

Assessment Strategy

Paediatrics Specialty Postgraduate Training

Version 1

Approved by the GMC for implementation from 1st August 2018

This document outlines the Assessment Strategy to be used by trainees completing postgraduate training in paediatrics in the UK. It accompanies the RCPCH Progress curriculum.

This is Version 1.0. As the document is updated, version numbers will be changed, and content changes noted in the table below.

| Version number | Date issued | Summary of changes |
|----------------|-------------|--------------------|
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Executive Summary



This Assessment Strategy comprises the rationale for, and content of, the RCPCH Programme of Assessment,¹ to be used from 1st August 2018 onwards. It reflects the evolution of previous strategies as opposed to revolution, reinforcing the assessment practices which currently work effectively and ensuring these can continue to be deployed appropriately to support the new curriculum – RCPCH Progress. This strategy must be read in conjunction with the RCPCH Progress curriculum and syllabi.

This document outlines the purpose of each assessment and the mechanisms by which their ongoing validity are ensured. It also outlines the principles by which feedback should be provided and received.

The assessments within the Programme of Assessment have not changed from previous Assessment Strategies, but the way in which they are used and the focus applied will be subtly different to reflect the updated curriculum structure and ethos. With trainees now focused on achievement of higher level, holistic Learning Outcomes, all assessments will demonstrate and/or develop capability in one or more Outcome. Feedback will be framed around the curriculum domains (and therefore implicitly the GMC's Generic Professional Capabilities) and the Learning Outcomes.

The RCPCH ePortfolio, Kaizen, will be adapted to support the new curriculum structure, making the purpose of each assessment and its relationship to the curriculum more explicit, and actively encouraging reflection on the assessment outcome with any further development needs identified. All assessments are mapped to the Key Capabilities within the curriculum syllabi, which are in turn mapped to the GPCs. The educational supervisor form within ePortfolio will be redesigned to make the review of evidence against each Learning Outcome (and thus the GPCs) simple and explicit.

Trainees must prioritise the generation and recording of high-quality evidence rather than the quantity of assessment completed, ensuring the evidence is valid and relevant for the Learning Outcome(s) and that the intended purpose has been met. RCPCH does not currently stipulate minimum numbers of assessments for most workplace based assessments, and this continues within this updated Assessment Strategy.

In line with the GMC *Designing and maintaining postgraduate assessment programmes* as supporting guidance, key critical progression points ('waypoints') have been identified, where the trainee will be preparing for a significant transition. 'Entrustable Professional Activities' (EPAs) are to be identified to support assessment at these points. These are 'units of professional practice, defined as tasks or responsibilities to be entrusted to the unsupervised execution by a trainee once he or she has attained sufficient specific competence'. (Ten Cate, 2013, p157).

¹Defined by the GMC as 'the integrated framework of exams, assessments in the workplace and judgements made about a learner during their approved programme of training' (GMC, 2017a, p.5).

The existing Acute Care Assessment Tool (ACAT) is intended to assess the integration of clinical and non-clinical skills in a professional way over a sustained period (e.g. medical take or intensive care shift).

The RCPCH intends to adapt this current assessment to form a number of EPAs, mapped to the curricular domains, for use at the critical progression point prior to moving on to Level 2 training, as this transition brings the added responsibilities of working on a middle-tier rota. These EPAs will initially be introduced as a pilot and reviewed prior to full implementation, subject to approval by the GMC.

Background to the Assessment Strategy

The RCPCH is responsible for setting and maintaining the standards of training and assessment in paediatrics and its 17 sub-specialties, in accordance with the requirements set by the GMC. In this capacity, the College develops and periodically reviews the curriculum (and supporting syllabi) for training, and the Programme of Assessment to be used alongside the curriculum to facilitate both the formative and summative assessment of progress and capability.

Recent changes

Although the curriculum has remained unchanged since 2010, the Programme of Assessment has evolved since the last formal Assessment Strategy was published, reflecting developments in assessment theory and practice, and pre-empting the regulatory move towards the assessment of more generic skills, behaviours and attributes, alongside specific clinical skills. These changes have been partly driven by developments in technology, with the introduction of computer-based testing in the written examinations, and a new ePortfolio system – RCPCH Kaizen.

Formative Supervised Learning Events (SLEs) were piloted and integrated into the Programme of Assessment in 2013. Subsequently, the mandatory minimum number for each type of SLE has been removed in most cases, encouraging trainees to focus on ‘quality over quantity’, and deploying the right assessment in a time and manner that best meets their development and training needs. The 2016 *National Training Survey* highlighted the challenge for doctors in training to achieve balance between their training and clinical duties,² and so it is crucial that time made available for training and assessment is used productively.

More recently, **test blueprints** have been devised and implemented for the MRCPCH Theory examinations (Foundations of Practice, Theory and Science, and Applied Knowledge in Practice), to ensure greater consistency across each diet, while a review of the MRCPCH Clinical examination is currently underway.

From the 2011–2012 training year onwards, all trainees entering Level 3 training have been required to undertake the formative **RCPCH START** (Specialty Trainee Assessment of Readiness for Tenure) assessment. This is intended to inform their final period of training as they develop the skills required to work as a consultant. Initial studies suggest strong acceptability amongst trainees and trainers, and a proven positive impact.³

A new strategy for a new curriculum

The curriculum for paediatrics, including General Paediatrics and the 17 paediatrics sub-specialties, has now undergone a major review (2015–2017), resulting in the development of the new RCPCH Progress curriculum which will be implemented from the 2018–2019 training year onwards. The new curriculum design incorporates feedback from trainees and trainers, which will ensure it is easy to engage with, flexible, and meets the needs of the modern paediatric workforce. The curriculum will also meet the requirements of the new GMC *Excellence by design: standards for postgraduate curricula* (2017).

RCPCH Progress represents a departure from the competency-based framework approach. Instead, it comprises a smaller number of Learning Outcomes, which are framed around the Generic Professional Capabilities (GPCs). Educational supervisors are required to make a professional judgement as to whether the trainee has achieved each Learning Outcome, considering evidence provided in the training portfolio and mapped to the Outcomes. For each Learning Outcome there are Key Capabilities, which must be demonstrated to achieve the Learning Outcome. The onus is on the trainee, primarily, with support from their trainer(s), to demonstrate satisfactorily how they meet the Learning Outcome.

This Assessment Strategy reflects these changes to the curriculum, both structurally (with assessments clearly linked to Learning Outcomes and Key Capabilities), and by supporting the underpinning principles within the curriculum of flexibility and tailoring to the specific learning needs of each trainee.

The RCPCH is committed to continuous improvement in assessment, monitoring the validity and reliability of assessments used to support the current training curriculum and engaging with new educational research both as a consumer and producer. Therefore, the Programme of Assessment will continue to evolve in response to new evidence, testing and integrating new assessments and approaches where appropriate.

² National Training Survey 2016: Programme Specific Question no. 9 for paediatrics asked to what extent respondents agreed they had sufficient opportunity to complete their SLEs. Fifty-seven percent agreed or strongly agreed, while 14% disagreed or strongly disagreed, with the remainder neutral; responses were most negative for the ST4–ST7 respondents.

³ Foard, L. & Reece, A. Personal communication. START Impact Study (in progress).

The Purpose of the Programme of Assessment

The GMC define the purpose of the Programme of Assessment as being ‘to robustly evidence, ensure and clearly communicate the expected levels of performance at critical progression points in, and to demonstrate satisfactory completion of training as required by the approved curriculum’ (GMC, 2017a, p.5).

The Programme of Assessment must reassure the individual, the profession and the public, as well as employers and regulatory bodies, that a doctor in paediatric postgraduate training is fit to practice. In order to achieve this, all areas of the training curriculum need to be sampled and assessed in different ways, using an assessment tool which is appropriate to the purpose.

In line with past assessment strategies, our aim continues to be the provision of a comprehensive Programme of Assessment that:

- ensures that trainees have acquired the full range of knowledge, understanding, skills, attitudes and behaviours that are required of a paediatrician;
- provides robust evidence for decisions that are made about a trainee’s readiness to progress to the next stage of training, while supporting trainers and assessors so that they feel confident and empowered to make consistent, transparent and evidence-based decisions;
- supports trainees in their learning by providing feedback at all stages of their progression, and encouraging reflection;
- identifies trainees who are struggling to achieve competence or are in difficulty in any other way, enabling appropriate, structured and targeted support;
- reassures the public that safe decisions are made about a trainee’s competence to perform in practice;
- contributes to the continuing emphasis on evidence-based quality management in all areas of educational activity, including the assessment processes in the College and the workplace;
- encourages development of the trainee’s professionalism and self-managed continuing professional development, through the experience of reflective practice and presenting a portfolio of evidence, preparing them for future revalidation processes and engagement with quality management systems.

To achieve these aims the underpinning rationale of this Assessment Strategy will reflect:

- assessments that support both *practical and theoretical* models of assessment methodologies, and include formative and summative assessment;
- assessment criteria that are *clear and explicit*, and an assessment process that trainees are *confident* in;
- the *support* required for trainees, including challenging and inspiring them as part of the overall learning experience, which will encourage the development of competent paediatricians who strive for excellence;
- the *promotion of equality, diversity and respect*, ensuring that assessments are fair and equitable for all trainees and that the safeguarding of both patients and colleagues is paramount;
- an engagement in *reflective* practice, actively encouraging independent and trainee-led learning;
- that all assessments will be carried out by *assessors with the relevant skills, knowledge, training and support* to do so effectively, making fair and consistent judgements.

The Programme of Assessment comprises a range of assessment methods to be used to assess capability in relation to the curriculum Learning Outcomes, and a blueprint which illustrates the assessment types that can be used to assess specific Learning Outcomes. The Learning Outcomes are broad objectives, and so should not be confined to one-off assessments (Schuwirth & van der Vleuten, 2012), instead using an integrated approach with a range of methodologies and sufficient evidence to ensure reliability.

As van der Vleuten and Schuwirth (2005) noted, choosing one assessment method over another inevitably means some compromises, with the type of compromise varying for each specific assessment context. Good assessment involves a mindful choice about where and how to compromise, carefully selecting the appropriate combination of methods where the compromises are justified in light of the educational context and the purpose of the whole programme (van der Vleuten, 2016).

The type of assessment to be used in all cases must be appropriate to the purpose. Assessment can be formative and can help to guide learning, reassure about knowledge and skills, prompt reflection, and nurture appropriate attitudinal responses. It can also be summative, in which case an overall judgement regarding competence, fitness to practice, or qualification for progression to higher levels of responsibility is made (Epstein, 2007). Within this Programme of Assessment, the RCPCH has sought to provide sufficient guidance as to when and how to use each assessment, whilst allowing the trainee and their supervisor the freedom to make an informed judgement as to which combination of methods is the most appropriate in any given situation.

The blueprint within the Programme of Assessment ensures that the assessments utilised throughout training are relevant to the depth or level of knowledge or skill being assessed, with different assessments most appropriate to be applied at different levels of training. The curriculum Learning Outcomes develop over three levels of training.

Assessments supporting the Level 1 Learning Outcomes focus on acquiring the knowledge base required to be a safe and effective paediatrician. During Level 2, trainees begin to apply this knowledge to clinical practice and demonstrate autonomy. By Level 3, they are developing professional expertise, analysing and evaluating the knowledge and skills they have learned and being able to teach and develop others.

The Programme of Assessment also clearly defines the specific waypoints or critical progression stages that trainees will need to pass through in order to progress to the next level of training, or to be able to undertake specific activities, or to assume responsibilities that mean they can perform independently or without direct supervision. The RCPCH examinations and the RCPCH START assessment already contribute to this, and the introduction of EPAs will provide further support for assessment at critical progression stages.

Ensuring Validity



In line with wider global assessment practice, for the RCPCH Programme of Assessment 'validity is the *sine qua non* of assessment, as without evidence of validity, assessments in medical education have little or no intrinsic meaning' (Downing, 2003, p.830). Therefore, any programme of assessment must be supported by a comprehensive approach to ensure validity in the development, implementation and ongoing review of the overarching programme and the individual assessments embedded within it.

Validity as a concept is both nebulous and potentially infinite (Newton and Shaw [2014, p.8] alone identify over 150 different 'types' of validity to be considered), and so to adequately judge and ensure the validity of the RCPCH assessments it is crucial to define what this means in the context of paediatric assessment. The RCPCH approach to validation is based on the following core principles, all of which are well established in the medical and broader educational literature:

- All validity is construct validity, in line with the work of Messick (1998, p.37) and continued in later editions of the *Standards for Educational and Psychological Testing*.
- Validity is not a property of an individual test, and refers instead to the interpretations and uses of a test or test score for a specified purpose (Cronbach, 1971; Kane, 2006, 2016).
- Validation must take into consideration not only the evidence to support the interpretation of the test use ('the interpretive argument'), but also an evaluation of whether the interpretive argument is sound ('the validity argument') (Kane, 2006).
- Validation is never finished, and is an ongoing process relying on multiple evidence sources (Cronbach, 1988; Sireci, 2007). Therefore, it must be approached in a manner that is proportionate, measured, structured and feasible.
- Construct-irrelevant variance must be limited insofar as possible and any instances addressed in a timely manner (AERA, 1999).

The RCPCH has a well-established methodology in place for evaluating the extent to which its examinations and assessments are valid for the purpose for which they are intended. The overarching blueprint has been developed and evolved over the last decade to ensure that the assessments used are the most appropriate for the given construct. New assessments are piloted and evaluated, test outcomes are scrutinised and reported on by psychometric experts, and assessments are periodically reviewed to ensure they remain fit for purpose. Specific information outlining the validity evidence gathered for each assessment type is outlined within this document.

Reliability

Reliability is a fundamental requirement of validity (Isaacs, Zara & Herbert, 2013, p.128), but also can pose a threat to validity if pursued to the furthest extreme. The RCPCH incorporates a range of techniques through its assessments (e.g., test blueprints and post-examination statistical analyses) to ensure reliability, but is also clear that one should 'never switch to a less valid measure simply because it is more reliable' (Nunnally & Bernstein, 1994, p.265). Examples of how reliability is addressed for the assessments within this Programme of Assessment are included under the broader phraseology of validity evidence, reflecting the intertwined nature of the two concepts.

Frameworks for validation

Whilst the College is confident in the quality and quantity of validity evidence currently gathered and evaluated, particularly in relation to the centrally set and administered examinations and assessments, it has been noted that validation is not currently structured in a fully systematic manner. Additionally, the validity argument (as opposed to the interpretive argument) is not always revisited and reviewed at desirable intervals.

In order to address this, a framework for validation will be devised over the next two years, allowing scrutiny of the robustness of the interpretative argument and the validity argument for all categories of assessment. The purpose of producing a validation framework is to state not only what validity evidence is gathered to confirm the assessments are fit for purpose, but also to justify *why* that evidence is appropriate to use, and *how* it is sufficient and proportionate.

The benefits of developing a codified framework are that the College can ensure that resources are targeted appropriately (including those areas where threats to validity are identified), and evidence is gathered in a coherent and planned manner that allows for the easier review of whether validity is within the acceptable range. Further information regarding this planned development is detailed within the 'Future of Assessment' chapter.

How to Use the Programme of Assessment

The Programme of Assessment must be used in conjunction with the RCPCH Progress curriculum and the relevant syllabus for each training level. All trainees should refer to the core syllabus for each level. Level 3 trainees must also refer to either the Level 3 General Paediatrics syllabus or the relevant Level 3 syllabus for their sub-specialty.

The key aspect of the Programme of Assessment is the assessment blueprint. This is a grid indicating the assessment requirements at each level, which assessments must be completed satisfactorily at key waypoints and, where appropriate, the minimum number of assessments required. The critical progression points identified are a) at the end of Level 1 training (prior to commencing work on the middle-grade rota), and b) at the point of Certificate of Completion of Training (CCT).

The Programme of Assessment comprises a wide range of assessments, which must be used in conjunction with the blueprint to develop skills and assess capability. The assessments are a blend of formative and summative; centrally and locally set and administered; and knowledge, skills and capability-based assessments capturing a wide range of evidence which can be integrated to reach judgements as to the trainee's suitability for progression. The assessments also provide trainees with the opportunity to obtain developmental feedback.

Each syllabus document contains more detailed guidance on the assessments to be used to demonstrate the Key Capabilities, which underpin the curriculum Learning Outcomes. The Assessment Grid at the back of each syllabus document lists all Key (mandatory) Capabilities, and indicates the assessment that the RCPCH either mandates or recommends as most suitable for assessing that particular capability. Please note, not all assessments are mandated or their use prescribed, such that trainees may use other assessment types from the list within this Programme of Assessment, where they and their supervisors feel this is appropriate.

The Programme of Assessment Blueprint



| | Level 1 | | | Level 2 | | Level 3 | | |
|---|--|------------------------------|--------------------------|--|--------------------|--|-----|--------------------|
| | ST1 | ST2 | (ST3) ¹ | ST4 | (ST5) ¹ | ST6 | ST7 | (ST8) ¹ |
| Supervised Learning Events | | | | | | | | |
| ePaedMini-CEX & Cbd | No requirement for a minimum total. Aim for quality over quantity. Useful SLEs will challenge, act as a stimulus and mechanism for reflection, uncover learning needs and provide an opportunity for developmental feedback. ^{2,3,4,12} | | | | | | | |
| To include: ⁶ | | | | | | | | |
| ACAT (CEX/CbD) | Optional ⁵ | | | 1 ⁷ | | Optional ⁵ | | |
| HAT (CEX) | 1 | | | 1 ⁷ | | 1 ⁷ | | |
| LEADER (CbD) | Optional ⁵ | | | 1 ⁷ | | Optional ⁵ | | |
| Safeguarding (CbD) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EPA: Gen Paeds* | 1** | | | | | | | |
| EPA: Neonates* | 1 (part a and b)** | | | | | | | |
| DOC | Optional ⁵ | | | 5 ⁷ | | 5 ⁷ | | |
| Assessment of Performance (AoP) | | | | | | | | |
| DOPS¹² | Minimum of 1 satisfactory AoP for each of the compulsory procedures ^{8,9} | | | Minimum of 1 satisfactory AoP for the compulsory procedures ^{8,9} | | Minimum of 1 satisfactory AoP for the compulsory procedures ^{8,9} | | |
| PaedCCF | | | | 1 ¹³ | | 1 ¹³ | | |
| ePaedMSF | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Other evidence required for ARCP progression | | | | | | | | |
| Evidence | Life support ¹⁰ and safeguarding ¹¹ | | | Safeguarding ¹¹ | | RCPCH START* | | |
| MRCPCH Examinations | | | | | | | | |
| MRCPCH Theory exams (FOP, TAS & AKP) | 1-2 exams (desirable) | 2 out of 3 exams (essential) | All 3 exams* (essential) | | | | | |
| MRCPCH Clinical exam | | | | Essential* | | | | |
| Trainer's Report | | | | | | | | |
| Trainer's report (incl. ePortfolio) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

* Critical progression point or waypoint assessments.

** Not currently mandatory. These assessments are being piloted and will become a compulsory element of the Programme of Assessment at a later date.

Explanatory guidance

- The statutory minimum training times are 24 months at Level 1, 12 months at Level 2, and 24 months at Level 3 (all whole time equivalent [WTE]); thus, the training years in parentheses (ST3, ST5 and ST8) might not be undertaken by all trainees, depending upon the individual's progress.

Supervised Learning Events

- The purpose of SLEs is as a means of engaging in formative learning; therefore, a trainee who presents evidence of SLEs that only cover a restricted area of the curriculum runs the risk of being judged as having poor strategic learning skills.
- Trainees should use SLEs to demonstrate that they have engaged in formative feedback. They should record any learning objectives that arise in their Personal Development Plan (PDP) and show evidence that these objectives have subsequently been achieved.
- There is no minimum number of SLEs (other than the mandatory assessments described in note 7). Trainees and supervisors should aim for quality over quantity; a useful SLE will stretch the trainee, act as a stimulus and mechanism for reflection, uncover learning needs, and provide an opportunity for the trainee to receive developmental feedback. Trainees do not need to achieve a prescribed ratio of Mini Clinical Evaluation (ePaed Mini-CEX) to Case-based Discussion (ePaed Cbd) assessments; it is anticipated that more junior trainees might undertake relatively more ePaed Mini-CEXs and more senior trainees undertake more ePaed CbDs, reflecting the increasing complexity of decision making and so forth.
- Trainees are also encouraged to undertake the assessments indicated as optional.
- The numbers of SLEs given for the Acute Care Assessment Tool (ACAT), Handover Assessment Tool (HAT), clinical Leadership skills assessment (LEADER) and Safeguarding CbD are minimum requirements; senior trainees in particular should bear in mind that each of the SLEs is designed for the formative assessment of different aspects of the curriculum and more than this minimum number of some SLEs might be required, depending upon the specific requirements and clinical context of a sub-specialty. Trainees are therefore advised to consult their relevant sub-specialty syllabus, in case there are additional specified assessment requirements.
- At least one of each of these SLEs must be assessed by a senior supervisory clinician (e.g. a consultant or senior Specialty and Associate Specialist Grade [SASG]/specialty doctor), that is, ACAT and HAT during Level 2, LEADER during Level 2 and Level 3, and at least one of the five Discussions of Correspondence (DOC) during Level 2 and Level 3.

Assessment of Performance

- The compulsory procedural skills are listed on the RCPCH website: www.rcpch.ac.uk
- The ePortfolio skills log should be used to demonstrate development and continued competence.

Additional requirements

10. Trainees must also complete accredited neonatal and paediatric life support training during Level 1 training (NLS, EPALS, APLS or equivalent).
11. Trainees must achieve the Level 1 and 2 Intercollegiate Safeguarding Competences by the end of ST3, the majority of Level 3 competences by the end of ST5, and all Level 3 competences along with the additional paediatrician competences by the end of ST8.
12. Trainees can complete up to 25% of assessments during simulation, but they are required to complete a non-simulated assessment for each of the mandatory Directly Observed Practical Skills (DOPS).
13. PaedCCF can be used as an additional tool if required.

RCPCH Assessments



The assessments deployed within the RCPCH Programme of Assessment broadly fall under three categories:

- **MRCPCH examinations:** three theory examinations and one clinical high-stakes examination.
- **Workplace-based assessments:** a variety of SLEs and other assessments carried out in real working situations. These are formative assessments designed to provide the trainee with constructive feedback to improve their performance, although some also serve a summative function. In future, the workplace-based assessment group will also include new assessments of EPAs.
- **RCPCH START:** a formative assessment of readiness for becoming a consultant.

In addition to these assessments, trainees should also use their ePortfolio to collate evidence related to their development, such as reflection or courses completed. The annual trainer's report also forms part of the trainee's ePortfolio record, and must be submitted prior to the Annual Review of Competence Profession (ARCP) meeting.

The table below indicates how each of the assessments relates to the curriculum domains. Information on which assessments relate to the Level 3 General Paediatric or sub-specialty Learning Outcomes can be found within each of the relevant syllabus documents.

The following pages provide an outline of the purpose of each assessment, the rationale for use, and how validity is ensured at all stages – design, delivery, standards setting, and through periodic review.

For more detailed information specifically for trainees and trainers on using, administering or preparing for each examination or assessment, please refer to the [Education & Training pages of the RCPCH website](#).

• = assesses this domain
 (•) = may assess this domain

| RCPCH Assessments | | RCPCH Progress curriculum domains (Incorporating the Generic Professional Capabilities) | | | | | | | | | | |
|-------------------|-----|---|---|--|--|---|-----------------------------|--|---------------------|--------------|------------------------|----------|
| | | Professional values and behaviours | Professional skills and knowledge (communication) | Professional skills and knowledge (procedures) | Professional skills and knowledge (patient management) | Health promotion and illness prevention | Leadership and team-working | Patient safety, including safe prescribing | Quality improvement | Safeguarding | Education and training | Research |
| ePaed Cbd | | • | • | | • | | | | | | | |
| ePaed Mini-CEX | | • | • | | • | | | | | | | |
| DOC | | • | | | • | | | | | | | |
| LEADER | | • | | | • | | | | | | | |
| ACAT | | • | | (•) | • | | | | | | | |
| SAFEGUARDING Cbd | | • | | | • | | | | | | | |
| HAT | | • | | | • | | | | | | | |
| ePortfolio | | • | | | • | | | | | | | |
| ePaedMSF | | • | | | • | | | | | | | |
| PaedCCF | | • | | | • | | | | | | | |
| START | | • | | | • | | | | | | | |
| EPAS | | • | | | • | | | | | | | |
| Trainer's report | | • | | | • | | | | | | | |
| DOPS | | • | | | • | | | | | | | |
| MRCPPCH FOP | (•) | | | | • | | | | | | | |
| MRCPPCH TAS | (•) | | | | • | | | | | | | |
| MRCPPCH AKP | (•) | | | | • | | | | | | | |
| MRCPPCH CLINICAL | | | • | | | | | | | | | |

MRCPPCH Examinations

Membership of the Royal College of Paediatrics and Child Health (MRCPPCH) is gained by passing three theory examinations and one clinical examination. Trainees must gain Membership before progressing beyond the first level of training. The examinations are usually taken during the period of Level 1 paediatric training, although some trainees may have opted to sit one or more examination prior to commencing their specialty training.

The MRCPPCH Theory examinations are completed via computer-based testing.⁴ The syllabus and blueprint ('test specification') for the Theory examinations are published on the [RCPCH examinations web pages](#). The MRCPPCH Clinical examination is currently under review, with the plan to implement significant changes, some of which are outlined below.

Examinations

Foundation of Practice – theory examination

The purpose of the Foundation of Practice (FOP) examination assesses the candidate's knowledge, understanding and clinical decision-making abilities. The examination lasts 2.5 hours and uses a combination of Best of Five (BO5) and extended matching questions (EMQs). Its focus is on the knowledge required to safely manage common paediatric problems which might be encountered in primary and secondary care settings.

Theory and Science – theory examination

The purpose of the Theory and Science (TAS) examination is to assess the basic scientific, physiological and pharmacological principles upon which clinical practice is based, and the candidate's grasp of the principles of evidence-based practice. The examination lasts 2.5 hours and uses a combination of BO5 and EMQs. Its focus is on the basic science, anatomy and physiology required to solve clinical problems that are likely to be encountered during a career as a paediatrician.

Applied Knowledge in Practice – theory examination

The purpose of the Applied Knowledge in Practice (AKP) examination is to assess the candidate's knowledge, understanding and clinical decision-making abilities. AKP comprises two 2.5 hour examination papers, sat on the same day. The candidate's scores are combined from the two papers to generate an overall score. In addition to the BO5 and EMQs used in the other theory examinations, the AKP examination also includes 'n from many' questions. Its focus is on the application of this knowledge into clinical practice and includes rarer presentations that can be encountered during clinical practice over a career.

⁴ Reasonable adjustments including the provision of a paper-based test can be made where required. See the Reasonable Adjustments policy in the RCPCH Examination rules and regulations for more details.

MRCPCH Clinical examination

The purpose of the Clinical examination is to assess whether candidates have reached the standard in clinical skills expected of a newly appointed Specialty Trainee at year 4 (ST4). It is an Objective Structured Clinical Examination (OSCE) style format comprising ten stations, which test candidates in:

- communication skills
- history-taking and management planning
- recognition and diagnosis of clinical signs and symptoms
- physical examination skills
- child development

In two of the stations, candidates are expected to display their competence in communication by being given information to impart and discuss with a child, parent/carer or colleague. Currently, one station uses a selection of videos to assess a candidate's ability to treat acute paediatric/neonatal conditions. Scenarios for this station are specifically developed with recognition towards the challenges of testing acute/neonatal conditions in an OSCE, which relies heavily on the use of real patients.

Candidates are expected to demonstrate proficiency in these domains, although currently there can be overall compensation.

Anchor statements outline the expected general standard for each station and are provided to all examiners in order to aid them in reaching their overall judgments. More information on these can be found on the RCPCH website: <http://www.rcpch.ac.uk/training-examinations-professional-development/assessment-and-examinations/examinations/mrcpch-clini>

The examination is guided by important educational principles, while holding true to the considerable strengths of a clinical examination, including the examination of real children.

Due to the requirement of patient participation, clinical examinations have historically been held on hospital wards or medical education centres that have access to medical equipment. As such, a variety of centres at varying locations across the UK are required within designated examination weeks/diets. A typical week of an MRCPCH Clinical examination might see as many as 12 host centres accommodating up to 24 candidates per day. Candidates are tested in a full spectrum of clinical cases.

Ensuring validity

Design (theory examinations)

The RCPCH has developed a substantial and secure bank of questions for use in the three parts of the theory examinations covering the full spectrum of the syllabus. This bank is constantly reviewed and new questions are written to ensure that questions reflect advances in assessment and clinical practice, and incorporate any updates to the curriculum.

All questions ('items') for the theory examinations are authored by senior trainees and consultants. Recent advances have included new training packages for all question writers, launched in Spring 2017. This includes additional guidance on writing questions for candidates from overseas, or who have protected characteristics. Questions are reviewed by an expert theory reviewer (senior theory examiner) before being included in the question bank. The theory examinations are pulled to a structured blueprint, which ensures an appropriate and consistent breadth and depth of content for each examination paper. This is based upon a 'systems-based' approach defined by the relevant syllabus, which reflects the relative importance of different syllabus areas to clinical practice.

The RCPCH is satisfied as to the evidence base for all item types used to assess the knowledge of candidates, described as follows:

Best of Five

The BO5 item type is a multiple choice single response item; it is comprised of a stem, a lead in and five options, broken down into one key and four plausible distractors. While there has been extensive research into the ideal number of options a multiple choice question (MCQ) should have, whether it be three (Nwadinigwe & Naibi, 2013), four (Rogers & Harley, 1999) or five (Haladyna, Downing & Rodriguez, 2002); the RCPCH has adopted the five options approach. The decision to do so was based around the psychometric durability and defensibility of the item type, whereby the fewer the options in an item, the higher the chances of guessing the key. Therefore, by increasing the number of options we reduce the guessing effect (three options: 33.3%, four options: 25%, five options: 20%) (Woodford & Bancroft, 2004), which in turn increases the psychometric quality of the examination scores, making them more reliable and valid.

Extended Matching Question

The EMQ is an R-type item, which is based on three separate stems that use a single common list of options; the RCPCH EMQ consists of a theme, three different stems, a lead in and an option list with ten options that consist of nine distractors and a key (the key may or may not vary by stem). EMQ items are used to assess diagnostic reasoning within medical education, where using a large number of options directs the items towards being a free response item, which forces the candidates to construct an answer (Case & Swanson, 1993) and show an understanding of the relationship between facts (Duthie, Fiander & Hodges, 2007). Similarly to the decision to use BO5 items, psychometric advantages weighed in heavily. The ability to guess successfully is reduced due to the number of options, and by increasing the options available to the candidates this has a discernible impact on the item level statistics. The inclusion of more options results in the item having increased p+ values (difficulty), biserial correlation (discrimination) and reliability (Case & Swanson, 1989; Bhakta, Tennant, Horton, Lawton &

Andrich, 2005).

“n from Many”

The “n from Many” item type is a multiple choice multiple response question that in some ways can be seen as an extension the EMQ. It is used solely in the AKP examination of the MRCPCH. This item type is made up of a stem, a lead in and a list of options; unlike the BO5 this list will exceed one key and five options. The number of keys will be outlined in the stem and can vary between two and three keys. This item type was chosen as it addresses decision-making situations when consultants are required to provide a list of options, such as to request diagnostic studies or initiate the next steps in patient management (Case, Swanson & Ripkey, 1994). The RCPCH adopts a partial credit approach with regard to this item type, as the dichotomous, all or nothing approach tends to skew discrimination and difficulty values to either extreme (Ripkey et al., 1994; Bauer, Holzer, Kopp & Fischer, 2011).

Multiple True/False

Multiple True/False items were previously used in the MRCPCH examinations, but have now been discontinued. In 2015, internal research was carried out on the usefulness and predictive validity of item types in use in the MRCPCH, and it was noticed that by replacing Multiple True/False items with BO5 items the reliability of each part of the MRCPCH examinations could be increased.

Design (clinical examinations)

Scenarios for the MRCPCH Clinical Communication and Video stations are authored by senior trainees and consultants. New group members are selected based on their evidenced engagement in medical education and training. They are then trained and provided with guidance on the writing of scenarios. Scenarios are reviewed by Group Members/Vice Chairs/Chairs before being included in the relevant scenario banks. The Communication and Video Station scenarios are pulled to ensure an appropriate and consistent breadth and depth of content for each examination day, taking into consideration the specific content of the other seven stations. The remaining stations include five system-specific clinical examination skills stations, one history-taking and management planning station, and one child development station, all of which currently employ real patients.

The RCPCH has developed a specific training programme to develop consultants in the role of being a clinical examiner, having given attention to this issue since the examination was reworked into its current format as a multi-station assessment in 2004 (Khera et al., 2005). The aim of the programme is to improve the validity, reliability, and fairness of the examination. The duration of the examination and the ten distinct assessments of the candidate support reliability. Candidates are assessed by a different assessor at each station, ensuring that their performance at one station does not influence the next.

Delivery

Theory examinations are sat in line with the RCPCH Examination regulations, which include comprehensive requirements for centres, invigilators, candidates and equipment to ensure a fair and high-quality assessment experience. The College has also worked to overcome cheating in theory examination centres by an analysis of similarities as part of the quality assurance process (McManus, Lissauer & Williams, 2005). Reasonable adjustments, special consideration and appeals are all available to candidates, in line with published processes.

The clinical examination is conducted in a number of different hospitals and education facilities in the UK and abroad, referred to as ‘host’ centres. Each host centre has designated host examiners who organise the examination in line with the RCPCH guidance and with support from the latter to ensure consistency.

The clinical examination relies heavily on support from the examiners. All MRCPCH examiners are appointed based on meeting the requirements and expected standards published on the [RCPCH website](#). The RCPCH provides a comprehensive training and support package for newly appointed and existing examiners, and has recently introduced a formalised selection, appointment and training process for senior examiners who are responsible for quality assurance and support on each examination day.

The training and support includes:

- Provision of all relevant supporting guidance/examiner portfolio documents
- Examiner elects (examiners in training), who are required to complete a multiple choice question to demonstrate familiarity with the content of supporting guidance before attending training
- A full day training package including modules on:
 - equality and diversity considerations within clinical examinations
 - the benchmarking process for all clinical stations
 - reviewing video examples of examiner/candidate interactions
 - mock marking exercises
 - reference to the expected standard of performance by domain/feedback categories/system focus
- A mentoring system whereby experienced examiners are paired with examiner elects on examination days to shadow, observe, benchmark and mark. Mentors are required to complete feedback on examiner elect performance on the day(s) of the examination
- Psychometric review of examiner performance including comparison of the average mark with those of peers, hawk/dove index feedback/ discriminative ability/ t-test score demonstrating whether the marks examiners award discriminate well in comparison with candidates' overall performance
- Examiner retraining, featuring a full day training programme similar in content to examiner elect training, is held once a year. All MRCPCH examiners are expected to attend every five years.

Standard setting

There are several recognised processes for standard setting theory examinations. For the standard setting study, the RCPCH adopted the modified Angoff method. The modified Angoff method requires between 5 and 10 Subject Matter Experts (SMEs), while the RCPCH uses a minimum of 7 to first reach consensus (Norcini & Shea, 1997) on a definition of the minimally-competent or borderline candidate (Boursicot & Roberts, 2006). SMEs then read and answer each item in the test and predict the proportion of minimally-competent candidates who would answer each item correctly. The resulting ratings are analysed and discussed with the participating SMEs. The SMEs are given an opportunity to affirm or revise their original ratings, and then presented with a ‘reality check’ where they can see how the cohort performed on

each individual item; at this point SMEs are given a final opportunity to revise their ratings. Summing the ratings across items and across SMEs followed by a weighted average based on mark allocations provides a recommended cut score. The RCPCH facilitates this process for each theory examination, using an in-person standard setting panel. The results of this process are provided to the RCPCH Examinations Executive, who determine the final cut score.

For the Clinical examination, standard setting or benchmarking is carried out for all stations (except the video station), with a pair of examiners agreeing on the pass/fail criteria prior to the examination commencing. Patients/scenarios/role-players are engaged in this process, which takes place immediately before each examination circuit begins. A senior examiner is appointed for all examination centres. They ensure that there is quality assurance of the standard setting procedure, providing advice when there is debate regarding the recommended standard to be set.

In 2016, senior examiner training was commenced to ensure all senior examiners follow a standard procedure in the execution of the examination to ensure fairness and consistency across all examination centres.

Monitoring and review

The RCPCH monitors pass rates at the cohort and various group levels including, but not limited to, ethnicity, training grade and Deanery. We are continuing to ensure that our examinations are in line with GMC expectations, and considerations are constantly being expanded to identify possible instances of differential attainment. The RCPCH is continually in the process of conducting in-house reviews of our current methods to ensure they are as robust and up to date as possible. The FOP and TAS examinations have been used as a basis to determine which types of items would result in an increased reliability through reliability modelling. In relation to the standard setting process, field research has been concluded on the reliability and repeatability of our Angoff process. Furthermore, we have gathered feedback from Angoff judges to understand why they participate, which resulted in data ensuring the correct recruitment and high retention of SMEs as Angoff judges.

The Clinical examination has been subject to gradual review since its inception, leading to a novel video station being introduced in an attempt to involve the acute assessment skills of children presenting with acute medical issues. Evaluation of this station correlated its scores positively with performance in the OSCE overall (Webb et al., 2012). A full review of the Clinical examination is currently underway, including an anticipated move from linear to domain-based marking. A pilot was carried out in July 2016, and the results evaluated by a group of senior examiners who had observed the pilot. With modifications, a further pilot is proposed in September 2017. The revised examination is expected to be implemented approximately one year later, subject to GMC approval.

Workplace-based Assessments

Workplace-based assessments (WPBAs) were ideologically incepted on the back of Modernising Medical Careers, and began first use in foundation training (Norcini & Burch, 2007). Despite a clear formative focus, in paediatrics they had tended to be used in a summative manner with a specific number defined as requiring completion by the end of each training year. The RCPCH embraced the ideology of workplace assessment once they were introduced in the Foundation Year programme.

In 2013, the formative WPBAs were relaunched as Supervised Learning Events (SLEs), emphasising their primary formative intention and distinguishing them from Assessments of Performance, which are summative WPBAs.

There is no minimum number of SLEs; however, at least one of each of these SLEs must be assessed by a senior supervisory clinician (e.g. a consultant or senior SASG/specialty doctor), that is, ACAT and HAT during Level 2, LEADER during Level 2 and Level 3, and at least one of the five DOC during Level 2 and Level 3.

Trainees and supervisors should aim for quality not quantity; a useful SLE will stretch the trainee, act as a stimulus and mechanism for reflection, uncover learning needs and provide an opportunity for the trainee to receive developmental feedback. Trainees do not need to achieve a prescribed ratio of ePaed Mini-CEX to ePaed CbD assessments; it is anticipated that more junior trainees might undertake relatively more ePaed Mini-CEXs and more senior trainees undertake more ePaed CbDs, reflecting the increasing complexity of decision making, and so forth.

Trainees should consider carefully which Learning Outcomes are being assessed when recording and reflecting on each assessment, only 'tagging' to aspects of the curriculum for which the evidence is valid.

Assessments

Mini-Clinical Evaluation exercise (ePaedMini-CEX)

The purpose of the ePaedMini-CEX is to provide feedback on skills essential to the provision of good clinical care in a paediatric setting.

This assessment was developed for use in the foundation years as part of Modernising Medical Careers, and has been modified to map to paediatric assessment standards. It enables trainees to be assessed in real patient encounters. Further specific assessments have been developed for use in the clinical arena, such as ACAT and HAT.

Case-based Discussion (ePaedCbD)

The purpose of the ePaedCbD is to assess clinical reasoning and decision making, and the application or use of medical knowledge in relation to patient care. This is a formative assessment, and so cases should be chosen that have created challenge, doubt or difficulty in order to maximise the learning opportunity.

A family of ePaed CbDs now exist, specifically targeting safeguarding (Safeguarding CbD) and leadership (LEADER).

Handover Assessment Tool (HAT)

This is a sub-set of the ePaed Mini-CEX assessment. The purpose of the HAT is to evaluate the effectiveness of a trainee's contribution to handover, and is designed to be sufficiently flexible to be used in a range of handover settings.

Acute Care Assessment Tool (ACAT)

This is a sub-set of the ePaed Mini-CEX and ePaed CbD assessments. The purpose of the ACAT is to provide the trainee with formative feedback on their ability to integrate multiple skills in a complex and challenging environment with competing priorities, and over a sustained period, such a paediatric 'take', and the intensive care shift of post-take ward round.

Clinical Leadership skills assessment (LEADER)

This is a sub-set of the ePaed CbD assessment. The purpose of LEADER is to provide the trainee with formative feedback on their leadership skills in relation to a specific case or problem. Whilst only compulsory at Level 2 and Level 3, it is also strongly recommended for use at Level 1 to highlight the broad scope of leadership required from doctors at all levels of their clinical practice.

Directly Observed Practical Skills (DOPS)

The purpose of the DOPS is to assess the trainee's competence to perform specific procedures without supervision. DOPS are both formative, as trainees should be given feedback after each assessment, and summative, as all procedures must be demonstrated to a satisfactory level (i.e. competent to perform without supervision).

The full list of procedures for which a DOPS must be completed satisfactorily are contained within the core syllabus document for each level, and are available as a separate list on [DOPS page of the RCPCH website](#).

Discussion of Correspondence (DOC)

The purpose of the DOC is to provide a structured assessment and opportunity for learning development across a variety of types of written communication (e.g. correspondence and clinical notes).

Multi Source Feedback (ePaedMSF)

The purpose of ePaedMSF is for the trainee to receive and reflect on feedback from a wide range of individuals from their professional sphere.

ePaedMSF has evolved from the Sheffield Peer Review Assessment Tool (SPRAT), and has been adapted to each level of training (Archer, Norcini & Davies, 2005). This assessment is invaluable for assessing a trainee's performance over time, in everyday practice. It has not evolved significantly since introduction, and there are concerns about the self-nomination of raters (Archer, McGraw & Davies, 2010), and also the issue of 'scores' across multiple diverse domains. Further review of how this tool can be developed to improve its value is underway.

Carers for Children Feedback (PaedCCF)

The purpose of the PaedCCF is to gather feedback from parents and carers so that doctors can measure how effectively they interact and communicate with parents/carers and children. Whilst more commonly used for consultant revalidation, this can also be utilised by trainees where required as part of their reflection and/or where this has been identified as a specific area requiring development.

Entrustable Professional Activity Assessments (EPAs) for Informing Critical Progression Decisions at Level One Training (To be piloted)

In future, the RCPCH aims to introduce workplace based assessments focused on EPAs to inform decisions relating to trainee progression at the critical progression point at the end of Level 1 training. This will enable assessment of several Learning Outcomes (mapped to the GPC framework) in an integrated fashion, within the context of a meaningful clinical activity. Each EPA will result in an entrustment decision (ten Cate, 2013), confirming that the trainee is able to undertake specific responsibilities safely and independently. The EPA assessments will inform the progression decision, which will be taken by the panel at the trainee's ARCP.

As the RCPCH is submitting the curriculum and Assessment Strategy immediately after the publication of the revised GMC standards and assessment guidance, these assessments are still at an early stage of development. It is anticipated that trainees and assessors will require considerable support and training in the concepts and application of undertaking EPA-based assessment, in a similar way to that required when WPBAs were introduced. The EPAs described below will be introduced initially as a pilot, and evaluated for their acceptability, fairness, reliability, validity and utility in informing progression decisions, before the RCPCH seeks further regulatory approval prior to mandating their use.

The EPAs are centred on a trainee's ability to manage acute unscheduled care within the context of general paediatrics and neonatology, as these were identified at an RCPCH Heads of Schools and Regional Leads workshop in December 2016 as priority areas in which entrustment decisions are required to ensure patient safety.

The following EPAs have been developed from an existing and approved WPBA, the ACAT, whose purpose has been described above.

Neonatal EPA

This comprises two arenas of professional activity:

Part (a): Term / Late Preterm

Management of the term infant (37+ weeks) and late preterm infant (35–36 weeks), including resuscitation at birth; identification of infants requiring specific investigations or monitoring (e.g. risk of sepsis, hypoglycaemia and drug withdrawal); postnatal newborn examination and review; and the identification, investigation and initial management of infants who require neonatal unit admission.

Part (b): Intensive Care

Management of the neonatal intensive care unit, including the stabilisation of the infant following preterm delivery; investigation and initial management of infants who are acutely unwell (e.g. septicaemia, acute respiratory deterioration and neurological dysfunction); and planning and directing care for infants with high dependency or special care dependency requirements.

The entrustment decision will be made separately for each neonatal arena and will be adapted from ten Cate (2013).

General Paediatrics EPA

This activity involves planning care and being able to lead the ward round on a general paediatric inpatient unit and assesses bed/cot-side clinical assessment and formulation of management plans; communication with team and family/carer; organisation of clinical team with appropriate prioritisation of clinical tasks arising from ward round decisions; and documentation of admission in the hospital electronic discharge system generating a letter for the family and/or general practitioner.

The entrustment decision will comprise one of three options, adapted from ten Cate (2013), as in the Neonatal EPA above.

Ensuring validity

Design

WPBAs have now been in routine practice for over 10 years, and the fact they are now embedded would support their value in day-to-day supervision across training for trainees and trainers. Following the publication of the GMC's *Learning and assessment in the clinical environment: the way forward* (2011), the RCPCH developed, piloted and rolled out the SLE suite of formative WPBAs.

To date there has been limited published evidence in the literature supporting the validity and reliability of WPBAs, reflecting the challenge of studying such a heterogeneous collection of assessments, undertaken by a diverse cohort of trainees, and identifying a meaningful measure of their change in behaviour as training progresses (Miller & Archer, 2010). Therefore, as the RCPCH is able to improve its data set, this Assessment Strategy commits to the intention to monitor and evaluate the performance of the approved SLEs, seeking opportunities to refine either the assessment or the guidance, as well as evaluating the more recent assessments such as EPAs.

Delivery

WPBAs are delivered by the clinical and educational supervisors of trainees in training posts across the NHS hospitals of the UK. Many Schools of Paediatrics and Trusts run educational supervisor training, as well as the bespoke Paediatric Educational Supervisor training course run by the RCPCH.

The assessments are now embedded, and so have become a part of the fabric of the day-to-day work for paediatric trainees who have in the main become proactive in ensuring their ePortfolio evidences their educational achievements in sufficient quality and quantity as they progress through training. The Schools of Paediatrics oversee their delivery and the ARCP meetings, while the RCPCH has published the *Workplace Based Assessment Falsification Protocol*, to be followed where falsification of evidence related to WPBAs/SLEs is suspected.

The assessments are recorded through the RCPCH Kaizen ePortfolio, meaning they are available to be completed as necessary, either in real time, on the job or at a pre-arranged time with the trainee and educational or clinical supervisor.

Standard setting

By the nature of this formative assessment, the standard depends on the developmental conversation between the trainee and the trainer. These are innately personal episodes of feedback on an individual's performance as judged by a senior colleague. Reference to a description of good performance and areas to develop are usually included, with a section for trainee reflection on the feedback.

Until recently, the RCPCH's WPBAs, ePaed CbD and ePaed Mini-CEX assessments were similar to those used in other specialties, requiring a rating or a score to be completed in various aspects of the care or case management. While attempts were made to explain and standardise the way the assessments were performed, use specific descriptors in place of the numerical score, and align the response scale against expectations about performance and the expectations of those 'judging' the assessment in order to improve validity and reliability, they have remained controversial (Crossley et al., 2011; Crossley & Jolly, 2012).

The major issues identified are a low score being perceived as failure, a 'tick box' attitude to completion, not using assessment outcomes appropriately as a developmental conversation, not embedding them in the working week, not knowing how to make the complex judgements, and not triangulating with other feedback across assessments through clinical and educational supervision (Workplace Based Assessment Working Group, 2010). To address this, when the new SLEs were published in 2013 the scores were removed, making each assessment more formative with written feedback in various domains for each assessment, using the exemplars and descriptors published on the College website (<http://www.rcpch.ac.uk/assessment>). The RCPCH is leading work in this area, with the College recently approach by a publisher to request permission to use the ePaed Mini-CEX exemplar in a book chapter for a text on Medical Education.

Monitoring and review

The College holds a large data set from SLEs over time, with research projects being carried out by the in-house psychometric team as requested to support monitoring and continual improvement. A project assessing the validity and reliability of Multi Source Feedback (MSF) is planned. Quality assurance is necessary to ensure reliability and validity. Triangulation is key; one tool is unlikely to tell the whole story, so the full suite of assessments is necessary to give a rounded view of the trainee across many domains and in a variety of different areas. While the assessments can be validated and set centrally by the College, their use in support of a trainee for a progression decision comes down to the evidence presented in their ePortfolio and the trainer's report, which inform the ARCP panel held by the Schools.

With the recent introduction of a new ePortfolio, the RCPCH is hoping to gather an even more diverse set of data, allowing in-depth scrutiny of how the SLE assessments perform for different groups of trainees with a variety of specific characteristics. Locally, it is expected that Heads of Schools are aware of how SLEs are used and performing within their trainee cohort. Heads of Schools report to the RCPCH annually on all matters related to training and assessment, and are encouraged to raise any issues related to the SLEs through this forum, and to share examples of best practice regarding how they carry out and monitor assessment.

RCPCH START

The RCPCH START assessment

The RCPCH Specialty Trainee Assessment of Readiness for Tenure (START) is a formative, multi-scenario assessment aimed at assessing consultant readiness. It has been mandatory for all paediatric trainees to complete the assessment since 2012 (i.e. those entering ST6 from August 2011 onwards). RCPCH START exists to help bridge the gap between training and consultant appointment, and is designed to assess trainees in areas they have not been assessed previously.

Using scenarios based on commonly encountered situations, RCPCH START assesses across six marking domains:

- Clinical decision making and prioritising
- Knowledge
- Managing complexity
- Professionalism
- Safety and risk management
- Communication.

The assessment comprises 12 scenarios around high-level skills. It is undertaken during Level 3 of paediatrics training, usually at ST7, to enable development areas to be addressed. The assessors, all paediatric consultants, facilitate a professional conversation with the senior trainees to assess their consultant readiness skills within a given scenario in the style of Schon (1983). Aspects assessed include prescribing, critical appraisal, logistics, management, ethics, safeguarding, leading a ward round and handover.

Feedback from the assessment is collated and provided to the trainees several weeks after the assessment through their ePortfolio. Personal Development Plans in any areas assessed as needing development can be made by the trainee with their educational supervisor, to work on in their penultimate training year.

Ensuring validity

Design

As part of the initial development of RCPCH START, two pilots were held in 2009 and 2010 that were well received and evaluated (McGraw, 2010).

The assessment is currently mapped to the four domains of the GMC's Good Medical Practice (GMC, 2013), and therefore align to the subsequently published GPCs. At the next review, the RCPCH will consider if a more explicit alignment is required. Scenarios are broadly generic, although some sub-specialty specific scenarios are used as this allows for more robust assessment of the trainees' capability in a more familiar clinical scenario. Scenarios are authored and reviewed by experienced clinicians, familiar with the requirements for the assessment. As noted above, domains are used consistently for assessment, ensuring reliability.

The teaching station is a novel teaching scenario of 'doing' reaching the pinnacle of Miller's pyramid (Miller, 1990), where the trainee does a micro-teach within the assessment station to medical students based on a given or trainee-selected topic (Reece & Fertleman, 2015).

Delivery

The assessment is carried out by trained RCPCH START assessors, providing consistency and externality (i.e. offering feedback from assessors outside the trainees' local programme).

Benchmarking sessions take place at the start of each assessment session, helping to ensure consistency in the standard required across all circuits. A programme of in-assessment peer observation of assessors by more experienced assessors contributes to internal consistency, validity and reliability, and provides a mechanism for additional scrutiny of specific candidates if a serious concern is raised and more detailed feedback will need to be provided.

The assessment is invigilated by RCPCH staff, and different scenarios are used on each of the two days to ensure the confidentiality of the assessment.

The provision of formative feedback is a crucial aspect of the assessment process, with trainees receiving feedback on their performance in each of the scenarios and across the six domains. Areas for development are identified by the assessors, and the trainees are then required to meet with their educational supervisor and plan how to address these developmental issues.

Standard setting

All assessors receive training prior to participating in the assessment, and take part in benchmarking at the beginning of each session to ensure consistency in how each scenario is assessed. Supporting assessors sample, observe and support throughout. Detailed analysis for each scenario and assessor is subsequently undertaken and provided to the RCPCH START Board for review and action when required. The RCPCH START Board also reviews the verbatim feedback for trainees where serious concerns were raised to ensure this is of a suitable quality to be of formative value, before being shared with the trainees. Feedback is provided in line with the guidance of the Academy of Medical Royal Colleges ([AMRC], 2016), who state that it should be:

- Provided during or immediately after WPBAs
- Descriptive, non-judgemental and focused on trainees' behaviours
- Specific and related to the learning goals
- Used to form action plans detailing any future learning
- Confirmed by the trainees that they understand it.

Monitoring and review

Since inception, 10 diets have been held with positive acceptance from trainees and trainers (Reece et al., 2015). The START Executive is chaired by an appointed clinician with assessment expertise and supported by Vice Chairs with similar interest, as well as trainee representation and key College staff. The Executive meet at least 3 times a year and report to the College's Assessment Executive. A feedback survey is issued to all candidates following each START assessment, and the results of this together with detailed psychometric analyses of the performance of each station and assessor are shared with the START Executive committee.

An acceptability survey of RCPCH START showed general acceptability by trainees and assessors. Over 5 sessions, a total of 507 paediatric trainees performed the assessment. Two hundred and seventy-three responded to a survey on acceptability (response rate = 54%), while of the 181 assessors, 112 responded (62%). Seventy-two percent of the trainee responders agreed that START is fair and consistent, 72% agreed it is a good assessment of skills that have not been assessed elsewhere in training, and 63% agreed that START is a good assessment for determining 'readiness' for consultant practice. Ninety-five percent of the assessors who responded agreed that START is a good assessment of skills that have not been assessed elsewhere in training, and 96% agreed that it is a good assessment for determining readiness for consultant practice.

More recently, studies of trainee satisfaction have shown that START is a good preparation for consultant interview and assesses in the range of issues a newly appointed consultant will face.

Guidance for Annual Reviews of Competence Progression (ARCP)

Throughout training there should be engagement with Good Medical Practice and the learning process (curriculum, formative and summative assessment) by regular participation in SLEs and utilising the ePortfolio to demonstrate that the requirements of the GMC's approved curriculum and associated assessment system have been met. Examples of evidence include:

- Educational supervision documentation of meetings and outcomes
- Regular participation in SLEs that sample the curriculum (as laid out in the assessment system)
- Examination outcomes
- Professional Development Plan
- Trainer's report
- Reflective entries
- Skills log
- Record of training events
- Teaching resources
- Audits
- Clinical governance/quality improvement activities
- Presentations/research/publications.

The educational supervisor should utilise much of this evidence when completing the trainer's report, as this will be used to inform the ARCP panel. Educational supervisors will also find useful information in the *College Assessment Guide for Trainees and Trainers*.

The trainee should maintain their ePortfolio in an up-to-date and well-organised manner, including:

- A current CV
- An active Personal Development Plan
- Evidence of regular reflective practice
- Evidence of teaching activities
- Evidence of educational meetings/Continued Professional Development
- Evidence of governance/quality improvement activities
- Evidence of research/presentations/publications
- Mandatory School training days
- Required course certificates (e.g. resuscitation and safeguarding)

All the above will be relevant to the trainee's stage of training.

Satisfactory completion of Level 1 training requirements

Trainees must demonstrate that they have fulfilled all Level 1 Learning Outcomes, including the Key Capabilities for each, as specified in the Level 1 syllabus. Evidence must include:

- MRCPCH Examination. Trainees cannot progress from Level 1 (ST3) without passing all 3 MRCPCH 'written' (now computer-based) examinations and the MRCPCH Clinical examination. Trainees cannot progress from ST2 without passing 2 out of the 3 written examination papers (now computer-based)
- Accredited paediatric and neonatal life support training
- SLEs (see NOTE below), covering:
 - A minimum of 6 core acute conditions (respiratory, gastroenteritis, convulsions, fever, rash and abdominal pain) to be covered using ePaed Mini-CEX and CbDs
 - A minimum of 1 case (per training year) with a safeguarding element in the form of a Safeguarding CbD
 - A minimum of 1 HAT (CEX) (during the period of Level 1 training)
 - The LEADER (CbD) and ACAT (CbD/CEX) are optional, although their use should be encouraged
- One Satisfactory DOPS to cover the following compulsory procedures:
 - Bag/mask ventilation
 - Peripheral venous cannulation
 - Lumbar puncture
 - Tracheal intubation (of newborn infants)
 - Umbilical venous cannulation
- The skills log within ePortfolio completed and maintained for all practical
- procedures in the Level 1 framework
- Minimum of 1 satisfactory ePaedMSF per year (not pro rata) to cover neonatal and
- general paediatric practice
- Up-to-date ePortfolio
- An annual trainer's report that summarises the evidence to be presented to the ARCP
- Enhanced Form R
- GMC Survey Receipt.

N.B. In future, EPA assessments will also be required at this critical progression point, although at present these will be used as a pilot only.

Satisfactory completion of Level 2 training requirements

Trainees must demonstrate that they have fulfilled all Level 2 Learning Outcomes, including the Key Capabilities for each, as specified in the Level 2 syllabus. Evidence must include:

- Up-to-date accredited paediatric and neonatal life support training
- SLEs covering work in general, neonatal and community paediatrics, on wards and in clinic settings that include:
 - A minimum of 1 case per training year with a safeguarding element (Safeguarding CbD)
 - A minimum of 1 LEADER (CbD) per training year*
 - A minimum of 1 HAT (CEX) per training year*
 - A minimum of 1 ACAT (CbD/CEX) (during the period of Level 2 training)*

* At least one of these SLEs must be assessed by a senior supervisory clinician (e.g. a consultant or senior SASG/specialty doctor)

- Skills log within ePortfolio updated, showing continued competence for all Level 1 and Level 2 practical procedures
- Minimum of 5 satisfactory DOC assessments over the period of Level 2 training, where at least one of the DOC must be assessed by a senior supervisory clinician (e.g. a consultant or senior SASG/specialty doctor)
- Minimum of 1 satisfactory ePaedMSF per year (not pro rata) to cover neonatal, community general paediatric posts
- Achievement of the Level 2 RCPCH General Paediatric curriculum safeguarding competences (Safeguarding CbDs) and the majority of the Intercollegiate Safeguarding Level 3 competences
- PaedCCF can be used as an additional tool if required
- An up-to-date ePortfolio
- An annual trainer's report that summarises the evidence to be presented to the ARCP
- Enhanced Form R
- GMC Survey Receipt.

Satisfactory completion of Level 3 training requirements

Trainees must demonstrate that they have fulfilled all Level 3 Generic Learning Outcomes and the Specialty Outcomes for General Paediatrics or their sub-specialty, including the Key Capabilities for each as specified in the Level 3 syllabus. Evidence must include:

- Accredited paediatric and neonatal life support training
- SLEs that feature the core conditions required by the specialty/sub-specialty, to include:
 - A minimum of 1 case per training year with a safeguarding element (Safeguarding CbD)
 - A minimum of 1 LEADER (CbD) per training year*
 - The HAT (CEX) and ACAT (CbD/CEX) are optional, although their use should be encouraged, depending upon the sub-specialty context

* At least one of these SLEs must be assessed by a senior supervisory clinician (e.g. a consultant or senior SASG/specialty doctor)

- Satisfactory DOPS to cover for each practical procedure in the Level 3 framework if relevant for the sub-specialty (provide feedback for Level 1 and Level 2 trainees)
- Minimum of 5 satisfactory DOC assessments over the period of Level 3 training, where at least one of the DOC must be assessed by a senior supervisory clinician (e.g. a consultant or senior SASG/specialty doctor)
- Minimum of 1 satisfactory ePaedMSF per year (not pro rata)
- Achievement of the Level 3 RCPCH General Paediatric curriculum safeguarding competences (Safeguarding CbDs), the Intercollegiate Safeguarding Level 3 competences and the additional competences for paediatricians
- PaedCCF can be used as an additional tool if required
- Completion of the START assessment and evidence of implementing any targeted developmental feedback through the trainee's Personal Development Plan
- An up-to-date ePortfolio
- An annual trainer's report that summarises the evidence to be presented to the ARCP
- A relevant sub-specialty College Specialty Advisory Committee (CSAC) progression form for GRID trainees, where applicable with a recommended ARCP outcome for the sub-specialty element of their training
- Enhanced Form R
- GMC Survey Receipt.

Evaluation of Supervised Learning Events

The decision in 2016 to remove the minimum number required for most SLEs reflects the RCPCH's focus on quality over quantity. Supervisors and ARCP panels should consider the extent to which trainees have effectively used the SLEs to support and evidence their training and development, using the following guidance:

| | |
|--------------------------|---|
| Poor/unacceptable | <ul style="list-style-type: none"> • Only compulsory SLEs undertaken. • No evidence of reflection. • No evidence of how feedback informed practice. |
| Good/acceptable | <ul style="list-style-type: none"> • Undertaking SLEs in a variety of clinical situations, with a range of assessors. • Evidence of reflection and/or feedback informing practice. |
| Excellent | <p>In addition to the good/acceptable criteria:</p> <ul style="list-style-type: none"> • Using SLEs in a novel and innovative manner • Evidence of self-challenge, using SLEs to gain insight into, or to challenge, weaker areas of practice • Mature reflection, with consideration of how future practice has been informed • Evidence of completion of action plans/learning objectives, arising as a result of the SLE feedback. |

Feedback and Reflection

Giving feedback

Feedback to any learner (trainee) is sometimes seen as merely providing a commentary on what the learner has achieved, or what corrections need to be made. Providing the learner with feedback should be much more than that. Feedback can be formative or summative.

Formative feedback is that which supports the trainee with learning and development, and as it is not assessed or graded, it therefore carries no summative judgement.

Summative feedback is that which provides a summative judgment about the trainee's performance.

(Irons, 2007)

The focus on feedback is important, as through analysis of the national trainee survey we can identify that trainees value the importance of feedback, but that this is often an area in which they express concerns. This is usually about the quality and depth of feedback from their supervisors, and their view that insufficient time is allowed for this.

Feedback, when performed well, carries the potential to:

- improve the trainee's awareness of their strengths and areas for development, which enhances the trainee learning experience, stretches the trainee and drives the learning to that of excellence;
- boost the trainee's confidence, self-esteem and motivation, thereby leading to greater progress;
- be used for developmental activity, developing generic skills and a greater dialogue between the trainee and supervisor/assessor.

To provide high-quality feedback that enables these factors to optimise their potential does require the supervisor/assessor to devote quite a bit of professional time, and in busy clinical environments this can sometimes be lacking. Negative views can also be a result of perceptions, and while the supervisor/assessor may believe they have provided copious and high-quality feedback, the trainee can feel the opposite, as sometimes feedback is not recognised as such.

What makes feedback more effective?

Trainees value feedback that comes across 'loud and clear', and has the trainee placed firmly at the centre of this. It is produced for the trainee, and the central theme is the trainee's learning needs and experience.

Effective feedback has the following characteristics:

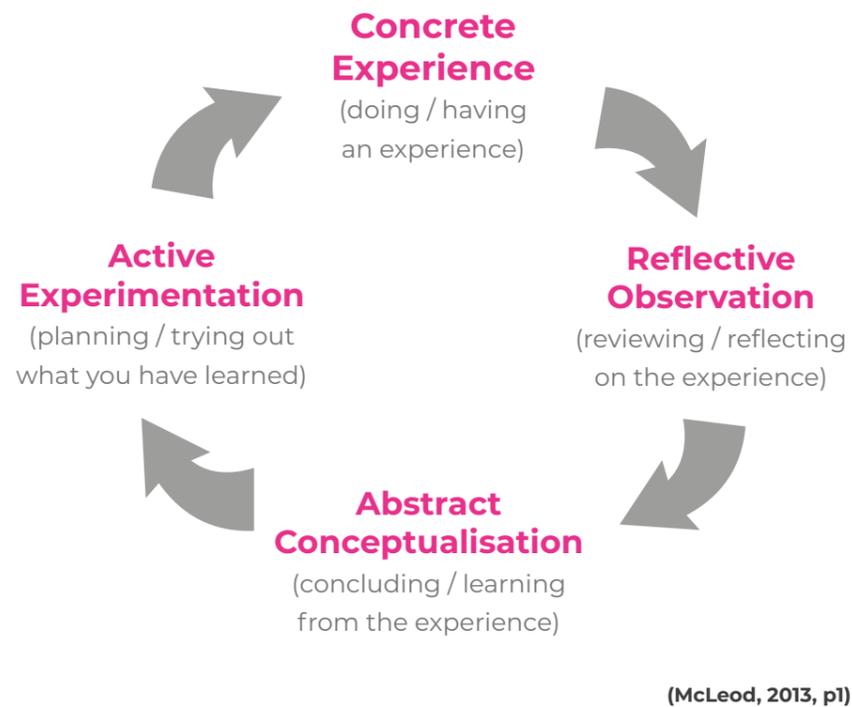
- Feedback is timely and provided as near as possible to the activity or assessment.
- Feedback is seen as being useful to the trainee, while equally the trainee must be able to understand the feedback. It is important therefore that it is clear and comprehensive.
- Feedback must be constructive. It must also consider how future developments and assessments can be supported, e.g. where does this fit with generic skills?
- Feedback should be encouraging and supportive, building on strengths but also identifying areas for development and supporting the trainee to produce clear action plans to address these.
- The focus of feedback is placed on the behaviour/capability and not on the person, ensuring that the Learning Outcome achievement is the primary focus.
- Feedback should not be a 'done' merely to experience it, but a natural dialogue should commence between trainee/assessor/peers, and be conducted in a manner that encourages open communication and honesty.
- Feedback supports the trainee in becoming self-aware and forming their own judgements about their own performance and level of work.

Reflective practice

There are many approaches and opportunities to learn from our experiences. However, identifying these will require us to think about them and consider the impact of our actions and the outcomes. Learning from experiences, both positive and negative, is a powerful learning tool.

This is commonly known as reflective practice and will be a key underpinning concept of the whole curriculum.

There are different models of reflection, but the RCPCH uses that of Kolb's Learning Cycle (1974), outlined in the diagram below:



Reflection should be a core activity for both the trainee and trainers/supervisors, and used as a mechanism to improve practice or to ratify that it is being achieved well.

Kolb's model enables a structured approach to this reflective activity, providing prompts for aspects of consideration.

Ensuring Quality

A robust quality assurance and improvement framework is required to support an effective assessment strategy. The purpose of this is to promote the improving quality of the trainee experience and ensure that the regular review and evaluation of this strategy is maintained.

The RCPCH quality infrastructure for training and assessment is based on the Plan, Do, Study, Act (PDSA) cycle, introduced by Deming (The W.Edwards Deming Institute, 2016). In the context of the Programme of Assessment, this means planning for effective assessment processes, executing those processes, review and evaluation including data analysis and multi-source feedback, and finally implementing any required changes.

This quality framework is already in place, but continually evolves to meet changing standards and in response to the outcome of monitoring and review activity, thereby ensuring that resources are developed to address the area of most need and/or risk.

The framework to support this Programme of Assessment will comprise a number of quality improvement tools and processes that impact on the overarching aspects of assessment. These will include:

- 1. Effective recruitment mechanisms.** It is important that the right trainee is recruited into the paediatric programme, and that trainees are not set up to fail before they have begun. The RCPCH recruitment process includes testing of aptitude and attributes along with any existing skills and knowledge specific to paediatrics. A major research project is planned for 2017–2018 to better understand the factors that impact on trainees applying for and being successful in their application to paediatrics, which will further inform work in this area. Recruitment assessments are to be better aligned with the validity processes already utilised for other RCPCH assessments.
- 2. Support for induction periods and review of induction.** The RCPCH provides guidance through face-to-face workshops and online resources to support College tutors in planning and reviewing inductions. The College Tutor Toolkit is periodically updated, and sharing of best practice is actively encouraged.
- 3. Monitoring of the curriculum and SLE usage.** Reviewing ePortfolios will be key to this process, along with talking to and getting feedback from those managing this in practice. This will also include ensuring that standards are being upheld and that there are consistent approaches to the collection and tagging of evidence, and standardisation between Deaneries being encouraged and monitored.
- 4. Gathering and responding to trainee feedback.** Analysis of the National Training Survey, and other surveys carried out directly by the College and/or its committees will be key to identifying both concerns and good practice. The psychometric team at the RCPCH already plan this analysis into the training year and report their findings to senior management teams. The aim is to increase trainee/trainer satisfaction year on year. Feedback is also gathered through a highly pro-active Trainees Committee, and trainee representatives on the Examinations, Assessment and START Executive Committees.

5. **Data analysis.** This is a strong feature of RCPCH reporting, with a dedicated psychometric team performing regular analysis of all centrally administered examinations and assessments, and as required for other data such as the National Training Survey results. It is hoped that the new ePortfolio system will be able to provide a wider variety of data on the WPBAs and ARCPs to support the team in undertaking further analysis. Data will continue to be provided to the regulatory body as requested. Transparency and openness will be promoted by the publication of outcomes of high stakes metrics and progression assessments.
6. **Quality assurance of examinations.** This takes a variety of forms during the development, delivery, standard setting and review stages, as captured in the validity arguments for each of the assessments within this strategy, and will be developed further within the forthcoming validation framework.
7. **Quality of assessors and supervisors.** This is supported by a strong Educational Supervisor course provided by the RCPCH. Monitoring and review of educational supervisor reports by the RCPCH is a process that will be introduced in 2017. Working alongside the Heads of Schools, a supervisor feedback form is being introduced to offer peer support to supervisors and will enable feedback to be given (using a standardised form) to supervisors about the quality of their feedback to trainees, along with supportive mechanisms for development. The College is supportive of GMC moves towards greater recognition and accreditation for clinicians undertaking assessor roles and other responsibilities supporting education and training.
8. **Monitoring and support for ARCP.** The externality process has been reviewed and strengthened over the past 2 years and this is now managed by the Quality and Standards team at the RCPCH. There is a focused review of where externality is most effective, and the team ensure that the Gold Guide requirements are met across all Deaneries. Improvement aspirations include closer scrutiny of external reporting and feedback to external representatives on the quality of their reports. Additional training and standardisation activities are also being considered.
9. **Self assessment and review.** Annual self assessment contributing towards the Annual Specialty Report (ASR) is undertaken using a range of data sources. This report is submitted to the GMC, as well as shared internally to support continual improvement.
10. **Opportunity for syllabus review.** An annual window of opportunity for amendments to the syllabus will be scheduled into the training year calendar. Proposals for review can be submitted by specialist interest groups and individuals during this predetermined period, for consideration by the Education and Training Quality Committee. Proposed amendments can include both the addition of new medical practices or removal of those that may be redundant, a change to the mandatory or optional nature of a particular element of the syllabus, or to the assessment method or process.

Along with these mechanisms there will be scheduled review points for the evaluation of the effectiveness and impact of this strategy.

By applying the framework processes outlined above, the College will ensure that assessment is monitored and reviewed in a structured, planned and risk-based manner.

Ensuring Equality, Diversity and Fairness in Assessment

As part of the development of the RCPCH Progress curriculum and accompanying Assessment Strategy the College undertook an Equality and Diversity Impact Assessment, considering any actual or potential adverse effects of implementation on those with protected characteristics (as defined in the Equality Act, 2010). The Impact Assessment also included consideration of any likely effect on Less Than Full Time (LTFT) trainees, as these form a sizeable proportion of the paediatric trainee population.

The review considered evidence of the actual or potential impact on three distinct strands, of which one was assessment. The evidence considered came from the existing literature and guidance, existing data relating to the current assessments, review by users, and review by lay experts.

Given that the range of assessments comprising the Programme of Assessment have not been altered in this updated strategy, the impact assessment considered evidence related to the equality and fairness of the existing assessments, taking in similar evidence to the validity evidence contained within this document. In addition to considering the evidence currently held for these assessments, the Impact Assessment also identified further actions required to better confirm the equality and fairness of the assessments.

The RCPCH currently seeks to address issues of equality, diversity and fairness in a range of ways, including:

- Examination and assessment content authored, implemented and reviewed by a diverse range of individuals. Equality and diversity data are gathered regularly for clinicians involved in the work of the Education and Training division, including those committees with responsibility for examinations and assessment.
- Training for examiners and assessors includes consideration of potential adverse effects and how to ensure these are removed or mitigated when designing, authoring and administering examinations and assessments.
- Feedback is gathered from candidates following centrally administered examinations and assessments, and from the entire trainee cohort through the National Training Survey and RCPCH-led surveys.
- The College provides Reasonable Adjustments where evidence supporting a request exists.
- Outcomes for examinations and assessments are monitored to identify any trends that may post a concern with regards to equality, diversity or fairness. Concerns are escalated appropriately, and where relevant may be discussed with the Heads of Schools and/or reported in the Annual Specialty Report.
- Within the RCPCH Progress curriculum, those procedures which are mandatory have been carefully reviewed to ensure nothing is included that is not critical, and therefore there are

no unnecessary barriers to progression through and completion of training. Beyond these mandatory requirements, the assessments can be deployed in a more flexible and tailored manner, meeting the requirements of the individual trainee.

- The use of online examination and assessment systems which can be adjusted (e.g. text, font size and colour) where necessary to meet specific access needs.

The RCPCH is committed to the following actions to enhance its existing work in relation to ensuring equality, diversity and fairness in assessment:

- To continue to review the nominations and appointment process to College positions responsible for examinations and assessments, ensuring equality of opportunity and access.
- To increase the number of characteristics for which examination data is routinely reviewed.
- To implement a range of measure to improve the quality and quantity of the data set that the College holds related to protected characteristics for all those involved in training and assessment, enabling more comprehensive analysis and reporting.
- To develop improved training related to equality and diversity for all clinicians with a role in the examinations and assessments.
- To implement improvements to the review of the complaints log, ensuring that any issues and/or trends are identified promptly and acted on accordingly.

The Future of Assessment

Entrustable professional activities

EPAs (i.e. broad areas of professional practice that can be entrusted to a sufficiently competent individual) were first identified as a concept to be used within medical education as early as 2005 (ten Cate, 2015), but have only been explicitly included in the GMC *Standards for Curricula and Assessment* as a recommended feature of curricula and assessment since the 2017 version, issued as the RCPCH Progress curriculum and this accompanying Programme of Assessment were close to completion.

The use of high level Learning Outcomes within the new curriculum captures the EPAs to some degree, although to make these more explicit within this Programme of Assessment two new EPA assessments have been introduced at the key waypoint at the end of Level 1 training, prior to the trainee being able to begin work at the middle-grade level. Based on the feedback from the RCPCH Progress pilot and first year of full operation, further EPA-specific assessments may be developed in future years, where a need is identified.

Development of a validation framework

As outlined in the 'Ensuring Validity' chapter, the RCPCH is developing a comprehensive validation framework, which will demonstrate how validity is ensured in the development, delivery and review of the Programme of Assessment and the individual assessments within it. The purpose of a validation framework is to capture not only *what* validity evidence is gathered, but also to justify *why* this evidence is appropriate, sufficient and proportionate, and to ensure validity is considered in a systematic way.

The framework for validation will be based on Kane's (2006) use of Toulmin's Model of Inference, and as developed and applied by Cook, Brydges, Ginsburg and Hatala (2015) and Shaw, Crisp and Johnson (2012). This approach requires identification of the range of inferences made (e.g. with regards to the construct representation, scoring and generalisation) and the warrant, or justification, supporting this inference. The validation questions that must be addressed to demonstrate each warrant are captured, and evidence for (or threats to) validity identified in each case. Evidence used to support these warrants may be quantitative or qualitative, gathered at different points and with different frequencies throughout the lifespan of the examination or assessment. Validity should always be seen in degrees rather than as a binary judgement, and consideration of the range of evidence available and how this supports the original claims of the examination or assessment support in this evaluation.

Initially, the framework will address validity across the entire Programme of Assessment, recognising that 'the quality of the assessment should be determined across methods...it is not only the quality of the building blocks that is relevant, but also the ways in which they are combined' (Schuwirth & van der Vleuten, 2012, p.39), confirming whether as a whole the Programme can be seen to be adequately assessing the knowledge, skills, behaviours and attributes required of a paediatrician. However, it must also be sufficiently granular to ensure

the quality of the building blocks themselves, confirming that each is playing the role it is designed to within the Programme. The structure of the framework will be designed to address all key elements of validity relevant to the specific assessments within the Programme of Assessment. The exact structure is still to be designed, but Shaw and Crisp (2012) outline a broad range of approaches taken to devising frameworks, all of which will be considered when identifying the most relevant approach to evaluating the validity of inferences for the RCPCH examinations and assessments.

The RCPCH intends to begin development of these formal frameworks in 2017, to be fully in place and informing a scheduled programme of review for all assessments within two years.

Shape of training

Following the publication of the *Shape of Training Report* in 2013, the RCPCH issued a position paper and subsequently established a Task and Finish Group to review the paediatric training programme structure and content in line with the recommendations of the Report. The recommendations from this group have now been approved by the College's Council, and a new Implementation Group established to implement the planned changes by 2020, including the move to a two rather than three level training programme. The Programme of Assessment will be reviewed again prior to any changes to the training programme being rolled out, to ensure its ongoing suitability.

Clinical review outcome

A full review of the Clinical examination is currently underway, including an anticipated move from linear to domain-based marking. A pilot was carried out in July 2016, and the results evaluated by a group of senior examiners who had observed the pilot. With modifications, a further pilot is proposed in September 2017. The revised examination is expected to be implemented approximately one year later, subject to GMC approval.

Increased involvement of patients

The College has a very active Children and Young People's (CYP) engagement group – RCPCH & Us. The Education and Training Division continually review further ways of involving children, young people, and their families/carers with the assessment process. For example, a programme for CYP engagement in START is being developed by the RCPCH & Us team and the START Executive, including using CYP narratives to inform the START assessment scenarios.

Regulatory changes

Health Education England (HEE) is currently undertaking a review of the ARCP process, with the stated aim to improve opportunities to support progression on the basis of competency, to value experience gained outside formal training programmes and to introduce greater flexibility. HEE intend to publish recommendations for change in January 2018, and the RCPCH will then review its own processes for supporting the ARCPs in line with any amendments required or recommended.

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Useful Sources of Information

GMC/AoMRC guidance and standards

- [GMC 'Promoting excellence: standards for medical education and training'](#)
- [GMC 'Excellence by design: standards for postgraduate curricula'](#)
- [GMC 'Generic Professional Capabilities Framework'](#)
- [GMC 'Designing and maintaining postgraduate assessment programmes'](#)
- [GMC 'Equality and diversity guidance for curricula and assessment systems'](#)
- [Academy of Medical Royal Colleges 'Improving feedback and reflection to improve learning: A practical guide for trainees and trainers'](#)

RCPCH examinations

- [RCPCH Theory Examination syllabus](#)
- [RCPCH Theory Examination sample papers](#)
- [MRCPCH Clinical Examination: information for candidates](#)
- [MRCPCH Clinical Examination: syllabus, structure and anchor statements](#)
- [Examination policies and regulations](#)
- [Examination pass rates](#)

RCPCH assessments

- [An informative guide to formative and summative feedback for RCPCH trainees and trainers](#)
- [RCPCH guidance and forms for each assessment tool](#)
- [RCPCH ePortfolio guidance](#)

RCPCH contacts

Detailed information about all aspects of the RCPCH curriculum, examinations and assessments can be found on our website: www.rcpch.ac.uk

Examination queries: examinations.enquiries@rcpch.ac.uk

Assessment or ePortfolio queries: eportfolio@rcpch.ac.uk

RCPCH START queries: start@rcpch.ac.uk

Feedback on the Programme of Assessment: qualityandstandards@rcpch.ac.uk

