

In practice, many countries have a mixture of all the three main systems. The difference between countries is the extent to which each system predominates. For example, the US does have state GPs and hospitals, but investment is low, and facilities are poor quality. Insurance and private schemes are well established but only cover approximately 50% of the population. Health outcomes are very poor in relation to cost (4-6).

In contrast, Scandinavian countries, the UK, and Cuba have relatively well-developed state funded primary care facilities with universal coverage and relatively small (but increasing) insurance and private sectors. However, income tax rates in these countries is high (as much as 60%). Health outcomes are very good in relation to cost but governments appear cash-poor.

MEDICAL PERSONNEL IN PRIMARY CARE

Broadly speaking there are two types of system here:

1. Medical model; GPs or family practitioners (the more common name abroad) are medically qualified and co-ordinate multi-professional healthcare teams. Tends to be in westernised countries.
2. Insufficient medical personnel exist to perform the roles of GPs. This is the case in the majority of countries. Primary care is delivered by nurses, midwives, or non-clinical personnel, such as community health workers, who have often had some form of basic medical training.

In most accounts of healthcare systems, the role of relatives, communities, and the third (voluntary) sector appear under-represented.

HEALTH SYSTEM EXAMPLES

CUBA

Cuba is hailed as a true success story for primary care with a unique and highly effective system. Over the last 40 years the country has been strongly committed to achieving universal, high-quality primary care coverage and in doing so has succeeded in reducing child mortality deaths from 46 to 7 per 1,000 births and achieving one of the world's highest life expectancies.

The system is based upon a series of around 500 polyclinics, each serving between 30,000 to 60,000 people, which form an organisational hub for neighbourhood-based family doctor-and-nurse offices and serve as accredited research and teaching centres.

The polyclinics have been further developed in recent years to offer a range of additional services from radiography to diabetic foot and acute stroke clinics. Moreover, each is tailored towards the specific needs of the local population. For example, some offer extensive smoking cessation services in high prevalence areas, whilst others a greater number of sexual health or allergy clinics.

In this fashion, primary health care covers over 95% of Cuba's population, with a strong emphasis on prevention. Over 97% of medical trainees spend time in the primary care system post-graduation and the country is rapidly training more family doctors, recognising their value and contribution to the country's healthcare success (7).

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

ISRAEL

Israel has managed to retain tight control over health spending. In contrast to many OECD countries it spends just 8% GDP on healthcare (the 8th lowest). It has achieved such impressive figures through the provision of high quality universal primary health care that helps avoid expensive hospitalisation. For example, Israel has the same rate of diabetes (6.5% of adults) as many other countries, but the second lowest rate of hospitalisation for poorly controlled disease.

This avoidance of secondary care services is achieved by co-locating medical teams in community-based health clinics that allow patients access to a broad range of health expertise in a single visit. Moreover, these clinics are held to account through Quality Indicators that track performance across 35 key measures. Unlike other countries that use financial incentives to encourage target attainment (the UK, France, or Australia), Israel helps clinics by showing them where they could improve.

Israel is now expanding its data monitoring systems to cover a wider range of chronic diseases and is attempting to encourage more younger doctors into primary care, to ensure sustainability of its system (8).

SOUTH AFRICA

The South African healthcare system is an exemplar of external forces impacting on development and delivery of primary care services. In the early 1940s, several highly innovative community-oriented primary care clinics were developed, focusing on health of the family and community rather than the individual e.g. through mandatory immunisation, community food gardens, child growth monitoring and other initiatives. This Pholela-model of healthcare, which empowered communities and families to make decisions regarding their own healthcare (that is, patient-centred care), spread across many parts of rural South Africa - a great achievement.

However, plans to construct a National Healthcare System like that in the UK were thwarted by the government's unwillingness to facilitate taxpayer funding. With the onset of Apartheid, increasing financial and political pressures combined with a racial segmentation in healthcare provision and general deregulation. This led to a disintegration in the well-organised community model, from which South Africa has never fully recovered.

Although national progressive policies have attempted to refocus the country towards primary care, significant inequality persists, with dual public and private systems and a plethora of highly variable administrative units. Given the huge pressure on public primary care services, exacerbated by a post-Apartheid exodus of primary care physicians, many individuals opt to use private primary care clinics, which then perpetuates the distinction and maintains the country's inequalities.

Whilst much rhetoric in South Africa focuses on strengthening and developing primary care, in reality, the economic and workforce pressures loading the system have highlighted how dependent such ideals may be on a supportive external environment (9).

CHINA

The challenges facing primary care in China, as for provision of many other of the country's services, lie in its huge population. Before the 1970s, under a planned economy, primary care developed rapidly. However, the market-based profit-seeking economy from the 1980s onwards has supported far slower growth in the sector.

Primary care is delivered from Community Health Centres, which have varying levels of government investment and involvement, resulting in highly disparate levels of care. Moreover, given that China's system involves an insurance-based model, with individual patients expected to make

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

significant co-payment contributions to any treatment, many simply bypass primary care, presenting at more expensive secondary care services.

This reflects how overwhelmed Chinese primary care has been by the aging, growing, and increasingly multi-morbid population. Until the country trains far more primary care physicians and invests heavily in the sector, China is unlikely to see any improvement. Healthcare costs will continue to escalate, and many patients will go untreated (10).

USA

In theory, the organisation of primary care in the USA is not dissimilar to that in the UK. However, although several family doctors, general practitioners, general internists, general paediatricians, and general obstetric and gynaecologists work in the community, the majority are private practitioners and over a third work single-handedly. Moreover, many work part-time in inpatient settings and few provide home visits. During the 1990s, US-managed care organisations tried to encourage primary care physicians to take on a gatekeeper role to secondary care services. However, that proved unpopular for physicians and patients alike, and thus the USA did not enjoy the associated cost savings. Many primary care physicians are still paid on a fee-for-service basis and patients became dissatisfied when they felt they were paying their generalist to keep them from accessing specialist services.

In stark contrast to the UK, the market forces in the USA are still driving healthcare towards the greater volume and profitability of the hospital sector. Primary care physicians earn considerably less than specialists, are associated with a lower status overall, and currently struggle with an unwieldy, unsatisfying electronic patient record system. Thus, it remains an unpopular career choice amongst medical students. With the rescinding of much of the Affordable Care Act ('Obamacare'), which mandated regular state-backed health checks and a well-funded primary care service, the health outcomes of some of the most vulnerable have arguably become more precarious. As we have seen, inequality within countries is a potent cause of disease in itself. There is much rhetoric amongst health system leaders about the need to 'refocus' the American system – by far the most expensive in the world, for some of the worst health outcomes – yet on the ground it is hard to see many practical changes, or indeed, what will force such change (11).

SUMMARY

Despite 40 years of global promotion of primary care, universal coverage remains highly variable with success stories and less inspiring tales. However, the positive impacts on both a healthcare system and individual patients of strong primary care foundations are clearly evident. As such, physicians, medical students and policymakers around the world would be well to afford the sector the respect it deserves.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

ACTIVE LEARNING

Tell your GP about international primary care. Talk to them about their experiences working abroad. What did they think of the systems that they encountered?

Do you know how primary care is delivered where you will spend or already spent your elective?
Does this system achieve the aims of Alma-Ata

What do you think is good about the system? Could the NHS benefit from any of these things to the NHS?

What are the challenges and drawbacks? What would you want to change? Why?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

RESOURCES

Find out more about the work of the World Health Organisation (WHO) concerning the development of primary care on an international stage.

Exchanges and seeing other healthcare systems in action can be a powerful learning experience about other healthcare systems. For more information on exchanges, enquire at your schools about:

- Hippocrates exchanges (one-to-two-week self-funded placements in Europe),
- FM360 exchanges (observational placements based in countries outside of Europe and usually for four weeks).

Find out more about eco-tourism and opportunities to work developing primary care abroad. Blue Ventures are a fine example of this resource – https://blueventures.org.

Find out about the work of Medicine sans Frontieres (MSF) - www.msf.org.uk.

Try reading The Honorary Counsel by Graham Greene for an insight into the life of a Doctor in Brazil or Madame Bovary by Gustav Flaubert about French provincial practice (also a film).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3E

The role of general practice in other countries

REFERENCES

1. WHO. International Conference on Primary Health Care, Alma-Ata. USSR; 1978.
2. WHO. Health in 2015: From MDGs to SDGs. Geneva; 2015.
3. World Health Organization. Declaration of Astana. Geneva: World Health Organisation Accessed: 16 January 2019.
4. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q. 2005;83(3):457-502.
5. Starfield B. Primary care: balancing health needs, services and technology. International Journal of Integrated Care. 2011;1:1-2.
6. Caley M. Remember Barbara Starfield: primary care is the health system's bedrock. BMJ. 2013;347:f4627.
7. Reed G. Cuba's primary health care revolution: 30 years on.: WHO; 2008.
8. Pearson M. Israel: excellent primary health care, but hospitals must improve. OECD Reviews of Health Care Quality. 2018.
9. Kautzky K, Tollman, S. A Perspective on Primary Health Care in South Africa University of Witwatersrand 2018
10. Shani M, Wang HH, Wong SY, Griffiths SM. International primary care snapshots: Israel and China. Br J Gen Pract. 2015;65(634):250-1.
11. Bates DW. Primary care and the US health care system: what needs to change? J Gen Intern Med. 2010;25(10):998-9.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

INTRODUCTION

"Climate change is the biggest health threat to the 21st century."

Dr Margaret Chan WHO Director-General 2006-2017

As the international drive for healthcare professionals to embrace sustainability gains momentum, the UK has taken the lead. In the General Medical Council's document Outcomes for Graduates 2018 the medical regulator has placed a new obligation on medical education:

> Newly qualified doctors must be able to apply the principles, methods and knowledge of population health and the improvement of health and **sustainable healthcare** to medical practice.

Doctors qualifying or registering in the UK are therefore required to understand and apply the principles of sustainable healthcare to medical practice. Teaching this is the responsibility of medical schools and of all doctors who are involved in medical education.

WHAT IS SUSTAINABLE HEALTHCARE?

Sustainable healthcare is all about providing high quality care and improved public health without exhausting natural resources or causing severe ecological damage to planetary health. A healthcare system is sustainable if it works within its financial, environmental and social resources, improving and protecting health now and for future generations. Sustainable healthcare has two principle aims. Firstly, it minimises its own contribution to environmental harm by improving the sustainability of its internal systems. Secondly, it actively promotes pro-environmental practice for patients and populations.

WHAT IS PLANETARY HEALTH?

Planetary health links the disruptions of the Earth's natural systems caused by humans with the resulting impacts on public health and then develops and evaluates evidence-based solutions to secure a world that is healthy and sustainable for everyone. Good planetary health will come by seeing the threats and reacting fast enough by switching to better ways of living. Examples include water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, and global pollution.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

PRIMARY CARE

The figure below gives estimates of sources of carbon emissions from the whole of the NHS. Estimates of the carbon footprint in general practices specifically suggest that between 65% and 90% is associated with pharmaceutical prescribing. If we exclude all medical treatments, including pharmaceuticals, the biggest contributor to the carbon footprint is patient and staff travel.

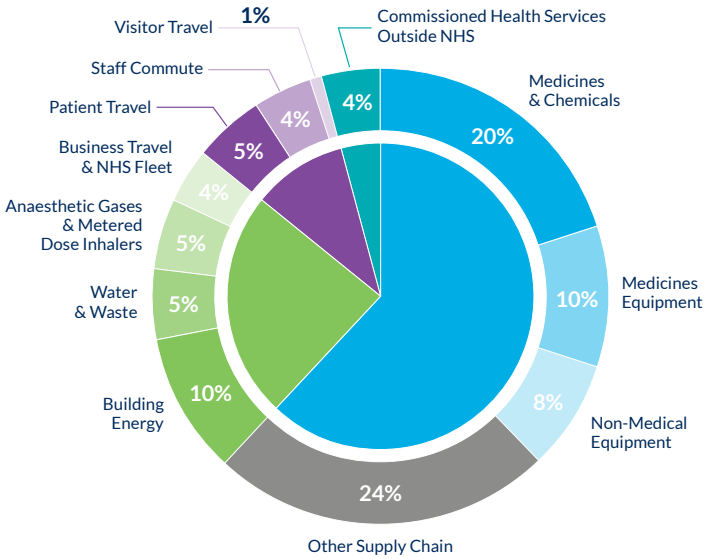


Figure 12 – Sources of carbon emissions by proportion of the NHS's carbon footprint

Modern primary care is surprisingly carbon intensive. Most of that carbon cost comes through standard clinical care such as referrals, investigations, and prescriptions. Fortuitously, lowering the carbon intensity of our work often leads to care of higher quality. For example:

- Prevention of ill-health (e.g. action on fuel poverty, health inequalities, social prescribing, nature-based interventions, sustainable diets, and active travel).
- Reducing iatrogenic harm and waste (e.g. reducing harmful polypharmacy, collaborative care plans to prevent unplanned admissions, and reducing overdiagnosis).
- Patient empowerment and self-management (e.g. shared decisions making and improving self-management of long-term conditions).
- Low-carbon prescribing (e.g. using DPI inhalers where appropriate).

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

BMA REPORT

The British Medical Association (BMA) wrote a report entitled Sustainable and Environmentally Friendly General Practice, in which they outline ways in which general practice can develop, and can be helped to develop, environmentally responsible practices. They suggest the following areas must be treated as an absolute priority by the government in supporting general practice to address climate change.

1. **Use of Green Impact for Health** (also see in resources below)

   Green Impact for Health is a free toolkit that supports practices to make environmentally responsible changes. Practices that sign up are provided with an extensive list of actions that can be taken to make improvements. These actions are in clinical areas such as prescribing (reducing inappropriate prescribing, switching to low carbon inhalers, and increasing social prescribing) as well as business areas such as travel (active travel by practice) and practice premises (reducing waste, switching to green energy providers, increasing energy efficiency). There is also a 'continuing improvement process' for practice teams where points are collected, and awards made each year to recognise your practice's positive achievements.

2. **Prescribing**

   Pharmaceuticals are the second highest contributing factor towards the NHS carbon footprint, and the largest contributor in general practice. There are a range of options that the pharmaceutical industries should develop to help reduce the impact of pharmaceuticals:

   - **Labelling.** GPs and other prescribers must be provided with information about the relative carbon footprint of the drugs that they prescribe.
   - **Inhalers.** The 2020/21 update to the General Medical Services (GMS) contract includes a goal for practices to reduce metered dose inhaler (MDI) prescriptions as a percentage of all inhaler prescriptions. Where it is clinically appropriate, practices should be offering their patients the opportunity to make the switch to dry powder inhalers (DPI), which are considerably better for the environment.
   - **Over-prescribing and waste.** Pharmaceutical wastage is a financial burden on the NHS and has a negative environmental impact. Discouraging stockpiling and regularly reviewing repeat prescriptions can help to reduce waste and benefit patients by potentially reducing the number of medicines they take.
   - **Deprescribing.** Online tools like medstopper.com could play a pivotal role if incorporated into practice IT systems. The tool helps clinicians and patients make decisions about reducing or stopping medications. See umweltbundesamt.de/en/topics/chemicals/pharmaceuticals for more information about the ecotoxic effect of prescriptions.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

3. **Social prescribing**

   Effective use of social prescribing has the potential to improve patients' health and wellbeing while also reducing practice attendances and wider NHS use. For some patients, social prescribing may take the form of nature-based health interventions (green prescribing) which can be used to supplement orthodox medical treatments. Nature-based activities may lead patients into better health as well as into more pro- environmental behaviours and a general sense of environmental stewardship. Through social prescribing, GPs have the potential to lead patients into more environmentally aware lifestyles.

   Social prescribing has been part of the GMS contract since 2019, with 100% of funding for access to social prescribers being paid for through the Primary Care Networks' Directed Enhanced Services.

4. **Equipment**

   For most patients and clinicians, disposable medical instruments became the norm as a result of concerns about diseases such as Creutzfeldt-Jacob. However, medical equipment and instruments are the leading contributor to the NHS's carbon footprint and while their contribution is not as high in primary care, there is still room for improvement.

   One way to address this part of the carbon footprint would be to return to the use of re-usable instruments, either sterilised onsite, or by an external service in order to benefit from economies of scale.

5. **Remote consultations**

   The COVID-19 pandemic has encouraged practices and patients into finding alternatives to face-to-face consultations. As both practitioners and patients become more familiar with the use of telephone and video consultations, many will want to continue to use both remote working and remote consultations beyond the restrictions. Remote consulting can be appropriate for certain kinds of consultation and its use would reduce the need for (potentially environmentally damaging) patient travel.

6. **Infrastructure and premises**

   Many practice premises will need improvements to make them fit for the future in terms of the service they provide to patients and the working conditions for clinicians. In the BMA's 2018 premises survey, only half of practices considered their premises to be fit for present needs and only a fifth felt that their premises were fit for the future. The process for making these improvements should also consider those which would lead to a reduction in the practice's carbon footprint (for example, installing solar panels). The carbon emissions impact of these improvements needs to be properly assessed and appropriate funding provided.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

ACTIVE LEARNING

Find out more about the impact of climate change and what we can about it in general practice by looking at the resources on the next page.

Can you offer to do a sustainability Quality Improvement project in your current clinical placement? See sustainablehealthcare.org.uk/susqi for ideas.

What is a planetary health impact assessment, and how do you it?

What are the challenges and drawbacks? What would you want to change? Why?

You can do your own planetary health impact assessments, to evaluate how your activity may cause environmental changes that affect natural systems and long-term health, and decide how we can make meaningful restorations and reparations. You can do this using footprint.wwf.org.uk or carbonfootprint.com/calculator1.

How do you offset your ongoing and/or past CO_2 emissions? Try any of the following: goldstandard.org/get-involved/donate-to-us, carbonfootprint.com/carbonoffsetprojects, ecologi.com, woodlandtrust.org.uk/plant-trees/large-scale-planting, or nhsforest.org.

Reflect on how you as a future medical professional might be able to be involved in advocacy in this area.

Consider getting involved now, such as being involved in the Planetary Health Report Card (phreportcard.org) or Health Declares organisations (healthdeclares.org).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

RESOURCES

The RCGP's Green Impact for Health is a free, online toolkit designed to help practices to become more efficient and improve sustainability. The toolkit has been developed as a collaboration between the University of Bristol, RCGP, Health Education England South West, and the National Union of Students. It contains actions designed by GPs and sustainability professionals, specifically to help practices improve their sustainability and environmental impact. Green Impact for Health provides guidance about the small changes that will improve quality, save money and improve the environmental sustainability in a general practice. It has already been used by almost 400 General practices across the country.

UK Health Alliance for Climate Change (UKHACC) brings together doctors, nurses, and other health professionals to advocate for responses to climate change that protect and promote public health. The UKHACC was formed in 2016 to coordinate action, provide leadership and help amplify the voices of healthcare professionals across the UK.

Sustainable Development Unit (SDU) is a national unit based in Cambridge working on behalf of the health and care system in England. It was established in 2008. It supports the NHS, public health, and social care to embed and promote the three elements of sustainable development: environmental, social, and financial. The SDU is jointly funded by, and accountable to, NHS England and Public Health England to ensure that the health and care system fulfils its potential as a leading sustainable and low carbon service.

Centre for Sustainable Healthcare (CSH) is a charity based in Oxford working on sustainable healthcare in research and practice. It was established in 2008. It provides strategic input and consultancy to national and local programmes. There is a network for primary care (networks.sustainablehealthcare.org.uk/network/sustainable-primary-care) with lots of resources, as well as a forum for discussion.

World Organisation of Family Doctors (WONCA) has a Working Party on the environment that fosters the role of family doctors in protecting the health of their patients and communities from the impacts of environmental hazards and environmental degradation, and to promote healthy and sustainable societies at the local and global level. Family doctors from every region of the world are engaging in planetary health within their local and global communities. The Working Party always welcomes new members.

Planetary Health Alliance is a consortium of over 120 dedicated universities, non-governmental organisations, government entities, research institutes, and other partners around the world committed to advancing planetary health.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

3F

Sustainable healthcare

Lancet Countdown: Tracking Progress on Health and Climate Change is an international research collaboration, dedicated to tracking the world's response to climate change, and the health benefits that emerge from this transition.

Every weekday morning, Carbon Brief sends out a free email digest called Carbon Brief Daily News, includeing the past 24 hours of media coverage related to climate change and energy, as well as their pick of the key studies published in the peer-reviewed journals.

The BMA report Sustainable and Environmentally Friendly General Practice covers ways in which GP practices can develop – and can be helped to develop - environmentally responsible practices, as part of the campaign for carbon neutrality by 2030.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

THEME 4:

SCHOLARLY GENERAL PRACTICE

General practice comprises the practical and scholarly aspects of delivering highly effective personalised care to individuals, their families, and populations in community settings. General practice is a large professional discipline with philosophical principles and a systematic body of knowledge based on a vast amount of qualitative and quantitative research. This knowledge must be applied in several ways (joint decision making, management planning, and practical procedures) and in many varying contexts (face-to-face, online, telephone, rural, and urban) in a highly resource-efficient way.

Every general practitioner - often humbly - therefore embodies scholarly practice: the assimilation and maintenance of a large body of rapidly expanding knowledge, its theoretical and practical application over a wide range of contexts, and the subsequent generation of meaningful changes in many people's lives. In addition, all practitioners (through the Hippocratic Oath), pledge to train the next generation of the profession and so most GPs are teachers. In fact, the original meaning of the word doctor is derived from the Latin docere, to teach.

OVERVIEW

Overview

How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE

1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE

2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE

3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE

4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS

EPILOGUE

4A

Learning in primary care settings

INTRODUCTION

Learning from patients is an essential skill that all clinicians must master. Working in a busy clinical environment, formal opportunities for learning can be limited and it is therefore essential that we are able to identify learning needs from patients as they are being seen. Problem-based learning approaches are a useful start but need considerable adaption for use in clinical environments (1,2) and this section focusses on practical ways in which this can be done.

Initially, it is possible to extract learning points at relative leisure through practising history taking skills. After the history is taken and presented, learning points can be derived. As time goes by this 'cold learning' should expand to include 'hot learning': learning in real clinical time as the patients are seen. Learning sources should now also include learning from clinical errors, significant events, complaints, and patient feedback. Methods of learning can now include reflective practice, quality improvement cycles and clinical audit. See the section on quality of care to learn more about these concepts.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4A

Learning in primary care settings

PRIMARY CARE AS A RICH LEARNING ENVIRONMENT

VALUE OF THE PATIENTS

General practice provides easy access to a huge variety of patient cases and modes of presentation and the lack of instant access to investigations prompts development of communication, practical and reasoning skills. Multimorbidity and polypharmacy are commonplace in primary care and an understanding of this puts individual diagnoses into context, helping to develop a generalist holistic approach, with a focus on personalised care.

Elements of continuity are often evident as relationships are built with both patients and supervisors (especially if Longitudinal Placements (3) are provided by medical schools) providing a powerful opportunity for reflection and learning (4). Giving learners the opportunity to lead the consultation in an authentic role with implied responsibility can empower them to learn responsively and reflect deeply on encounters with patients.

VALUE OF THE SUPERVISOR

Within a general practice placement, learners can benefit from consistent feedback and guidance from their supervisor. Supervisors can highlight useful learning opportunities and guide learners through the reflective process. They can provide guidance on clinical knowledge and skills and attitudes, organise problem-based discussions, give informal and formal feedback, and demonstrate role modelling behaviours (5).

VALUE OF THE TEAM

Inter-professional learning and collaboration with the primary healthcare team are essential activities which usually arise following interactions related to patient care. The multi-faceted complexity of patients in primary care and the consequent need for multi-disciplinary team meetings, joint visits, and inter-professional reviews form a positive learning environment motivated by the desire to provide high-quality patient care (6).

REFLECTIVE PRACTICE

> Reflection is a metacognitive process that occurs before, during and after situations with the purpose of developing greater understanding of both the self and the situation so that future encounters with the situation are informed from previous encounters. (7)

Reflection is a key component of experiential learning and learning from patients, with the 'Kolb cycle' a well-recognised description of this process.

The reflective or experiential learning cycle, sometimes just called the learning cycle (7,8).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4A

Learning in primary care settings



Figure 13

The key point about learning here is that learning requires not only an experience but also interpretation (or reflection) of the experience. This requires reflection on what happened, why and how it fits into what is already known, and then identifying what new knowledge may be needed (9). Reflection can be triggered by formal request or by spontaneously noticing something (6). It is this constant questioning or reflection on what is happening that is the hallmark of good learners.

Reflection can be a private activity or guided or collaborative (6). Reflection can be related to a specific task or encounter or related to a professional behaviour or role. It can occur during an event or experience or afterwards (6). Reflection is self-regulated empowering clinicians to become 'masters of their own lifelong learning' (7). Evidence suggests this promotes a deeper approach to learning, improved academic outcomes, psychological wellbeing, and better career progression (10).

Some of us have a naturally reflective learning style, while others may need guidance on how to reflect following an encounter with a patient. We can all improve reflection, through receiving feedback on the quality of our reflection from clinical supervisors.

REFLECTION IN PRACTICE

- **Reflective diaries:** Keeping a brief note of day-to-day events, especially challenges faced in consultations or where there is uncertainty, can help as a focus for reflection. An A5-sized notebook is just about the right size for use in the clinical environment; a soft-covered one can be folded and slotted into a pocket when mobile, but provides enough space to write in.

  Getting the 'materials' right in learning is an important consideration. Observations of clinical learning suggest that often the rate-limiting factor in learning is simply the absence of a pen and paper to put reflections and learning needs down on (11)!

- **PUNs & DENs:** This concept was developed within primary care. 'Patient Unmet Needs' (PUNs) are elicited by asking the questions "Was I equipped to meet the patient's needs? Could I have done better?" at the end of each consultation over a number of surgeries. This will identify an area or a number of areas to focus future learning or development on which are the 'Doctors Educational Needs' (DENs) (12-15).

- **Guided reflection:** Guided reflection with a mentor may be necessary at times to help facilitate effective reflection in challenging areas or when assumptions are already in place. This could be with the support of a supervisor in practice or a peer learning group. Reflection in this context can be documented or discussed in a debrief-type setting or opportunistically during a break (7).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4A

Learning in primary care settings

- **Learning from mistakes:** Depending on the clinical issue, noticing a mistake or the potential for an error should lead to an evaluative reflection on not only the learner's clinical practice, but also the context of the case. This may prompt a significant events analysis (SEA) to be discussed with practice team, or it may lead to an audit to case find any other similar issues and to prevent future problems (12).
- **Personal development plans (PDPs):** Self-directed learning has been described as "a process in which individuals take the initiative in diagnosing their learning needs, designing learning experiences, locating resources and evaluating learning" (13).

  PDPs are essentially individual action plans and have become an integral part of self-directed learning. Being able to identify a learning need and develop a responsive realistic plan to address it is part of continuing professional development (CPD). PDPs should be SMART (Specific, Measurable, Achievable, Realistic, and Timed) (7,16).

PORTFOLIOS

The use of portfolios in medical education, in either paper or electronic format, is widely used as a method for documenting learning (17). Learners are often required to document encounters with patients including a reflection on what they have learnt, therefore encouraging the development of a reflective learning style. Electronic portfolios have increased the quantity of reflection, but the quality and depth of reflection and effectiveness of learning from patients is yet to be established. Buckley et al. outline practical tips on how to maximise the benefits of the portfolio (17).

Portfolios can be used to record clinical competencies and patient case discussions as evidence of engagement with placements which can be used for formative or summative assessment. Portfolio use can be limited by engagement of the supervisor and the need for adequate clinical supervision to facilitate learning.

UNDERSTANDING APPRAISAL AND REVALIDATION

Medical appraisal was introduced to the NHS in 2001 and encouraged the documentation of achievement and professional development needs through self-directed learning and reflection with a focus on improving patient care. Revalidation was introduced for all consultants and general practitioners by the General Medical Council (GMC) in 2012. Revalidation occurs every five years and requires completion of annual appraisals to demonstrate fitness to practice. Doctors in postgraduate training are required to complete an Annual Review of Competency Progression (ARCP), which includes documentation and reflection on contact with patients and agreement of a PDP.

Undergraduate students should therefore gain an understanding of the importance of learning from patients, effective documentation of learning and reflective practice. They should understand the link between their own portfolio, annual appraisal, personal development plans and the implications this has for revalidation in their future careers.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

4A

Learning in primary care settings

ACTIVE LEARNING

Write down the key learning skills you have learned in practices. Consider how these skills may help in the learning activities outlined in this section and when seeing patients.

Reflect on each patient seen during a clinic and develop a list of PUNs and DENs to address your learning needs.

Use a reflective framework to reflect on a patient you have seen in primary care.

Ask your GP supervisor how the practice and individuals learn from complaints or significant events. Review the practice log of significant events or look at an individual event and see what leaning took place. Did the significant event or complaint trigger an audit or quality improvement activity?

If you see a significant event while in practice discuss it with you supervisor and submit it formally for review.

Record your learning in a reflective diary or portfolio.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4A

Learning in primary care settings

RESOURCES

- RCGP Reflective practice
- RCGP Revalidation
- RCGP Appraisal and revalidation support

REFERENCES

1. Albanese MA, Mitchell S. Problem-based learning: A review of literature on its outcomes and implementation issues. Academic Medicine. 1993;68(1):52-81.
2. O'Neill PA, Willis SC, Jones A. A Model of How Students Link Problem based Learning with Clinical Experience through "Elaboration". Academic Medicine. 2002;77(6):552-61.
3. Harding A. 'A rose by any other name; longitudinal (integrated) placements in the UK and Europe. Education for Primary Care. 2019;30(5):317-8.
4. Hirsh D, Walters L, Poncelet AN. Better learning, better doctors, better delivery system: Possibilities from a case study of longitudinal integrated clerkships. Medical Teacher. 2012;34(7):548-54.
5. Kilminster S, Cottrell D, Grant J & Jolly B. AMEE Guide No. 27: Effective educational and clinical supervision. Medical Teacher 2007. 29: 2-19.
6. Mertens F, de Groot E, Meijer L, Wens J, Cherry MG, Deveugele M, Damoiseaux R, Stes A & Pype P. Workplace learning through collaboration in primary healthcare: A BEME realist review of what works, for whom and in what circumstances: BEME Guide No. 46, Medical Teacher 2018, 40:2, 117-134,
7. Sandars J. The use of reflection in medical education: AMEE Guide no. 44. Medical Teacher 2009. 31: 685-695.
8. Kolb DA. Experiential learning: experience as the source of learning and development. 1984.
9. Uygur J, Stuart E, De Paor M, Wallace E, Duffy S, O'Shea M, Smith S & Pawlikowska T. A Best Evidence in Medical Education systematic review to determine the most effective teaching methods that develop reflection in medical students: BEME Guide No. 51, Medical Teacher 2019, 41:1, 3-16.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4A

Learning in primary care settings

10. Schon, D. The reflective practitioner; how professionals think in action. Ashgate; Aldershot (1983)
11. Harding A. Actor-Network-Theory and Micro-Learning Networks. Education for primary care: 2017;28(5):295-6.
12. Grant J. The Good CPD Guide: A Practical Guide to Managed Continuing Professional Development in Medicine. Radcliffe Pub.; 2012.
13. Jennngs SF. Personal development plans and self directed learning for healthcare professionals: are they evidence based? Postgrad Med J 2007. 83: 518-524
14. Challis M. AMEE Medical Education Guide No. 19: Personal Learning Plans. Medical teacher 2000. 22:3, 225-236
15. Eve R. PUNs and DENs : Discovering Learning Needs in General Practice. Radcliffe Medical; 2003.
16. Van Tartwijk J & Driessen EW. Portfolios for assessment and learning: AMEE Guide no. 45. Medical Teacher 2009. 31: 790-801.
17. Buckley S, Coleman J, Davison I, Khan KS, Zamora J, Malick S, Morley D, Pollard D, Tamasine A, Popovic C & Sayers J. The educational effects of portfolios on undergraduate student learning. A Best Evidence Medical Education (BEME) systematic review. BEME Guide No. 11. Medical Teacher 2009, 31:4, 282-298

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

INTRODUCTION

GPs now carry out a lot of teaching. This section is therefore for both teachers and for learners who may consider getting more involved in teaching or near-peer teaching. For those interested in this area, many universities now offer modules, certificates or masters courses in medical teaching.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

THE LEARNING ENVIRONMENT

The clinical environment is different from the classroom in almost every respect:

- Learners are not the only priority; they can find themselves 'filtered out' by busy clinicians seeing patients.
- No detailed learning objectives; these are unachievable due to service pressure and the fact that patient presentations cannot be pre-planned (1, 2).
- There are constant interruptions.

New clinical learners can be overwhelmed by this and find it difficult to learn or retrieve information, especially when they are also concerned about placement assessments. We suggest teachers therefore:

1. Try to limit questions and answers about clinical factoids, for instance 'what the causes of x are', 'what anatomical structure y is', etc.
2. Instead ask learners what they are thinking and what they would do.
3. Explain what you (the teacher) is thinking.
4. Be aware that the service environment can disable student recall and performance, especially in the early years.
5. Carry out placement assessments as early as possible to enable students to then concentrate on clinical learning.

LEARNING STYLES

Some evidence suggests that we have a preferred learning style. Many different categories exist but the styles range from those who like to learn the theory to those who prefer practical learning (active learners).

The majority of clinicians and would-be clinicians are 'active learners' (3) and evidence suggests that for all learners, attention span falls very rapidly after about 15 minutes of inactive learning (such as a lecture). Some active teaching and learning techniques are listed below:

1. **'Get out!'** If attention is flagging, then get out and have a break. An offer of a caffeinated drink in the health services is seldom unappreciated.
2. **'Go and do something.'** For example, ask them to look up the last condition they saw and give a presentation in then minutes.
3. **'Go and have a look at the patient notes and give me a summary.'**
4. **'Try starting/finishing the next consultation.'** The learner can sit in your seat while you watch (hot seating).
5. **Tie together several cases** using a topic or principle of general practice, for example Continuity of care. In this case, during the surgery, try to note down how continuity affects the different patients seen.

The most important thing, however, is to remember that learners are human beings and respond to acknowledgement of their presence. All too often, observations of clinical learning reveal that learners can be 'filtered out' by busy clinicians. Basic acknowledgement practices such as 'you okay?' or 'hang on in there', or even a friendly glance, can have dramatic effects on student attention (2).

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

SOCIAL LEARNING

Part of learning to be a doctor involves learning how to act, speak, and dress like a doctor. For this, generations of learners have looked to practitioners as role models. What clinical teachers say and do has a profound effect on students. This kind of learning is seldom consciously planned in medical school curricula and so is known as the hidden curriculum (4, 5). What is certain is that students are profoundly affected by negative comments about other healthcare professionals and find this behaviour upsetting. It is therefore not acceptable for clinicians to engage in negative comments - even in jest - about other health professionals.

Another part of learning a profession involves feeling a part of the profession. Some research (6, 7) suggests that this is a gradual process, with learners initially taking on routine tasks as 'legitimate participants', before moving on to tasks with more responsibility, eventually becoming part of a 'community of practice. The observations that originally led to this idea were based on old-style apprenticeships, which have ceased to exist at present in most clinical education. This has meant that many learners can feel like a spare part on clinical attachments and feel very uncomfortable. Giving learners a role at the practice is therefore a very good idea. Options include:

- Helping to summarise patient notes. This is usually paid, and students often perform this task in their holidays.
- Providing or coordinating patient transport in adverse weather.
- Doing flu jabs. Students are often paid for this in the flu vaccination season.
- Performing routine health investigations (ECG, spirometry etc) as part of routine health monitoring.
- Phlebotomy and other clinical tasks, when suitably trained. See the SAPC website for more details on indemnity.
- Quality and Outcomes Framework (QOF) checks for patients located in nursing homes.
- Health promotion clinics, for instance smoking cessation, lifestyle, and weight management.

LEARNING FROM PATIENTS

It is not possible normally to predict what kinds of patients will come to a surgery and the strength of general practice is that many different cases are seen each day. How to structure clinical learning around this? Firstly, the bedrock of developing good clinical practice is for learners to see lots of patients, enabling pattern recognition to develop. The second main way in which clinical knowledge develops is through reflecting (see previous section) and thinking about clinical experiences. This can be greatly enhanced through receiving feedback on patients seen. The way in which feedback takes place is variable, but a number of suggested methods exist.

The one-minute preceptor model (8)

This can be used in instances where a diagnosis has been made:

- Clinical encounter/experience
- Get a commitment from the learner: 'what do you think the diagnosis is?'
- 'What might be the underlying anatomy/physiology/ pathophysiology here?'
- Probe underlying thinking: 'why do you think...?'
- Reinforce good: 'your thinking is supported by...'

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

- Identify omissions and points to improve
- Try to relate to general principles. Don't be afraid to use your own personal experience here: 'generally in these cases' or 'I have found in general that…'

More commonly, the diagnosis is already known, and management decisions need to be taken regarding care and the following method may be more appropriate:

The 30-second teaching model:

- Clinical encounter/experience
- Clarify relevant factual knowledge
- Why do you think x happened/was done?
- Explain the clinical reasoning behind actions taken and how guidelines etc. have been adapted to suit individual patients
- Signpost to further relevant knowledge/guidelines but also point out where individual care deviates from guidelines or where guidelines or textbook guidance do not exist or are inadequate.

Each clinical learning episode should be recorded by learners in their clinical log so that all parties can be assured that regulatory body (such as GMC) outcomes are being met.

LONGITUDINAL PLACEMENTS (LOPS)

For chronic conditions (that now account for most clinical presentations), the undergraduate model of a one-off 'clerking' encounter is out-of-date; it has remained unaltered since the 1850s. Learners need opportunities to learn how chronic conditions develop and in tandem with this, how the relationship between physician and patient evolves. This relationship has a profound effect on the eventual outcome of the condition (9).

A popular way of encouraging this to take place in undergraduate education is for medical students to return to the same practice and to follow a panel of patients there. These are known as longitudinal placements LOPs in the UK (10), or Longitudinal Integrated Clerkships (LICs) in the USA and Australia. The evidence base for this kind of learning is strong and compared with traditional short placements the evidence suggests:

1. More exposure to clinical cases and performing procedures (11)
2. Better liked by students (12)
3. Better empathy retention by students (13, 14)
4. Better relationships with teachers and patients (12)
5. The same performance on knowledge test scores (11)
6. Better retention figures for medical personnel (15, 16).

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

AN APPROACH TO TEACHING BASED ON THE TEACHING CYCLE

Traditional classroom teaching is based on a simple three-stage process (17, 18) that has been used for many thousands of years in teaching.

Planning placement learning & teaching

We have already seen that learning on placements is very different to classroom learning and so several adaptions are necessary to plan placement (or work-based) learning.

Firstly, it is very difficult to plan exactly what will happen at work, so having very detailed plans or curricula is therefore frequently impractical (19). Focussing on a general theme for a teaching clinic or for a week is often more achievable (20, 21) and this resource has adopted this evidence-based approach and provides many such themes and principles.

General practice covers a vast canvas. It is very difficult therefore for teachers and learners to embark on a learning episode such as a clinic without an idea on what to focus on. It is therefore a good idea that the learner and teacher agree together on a topic or theme before the learning session begins. Feedback from generations of students indicates that this 'intro' session is disproportionately important. Apart from agreeing on what is to be learned, a short introduction session could also cover:

- Brief introductions and greetings. Learning is partly a social process and knowing the name of a learner is disproportionately important.
- The locations of toilets, tea and coffee, etc.
- Materials needed for learning. The medical workplace is a highly technical environment and dependant on computers. Learners need access to computers and patient records, so passwords are essential.

If learners are sitting in on telephone consultations, then an additional pair of headphones or using speakers is essential. Students need a pen and A5 notebook or a laptop or smartphone to make notes. When more extended explanations are given, learners can be encouraged to record this on their mobile devices. Evidence suggests that students often do not have access to the right materials needed for learning, making them 'technological refugees' in learning environments (1).

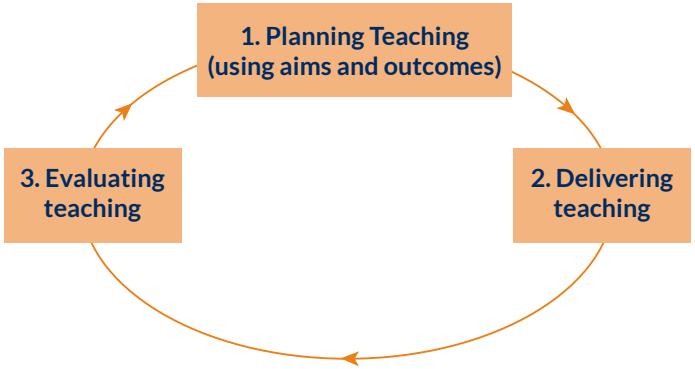


Figure 14

Planning self directed learning (sdl) time with students

A popular theory of learning, Adult Learning (22), suggests that learners prefer to be treated as 'adults' and to play a part in choosing what they learn. However, evidence suggests that learners need guidance in planning SDL time (2). Options for this time include:

- Working on the 'theme' for the placement; ideas for this are contained in each of the principles outlined in this resource
- Working on an audit or research project at the practice
- Following up cases previously seen
- Some practices have designed resource packs of cases, ECGs, x-Rays and others for learners to look at.

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

DELIVERING TEACHING

In contrast to the formal/planned teaching in classrooms, teaching on placements is informal and unplanned. However, several themes have arisen through student feedback about this kind of teaching:

- It is often better to keep any teaching at a simpler level and then progress towards increasing difficulty as learners' level of understanding becomes apparent. Teaching can then be orientated towards the learners' 'zone of proximal development' (23); that is, the point between what a learner knows and what is not known.
- Informal teaching is unrecorded and can therefore be a place where teachers sometimes feel free to voice opinions regarding other members of the profession. This can be extremely damaging to learning. In a similar vein, compliments to learners about clothing and appearance can frequently be misinterpreted and are probably best avoided.
- GPs frequently get to know learners better than most other teachers. Issues of professionalism can therefore emerge. It is not acceptable to let major breaches of professionalism go unreported - whether by learner or teacher. Many learners and teachers alike harbour a concern about where this boundary falls. Here the adage 'use the force' emerges: a feeling that something is very wrong emerges almost immediately. Thankfully incidents like this are very rare.

It is increasingly important that clinical teachers adopt a professional approach to teaching. One way in which this can be done is to collect evidence of preparation, collection of evaluation and reflection on teaching and the evaluation received. Resources to help this, such as evaluation forms and preparation for teaching forms can be found later on.

This evidence may also prove useful in appraisal, as increasingly, doctors are asked to show evidence of quality improvement in all aspects of work undertaken. Another way to 'professionalise' teaching is to consider one of the many certificate, master's, or doctorate programmes in education currently offered at many universities.

ASSESSING LEARNING & EVALUATION

Assessment structures will vary from school to school and are not the subject matter for this book, although the content of this resource may serve as a useful blueprint for those designing assessments.

However, evaluation of learning is essential if teaching and learning is to improve. Evaluation is the process of collecting feedback (of limited use in itself) and then crucially reflecting on this information and planning improvements to teaching, much like the reflective cycle. There are three main types of evaluation:

1. **Learner evaluation:** It is a GMC requirement of students to provide feedback about teaching, and each practice should ensure that students give feedback after each placement. A drop box for students to leave feedback is worth thinking about, as students can feel pressurised to provide good feedback if forms are filled out and handed directly back to a teacher. A simple feedback form is provided in the resources.
2. **Peer evaluation:** From time to time, it may be useful to have a colleague sit in and observe teaching. Some teachers use cameras or smartphones to record some of their teaching for this purpose and then share excerpts with peers.
3. **Self evaluation:** This is particularly valuable and may realistically be only a minute or so of reflection and a short note.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

ACTIVE LEARNING

Talk to your placement provider about what teaching is like.

Pick a small topic, revise the content of this section, and try to put into practice.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

RESOURCES

For a light-hearted look at some of the pitfalls in teaching medical students, watch Doctor in the House, a 1950s farce that reflects the attitudes to teaching medical students present at the time.

Learning medicine has been the subject of novels (The House of God by Samuel Shem and more recently This is Going to Hurt by Adam Kay).

Learning medicine has also been the subject of several ethnographies, where researchers 'go native' and follow round students observing how they learn. The Boys in White by Howard Becker and Making Doctors by Simon Sinclair are excellent examples of learning ethnographies based on observations in the US and UK respectively.

For beginner medical teachers, an excellent place to start is the ABC of learning and teaching in medicine by Peter Cantillon (Wiley-Blackwell).

REFERENCES

1. Harding A. Actor-Network-Theory and Micro-Learning Networks. Education for primary care: an official publication of the Association of Course Organisers, National Association of GP Tutors, World Organisation of Family Doctors. 2017;28(5):295-6.
2. Harding AM. How do medical students learn technical proficiency on hospital placements? The role of Learning Networks. London: University College London; 2017.
3. Armstrong E, Parsa-Parsi R. How can physicians' learning styles drive educational planning? Academic Medicine. 2005;80(7):680.
4. Lempp H, Seale C. The hidden curriculum in undergraduate medical education: qualitative study of medical students' perceptions of teaching. Bmj. 2004;329(7469):770.
5. Ozolins I, Hall H, Peterson R. The Student Voice: Recognising the hidden and informal curriculum in medicine. Medical Teacher. 2008;30(6):606-11.
6. Lave J, Wenger E. Situated Learning. Cambridge: Cambridge University Press; 1991.
7. Dornan T, Boshuizen H, King N, Scherpbier A. Experience based learning: a model linking the processes and outcomes of medical students' workplace learning. Medical Education. 2007;41(1):84-91.
8. Irby DM, Wilkerson L. Teaching when time is limited. British Medical Journal. 2008;336(7640):384-7.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4B

Teaching in primary care settings

9. Pereira-Gray DJ, Sidaway-Lee K, White E, Thorne A, Evans PH. Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality. BMJ Open. 2018;8(6):e021161.
10. Harding A. 'A rose by any other name; longitudinal (integrated) placements in the UK and Europe. Education for Primary Care. 2019;30(5):317-8.
11. Hirsh D, Gaufberg E, Ogur B, Cohen P, Krupat E, Cox M, et al. Educational outcomes of the Harvard Medical School–Cambridge integrated clerkship: A way forward for medical education. Academic Medicine. 2012;87(5):643-50.
12. Walters L, Greenhill J, Richards J, Ward H, Campbell N, Ash J, et al. Outcomes of longitudinal integrated clinical placements for students, clinicians and society. Medical Education. 2012;46(11):1028-41.
13. Hauer KE, O'Brien B, Poncelet AN. Longitudinal, integrated clerkship education: Better for learners and patients. Academic Medicine. 2009;84(7):821.
14. Teherani A, O'Brien BC, Masters DE, Poncelet AN, Robertson PA, Hauer KE. Burden, responsibility, and reward: preceptor experiences with the continuity of teaching in a longitudinal integrated clerkship. Academic Medicine. 2009;84(10):S50.
15. Strasser R, Hirsh D. Longitudinal integrated clerkships: transforming medical education worldwide? Medical Education. 2011;45(5):436-7.
16. Worley P, Silagy C, Prideaux D, Newble D, Jones A. The Parallel Rural Community Curriculum: an integrated clinical curriculum based in rural general practice. Medical Education. 2000;34(7):558-65.
17. Reece I, Walker S. Teaching Training and Learning. Fourth ed. Tyne and Wear: Business Education Pulishers Limited; 2000.
18. Tyler RW. Basic Principles of Curriculum and Instruction. Chicago: University of Chicago Press; 1949.
19. Miller KH, Edwards R, Priestley M. Levels and equivalence in credit and qualifications frameworks: contrasting the prescribed and enacted curriculum in school and college. Research Papers in Education. 2010;25(2):225-43.
20. Slattery P. Curriculum Development in the Postmodern Era. New York: Garland Publishing Inc; 1995.
21. Eraut M. Transfer of knowledge between education and workplace settings. In: Rainbird H, Fuller A, Munroe A, editors. Workplace Learning in Context. London: Routledge; 2004.
22. Knowles M. The adult learner: A neglected species: Gulf Publishing; 1978.
23. Engeström Y. Developmental work research as educational research: Looking ten years back and into the zone of proximal development. Nordisk pedagogik. 1996;16(3):131-43.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

INTRODUCTION

High-quality patient care depends on identifying and using evidence-based methods of diagnosis, treatment, and management over time. It became clear many years ago that the evidence obtained from research in secondary/ospital care could often not be applied to primary care, and that general practice needed to build an evidence base of its own. This section of the resource begins by identifying some important research topics in general practice and supplying references to key research papers which have addressed these topics. Many of these papers are suitable for use in teaching and learning sessions on research methodology, medical writing, critical reading, and peer review. We then look at how and where general practice and primary care research is conducted, and the features of the NHS that enable this research to be carried out. There is a section on the fundamentals of critical reading, and it might be interesting to look at some of the papers already referred to earlier and test these out on them. The final section describes where primary care research is published and how it is possible to contribute to this literature, even at an early stage in your medical career.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

THE SCOPE OF GENERAL PRACTICE & PRIMARY CARE RESEARCH

Over the last five or six decades, general practice researchers have turned their attention to several distinctive features of general practice. A number of these are described below, with examples of related, key papers reporting research conducted in general practice, largely by academic general practitioners and their colleagues in university departments.

The epidemiology of common disorders

Also known as the 'iceberg of illness' this emphasises that most patients who have symptoms don't seek medical treatment and that patients seen in hospital care represent only a tiny minority of the total patient population.

- Hannay (1) wrote the first systematic description of the iceberg phenomenon.
- Jones et al (2) conducted a cross-sectional survey of patients selected at random from participating practices which showed for the first time that dyspeptic symptoms are very common in the general population, that they frequently overlap with other gastro-intestinal symptoms, and that only a small minority of people with these symptoms seek medical attention.

Healthcare seeking behaviours

Stresses the importance of eliciting and addressing patients' ideas, concerns, and expectations in understanding why they have consulted and in making diagnoses and management plans. See the section on Long-term conditions for more on health seeking behaviours.

- Lydeard et al (3) conducted a semi-qualitative study which showed that symptom type and severity were not associated with the decision to consult, but concerns about the possible significance and seriousness of the symptoms were.
- Britten et al (4) conducted an important analysis of the effects of patients' expectations of receiving a prescription, and GPs' perceptions of them and their feelings of being pressurised to prescribe.

Diagnosis

Generalist medicine is carried out under conditions of uncertainty and undifferentiated symptoms. However, it has a focus on making early diagnoses of potentially serious disorders such as cancer and sepsis and improving the accuracy of diagnosis of chronic conditions such as heart failure and depression. See the section on the Generalist Clinical Method for more on diagnosis.

- Jones et al (5) conducted a large database study which quantified for the first time the risks of a diagnosis of cancer in patients presenting with haematuria, haemoptysis, rectal bleeding, and dysphagia.
- Hobbs et al (6) conducted a large population-based study which quantified for the first time the mortality risks of heart failure in the community and the poor prognosis associated with borderline systolic dysfunction.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

Treatment

This includes appropriate management in primary care, including therapeutic approaches in heart failure, coronary heart disease, gastrointestinal disorders such as inflammatory bowel disease and coeliac disease, respiratory illnesses such as asthma and COPD, and infectious diseases. See the chapter on Prescribing for more.

- Kennedy et al (7) conducted a general practice based randomised controlled trial which showed clearly the benefit of adding CBT to standard therapy in irritable bowel syndrome.
- Little et al (8) delayed prescribing of antibiotics for respiratory infections results in fewer than 40% of patients using antibiotics, with little difference in symptom control between immediate prescribing, non-prescribing, and delayed prescribing.

Chronic disease management

Research in this area includes the long-term, high-quality care of people with diabetes, cardiovascular disorders, asthma, and neurological and psychological problems, and with multi-morbidity involving many of these chronic conditions. See Long term conditions and Multiple conditions for more on these topics.

- Training in patient-centred care for nurses and doctors can significantly improve communication, wellbeing, and satisfaction among patients with newly diagnosed diabetes (9).
- Lewis et al (10) conducted a randomised controlled trial which provided evidence to support the prescription of SSRIs to a wider group of primary care patients, including those with mild to moderate depression.

Screening, health promotion, and disease prevention

Including cardiovascular risk detection and risk reduction in smoking, alcohol and drug use. See Preventing disease and promoting health for more about this topic.

- Hippisley et al (11) conducted a large database study which provided updated risks estimates of CVD, with new risk factors, including migraine, severe mental illness, and an expanded definition of chronic kidney disease.
- Blood pressure self-monitoring and self-titration resulted in lower systolic blood pressure at 12 months in patients at high risk of cardiovascular disease (12).

Organisation and delivery of care

This includes understanding the ingredients of high-quality care, the identification of quality criteria to support the achievement of quality standards, understanding of the place and value of continuity of care, the adoption of new technologies and developing and evaluating new and evolving roles in the primary health care team.

- A landmark evaluation of the NHS Quality and Outcomes Framework, which showed some improvements after its introduction, with declining rates of improvement after targets were reached, some decline in quality of care, and a reduction in continuity of care (13).
- A systematic review of 22 observational studies showed an association between greater continuity of care and lower mortality rates (14).

SERIOUS & MINOR ILLNESS IN GENERAL PRACTICE

It is worth noting that general practice is involved in the whole spectrum of illness, from the minor and self-limiting to the serious and life-threatening, and that patients' problems are

OVERVIEW
Overview
How to use Learning General Practice
THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity
THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics
THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare
THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings
CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

generally seen in the framework of the biopsychosocial model of illness. This is reflected in the original research carried out in this setting. GPs are expert generalists who make accurate assessments of patients irrespective of the type and stage of the illness presentation, and initiate treatment and management informed by high-quality research evidence.

PRIMARY CARE RESEARCH IN MEDICAL SCHOOLS

The general practitioners who organise and deliver undergraduate teaching and general practice placements, working in university departments or divisions of general practice and primary care, are also frequently involved in research in these fields. Because of the complexity of many of the research questions that have required and still require answers, these departments and research teams are typically multi-disciplinary, including epidemiologists and statisticians, behavioural and social scientists, qualitative research experts, ethicists, and colleagues from other primary care clinical disciplines. Some medical schools pursue energetic programmes of medical educational research. Academic general practice in the universities is a highly regarded discipline, holding its own in terms of international quality ratings. General practice research is conducted in all UK Medical Schools, and the most highly rated departments form the National Institute of Health Research's National School of Primary Care Research.

DOING PRIMARY CARE RESEARCH

Some years ago, a member of a House of Lords Select Committee on medical research asked, in relation to research in general practice, and rather testily, "But where is the laboratory?" In the community, of course, where the subjects of primary care research - the units of analysis - can include individual citizens, patients, practices, practitioners, general practice organisations, and institutions.

Research in general practice and primary care in the UK has been world leading. Medical schools have generated world-class research across a range of topics and the *British Journal of General Practice* (BJGP) is now also world leading, with the highest Impact Factor (a measure of the frequency with which articles published in the Journal are cited by other researchers in their publications) worldwide. This success has been made possible largely by the structure of the general practice system within the NHS and strong support for general practice research by UK research funding bodies.

Because all UK citizens are required to register with a general practice, the patient databases held in general practice provide a virtually 100% complete population sampling frame. Because patients have long-term personal and trusting relationships with their general practitioners, recruitment into studies is greatly facilitated. General practices have, over the years, joined research networks and have been supported by the National Primary Care Research Network (PCRN), resourced through the NHS Research & Development programmes. Large databases, initially the General Practice Research Database, now the Clinical Practice Research Datalink (CPRD) provide enormous analytical power for large-scale studies. Other GP research networks such as Q Research, the Royal College of General Practitioners' Research Surveillance Centre, and Lambeth Data link, are also capable of generating valuable research information on individual and population health.

CRITICAL READING

Critical reading is the ability to appraise and evaluate the quality of an academic or professional article, generally a research paper. It is an important skill in medicine and critical reading abilities are required by clinicians in training and in practice, to evaluate the quality of new research and its relevance of that in a good practice, by teachers and trainers, who need to guide students and trainees through the medical

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

literature, and to students, who are increasingly expected to understand the elements of critical appraisal of research papers. In the first part of this document you will have read through a list of papers which demonstrate most of the research methods used in primary care and general practice research: surveys, large database research, randomised controlled trials, systematic reviews and meta analyses, tools for diagnosis and measurement, and qualitative studies.

The principles of critically appraising papers of all types are similar, although different research methods demand particular appraisal skills, particularly about methodology and analysis.

It is worth remembering that a research paper that has been published in a peer-reviewed journal such as the BJGP, the British Medical Journal or the Lancet will already have undergone a great deal of revision and rewriting in response to the comments provided to the Editor of the journal by two, three, or more external expert reviews. The text will have been copy edited to ensure that it reads well and conforms to publishing conventions. However, publication is still no guarantee of quality or of relevance.

To decide if the paper is trustworthy, relevant and interesting – 'is it new and is it true?' - try asking and answering the following questions:

1. Does the **introduction** to the paper clearly describe the background to the study - what is known and what is unknown - which leads to asking a clear research question?
2. Is the **aim or aims** of the study clearly stated?
3. Is the **methods** section clear and detailed enough to allow the research to be repeated by others?
4. Are the **results** clearly presented, with good use of appropriate graphics and the correct statistical tests?
5. Are the **sampling and recruitment** methods and inclusion/exclusion criteria clearly stated?
6. Are the **results** relevant to your own practice population/practice setting?
7. Is the **comparison with the existing** literature adequate?
8. Are the **strengths and weaknesses** of the study candidly and fully described?
9. Is the **referencing** adequate, with inclusion of relevant previous work and other sources?
10. Are potential **conflicts of interest** stated by the authors and do these matters?
11. Is the **funding source** identified and, for trials, the trial registration details included?
12. Is there a statement of **ethics committee** approval?

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

Many journals specify a structured Discussion section, in which many of these points should be covered. The BJGP specifies a section entitled "implications for research and practice". If the authors have been unable to provide a crisp and persuasive account of what the results mean in this section, it's often worth going back to the introduction, and looking at the precision, or otherwise, of the research question they were asking in the first place.

The BJGP website (bjgp.org) includes a link via the Authors and Reviewers section to a document entitled Critical Appraisal for Primary Care, in which more detailed guidance on appraising papers using different methodologies can be found.

CONTRIBUTING TO PRIMARY CARE RESEARCH

If you are interested in getting involved in general practice/primary care research, you probably should consider doing three things:

1. Reading the general practice research literature
2. Keeping your mind open to new research questions when you are on a general practice placement
3. Discussing your ideas with your GP tutor who may be able to put you in touch with staff in the medical school department of general practice/primary care, or its equivalent.

Three journals to read are the BJGP, published by the RCGP, Family Practice, published by OUP, and Education for Primary Care, published by Taylor and Francis. When you browse the BMJ, Lancet and the big American general medical journals from time to time you will see papers from GPs, often written in collaboration with specialists. Signing up an electronic notification service to reflect your interests is also worthwhile.

Many research papers raise as many questions as they do answers, and you may well find your imagination sparked by doing this. It is unlikely that a day in general practice will go by without a patient presenting a dilemma for which there is no ready-made answer, sometimes because the research hasn't been done and the evidence isn't there. It is unlikely that you won't encounter some consultations where things didn't go well, and you wonder how the risks and benefit of medication or a procedure could have been better communicated, or a more empathetic response made to a patient's concerns. Questions like these can often be the sand in the oyster of a significant research question. Don't be afraid to bring ideas for research to experienced academic colleagues. It may be difficult for them to provide close supervision without notice but registering your interest and keeping in touch could well lead to fruitful future collaboration. **Keep at it.**

While you are waiting for your Einstein moment, it's a good idea to get into the habit of scientific writing. The only way to start writing is to start writing, and drafting responses to articles in the correspondence columns of journals, and submitting short articles describing interesting experiences and possibly case reports are all ways are beginning to flex your muscles as a medical author. Editors of medical journals may be prepared to respond to enquiries about the suitability of articles that you are thinking about writing. Always try to get your work looked over by someone who can act as a critical friend, to help you be sure you do justice in print to what you have in your mind. **Good luck!**

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

THE FUTURE

One constant feature of health care is change. Patterns of illness and the kinds of patients that we see in general press and primary care will continue to diversify as the population ages and its demographics change, with new diseases emerging and new treatments becoming available. Novel diagnostics, personalised genomics for diagnosis and therapy, and increasingly sophisticated imaging technologies, along with communication technologies to facilitate patient: doctor interactions are all happening now. This means that there will be a continuing need for high-quality evidence about what works and what doesn't, the risks as well as the benefits, and the costs and opportunity costs. Primary care research will need to respond by developing new research paradigms, such as evaluations which can provide fast-track alternatives to cumbersome randomised controlled trials, using the enormous resources held in large healthcare databases more effectively, and in real time, and providing smarter ways of getting this evidence into practice. The intellectual challenges of doing research in general practice and primary care have never been greater.



OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

REFERENCES

1. Hannay DR. The 'iceberg' of illness and 'trivial' consultations J R Coll Gen Pract. 1980 Sep; 30(218): 551–554.
2. Jones R, Lydeard S. Prevalence of symptoms of dyspepsia in the community. BMJ 1989; 298:30-2.
3. S Lydeard and R Jones Factors affecting the decision to consult with dyspepsia: comparison of consulters and non-consulters. J R Coll Gen Pract. 1989 Dec; 39(329): 495–498.
4. Britten,N. Okomunne, O. The influence of patients' hopes of receiving a prescription on doctors' perceptions and the decision to prescribe: A questionnaire survey. BMJ 7121 p1506-1510.
5. Jones R, Latinovic R, Charlton J, Gulliford M. Alarm symptoms in early diagnosis of cancer in primary care: cohort study using the General Practice Research Database. BMJ 2007; 334 doi: https://doi.org/10.1136/bmj.39171.637106.AE (17 May 2007) Cite this as: BMJ 2007; 334:1040.
6. Hobbs FDR, Roalfe AK, Davis RC, et al. Prognosis of all-cause heart failure and borderline left ventricular systolic dysfunction: 5-year mortality follow-up of the Echocardiographic Heart of England Screening Study (ECHOES) Eur Heart J. 2007;28(9):1128–1134.
7. Kennedy,T. et al. Cognitive behavioural therapy in addition to antispasmodic treatment for irritable bowel syndrome in primary care: randomised controlled trial. BMJ 331 p435.
8. Little P, Moore M, Kelly J, Williamson I, Leydon G, McDermott L, Mullee M, Stuart B, on behalf of the PIPS investigators. Delayed antibiotic prescribing strategies for respiratory tract infections in primary care: pragmatic, factorial, randomised controlled trial BMJ 2014; 348 doi: https://doi.org/10.1136/bmj.g1606.
9. Kinmonth AL, Woodcock A, Griffin S, Spiegal N, Campbell MJ. Randomised controlled trial of patient centred care of diabetes in general practice: impact on current wellbeing and future disease risk. The Diabetes Care from Diagnosis Research Team. BMJ. 1998 Oct 31;317(7167):1202-8.
10. Lewis G, Duffy L, Ades A et al. The clinical effectiveness of sertraline in primary care and the role of depression severity and duration (PANDA): a pragmatic, double-blind, placebo-controlled randomised trial. Lancet Psychiatry 2019; 6: 903–14 Published Online September 19, 2019 https://doi.org/10.1016/ S2215-0366(19)30366-9.
11. Hippisley-Cox J, Coupland C, Brindle P. Development and validation of QRISK3 risk prediction algorithms to estimate future risk of cardiovascular disease: prospective cohort study BMJ 2017; 357 doi: https://doi.org/10.1136/bmj.j2099 (Published 23 May 2017) Cite this as: BMJ 2017;357: j2099.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

4C

Research in primary care settings

12. McManus R, Mant J, Haque S, Effect of Self-monitoring and Medication Self-titration on Systolic Blood Pressure in Hypertensive Patients at High Risk of Cardiovascular Disease The TASMIN-SR Randomized Clinical Trial JAMA. 2014; 312(8):799-808. doi:10.1001/jama.2014.10057.

13. Effect of pay for performance on the quality of general practice care in England. Campbell SM, Reeves D, Kontopantelis E, Sibbald B, Roland M N Engl J Med 2009; 361:368-378 DOI: 10.1056/NEJMsa0807651.

14. Pereira Gray DJ, Sidaway-Lee K, White E, et al. Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality. BMJ Open 2018;8: e021161. doi:10.1136/ bmjopen-2017-021161.

OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

CONTRIBUTORS

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OVERVIEW
Overview
How to use Learning General Practice

THEME 1: PERSON-CENTRED CARE
1a. The generalist clinical method
i The role of evidence in clinical decision-making
ii Uncertainty in clinical decision-making
iii Prescribing
1b. Holistic care (the biopsychosocial model)
i The physiology of holistic care
1c. The doctor-patient relationship
i Communication with patients of all backgrounds
1d. Continuity of care
1e. Long-term conditions
i Diagnostic phase
ii Maintenance phase
iii End of life care
1f. Emergency conditions
1g . Multi-morbidity and complexity

THEME 2: POPULATION-CENTRED CARE
2a. The social determinants of health
2b. Preventing disease and promoting health
2c. Quality of care
2d. Information technology
2e. Teamwork and leadership
2f. Medical ethics

THEME 3: EFFECTIVE DELIVERY OF CARE
3a. The generalist approach
3b. The history of UK general practice
3c. The current structure of UK general practice
3d. The funding of UK general practice
3e. The role of general practice in other countries
3f. Sustainable healthcare

THEME 4: SCHOLARLY GENERAL PRACTICE
4a. Learning in primary care settings
4b. Teaching in primary care settings
4c. Research in primary care settings

CONTRIBUTORS
EPILOGUE

A FINAL WORD ON LEARNING GENERAL PRACTICE

> "His talent was as natural as the pattern that was made by the dust on a butterfly's wings. At one time he understood it no more than the butterfly did and he did not know when it was brushed or marred. Later he became conscious of his damaged wings and of their construction and he learned to think and could not fly any more because the love of flight was gone and he could only remember when it had been effortless."
>
> Ernest Hemingway (1)

Hemmingway E. A Moveable Feast. London: Penguin; 1966

Conceptualising a complex medical discipline such as general practice is a hazardous task since medicine has always been associated with an aura of mystery. Indeed an old collective noun for a group of doctors was a 'mystery of doctors'.

This mystique can serve as a convenient smokescreen for practitioners when needed but is perilous as strategy. For students, patients, policy makers, and even other health professionals, the mystique and complexity of general practice can be difficult to grasp. This carries a risk that the discipline is underestimated or misunderstood, despite its ability to deliver the best value healthcare outcomes.

We have aimed in this document to provide a clear sense of the identity of general practice by shedding light on its unique history, structure, clinical methods, and knowledge base. For health services to work most efficiently these characteristics need to be both understood and integrated.

This book has sought to strike a balance between providing the key disciplinary themes and principles for learners searching for inspiration - for practitioners in search of identity and for policymakers in search of understanding – whilst retaining sufficient flexibility to adapt to the myriad of clinical environments and cases.

We hope to have left ample room for the mystery and magic of the art to endure and for the dust to settle peacefully on the butterfly's wings. For those of you who may disagree with our views, medicine is a moveable feast, and we would love to hear your thoughts!

Alex Harding, Kamila Hawthorne, and Joe Rosenthal
July 2021

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