Discover General Practice Outreach Session

How to use the teaching plan

- This teaching plan should be used as a guide and can be adapted to suit each teaching session.
- *Terminology:* The person delivering this session is referred to as the teacher in this plan.

Aims of session

- Encourage students to reflect on personal and professional skills that are important in a medical career.
- Introduce students to the wide variety of medical conditions diagnosed and managed by GPs.
- Demonstrate how GPs work with other health care professionals to provide the best care possible.
- Introduce students to some ethical issues that may arise within a GP consultation.
- Use problem solving tasks as a tool to enthuse students about the exciting nature of a medical career.

Teacher aims

- Deliver session with confidence and enthusiasm.
- Keep an eye on the energy and engagement level of the group and try to keep everyone participating and interested.
- Provide plenty of opportunities for students to ask questions.
- Be familiar with the diagnosis game cards for the second activity so you can advise students if they get stuck.

Teaching Plan

Equipment list

- Adhesive labels to be used as name badges
- Post-it notes
- Flip chart/Whiteboard
- Pens
- Container to hold diagnosis game cards
- Diagnosis game cards
- Investigation results cards

Before the session

- Ideally organise the room before students arrive such that the chairs are arranged in a large circle.
- Ensure you have all the equipment outlined in the above list.
- Diagnosis game cards preparation:
    1) Print in colour the diagnosis game cards (found in a separate document).
    2) Cut along the horizontal dotted lines so that the cards are separated into sets of 3 according to which medical condition they are related to.
    3) The final stage of game card preparation can only take place once the number of students attending the session is known. Therefore, this may have to wait until the session has commenced, in which case it can be done whilst the students are carrying out the first activity. Once the number of students is known, cut along the vertical dotted lines to separate the 3 game cards within a set. Adjust the number of game cards following the guidance on page 3 of this teaching plan so that the number of game cards in play is equal to the number of students.
    4) Fold in half the game cards that are to be used and place them into a small container.
- Investigation results cards preparation:
    1) Print in colour the investigation results cards (found in a separate document).
    2) Cut along the dotted lines but do not fold these cards in half.
    3) Spread the investigation results cards across a table facing upwards so that the images are visible.

Introduction

- Teacher should introduce themselves to the students and explain that this session will give them an insight into the exciting nature of a career in general practice.
- If students are not familiar with the other members of the group then provide them with adhesive labels to write their names on.
- Ask students to raise their hand if they have had any work experience in a GP surgery before.
- Then ask students to raise their hand if they have visited a GP as a patient.

Activity 1 – What makes a good GP? (5-10 minutes)

Outline:

1) Explain to students that the first activity will involve thinking about characteristics that make a good GP. Each student should write down 4 words on a post-it note to describe the skills that they think are the most important for a doctor to have.
2) Teacher should walk around the circle handing out 1 post-it note (and pen if necessary) per student whilst advising that they have around a minute to complete this task and that it is important that they do not confer with their neighbour. Remind students that they may like to think about their prior encounters with GPs to give them some ideas.
3) Once most students appear to have completed this task, pair students with a partner who is sat opposite to them in the circle then ask them to compare their lists of 4 words and work together to narrow down their 8 words back to 4 making sure they both agree.
4) After a couple of minutes, repeat the process such that students are now in groups of 4 and should once again narrow their 8 words down to four.
5) Repeat this process until there are only 2 groups of students and ask one person from each group to read out their group's 4 words and write all these words on the flipchat/whiteboard.
6) Encourage students to think about how they could demonstrate that they have some of these skills in their application to study medicine.

Skills developed during this activity:

- *Communication and teamwork* = Students will need to discuss their ideas with their peers. This may involve identifying areas where they agree, presenting an argument for their opinion if it differs to their peers and finding a mutually satisfying outcome where they may not agree.

Activity 2 – Diagnosis game (15-20 minutes)

Outline:

1) Explain to the students that the next activity is the diagnosis game which aims to show them some of the medical conditions that GPs can be involved in diagnosing and managing as well as the importance of working together with other healthcare professionals.
2) Prior to starting the game, explain to students that the following steps will happen:
    a. Students should imagine they are in a GP surgery.
    b. Within the teacher's container are game cards which contain details about different characters including patients, GPs and other healthcare professionals.
    c. The teacher will walk around the circle and students will each pick one character from the container.
    d. They will then have a couple of minutes to read the details about their character and the instructions that are written on their game cards.
    e. The aim of the game is for students to find the other 2 characters that are linked to their character so that they end up in groups of 3. The link will be that the characters are either a patient with a particular medical condition or a GP or other professional that treat that same medical condition.
    f. Students will then walk around within the circle of chairs and talk to all the other students in order to find out more about each other's character to determine whether they are linked by the same medical condition.
    g. Once students have found the other 2 members of their group, they should work through the tasks on their game cards together. This may involve collecting investigation results cards that have been laid across a table. At this point in the explanation the teacher should point to where these investigation results cards are located.

h. The students will have around 8 minutes to complete this activity. If any of the groups finish prior to this they can briefly discuss their case with the teacher and then collect a post-it note on which they should make a list of the main symptoms that their patient presented with and think about any other symptoms they may have had but did not mention.

3) The teacher should then hand out the game cards and give students time to read their individual instructions.
4) After sufficient time, ask students if they are all happy with what the aim of the game is and if they have any questions. Then inform then that if at any point during the game they are not sure what to do that they can ask the teacher for advice.
5) Instruct the students to stand up and begin looking for the characters that are linked to the same medical condition as them.
6) After 8 minutes, stop the game and ensure all students are sitting in their groups. Then inform the students that the length of time they've had to complete this game is the same as an average length of a GP consultation. Encourage students to briefly share their thoughts about this.
7) Spend the next 5-10 minutes asking each group of 3 to inform the other students which medical condition they were given and what the patient's symptoms were. Facilitate group discussion where appropriate.

This game can be adjusted based on the number of students attending the session:

Number of students	If divisible by 3	Remove complete strips of game cards so that number remaining is equal to the number of students.
	If not divisible by 3	Remove complete strips of game cards plus 1 or 2 of the game cards with a grey star in the top right corner so that number remaining is equal to the number of students. In this scenario, inform students with the stroke and/or HIV game cards that they will only have 2 members in their group instead of 3.
	If less than 15	Students can play the game twice with a new set of game cards for each game, for this it would be best to reduce the length of the game from 8 minutes to 5 minutes.
	If more than 30	Create additional game cards or print additional existing game cards and duplicate some of the characters.

Skills developed during this activity:

- *Problem solving skills* = Each set of game cards require students to interpret some information and apply this to their particular patient in order to determine certain outcomes for the patient.
- *Communication and teamwork* = As instructions are split between the different game cards within a set the students will need to work together in order to complete the tasks on their game cards.

Closing the session

- Ask students if they have enjoyed the session.
- Remind them to think of examples of when they have demonstrated some of the characteristics that make a good doctor.
- Encourage students to continue broadening their medical experiences to see whether medicine is the career for them.

Take home messages

- GPs play an important role in the diagnosis and management of a wide range of medical condition.
- GPs work closely with many other healthcare professionals to provide the best care possible for their patients.
- Students already have some of the skills that are needed to be a good doctor.

References for images and guidelines used in the diagnosis game

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Joel (17 years old)
Patient number: 603

Over the past few minutes you've started sweating and feeling weak. You're now feeling dizzy and a bit confused so you'd better sit down and wait for a healthcare professional who will know how to help you. The last time this happened was when you had too much insulin before your breakfast.

GP
Diabetes

1) You must find the patient who has the symptoms of the above condition.
2) Wait for your allied health professional to bring you the patient's finger prick test result.
3) You will then need to use the test result to determine whether the patient's blood sugar levels are low (hypoglycaemia), normal or high (hyperglcaemia).
4) Do you think this patient should be given insulin or food to stabilise their current episode?

Diabetes Specialist Nurse

A patient in the GP surgery has suddenly become unwell, you suspect they are having a diabetes related episode.

1) You must quickly find this patient.
2) Ask them what their patient number is so that you can collect the correct test results.
3) Work with the GP to interpret the test results using the information below to help you.

5 to 9 mmol/L = normal blood glucose range

Food = raises glucose levels in the blood
Insulin = lowers glucose levels in the blood

Jo (50 years old)
Patient number: 813

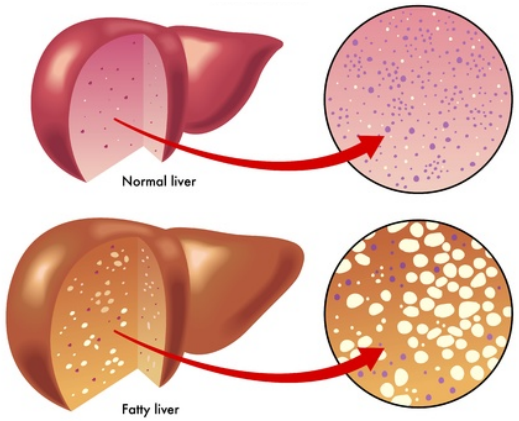
You have come to see your GP today as for the last couple of months you have had a constant dull pain in the top right of your abdomen just below your ribs and you have recently started to notice some weight loss even though you haven't been on a diet.

Alcohol intake:

- Two 125ml glass 11% white wine every Friday night
- One 250ml glass 14% white wine every Saturday night

GP
Liver disease

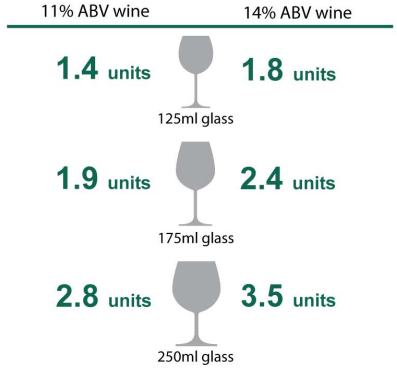
1) You must find the patient who has the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect the correct biopsy image.
3) Use the images below to help you decide whether or not the patient has fatty liver disease.



Alcohol Support Services

Today you are visiting a GP surgery in order to talk to one of the doctors about a new alcohol support service that you have recently set up for patients that drink over the recommended limit.

1) You must find the GP with a special interest in liver disease.
2) Using the images below, calculate the number of units their current patient drinks in a week.
3) Is this within the recommended guidelines of no more than 14 units a week?
4) Would this patient benefit from your services?



Margaret (70 years old)
Patient number: 234

You went to see your GP 2 weeks ago as you have had a persistent cough over the past year and have started to cough up blood over the past couple of months. You've also noticed that you can no longer walk up the stairs without having to stop every couple of steps in order to catch your breath and that all your clothes are starting to feel too big for you.

You've come back to see the GP again today to discuss the results of a chest X-ray that you had last week.

GP
Lung Cancer

1) You must find the patient who has the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect the correct chest X-ray.
3) Find the other health professional who will be able to help you interpret the X-ray and determine what can be done for the patient.

Hint: measure the size of the widest part of the cancer on the X-ray and use the lung cancer staging below to determine which stage the patient is in.

- **T1a** = less than 1cm
- **T1b** = 1- 2cm across
- **T1c** = 2-3cm across
- **T2a** = 3-4cm across
- **T2b** = 4-5cm across
- **T3** = 5-7cm across
- **T4** = bigger than 7cm

Pharmaceutical Sales Representative

Today you are visiting a GP surgery in order to talk to one of the doctors about recruiting patients to a clinical drug trial that is being funded by your pharmaceutical company. The trial is recruiting newly diagnosed patients with stage T3 or T4 lung cancer.

1) You must find the GP with a special interest in lung cancer.
2) Help the GP interpret the X-ray of a patient that they have recently seen in order to determine whether that patient is suitable to recruit to the drug trial.
3) On the basis of the patient's cancer stage are they eligible for the drug trial?

John (65 years old)
Patient number: 156

Over the past few minutes you have noticed a crushing pain developing in the centre of your chest. The pain feels like it is radiating to your left arm and you are starting to feel sick, sweaty and short of breath.

Find the healthcare professionals that will be able to help you.

GP
Heart Attack

1) You must quickly find the patient who has the symptoms of the above condition.
2) Wait for your allied health professional to bring you the patient's ECG results.
3) You will then need to interpret the ECG to decide whether the patient has had a STEMI or an NSTEMI.
4) Using the information below, decide whether the patient needs a blood test or urgent surgery.

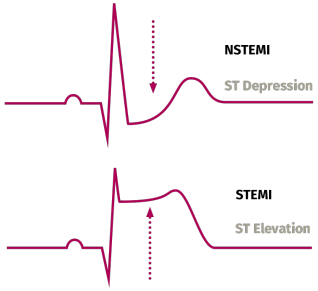
If NSTEMI need blood test
If STEMI need urgent surgery

Hint: look at your allied health professional's game card for a guide to interpreting the ECG.

Cardiac Nurse Practitioner

A patient in the GP surgery has suddenly become very unwell, you suspect they are having a heart attack.

1) You must quickly find this patient.
2) Ask them what their patient number is so that you can collect the correct ECG.
3) Work with the GP to interpret the patient's ECG using the images below to help you.



Leona (23)
Patient number: 576
Height: 152cm

You are struggling to breathe and every time you take a breath out your chest makes a wheezing sound. Due to your shortness of breath from now on you can only say yes or no until you find the healthcare professionals who can help you.

Hint: you need an inhaler.

GP
Asthma

1) You must find the patient who has the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect correct peak flow graph.
3) Peak flow is a simple measurement of how quickly you can blow air out of your lungs. It's often used to help monitor asthma. Using the peak flow graph and the information on your patient's game card you should determine what you would expect this patient's normal peak flow reading to be.
4) If you were to measure the patient's peak flow with their current symptoms do you think their reading would be higher or lower than normal?

Asthma Specialist Nurse

1) Your colleague has just told you that there is a patient in the waiting room who looks like they are having an asthma attack, you must quickly find this patient.
2) You must collect the correct medication to help this patient.
3) Once you have done this you can help the GP with their task.

Anna (15 years old)
Patient number: 817

You've come to see your GP today as after recently starting a new relationship you have become sexually active and as you do not want to become pregnant you would like to get a prescription for the oral contraceptive pill but definitely do not want your parents to find out.

GP
Birth Control

1) Your first patient of the day is a young lady wanting to start birth control, you must look for her in the waiting room.
2) If a patient is below a certain age then there is a set of criteria that must be satisfied if you are to offer them contraceptive services without their parents knowing. As you are struggling to remember what the guidelines say you should look for someone who is able to help you.
3) Using the guidelines you should decide whether or not this patient can be given birth control.

Medical Ethics Committee Member

Your job is to help one of the GPs decide if their current patient can be prescribed birth control. You must first find the correct GP.

Hint: for patients under 16 years old the GP must be satisfied that the patient meets the following criteria in order for them to be offered contraceptive services without parental knowledge or permission.

The Fraser guidelines (1985)

1. The young person will understand the practitioner's advice.
2. The young person cannot be persuaded to inform their parents.
3. The young person is likely to begin, or to continue having, sexual intercourse with or without contraceptive treatment.
4. Unless the young person receives contraceptive treatment, their physical or mental health, or both, are likely to suffer.
5. The young person's best interests require them to receive contraceptive advice or treatment with or without parental consent.

Stephanie (18 years old)
Patient number: 610

You've come to see your GP today as 2 days ago you started to notice a burning sensation when you pee, your urine is dark in colour and you are needing to go more often than usual. You also have a constant dull pain in your lower abdomen.

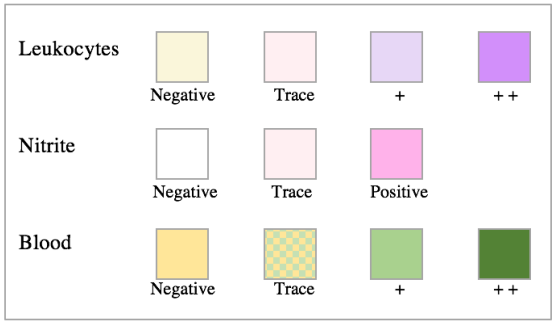
GP
Urinary Tract Infection (UTI)

1) You must find the patient who has the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect the correct test results.
3) Find a colleague who will be able to help you interpret the patient's urine dipstick results.
4) Do the results indicate that the patient has a UTI?

Laboratory Technician

1) You have just received a phone call from a GP asking you to help them interpret a patient's urine dipstick results.
2) You must first find this GP and then use the information below to determine whether this patient has a urinary tract infection (UTI).

Hint: the patient's symptoms are likely to be the result of a UTI if the urine dipstick is positive for leukocytes, nitrites and blood.



Michael (75 years old)
Patient number: 901

You are currently in a supermarket surrounded by people and although you know someone has brought you here you can't remember who it is. You must go around and find them so that they can help you.

Hint: this person is also looking for you.

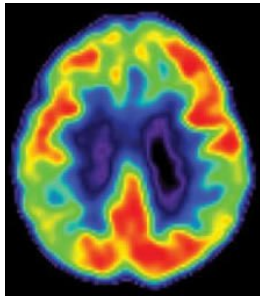
GP
Dementia

1) You must find the patient who has the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect their current scan result.
3) Use the image below to help you interpret the scan to determine whether this patient has dementia.

Hint: if the patient's level of brain activity has reduced compared to previous scans then it indicates they have Alzheimer's disease which is a form of dementia.

Sally (50 years old)

1) You are looking for your father as you need to take him to his GP appointment.
2) Once you find him you must work out what is wrong with him so you can find your right doctor.
3) Below is your father's brain scan result from 5 years ago. Remember to show this to his GP.



Ali (66 years old)
Patient number: 272

Whilst you were in the pub yesterday you suddenly started to feel very unwell. Your speech became slurred and when your friends told you to lift your arms up the left arm kept drifting downwards. At first your friends thought this was funny but when the left half of your face started to droop they called 999 and you were taken to hospital in an ambulance. Around 40 minutes later you started to feel better so you were sent home a couple of hours after this and told to book an urgent appointment with your GP.

Today you've come to your GP to talk a bit more about this episode.

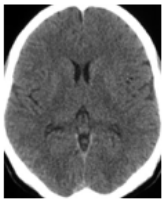
Additional patient details:

- Blood pressure = 130 systolic, 89 diastolic
- No diabetes

GP
Stroke

1) You must find the patient who has previously had the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect the correct scan result.
3) Use the images below to help you decide whether the patient has had a TIA (mini stroke), an ischaemic stroke or a haemorrhagic stroke.

TIA



Ischaemic

Haemorrhagic

Stroke Nurse Practitioner

1) You need to find a patient in the GP surgery who has recently had a stroke.
2) Collect the ABCD2 risk assessment tool.
3) Calculate the patient's ABCD2 score using the information on their game card
4) Use the information below to determine their risk of having another stroke based on their ABCD2 score.

- Score 1-3 = low risk
- Score 4-5 = moderate risk
- Score 6–7 = high risk

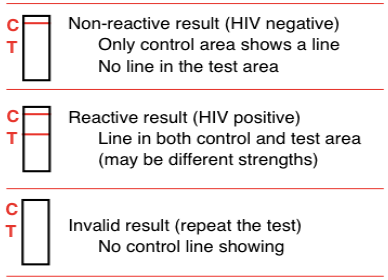
Bob (48 years old)
Patient number: 239

You have come to see your GP today as you have recently developed a strange rash over your body and have a high temperature and sore throat. After checking your symptoms online, you are concerned that you may have caught an infection from your new sexual partner.

You are worried that you will have to tell your wife if you are infected, but you refuse to do this as then she will find out that you have not been faithful to her.

GP
HIV

1) You must find the patient who has the symptoms of the above condition.
2) Ask them what their patient number is so that you can collect the correct test result.
3) Use the images below to help you determine whether this patient has HIV.



4) If the patient has HIV then their sexual contacts could be at risk of infection. How would you persuade the patient to inform their partner?

Medical Ethics Committee Member

Your job is to help one of the GPs decide if their current patient's HIV status needs to be disclosed to their partner. You must first find the correct GP.

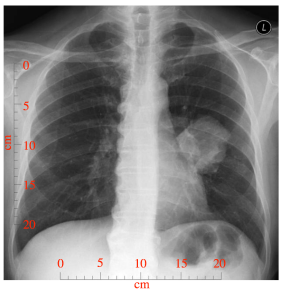
Hint: use the guidance below to help you.

Disclosing information about serious communicable diseases:

- Confidentiality is central to trust between doctors and patients.
- Personal information cannot be disclosed to other healthcare professionals without a patients' consent, as there should be no risk of infection to medical staff if standard infection control procedures are followed.
- Patient should be encouraged to inform their partner but if they refuse then personal information may be disclosed to a known sexual contact, without patients' consent, as the partner is at risk of infection and therefore harm. But the patient should be informed of the intended disclosure in advance.

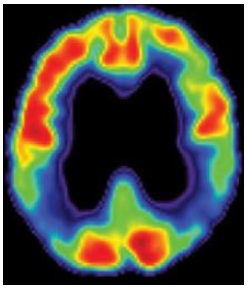
Patient number: 156

Patient number: 234



Patient number: 239

Patient number: 901

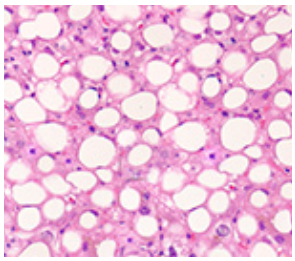


Patient number: 272

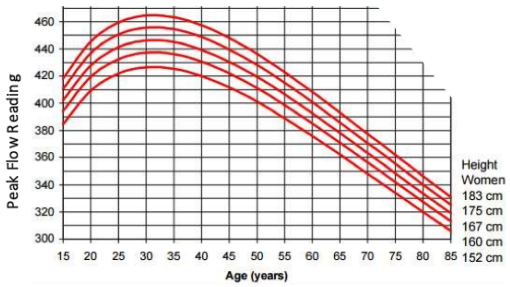
ABCD2 Risk Assessment Tool

Risk factor	Points
≥ 60 years old	1
Systolic blood pressure ≥ 140 mmHg OR Diastolic blood pressure ≥ 90 mmHg	1
Unilateral weakness during episode	2
Speech impairment during episode	1
Episode lasted ≥ 60 minutes	2
Episode lasted 10-59 minutes	1
Patient has diabetes	1

Patient number: 813

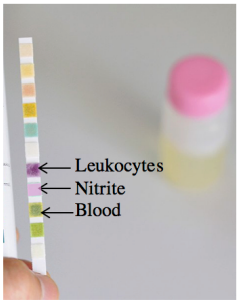


Patient number: 576



Patient number: 576

Patient number: 610



Patient number: 603