Royal College of
General Practitioners

Enhanced GP Training:

An integrated four-year curriculum, assessment and quality improvement training programme for General Practice

Report from the Curriculum, Assessment and Delivery Support Group

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Executive Summary

The RCGP's 2012 report *Preparing the Future GP: The Case for Enhanced GP Training*[1] sets out the evidence-based arguments for enhancing and extending GP specialty training to improve the quality of health care in all four UK nations. It describes the pressing need for change in the current training arrangements, given the central role of the general practice workforce in delivering key improvements in the National Health Service (NHS). These improvements include community-based child and mental health, caring for an older population with complex multi-morbidities, and enhancements to quality and safety through active participation in service re-design.

This report presents a proposed educational model for enhancing and extending GP training in all four UK nations, based on a spiral curriculum model, where expertise in generalist medical care is built up incrementally over time. It will build on its current strengths of the existing programme while also addressing identified weaknesses, to ensure the NHS develops a workforce of capable GPs that remain fit for purpose throughout their careers.

The delivery of the enhanced training programme will rely on the implementation of an integrated four-year curriculum and assessment package that reflects an increased spread across higher professional competencies, with greater depth of development in key areas essential to high quality general medical care and effective multi-professional working. The four-year curriculum is shaped around five key educational 'themes' required for generalist medical expertise within the NHS context; this will ensure its compatibility with future training models, maximise opportunities for multi-professional learning and complement models adopted by other disciplines seeking to increase their generalist skill base.

The proposed programme aims to achieve a high level of alignment between the training and assessment components, to optimise training in priority areas whist keeping assessment targeted and manageable. It also provides considerably increased scope for academic training opportunities and transfers between training programmes in different specialties – this could potentially shorten the training pathway for doctors who decide to change career after completing part of one training programme, and facilitate their safe transfer into another programme.

The proposed assessment model will be fully compatible with the GMC's *Good Medical Practice*[2] and will support the requirements of relicensing; the final training year has been designed to promote a smooth transition to independent practice and to engage the doctor on a career-long pathway of continuing professional development, appraisal and revalidation.

1 Gerada C, Riley B, Simon C (2012). Preparing the future GP: The case for enhanced GP training. www.rcgp.org.uk/pdf/Case_for_enhanced_GP_training.pdfhttp://www.rcgp.org.uk/policy/rcgp-policy-areas/~/media/Files/Policy/A-Z%20policy/Case_for_enhanced_GP_training.ashx
2 General Medical Council (2013). *Good Medical Practice.* London: GMC

Overview of the Four-Year Integrated Training Programme

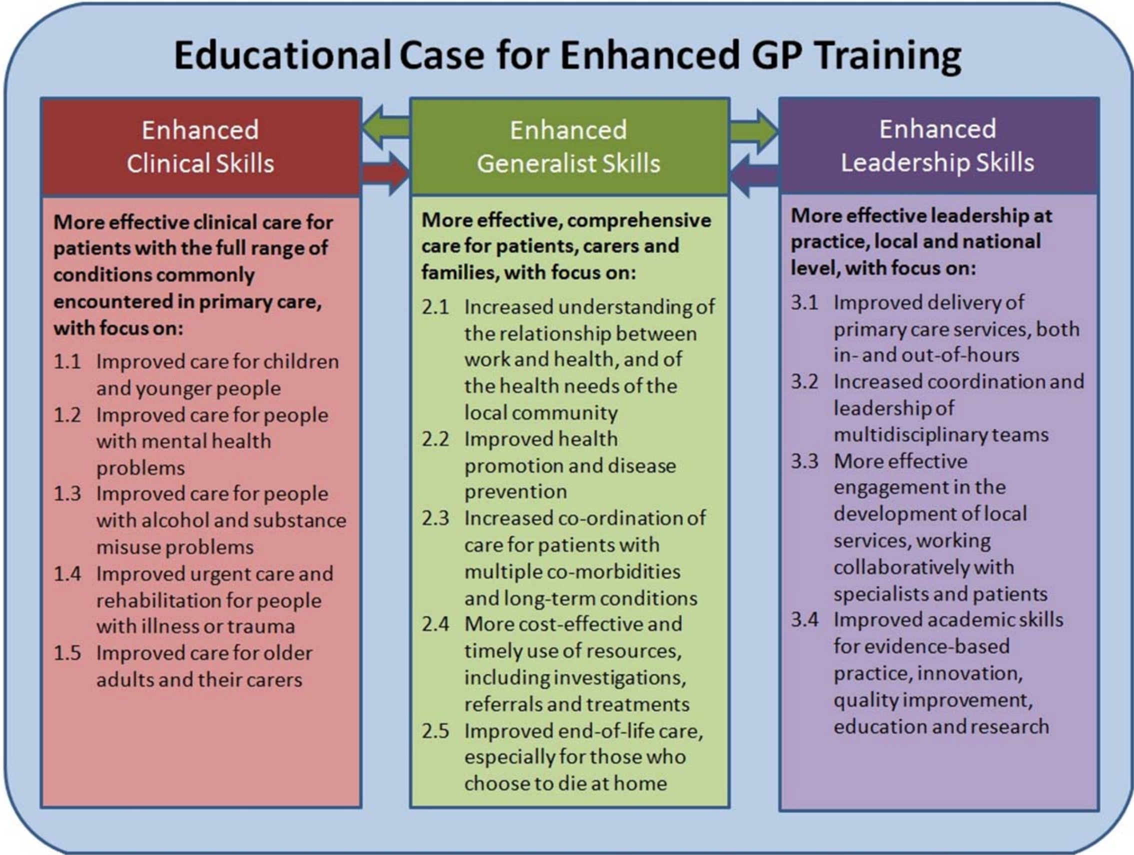
With the support won for its educational arguments for enhancing GP training, the RCGP has worked with a range of partner organisations with representation from all four UK nations, including COGPED, Deaneries, COPMeD, BMA (GPC), GMC, and other stakeholder groups, as well as trainee, lay and patient representatives, to develop a detailed proposal for an enhanced four-year programme (FTE) of GP specialty training that will:

- Deliver a workforce of highly skilled general practitioners with a greater fitness for purpose, equipped with the capabilities, skills and adaptability to meet the changing needs of the NHS
- Add significant value for trainees, patients and the service in all four nations, through enhanced training, improved health outcomes and increased quality and safety of care; and
- Enable doctors to make an effective transition to independent and multi-professional practice, self-directed continuing professional development and revalidation-readiness.

Specifically, the proposal sets out that future GPs will complete an integrated four-year enhanced curriculum, assessment and quality improvement programme, where they will:

- <u>All</u> receive specialist-led training opportunities in child health and mental health problems (Less than 50% of GP trainees currently undertake placements in these specialties)
- Spend at least 24 months (FTE) of their training programme in general practice-based settings – to learn how to manage an aging population of complex patients, with multiple morbidities, in their communities and homes (Fig. 1)
- Undertake more integrated training placements, consisting of combined general practice-based and specialist service-based experience, based in a range of relevant settings according to local circumstances
- Gain experience of general practice early in training, to improve the educational effectiveness of subsequent specialty-based training placements. The ideal model is for trainees to have early experience of general practice in ST1, to enable them to gain insight into what they need to learn within their hospital posts and to allow Educational Supervisors and Trainees to jointly identify specific learning needs at an early stage and agree an individual learning plan for subsequent training placements
- Successfully complete the summative Applied Knowledge Test (AKT) and Clinical Skills Assessment (CSA) components of the MRCGP before progression to the fourth training year
- Complete a structured Quality Improvement Programme in the fourth training year, involving supervised project work that will directly improve NHS services in their local communities
- Engage in supervised educational activities with a formative focus throughout the programme, by developing the supervised learning event (SLE) model
- Undertake workplace-based assessments throughout the programme, including the ST4 year
- Have greater flexibility to incorporate research training and to change career pathways in response to workforce needs, with more options to tailor their training for their own learning needs and local circumstances; and
- Become effectively prepared to transition into a career of independent practice, self-directed professional development and revalidation.

Figure 1: The RCGP's educational case for enhanced GP training



As currently, the Annual Review of Competency Progression (ARCP) Panel will make regular evidenced judgements about the doctor's progress and decide whether he or she is ready to move onto the next stage of training. The final 'exit' ARCP, towards the end of ST4, will draw together all the assessment evidence gathered during the four years of training and make a final summative judgement on the doctor's suitability for the award of a Certificate of Completion of Training (CCT) and the MRCGP qualification.

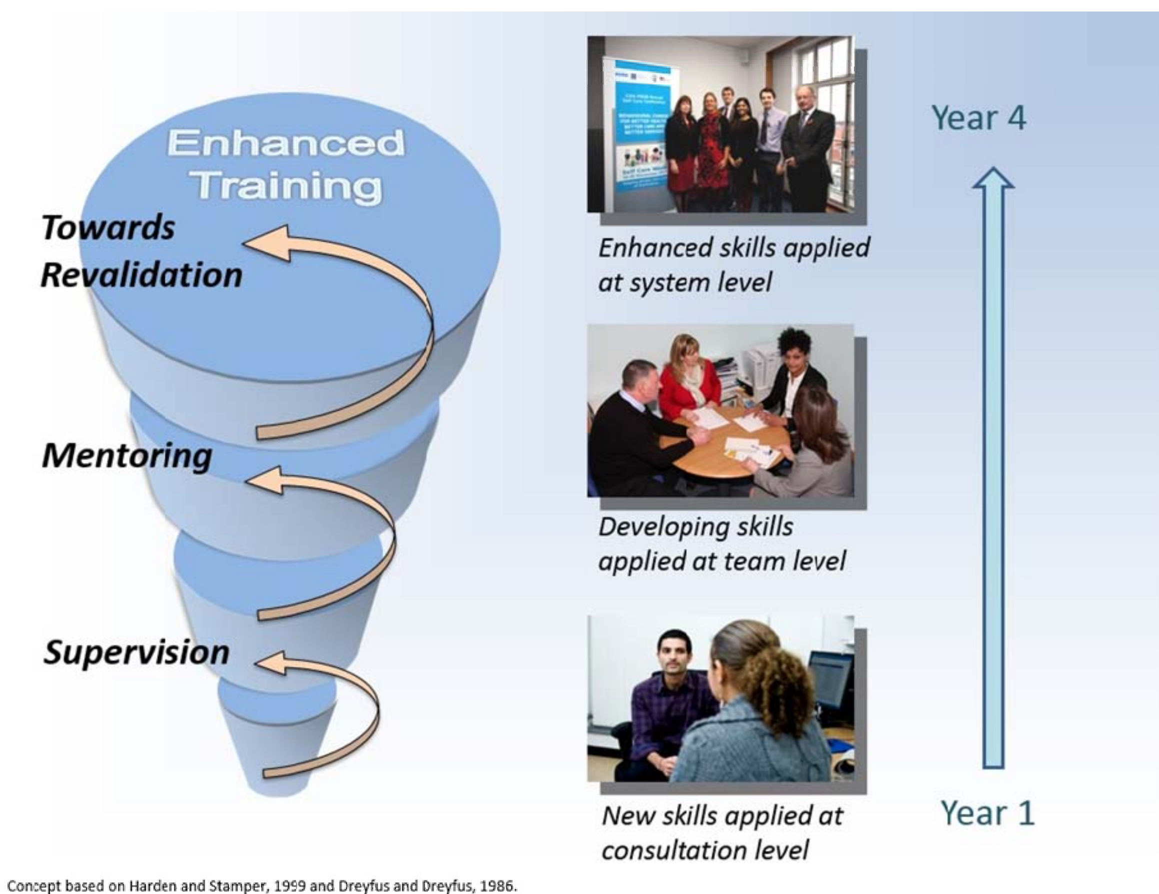
The Enhanced Four-Year GP Curriculum

The following section of this report presents a proposed educational model for enhancing and extending GP training in all four UK nations, based on a spiral curriculum model, where expertise in generalist medical care is built up incrementally over time (Fig. 1). This involves a rethink in the way the GP curriculum is currently presented and applied to GP training, building on its current strengths and addressing its existing weaknesses, to ensure the NHS develops a workforce of capable GPs that remain fit for purpose.

It should be emphasised that the proposed model is a *four-year spiral curriculum* (i.e. an integrated curriculum and formative assessment programme) and not just a fourth year added to the existing three-year curriculum. This approach is based on educational evidence to optimise the effectiveness and efficiency of the training programme.

The trajectory of the four-year spiral curriculum is intended to take the learner both ***higher***, in becoming progressively more expert, and ***wider***, in being progressively more able to apply skills to broader contexts. Critically, this trajectory will continue beyond training in order to facilitate an effective transition into lifelong continuing professional development, appraisal and revalidation.

Figure 2: The spiral curriculum model for enhanced GP training



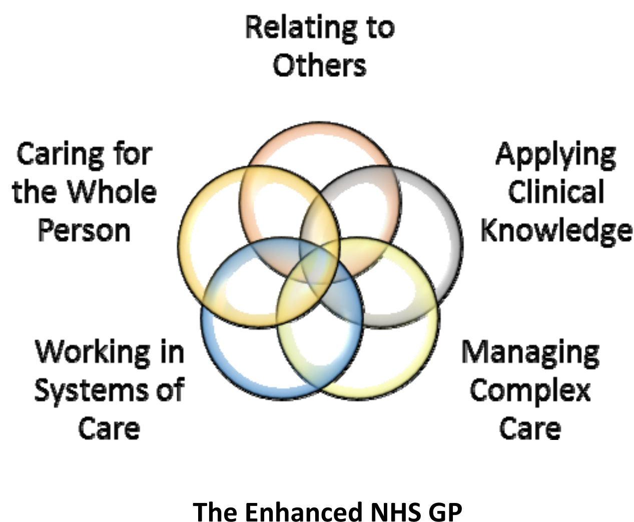
Developing expert generalist medical care

Modern generalist medical care requires more than a doctor with a broad base of clinical knowledge. It also relies on a number of advanced professional capabilities needed for proficiency in diagnosing and managing a wide range of undifferentiated health problems in community and home settings, responding to risk safely and effectively, managing long-term conditions and coordinating care with a range of carers, specialists, providers and other professionals.

Additionally, GPs must manage an increasingly complex population with multi-morbidity and deal safely with poly-pharmacy. They must also play an enhanced role in preventing disease and building health resilience and self-sufficiency in their local populatons, applying a holistic knowledge of the patient and community to practical care planning through person-centred approaches, such as shared decision-making. Finally, GPs must work effectively within and between multi-disciplinary services, coordinating care across organisational boundaries and using resources cost-effectively.

To deliver these expert capabilities, the curriculum will be built around five 'educational themes' required for the development of generalist care capability. These themes will be represented within the curriculum and MRCGP assessments and will run as developmental 'threads' throughout the four-year GP training programme, articulating conceptually with pre-programme competences and post-licensing GMC revalidation standards. They are also in keeping with the recent comprehensive NHS GP job analysis[3] and the consensus of opinion emerging from the GMC/HEE Shape of Medical Training review.

The five educational themes identified for the enhanced four-year GP curriculum are:



The Enhanced NHS GP

Although it would be possible to define other themes of relevance to high quality general practice, these five have been selected because of their current importance to the development and assessment of NHS GP competence and to maximise future workforce flexibility.

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3 Patterson F et al. (2013). A new competency model for general practice: implications for selection, training, and careers. British Journal of General Practice, Volume 63, Number 610, May 2013 , pp. e331-e338(8).

Exploring the five educational themes for enhanced GP training

The development of professional expertise will be underpinned by the **relating to others** theme. This theme is built throughout the training programme and develops in sophistication (i.e. height of the spiral) but also in breadth of impact (i.e. width of the spiral) over time, expanding from an understanding of the self to incorporate relationships within multi-disciplinary teams and ultimately encompasses leadership, organisational and system-wide relationships.

For example; at a *lesser* stage of development, a GP trainee would be expected to demonstrate:

- An awareness of their own values, principles, assumptions and biases
- An ability to show greater insight through learning from experience and feedback
- An ability to adopt a shared decision-making approach to individual patient consultations
- A rudimentary ability to identify and offer support to patients on an individual basis.

At a *more advanced* stage of development, the trainee would be expected to demonstrate:

- An ability to adopt shared decision-making approaches in team-based and organisational contexts of care and to facilitate engagement with patients and carers
- The ability to identify and address complex areas of ethical difficulty arising in practice
- The ability to contribute to their team's vision and direction, to encourage contribution and motivate others; and
- The ability to apply leadership capabilities to improve the care they provide and to be accountable for their professional performance and development.

In the *earlier* stages of training (e.g. ST1-2), which are predominantly spent in secondary care environments, a considerable focus of development will fall within the **applying clinical knowledge** theme, building elements of generalist medical expertise onto the primarily 'biomedical model' of medicine learnt in early training. This will particularly encompass skills in first-contact patient care (e.g. the assessment, diagnosis, investigation, treatment and/or referral of acutely ill patients) and in the medical management of common and important long-term conditions in which the GP increasingly plays a significant expert physician role. There will also be an enhanced focus on child health and mental health.

Appropriate early experience of general practice during ST1-2 will be required to enable the trainee to develop the mindset, approaches and values that underpin general practice and make the subsequent training experiences more effective (this will be especially important if general practice has not previously been experienced through Foundation or Broad-based training).

During ST3, which will be spent under expert educational supervision in general practice as currently, trainees would be expected to demonstrate how the familiar biomedical model is adapted, applied and enhanced through their developing generalist and integrated care approaches.

This requires an additional set of complementary skills and capabilities described in the **coordinating complex care** theme, including:

- Managing older patients with multiple morbidity and poly-pharmacy
- Skills in health promotion, disease prevention and supporting rehabilitation and recovery
- Appling skills in the context of a multi-professional team-based approach
- Adopting a problem-based (rather than disease-based) approach to patients presenting with undifferentiated illness or multiple symptoms
- Using complementary thinking skills (e.g. intuitive pattern-based cognitive approaches in addition to algorithmic methods)
- Managing uncertainty and medically unexplained symptoms
- Safely using time as a diagnostic and therapeutic tool for self-limiting ailments and adopting an incremental, risk-based approach to investigation and treatment.

The fourth educational theme, **working in systems of care**, encourages the development of wider perspectives of influence and responsibility. This emerges as the application of expertise progresses from the individual patient-doctor consultation, to team- and practice-based care provision and then to system-level and inter-organisational activity. Although this theme will develop throughout training, it will be given particular emphasis during the *latter* stages and made explicit through educational and assessment activities undertaken during the fourth training year (ST4).

For example, at a *lesser* stage of development, we might expect a GP trainee to demonstrate:

- A working understanding of prescribing and therapeutics and patient safety principles
- The ability to apply evidence-based policies, guidelines, protocols and procedures and to identify, analyse and communicate dangers to colleagues; and
- Compliance with systems that promote health, prevent disease and provide urgent care.

At a more *advanced* stage of development, the trainee would additionally be expected to demonstrate a much broader and sophisticated ability in systems-level thinking, for example:

- The ability to evaluate systems of care, prioritise developments and implement change
- The ability to access and use local epidemiological data, trends analysis, indicators of variation, and analysis of safety, quality and the patient experience to evaluate unmet needs, predict trends and to identify opportunities to improve services
- The use of systems by which their own and their colleagues' medical expertise and proficiency is updated, developed, shared and verified
- Deeper understanding of referral systems and integrated pathways to streamline patient care and to improve the interface between primary and secondary care.
- Understanding of the strengths, weaknesses and opportunities of the UK health system in the context of global systems of health care; and
- Understanding the GP's responsibility to maintain a continuity of concern for patient welfare as the patient moves through the health system and crosses organisational boundaries.

Finally, through the **caring for the whole person** theme, trainees would enhance the quality and effectiveness of their care by routinely applying more person-centred and holistic approaches to their growing experience of providing individual-, team- and system-based care, by demonstrating:

- Enhanced understanding of psychological, social, occupational, educational and cultural considerations (e.g. what is the problem from the patient's perspective?)
- Understanding of the impact on work, family life, and relationships and the interaction of this with health status and functioning (e.g. what is the impact from the patient's perspective?)
- Consideration of whom the patient's condition impacts on more widely (e.g. thinking beyond the patient to the needs of the patient's carers, family and community)
- Thinking beyond biomedicine to include evidence-based non-pharmacological approaches and therapies (e.g. what is the full range of management options available?)
- Who can be enlisted to help, drawn from both the doctor's and patient's contacts, the multi-disciplinary team and the wider community resources (e.g. who comprises the 'healing community' in this case?); and
- Shared decision-making and care-planning approaches (e.g. what are the patient's and their carers' needs and preferences, and how have these been taken into account?).

Facilitating self-directed continuing professional development and revalidation

The core suite of capabilities developed in the enhanced four-year curriculum will enable newly qualified GPs to provide high quality, safe, holistic and comprehensive care to their patients, to lead and improve services, and to retain career-long adaptability to meet future health service challenges.

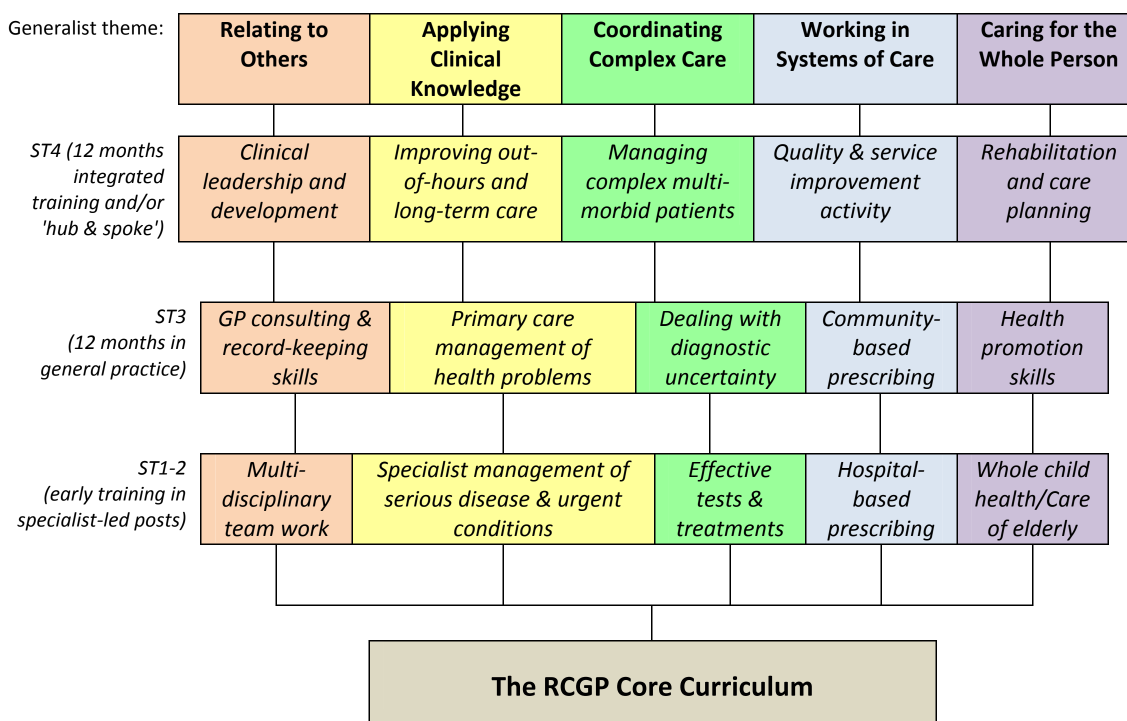
Beyond training, each of the five developmental themes in the enhanced curriculum sets a trajectory that will continue throughout the GP's career, further enhanced through self-directed continuing professional development, appraisal and revalidation. This key aim is explored further in the following sections on assessment and quality improvement.

Reflecting the themes in individual GP training programmes

While separated for conceptual reasons, the five themes would not be assessed as isolated entities but integrated as part of global developmental progression. The educational purpose of the themes is to clarify, illustrate and promote those areas of professional expertise that require particular focus, as these will be critical to ensuring that tomorrow's GP is fit for purpose in the future NHS.

Although all the illustrative statements would be applicable throughout the four-year training programme, the *level of application* of each theme to a trainee's everyday learning would vary over time, influenced by the context of his or her working environment, experience and role. Figure 3 illustrates how the relative training opportunities and emphasis of assessment interact with each expert theme during the progression of enhanced specialty training.

Figure 3: Examples of how training and assessment emphasis might vary during an individual GP's four-year specialty training programme, to ensure global coverage of the enhanced curriculum



Structuring the four-year curriculum

The RCGP Curriculum has a wide range of stakeholders and must meet patient, professional and wider societal needs as well as regulatory requirements. User feedback and a formal independent evaluation[4] of the curriculum have shown that its existing academically-focused format can present difficulties for some trainees and educators. To address the diversity of need, the enhanced four-year curriculum will be organised into a *core* and an *applied* curriculum, with each part optimised to its intended audience.

The Core Curriculum Statement

The Core Curriculum statement, *Being a General Practitioner*[5], will be updated to reflect the new training outcomes. As presently, it will define the role and core competences required of a GP working in the UK NHS. It will remain based on international academic definitions of general practice, will overview the key features of generalist expertise and will feature key scientific references and sources of evidence.

As such, it will serve as the foundation for GP training and the key academic resource on which career-long GP professional development is based. Through its description of the core competences of general practice, it will continue to inform the development of the MRCGP assessment blueprint, against which fitness-for-licensing judgements will be based.

The Applied Curriculum

The Applied Curriculum will be optimised to meet the needs of trainees, trainers and other educators tasked with delivering the learning and assessments in practice. As such, it will have less academic and theoretical focus and a greater emphasis on practical application to everyday practice. The Applied Curriculum will clarify the generic outcomes relevant to each of the five themes, thereby contextualising the core competences described in the Core Curriculum, *Being a GP*.

The Applied Curriculum will be communicated and supported through a range of concise, *illustrative modules*. The modules will assist in defining the knowledge and skill content of the curriculum and inform the content of the assessments within the approved MRCGP blueprint. They will act as practically-focused training resources to show how the contextualised competences set out in each theme can be learnt and applied in everyday practice. Each module will be written to illustrate a dominant educational theme and will contain:

- Key educational messages about the topic area, including important and changing areas of clinical and professional knowledge and expertise
- Case scenario(s) illustrating the application of relevant competences
- Examples of the trajectory of professional development over time
- Reflective questions to prompt discussion and learning
- Learning activities and resources to help with acquiring the relevant competences
- References and evidence-base.

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4 Bedward J, Davison I, Burke S, Thomas H. Evaluation of the RCGP GP Training Curriculum (2011). Accessed via: www.birmingham.ac.uk/Documents/college-social-sciences/education/crmde/rcgp-report-june2011.pdf

5 Royal College of General Practitioners (2012). Core Curriculum Statement: Being a General Practitioner. RCGP: London. www.rcgp.org.uk/curriculum

Figure 4: Overview of Provisional Content of the Enhanced Four-Year RCGP Curriculum

Core Curriculum Statement: Being a General Practitioner

Applied Curriculum – Educational Theme 1: Relating to Others

Illustrative modules:
R1. Understanding Your Values, Ethics and Professional Duties
R2. Consulting and Communicating [re-development of 'The GP Consultation in Practice']
R3. Supporting Carers and Families
R4. Working in Teams and Leading [re-development of 'The GP in the Wider Professional Environment']
R5. Developing Yourself and Others [re-development of 'Enhancing Professional Knowledge']

Applied Curriculum – Educational Theme 2: Applying Clinical Knowledge

Illustrative modules:
M1. Cardiovascular Health
M2. Child and Adolescent Health [re-development of 'Care of Children and Young People']
M3. Digestive, Liver and Pancreatic Health
M4. ENT, Oral and Facial Health
M5. Eye Health
M6. Genetic Health
M7. Haematological and Immune Health
M8. Infectious Disease and Travel Medicine
M9. Mental Health [re-development of 'Care of People with Mental Health Problems']
M10. Metabolic and Endocrine Health
M11. Musculoskeletal Health
M12. Neurological Health
M13. Renal and Urological Health
M14. Respiratory Health
M15. Sexual Health
M16. Skin Health

Applied Curriculum – Educational Theme 3: Coordinating Complex Care

Illustrative modules:
C1. People with Multiple Morbidity
C2. People with Unexplained Problems
C3. People who Engage in Harmful or Addictive Behaviours [re-development of 'Misuse of Drugs & Alcohol']
C4. People who Survive, Recover or Relapse
C5. People with Intellectual Disability

Applied Curriculum – Educational Theme 4: Working in Systems of Care

Illustrative modules:
S1. Accessing, Interpreting and Organising Information
S2. Prescribing Safely in the Community
S3. Promoting Health and Preventing Disease
S4. Providing Urgent and Emergency Care [re-development of 'Acutely Ill People']
S5. Using Diagnostic and Treatment Services Effectively
S6. Improving the System of Care [re-development of 'Patient Safety and Quality of Care']

Applied Curriculum – Educational Theme 5: Caring for the Whole Person

Illustrative modules:
W1. Children and Young People [re-development of 'Care of Children and Young People']
W2. Women
W3. Men
W4. Older Adults
W5. People near the End of Life [re-development of 'End of Life Care']

NB. The modules in black text will be developed from the existing GMC-approved curriculum 'contextual' and 'clinical example' statements. Those in grey text represent areas that are not explicitly described in the current three-year curriculum and will be freshly created. An online curriculum tool (in development) will organise and present the content, enabling it to be readily accessed, browsed and searched.

The Enhanced Four-Year Assessment Package

Using the five theme approach, an integrated programme of learning and assessment is proposed. This summary outlines how it will be achieved, based on the following key principles:[6 7 8]

1. Constructive alignment will be instigated across the programme – the intended learning outcomes, the curriculum, the teaching methods and assessments will integrate and complement each other[9 10]
2. There will be effective blueprinting of assessments to the curriculum competences and objectives, to the GMC quality standards[11], and the domains of Good Medical Practice[12]
3. A longitudinal assessment programme will be adopted, using individual data points aggregated for an end point global judgement of fitness for entry to independent practice.[13]
4. Assessment-driven learning is inevitable and will be harnessed to enhance training delivery, dependent on meaningful information for the learner through quality feedback[14]
5. In the latter stages of training, the assessment programme will facilitate an effective transition to self-directed professional development and revalidation-readiness

The current MRCGP framework[15] provides an evidence-based and robust assessment structure that will be further developed using enhanced tools that cover the required five themes, in particular focusing on the greater development of leadership and professionalism. It is important that summative elements are balanced with formative tools and that both should drive the learning. The assessment framework would provide a range of tools, the trainee selecting from a menu mandating the mix and number of tools to ensure appropriate blueprint coverage with sufficiency of evidence.[6]

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6 Schuwirth L W and Van der Vleuten C P M (2011). Programmatic assessment: From assessment of learning to assessment for learning. Medical Teacher; 33 (6): 478-485.
7 Van der Vleuten C P M, Schuwirth L W T et al. (2010). The assessment of professional competence: building blocks for theory development. Best Pract Res Clin Obstet Gynaecol; 24: 703-719.
8 Van der Vleuten C P M, Schuwirth L W T et al. (2012). A model for programmatic assessment fit for purpose. Medical Teacher; 34: 205-14.
9 Biggs J (1999): Teaching for Quality Learning at University, Buckingham: SRHE and Open University Press.
10 Biggs J (2003): Aligning teaching for constructing learning. York: The Health Education Academy. http://www.heacademy.ac.uk/assets/documents/resources/resourcedatabase/id477_aligning_teaching_for_constructing_learning.pdf
11 General Medical Council (2010). Standards for curricula and assessment systems. London: GMC. http://www.gmc-uk.org/education/postgraduate/standards_for_curricula_and_assessment_systems.asp
12 General Medical Council (2013). Good Medical Practice. GMC: London. http://www.gmc-uk.org/guidance/good_medical_practice.asp
13 General Medical Council (2011). Learning and assessment in the clinical environment: the way forward. London: GMC. www.gmc-uk.org/Learning_and_assessment_in_the_clinical_environment.pdf_45877621.pdf
14 Van der Vleuten C P M (Maastricht 2012). Confidential Report for RCGP Postgraduate Training Board on Workplace Based Assessment – internal RCGP document, personal communication.
15 RCGP website (June 2013): http://www.rcgp.org.uk/gp-training-and-exams/mrcgp-exam-overview.aspx

As suggested in the five theme model, assessment in enhanced GP training is not a static process confined to the final training year, but an integrated, formative four-year programme that samples the tools for self-assessment, driving the learning supplemented by retesting, consolidation with further learning and development of competence over time.

An outline of the four-year integrated assessment model

Enhanced clinical skills will be developed and assessed throughout the four years of training and assessed at key points. Areas of particular importance which are not tested to their maximum potential in the current three-year programme will be assessed more comprehensively using a number of enhanced elements.

The summative Applied Knowledge Test (AKT) questions will include enhanced content and format on key clinical domains, such as child health and safe prescribing. Similarly, the Clinical Skills Assessment (CSA) will test more widely in the enhanced communication and clinical skills using a wider range of clinical scenarios, designed to assess in greater depth those clinical areas that form the basis of the educational case for enhanced and extended GP training.

The established workplace based assessment system (WPBA), using the multi-functional RCGP Trainee ePortfolio (TeP), will continue throughout the first three years of GP training, to encourage trainees to build a portfolio of evidence throughout their training with the tools developed for greater educational impact. Additional and alternative tools and approaches will be used in ST4 to contribute to the evidence pool that informs the final summative judgement at the Annual Review of Competency Progression (ARCP) panel and to support a transition to self-directed professional learning and facilitating readiness for revalidation.

Supervised Learning Events

The assessment programme will be complemented by the development of formative educational activities, including Supervised Learning Events (SLEs)[12], moving away from focus on numerical scores and rating scales that can 'trivialize' some educational activities and assessments.

SLEs provide an important opportunity for learning and improvement in practice, and will be a crucial component of the enhanced four-year GP curriculum. SLEs will be used throughout the four-year training programme to:

- Highlight achievements and areas of excellence
- Provide immediate and meaningful feedback and suggest areas for further development and improved performance
- Demonstrate engagement in the educational process.

Figure 5: Example Process for a Supervised Learning Event

A range of tools and data sets will be collected throughout training to feed into SLEs and to help the doctor generate a portfolio of evidence which, in combination with workplace-based assessments and externally-moderated summative assessments (see table below), will enable a robust end-point global judgement to be made prior to the award of the CCT and MRCGP on completion of ST4.

The workplace-based data sets include:

- Case-based Discussion (CbD)
- Consultation Observation Tool (COT)
- Mini-CEX
- Learning log entries (LLE) promoting reflection, including 'professional conversations'
- Activity analysis – to include referral and prescribing activity
- 'Open Book' online knowledge assessments (e.g. Essential Knowledge Challenge)
- Significant events and SUIs
- Clinical Audit
- Out-of-hours and urgent care work
- Random and problem-based case analysis (differs from CbD)
- Integrated DOPs
- Reflection on compliments and complaints
- Multi-source Feedback
- Patient Satisfaction Questionnaires
- Quality Improvement Programme work.

This formative approach will underpin the doctor's development throughout the four-year training programme, focusing on the key clinical, generalist and leadership competencies necessary for high quality general practice care.

Supporting transition to self-directed learning, appraisal and revalidation

There is growing evidence that many GPs would benefit from an enhanced opportunity during training to develop their self-awareness and reflective learning skills, which are now a revalidation requirement. This is particularly so for doctors originating from training cultures in which these approaches are not the educational norm.

During ST1-3, assessment is necessarily focused on ensuring patient safety and is highly supervised and externally driven. The Trainee ePortfolio is a key learning tool to assist GP Trainees in developing their professional competencies and to store evidence of their professional development and learning. It also provides a platform for a GP trainee's Educational Supervisor to deliver a written record of formative assessment as well as acting as a tool for summative assessment purposes, used by Deanery ARCP Panels.

A gateway into ST4 will require all trainees to pass the AKT and CSA examinations. In ST4, the onus of assessment responsibility will shift to the trainee, through a greater requirement to build their own self-directed ePortfolio and to present evidence of effective learning and reflection; there will be an emphasis on the demonstration of the 'knowledge habit', clinical leadership and a requirement to engage in quality improvement activity, which will further dovetail with the ethos of appraisal and revalidation.

As such, ST4 will be a key 'transitional year' that sets the doctor on the path to successful annual appraisal and five-yearly revalidation. The portfolio-based evidence collection requirements will mirror those of NHS appraisal, with the educational impact augmented through the use of educational supervision and supervised learning events. This will facilitate the transition from supervised training to self-directed learning, creating a trajectory for career-long development and maximising the chances of successful revalidation.

The ARCP reviews and end-point assessment

An ARCP will be held at least once every 12 calendar months and between each specialty training year (sometimes called a 'gateway review'). As currently, the ARCP Panel will make an evidenced judgement about the doctor's progress and decide whether they are ready to move onto the next stage of training.

The final 'exit' ARCP towards the end of ST4 will draw together all the assessment evidence gathered during the four years of training, joining up the aggregated data points in the assessment model. The final ARCP process will therefore be enhanced in order to enable panels to make a final summative judgement on suitability for CCT based on all the evidence in the doctor's portfolio.

Quality assurance of the assessments and ARCP process

The College continues to refine and develop its methodology for quality assuring the assessments and ARCP process. This external assurance programme (using RCGP External Assessors) will continue to review ARCP processes and outcomes as well as the quality of Educational Supervisor reports and Clinical Supervisor reports, which provide essential evidence that the ARCP Panels use in their decision making (Edwards J and Petra H, 2013).[16]

There will also be an external quality assurance of the QIP assessment system which forms part of the trainees' assessment in the fourth year. This will also allow for a national calibration of this new assessment process. Results of the external quality assurance will be fed back to Deaneries or equivalent bodies to enable local faculty development.

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16 Edwards, J and Petra, H (2013). The effects of external quality management on workplace-based assessment. Education for Primary Care; Volume 24, Number 2, February 2013, pp. 105-110(6).

Table 1: Enhancements to existing MRCGP assessment tools

Assessment tool	Objective	Details	Proposed Enhancement
Applied Knowledge Test (AKT)	• To provide an external, summative assessment of the knowledge base that underpins NHS general practice	A three hour machine marked test comprising 200 question items. Approximately 80% of question items will be on clinical medicine, 10% on critical appraisal and evidence based clinical practice and 10% on health informatics and administrative issues. Questions focus on higher order problem solving rather than the simple recall of facts. Doctors who pass this assessment will have demonstrated their competence in applying knowledge at a sufficiently high level for independent practice.	A greater range of items will enhance the assessment of child and mental health, drug and alcohol abuse, lifestyle issues and end-of-life care. There is already a significant focus on safe prescribing and therapeutics in the current AKT. However, greater emphasis will be given to complex clinical issues such as the management of co-morbidity, including poly-pharmacy, and medically unexplained symptoms. Critical appraisal will be enhanced by moving beyond evidence-based medicine into the area of evidence-based service improvement. Additional items will be developed to test data analysis and critical thinking in the areas of referral practice, service performance and analysis of local health data.
Clinical Skills Assessment (CSA)	• To provide an external, summative assessment of the doctor's ability to integrate and apply the clinical, professional, communication and practical skills appropriate for general practice	The CSA uses simulation with trained actors and assessors to assess a range of scenarios from general practice. These are carefully blueprinted to the curriculum and also target particularly important aspects of clinical care and expertise.	An enhanced CSA in ST3 will test enhanced communication and clinical skills using a range of relevant clinical scenarios. Scenarios will be developed to appropriately reflect the skills required in the enhanced curriculum, including child health, mental health, multi-morbidity, complex care and prescribing safety.

Workplace-based Assessment (WPBA)	• To provide an opportunity for gathering evidence and reflecting on performance • To evaluate aspects of professional behaviour that are difficult to assess in traditional examinations • To provide constructive feedback on areas of strength and developmental needs, identifying doctors who may be in difficulty • To drive learning in important areas of competence • To provide data for ARCP process	WPBA assessments will take place throughout GP specialty training. A range of tools will provide data to enable ongoing formative assessment and evaluation of the doctor's progress in areas of professional practice best tested in the workplace.	The tools for WBPA in ST1-3 will remain essentially the same as currently, but will use enhanced CbD and integrated DOPs to enable assessors to probe more deeply and more widely, to include competences relating to the enhanced generalist and leadership skills where appropriate. The mandatory number of assessors for each year will be increased to take account of current best practice and expert consensus on the dependability of workplace-based assessment (see further information below). The enhancements planned to WPBA in ST4 are described in the following table.
Annual Review of Competency Progression (ARCP)	• To determine the doctor's fitness to progress to the next stage of training	An ARCP will be held at least once every 12 calendar months and between each training year (a 'gateway review'). As currently, the ARCP Panel will make an evidenced judgement about the doctor's progress and whether they are ready to move onto the next stage of training. A sample of ARCP outcomes will be scrutinised by a team of RCGP External Advisors, to ensure consistency in decision-making across deaneries.	The Applied Knowledge Test (AKT) and Clinical Skills Assessment (CSA), in combination with the ARCP review in ST3, will provide a gateway assessment that must be successfully completed before entry into ST4.

Table 2: Additional assessment tools in ST4 to enable end-point assessment and facilitate transition to self-directed learning

Assessment tool	Objective	Details	Rationale
Knowledge-based self-assessment tools combined with Supervised Learning Events (SLEs)	• To demonstrate self-awareness, insight, self-directed and reflective learning (in keeping with GMP Domain 1: Knowledge Skills and Performance) • To foster an effective self-directed learning habit • To develop and demonstrate attitudes required for career-long professional learning • To demonstrate skills required for the translation of new or changing knowledge into practice	In ST4, doctors will select from a menu of approved tools that enable them to demonstrate the maintenance and currency of their clinical knowledge (e.g. the RCGP accredited Essential Knowledge Update (EKU) and Challenge (EKC)). The self-assessment activity will generate evidence for discussion in a SLE or 'professional conversation' in which the level of competence, learning and development is validated by the Educational Supervisor and factored into the trainee's PDP. The mandatory guidance will outline the minimum requirement for sufficiency of evidence, and the optimum balance of knowledge focus (this might change at each staged PDP review) and the requirement to critically reflect on the impact of the learning activity.	In ST4, responsibility shifts to the doctor to build their portfolio and to present evidence of effective professional learning and reflection. This will encourage acquisition of the 'knowledge habit' and will dovetail with the ongoing educational requirements of appraisal and revalidation. This approach will be augmented by SLEs and will build on the 'high stakes' AKT completed in ST3 (the summative test of core knowledge and application), facilitating the transition to self-directed continuing professional development. Use of tools which offer an opportunity to benchmark performance against peers will be encouraged (e.g. RCGP's Essential Knowledge Challenge (EKC)).

Workplace-based assessment: Enhanced clinical and generalist skills	To measure and further develop clinical and professional skills that are central to enhancing the expertise of the GP, in particular in relation to: • Child health • Mental health • Complex care of older adults (e.g. multi-morbidity) • Drug and alcohol misuse • Safe prescribing • Providing 'whole person care' (e.g. health promotion, self-care and end-of-life care) • Working in systems of care (e.g. teamworking across boundaries)	Tools used earlier in training will be applied to more complex patient care scenarios and contexts encountered in ST4, in order to build further upon the skills demonstrated in the ST3 CSA: • Integrated Directly Observed Procedures (DOPs) • Enhanced Consultation Observation Tool (COT) • Enhanced Case-based Discussion (CbD) • Safe prescribing tool (in development)	New integrated DOPs moves away from the previous assessments of performance (AoPs) to a formative SLE-based approach. Enhanced COTs and CBDs will be adapted for use as data-generating tools for SLEs. Mandatory guidance will include the explicit requirement for the assessments to include a suitably wide range of cases of sufficient complexity and challenge, covering the domains of expert generalist care set out in the enhanced four-year curriculum.
Quality Improvement Programme (incorporating assessment of leadership and quality improvement skills) **[Full details of the QIP are given later in this document]**	• To enable GP trainees to acquire and demonstrate outcomes for leadership and quality improvement • In addition to enhanced educational outcomes, the QIP will improve patient, population and service outcomes (see below)	The doctor will be assessed both formatively and summatively during the programme. Multisource Feedback will be used as a valuable and formative data source at a key touch-point during the QIP. The data arising will form the basis of one or more SLEs.	The leadership and quality improvement skills now required to fulfil the role of the GP within the UK NHS are not reliably testable with the currently-approved MRCGP assessments. Furthermore, there is limited scope for the formative development of these skills within the three year GP training programme. The Quality Improvement programme will address this need by providing:

		Externality for the summative aspect of the assessment will be provided by one or more assessors beyond the doctor's regular Educational Supervisor. A marking scheme and templates will be developed to facilitate this process. Assessors will be trained, supported and calibrated.	1. A package of education, support and mentoring for leadership and service improvement 2. The completion of trainee-led quality improvement project work, founded on local service need 3. Assessments providing meaningful information for the learner through quality feedback, as part of a broader ST4 assessment package Full details of the QIP assessments are given later in this document.
Final Annual Review of Competency Progression (ARCP)	• To act as the exit process for the enhanced four-year programme • To ensure that trainees have achieved all the required competencies at the end-point of specialty training	This global, summative judgement will form a robust and evidence-based exit assessment, combining: • Summative data from external assessments and examinations • Formative assessment data from SLEs and other workplace-based learning activity • The portfolio of assessment evidence built by the doctor and validated from a number of tools, using a minimum number of varied assessors	The final 'exit' ARCP would draw together all the assessment evidence gathered during the four years of training – joining up the aggregated data points from the evidence-based assessment model (Van der Vleuten, 2012). The final ARCP processes will be enhanced in order to make a recommendation for CCT based on ALL the evidence in the portfolio. Mandatory guidance will require the use of multiple assessors and tools for dependability, in line with the latest psychometric expert consensus.

Factors affecting the validity and reliability of assessment

The utility of individual assessment tools is affected by a number of confounding factors that affect the variables in the utility equation:
Utility = educational impact x reliability x validity x cost effectiveness x acceptability

These factors determine the acceptability for inclusion of the range of assessment tools used in a programme of assessment.

The reliability of single test items can be improved by reducing inter-rater reliability. Wass describes this principle in oral examinations:[17] *'where the average judgement of ten examiners each assessing the candidate on one question, produces a more reliable test than that of one examiner asking ten questions.'*

The same is true for many of the workplace-based assessment tools used in medical specialties in the UK where the reliability of the process overall is dependent on multiple sampling, using a range of tools at different levels in Miller's pyramid and by a number of different assessors. There is currently no consensus on the sufficiency of evidence to make a dependable global judgement of performance, as the number of assessments required is contextual and trainee specific. This should, therefore, be tailored to the to the need of the individual trainee[18] and those progressing more slowly, or who are subject to borderline judgements, might need more evidence to provide more data points to define their progression curve[6]. This approach will be factored into the design and schedules for each staged review as part of future workplace based assessment programmes.

Reducing trivialization and developing the 'qualitative paradigm'

The programmatic approach is predicated on the assumption that 'assessment drives learning'. However, unless this is matched by appropriate constructive alignment of assessments to the learning and curriculum objectives, whilst avoiding rigid adherence to numerical scores and rating scales. Such unhelpful strategies might seek to achieve an optimum 'score' rather than responding effectively to formative feedback to lead to deeper understanding.

Memorising facts and check lists (or 'gaming' with formulaeic behaviour to fit the assessment criteria that becomes divorced from day-to-day clinical practice) results in learning becoming trivial. If assessors score or rate performance in a single strike of the pen, assigning a score without the opportunity for formative feedback, then the assessment becomes similarly trivialized. This lack of meaningfulness in assessment that might result in trivialization is a perpetual hazard to guard against in the design of assessment programmes.

Adapted from 2012 MMEd thesis[19] by Dr J Mamelok, Director of Postgraduate GP Education, Mersey Deanery and WPBA Clinical Lead, RCGP (reproduced with kind permission of the author)

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17 Wass V, Van der Vleuten C, Shatzer J & Jones R (2001). Assessment of clinical competence. The Lancet; 357: 945-47.
18 Schuwirth L W T, Southgate L, Page G G et al. (2002). When enough is enough: a conceptual basis for fair and defensible practice performance assessment. Medical Education; 36 (10): 925-30.

The Quality Improvement Programme

The future NHS GP will sit at the centre of a complex hub of care, taking a lead role in improving the quality and safety of patient care, improving the navigation of patients through the service, actively participating in service re-design, and engaging in academic activities of direct benefit to patients and the health service.

The Quality Improvement Programme element of enhanced GP training has been designed flexibly to support promote and sustain the delivery of quality and service improvement in the NHS in **all four** UK nations (see separate policy document).

Aims of the Quality Improvement Programme

The introduction of a quality improvement Programme into an enhanced four-year GP training programme for all UK GPs will meet the following aims:

Improved patient and population outcomes

- To support the improvement of patient care, service quality and population health within the local community context
- To address demonstrable patient and service needs, as determined by an analysis of relevant data and the measurement of patient and population outcomes
- To facilitate the implementation of patient-driven, evidence-based and risk-assessed interventions that improve patient outcomes

Improved service outcomes

- To facilitate the development of a flexible GP workforce that will be fit for purpose in the future NHS, by establishing a core skill set and a trajectory that facilitates lifelong professional learning, quality improvement, career development and revalidation
- To raise the profile of service improvement as a core responsibility of GPs, through engagement with the programme and dissemination of the outcomes

Improved educational outcomes for GPs

- To systematically enable trainees to gain valuable educational experience of leading, influencing and participating in quality improvement at an organisational and system level
- To generate evidence to enable the assessment, for licensing purposes, of the required leadership, academic, change management and quality improvement competences, as set out in the educational case
- To act as a vehicle for the prioritisation, resourcing, supervision and assessment of quality improvement activities within the enhanced four-year GP training programme.

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19 Mamelok J (2012). Achieving a consensus on educational objectives and assessments for extended Specialty Training programmes for licensing in General Practice (GPST). Masters in Medical Education Thesis, University of Dundee.

Educational rationale

A key purpose of the Quality Improvement Programme is to enable the GP trainee to achieve learning outcomes relating to leadership and quality improvement which are of central importance to the GP's role in the future NHS, as described in the educational case for enhanced GP training. Beyond training, demonstrating evidence of quality improvement activity also forms part of the revalidation criteria in all four UK nations.

To achieve its aims, the *programme* will include three aligned components:

1. A package of education, support and mentoring for leadership and service improvement
2. The completion of trainee-led QI project work, founded on local service need
3. Assessments providing meaningful information for the learner through quality feedback, as part of a broader ST4 assessment package.

The programme will centre on the ST4 GP trainee, who will take responsibility for planning and undertaking a quality measurement and improvement project, with mentoring and educational support provided by a range of complementary activities. These will include educational and assessment activities aligned to support the development of leadership and service improvement competences; such as the creation of a project proposal based on local need, participation in supervised learning events, the use of multi-source feedback to facilitate team-working and leadership capabilities, and the evaluation and sharing of outcomes and learning experiences.

The evidence for practically-focused training

The evidence base for quality improvement training was comprehensively reviewed in 2012 by the Health Foundation.[20] The authors concluded that, although there was a large and growing body of literature, much of the evidence on the most effective training methodologies was inconclusive due to the large range of definitions, interventions and approaches that have been adopted. However, the authors did note a general consensus among researchers that active learning strategies, which combine quality improvement education with practical work, are more effective than didactic or passive **training methods:** *'There is evidence that training that includes a practical focus, such as implementing quality improvement projects or work-based learning, may be more likely to result in tangible change compared to classroom-based or online learning.'*

This approach is further supported by a review of 27 studies of quality improvement training[21], which concluded: 'Factors that may contribute to successful improvement experiences for students include using health data to set project priorities, having a clear definition of a target community, selecting projects that can be completed in short periods of time that coincide with the structure of an academic year, and emphasising interdisciplinary teamwork.'

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20 The Health Foundation (2012). Evidence scan: Quality improvement training for healthcare professionals. Accessed via: http://www.health.org.uk/publications/quality-improvement-training-for-healthcare-professionals

21 Ogrinc G, Headrick L, Mutha S et al. A framework for teaching medical students and residents about practice-based learning and improvement, synthesized from a literature review. Acad Med 2003; 78: 748-753.

Based on the available evidence, the most effective educational approaches to support quality improvement are likely to involve opportunities for the learner to gain relevant knowledge in quality improvement methodology, to engage in practical experience of quality improvement within a supportive learning environment, and to receive targeted feedback and mentoring as required. This is the basis on which the Quality Improvement Programme for enhanced GP training is being developed. This activity-based approach also has the benefit that the activity itself leads directly to improved patient and service outcomes, in addition to its greater educational benefits.

Shaping the Quality Improvement Programme

The quality improvement programme will integrate with the whole four-year programme but will predominantly run over the course of the ST4 year. It will include a training package to support knowledge and skill development in relevant quality improvement methods and metrics, improvement science, change management and leadership. This will be delivered through a combination of e-learning, group learning and classroom-based activities. Expert advice, mentoring and facilities to support peer group learning will be made available to trainees (and supervisors)

Although the specific content of the project work will be set by the trainee in their local context, it will be shaped within the following parameters:

- Trainees will be encouraged to think about their quality improvement project at an early stage in training to maximise learning opportunities arising during training placements
- The project designed by the trainee should aim to address a demonstrable patient and/or service need. This would usually be determined by an analysis of relevant data, depending on the nature of the project (e.g. local health data, patient narratives, satisfaction surveys, contract feedback, needs analysis, service redesign data, health inequalities data, etc.). Team-based projects, such as participation in a larger existing initiative would be possible where each trainee's role is substantive and can be adequately defined
- The trainee's project should normally involve the analysis of some live or recently generated local data (though it is not necessary for trainees to collect such data themselves – one aim is to become familiar with interpreting the types of NHS data on which quality improvement and service re-design decisions are based)
- To ensure patient safety, proposed interventions should be risk-assessed by a suitably trained individual within the Deanery, Practice or local NHS organisation. Trainees will be required to justify their proposed intervention with evidence and describe the efforts made to ensure the intervention is patient-driven and minimises risk. The trainee should to be able to justify their actions in the QIP just as in their clinical role (e.g. use of guidelines, established measures and metrics, evidenced interventions)
- The intervention should aim to influence change at a service, organisational or pathway level. Although it may be possible to achieve this within a single practice organisation, trainees would be supported to work at a super-practice level where appropriate and where local circumstances allow (e.g. a practice federation, commissioning organisation, public health body, local authority, service, or patient pathway)
- One of the programme end points will include a plan on how the project outcomes will be shared. This could occur through presentations to peers and local or national casebooks of project (http://www.the-network.org.uk)

- Online journal-based publication tools could be developed to give all trainees the opportunity to publish their work and to create a repository of quality improvement information (e.g. http://qir.bmj.com). Institutions should be encouraged to provide opportunities for the work to be presented and shared, thus strengthening the impact on professionals, society and future service improvements
- The project will be piloted in at least two waves. The first wave will act as a feasibility study, and evaluation of these will inform and shape the project and subsequent pilot studies.

Translating generic outcomes into relevant locally-tailored objectives

A straightforward and flexible framework for designing and assessing the quality improvement programme will be essential to enable the required educational development and assessment to occur in relevant localised and personalised contexts. This is important for both the service and the trainee.

Providing real benefits to patients and the NHS

GP trainees will have the flexibility to choose and design their quality improvement project within their practices or wider communities. QIPs are already being undertaken in a number of pilot areas. Examples of real projects led by trainees include:

- A review of advanced care planning in care homes, to reduce unnecessary acute admissions, examine cost benefits, ensure maintenance of dignity, and explore patient preferences

- Re-design of the duty doctor system and introduction of a new triage system. This led to more productive working, was popular, thought to be safer, more efficient, provided greater continuity of care and led to more appropriate patient attendances

- Tackling of long waits for local physiotherapy services, through development of self-help leaflets for common musculoskeletal conditions, designed in conjunction with practice staff and a specialist.

To maximise its value and utility, the programme would have a small number of nodes or 'touch-points' at which the trainee would provide evidence of their work and receive systematic feedback (see Fig. 5). Evidence for discussion and feedback at each touch-point would be provided by the trainee, with support being provided from suitable mentors and an identified external supervisor. Such evidence could be gathered from a range of tools of relevance to the activities occurring in the programme. Examples of key touch-points might be:

1. **At the start of the programme:** The submission of a title and locally-tailored project proposal – this would require the trainee to justify their proposed intervention, outline their methods and address any patient safety, service stability or ethical concerns
2. **During the programme:** Reviewing and addressing feedback from colleagues and stakeholders (e.g. through supervised learning events, planned supervisor meetings, MSF or tailored CbD tools) – this would enable real-time problem-solving during the process of change and support the development of leadership capabilities

3. **When outcomes are available:** The evaluation, presentation and sharing of the work – this would involve an appropriate writing up process plus local and/or national dissemination and presentation to peers and stakeholders
4. **Following the programme:** The linking of the programme's outcomes and trainee's experience of the work to future development plans (depending on individual circumstances) – this would enable the trainee to demonstrate the ability to contextualise quality improvement outcomes and experience into professional development plans, to engage in critical reflection and self-assessment, and to test espoused values against experience, feeding directly into CPD and the first revalidation cycle.

A sequential nodal approach will ensure that trainees are not left unsupported and that any significant problems with project design are identified and addressed at an early stage. The touch-points will be mapped by the trainee to the quality improvement process adopted for their project and will serve as useful benchmarks for trainees when planning their work and checking whether sufficient evidence has been collated for assessment purposes. Templates, supervised learning events (SLEs), mentoring support and other resources will be made available to facilitate and streamline the touch-points.

Figure 6: Quality Improvement Programme – a four 'touch-point' model

Assessment principles and context

The QIP sits within a broader package of integrated learning and assessment in ST4 (see previous Assessment section). This incorporates a range of supportive and formative activities, including Supervised Learning Events (SLEs), supervision and mentoring, evaluation of submitted project work and an adapted MSF. This approach supports portfolio-based learning and links to future quality improvement activity beyond completion of training for the purposes of revalidation.

The knowledge and skill base required for undertaking QIP activities would be developed formatively throughout the training programme. Theoretical application of relevant knowledge (e.g. statistics and critical appraisal) would start to be assessed in the Applied Knowledge Test (AKT) examination (in ST2-3). The assessments in ST4 will serve to demonstrate the application of knowledge and skill in practice through the project work.

During the project work, supervised learning events (SLEs) that include structured professional conversations will provide real-time evidence of relevant leadership, influencing, team-working, change management and academic competences. A multisource feedback tool will be adapted to gather evidence relevant to these areas of development from colleagues and stakeholders.

The following principles for assessment are proposed:

- The project would be assessed formatively as it progresses and would be combined with other workplace-based assessments as supervised learning events contributing to the developing portfolio of evidence that informs the final global summative judgement. The QIP is one of many aggregated data points on the trainee's progression curve[22]
- The trainee's progress will be assessed at each 'touch point'. SLEs undertaken could use the six-point model described above as a prompt to assess and plan progress, with the opportunity for feedback (this model will be further developed through piloting and review).
- Tools such as Multisource Feedback will be used as a valuable and formative data source at relevant touch-points during the QIP. The data will form the basis of one or more SLEs.
- Externality will be provided by one or more assessors beyond the doctor's regular Educational Supervisor; marking scheme and templates will be developed to facilitate this process and assessors will be trained, supported and calibrated. A number of models for the introduction of externality have been developed and will be assessed during the piloting stage for feasibility and acceptability, as well as for educational and assessment value.
- The required curriculum competences for leadership and quality improvement would be assessed summatively through the ARCP process
- There should be evidence of clear constructive alignment against curriculum domains and learning outcomes, in keeping with GMC quality standards
- Trainee and educator acceptability in terms of the assessment burden will be a significant consideration and will be tested in piloting prior to implementation; and
- The assessment system should be locally administered by the Educational Supervisor with support of the Deanery or equivalent body but quality assured externally by the RCGP.

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[22] Van der Vleuten C P M, Schuwirth L W T et al. (2010). The assessment of professional competence: building blocks for theory development. Best Pract Res Clin Obstet Gynaecol; 24: 703-719.

Six-point plan for a focused Supervised Learning Event on the QI project

1. Choice of project

1.1 The project must be relevant to Primary Care and local service needs

1.2 There should be clear justification for the choice of project, including a scientific rationale, analysis of evidence, and alignment with local priorities

2. Evidence-based approach

2.1 The trainee should demonstrate skills for critical appraisal, service improvement and evidence-based practice

2.2 The evidence base and assessment of the need for service improvement and the proposed intervention should be clear and should use information from activity data generated locally and more widely (and from current literature, if appropriate)

3. SMART Strategic Action Plan

3.1 There should be a clear SMART action plan, which outlines the proposal and how the service would be improved within planned timescales. This might include a cost effectiveness analysis

4. Evaluation of impact and safety

4.1 A QIP outcome evaluation, with an impact appraisal, should be completed. The impact of the project intervention would not of itself be a progress assessment criterion for GPST4 trainees.

4.2 The trainee should make suitable attempts to measure the impact of their interventions, including the scientific use of appropriate methodologies and metrics and consideration of patient safety risks

5. Critical reflection

5.1 This is probably the most important aspect for trainee assessment purposes and assessment outcomes would be weighted on the quality of reflection

5.2 There should be evidence of critical reflection on the change process and impact of QIP, including adequate consideration of equality and diversity issues and the needs of key stakeholder groups

5.3 Personal reflection - the trainee should demonstrate evidence of lessons learned and how that learning might be applied in future projects or further development of the QIP

6. Conclusions and PDP

6.1 There should be a clear conclusion and plan going forward with PDP objectives set for the learner and perhaps the service or organisation

6.2 There should be a plan for sharing the learning with peers and stakeholders (e.g. presentation at a local educational event, conference and/or publication).

Table 3: Proposed timetable for the Quality Improvement Programme

Month	Aim of session	How achieved	Individuals involved
August	Introduction to quality improvement programme, including project work Identify own supervisor	Lecture and interactive session Read about available tool kits, review the website and learn about QI projects already done Learning log commenced	Large group or lecture Deanery educators Individual trainee work
September	Individual trainee thinks of a potential quality improvement idea and starts to develop an understanding of the framework	Trainee encouraged to 'think about what frustrates you, what could work better, what are the organisational needs with respect to a quality agenda' Multi-disciplinary team approach Learning log entry	Trainees work on own, and in small group (with group facilitator for small group)
Early October	Discuss project outline and suitability Submit title and locally-tailored project proposal	Meet with supervisor (2 hrs) Agree personal learning needs and identify barriers to be overcome Learning log entry Focused SLE	Trainee and supervisor
Late October	Getting started	Draw up project plan and timelines Identify resources Check re-ethical approval Learning log entry	Individual trainee work
December	Sharing ideas, obtaining peer feedback	Small group discussion Learning log entry	Trainees in small group
January	Progress report and feedback Reviewing and addressing feedback from colleagues and stakeholders	Meet with supervisor (2 hrs) Focused SLE Conduct MSF Learning log entry	Trainee and supervisor
February	Sharing ideas, obtaining peer feedback	Small group discussion Learning log entry	Trainees in small group

March	Progress report and feedback Dissemination strategy	Meet with supervisor (2 hrs) Focused SLE Review MSF Learning log entry	Trainee and supervisor
April	Sharing ideas, obtaining peer feedback	Compile abstract for project submission at regional level event and/or national level conference Small group discussion Learning log entry	Individual trainee work Trainees in small group
Early May	Progress report and feedback before final submission	Meet with supervisor (2 hrs) Discuss presentation and dissemination of work Focused SLE Learning log entry	Trainee and supervisor
Late May	Complete project	Submit for assessment Trainee submits project to external assessor Trainee creates appropriate presentation or poster	External assessor(s) Trainee uploads project to eportfolio-feeds into ARCP
June	Present regionally with potential national presentation	Deanery or national conference (poster, oral presentation, or workshop)	Individual trainee work Large group for presentations Deanery educators
July	Evaluation of process and reflection on learning	Linking the programme's outcomes and trainee's experience of the work to future personal development planning, feeding into first revalidation cycle Learning log entry and PDP	Large group sharing of learning Individual trainee work Educational supervisor