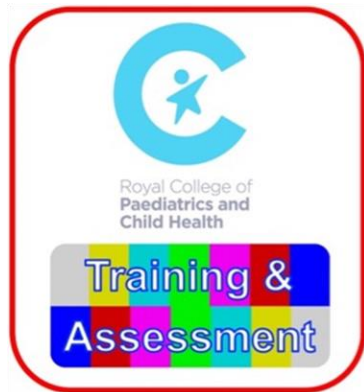


Obrigada por ver esta apresentação  
Gostaríamos de recordar-lhe que esta  
apresentação é propriedade do autor.

É-lhe fornecida pela Sociedade Portuguesa de  
Pediatria no contexto do 17º Congresso  
Nacional de Pediatria, para seu uso pessoal,  
tal como submetido pelo autor

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# Training & Assessment



**David Evans** @RCPCH\_TA

Vice President Training & Assessment



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# Royal College of Paediatrics and Child Health





# *The Bristol-Oporto Association*

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Rabelo](#)[Join us](#)[Foundation](#)[Diário](#)[Contact us](#)[Porto-  
Bristol](#)[BITA](#)

**Building bridges between Bristol and Oporto. Encouraging the whole community to embrace the culture, people and language of Porto and the Portuguese-speaking world.**



Construindo uma ponte entre Porto e Bristol.



# Training & Assessment in the UK

- Present day UK training in paediatrics:
  - Selection into paediatric training
  - Curriculum and training pathway
  - Examinations and Assessments
- Future developments:
  - Curriculum revision 2017
  - Shape of Training



# Selection into Paediatrics

Co-ordinated by RCPCH



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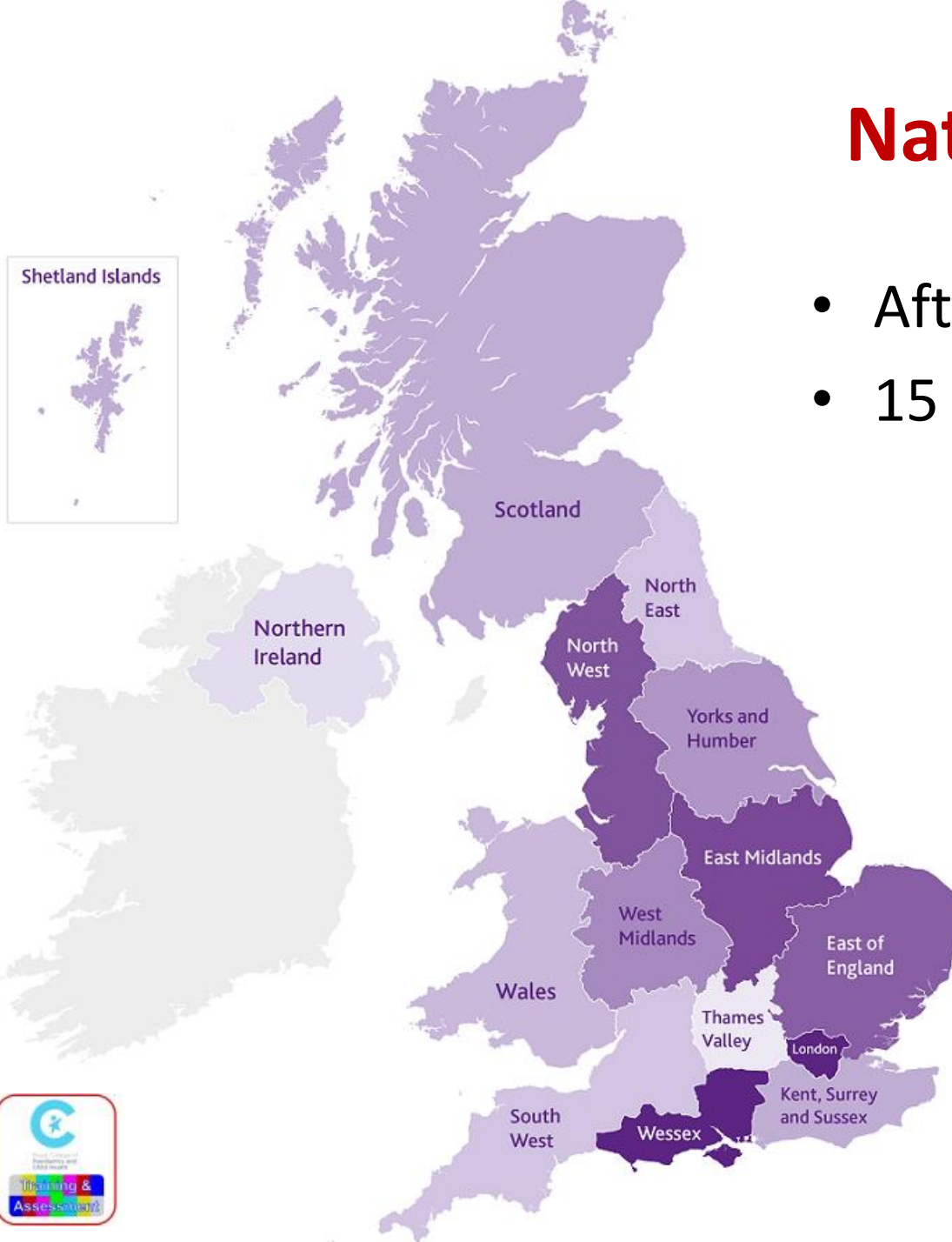
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# Medical School Graduates

- Foundation programme
  - 2-year structured programme of workplace-based learning between medical school and specialty training.
  - **Year 1** – 3 x 4-month placements in different specialties (2.6% placements are in paediatrics).
  - **Year 2** – 3 x 4-month placements with increasing responsibility for patient care (6.0% paediatrics)
  - 15 500 doctors in FY1 and FY2
  - Approximately 20% will have done a paediatric placement

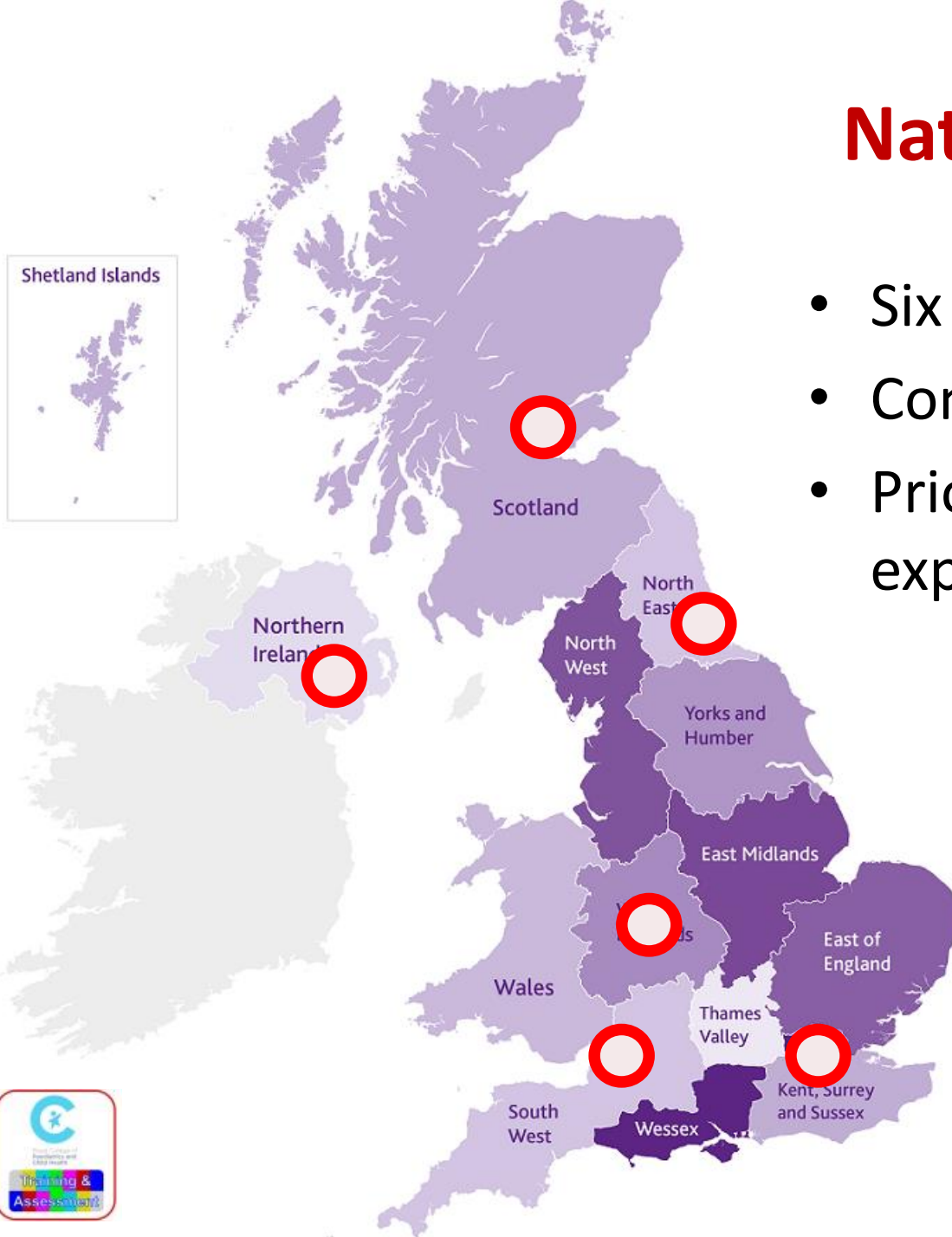
# National Selection

- After Foundation Year 2
- 15 regional programmes



# National Selection

- Six interview centres
- Consistent questions
- Prior paediatric experience not required



# Competition ratios

| LETB/deanery                                            | Number of posts (NTN) |             | Number of applicants |             | Appointable following interview |             | Offers accepted | Fill rate % 2015 | Competition ratio 2015 (applicants:posts) | Competition ratio 2014 (applicants:posts) |
|---------------------------------------------------------|-----------------------|-------------|----------------------|-------------|---------------------------------|-------------|-----------------|------------------|-------------------------------------------|-------------------------------------------|
| HE East Midlands (North and South)*                     | 28                    | ◀           | 33                   | ▼-2         | 25                              | ◀           | 27              | 96.43%           | 1.2                                       | 1.3                                       |
| HE East of England*                                     | 34                    | ▲+1         | 36                   | ▼-5         | 21                              | ▼-3         | 33              | 97.06%           | 1.1                                       | 1.2                                       |
| HE Kent, Surrey, Sussex                                 | 17                    | ▼ -3        | 25                   | ▼-10        | 22                              | ▼-9         | 17              | 100%             | 1.5                                       | 1.8                                       |
| London Shared Service (on behalf of the 3 London LETBs) | 109                   | ▲+6         | 241                  | ▼-28        | 204                             | ▼-24        | 109             | 100%             | 2.2                                       | 2.6                                       |
| HE North East                                           | 14                    | ▼ -4        | 15                   | ▼-8         | 10                              | ▼-11        | 10              | 71.43%           | 1.1                                       | 1.3                                       |
| HE North West - Mersey                                  | 15                    | ▼ -2        | 40                   | ▼-8         | 38                              | ▼-3         | 15              | 100%             | 2.7                                       | 2.8                                       |
| HE North West - North West                              | 21                    | ◀           | 44                   | ◀           | 36                              | ▼-3         | 21              | 100%             | 2.1                                       | 2.1                                       |
| HE South West                                           | 23                    | ▲+1         | 60                   | ▼-8         | 55                              | ▲+4         | 23              | 100%             | 2.7                                       | 0.8                                       |
| HE Thames Valley                                        | 12                    | ▼ -4        | 38                   | ▲+14        | 32                              | ▲+10        | 12              | 100%             | 3.2                                       | 1.5                                       |
| HE Wessex                                               | 14                    | ▲+1         | 28                   | ▲+2         | 24                              | ▲+1         | 14              | 100%             | 2.0                                       | 2                                         |
| HE West Midlands                                        | 34                    | ◀           | 62                   | ▲+2         | 45                              | ▼-4         | 34              | 100%             | 1.8                                       | 1.8                                       |
| HE Yorkshire and Humber*                                | 52                    | ▲+1         | 57                   | ▲+4         | 40                              | ◀           | 45              | 86.53%           | 1.1                                       | 1                                         |
| Northern Ireland                                        | 14                    | ▼ -2        | 34                   | ▲+8         | 32                              | ▲+7         | 14              | 100%             | 2.4                                       | 1.6                                       |
| Scotland                                                | 22                    | ▼ -3        | 64                   | ▲+11        | 53                              | ▲+8         | 22              | 100%             | 2.9                                       | 2.1                                       |
| Wales*                                                  | 22                    | ▲+4         | 23                   | ▼-1         | 17                              | ▲+3         | 21              | 95.45%           | 1.0                                       | 1.3                                       |
| <b>Total</b>                                            | <b>431</b>            | <b>▼ -4</b> | <b>800</b>           | <b>▼-14</b> | <b>654</b>                      | <b>▼-24</b> | <b>417</b>      | <b>96.75%</b>    | <b>1.9</b>                                | <b>1.9</b>                                |



800 applicants for 430 posts

# Bristol's Annual Balloon Fiesta – flying over the Clifton Suspension Bridge



# The Training Pathway

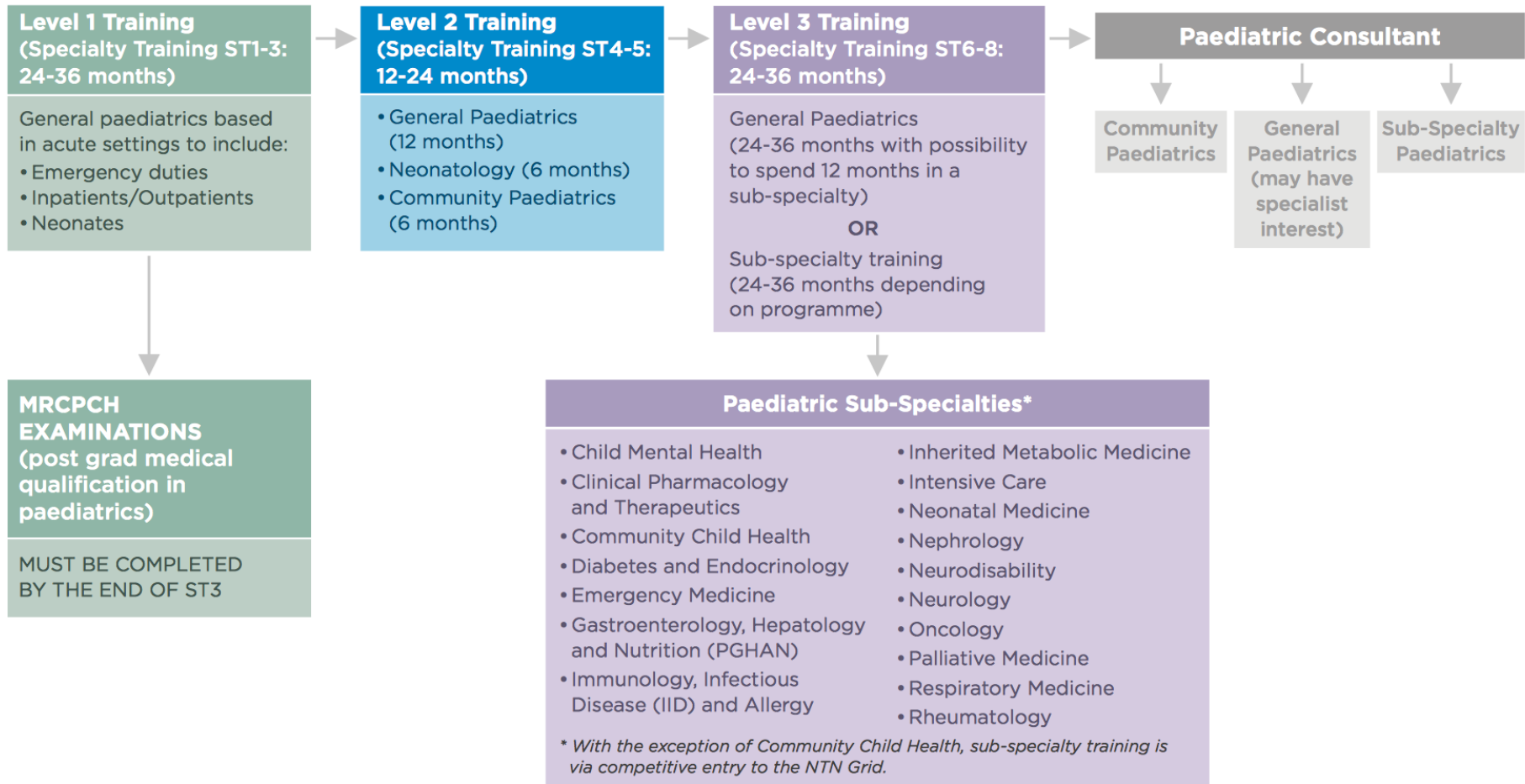
8 Training Years (ST1-8)



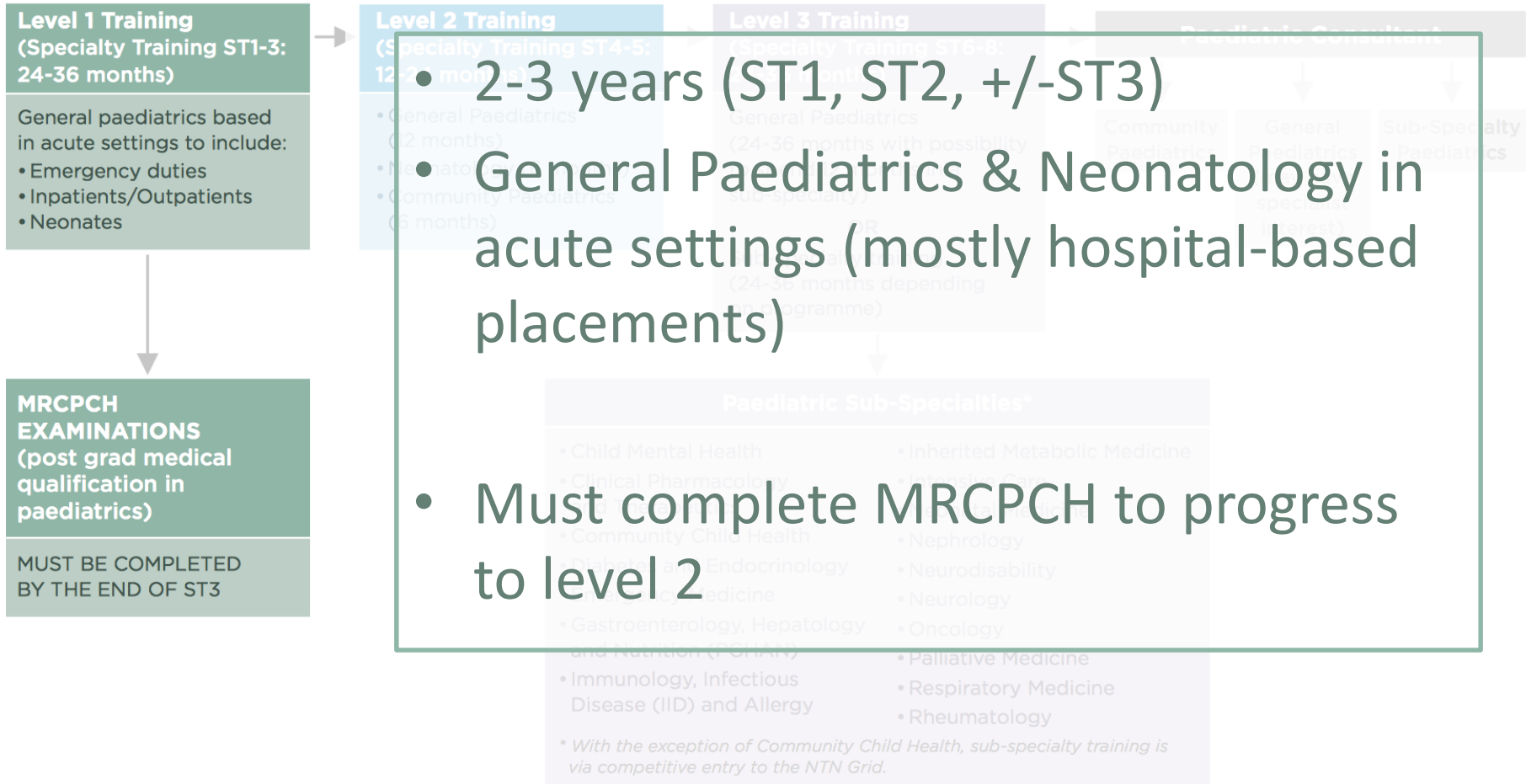
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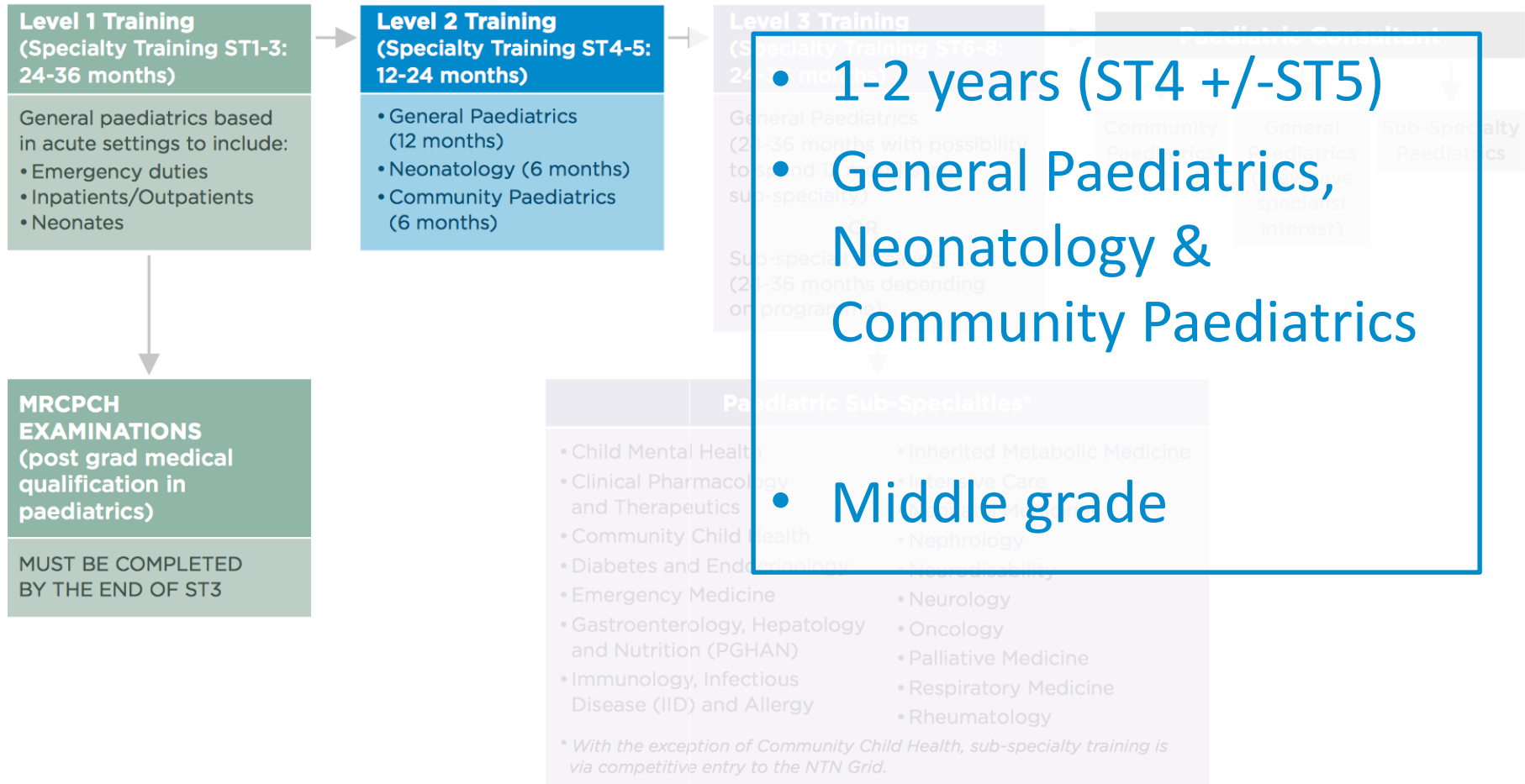
# Training Pathway



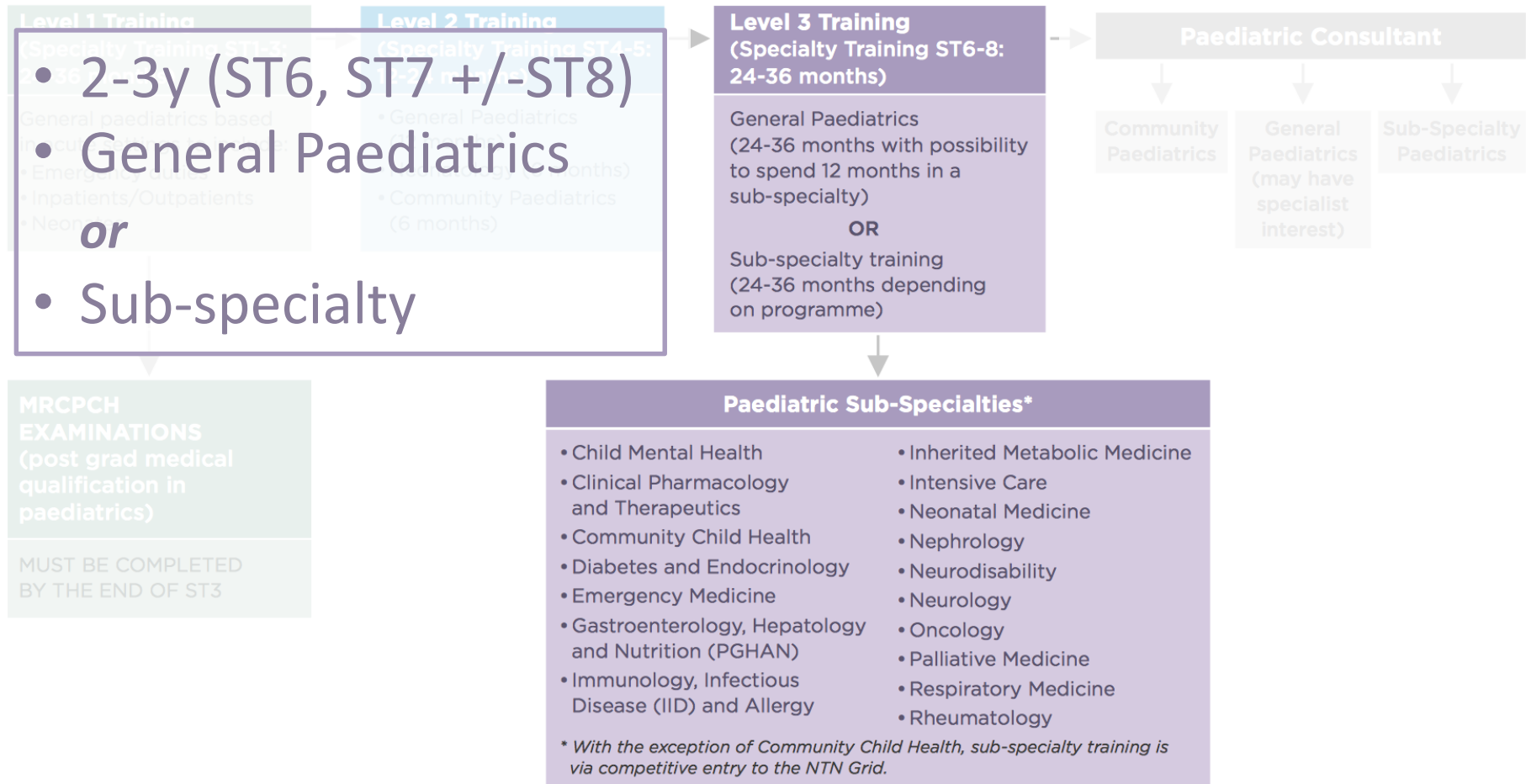
# Level 1



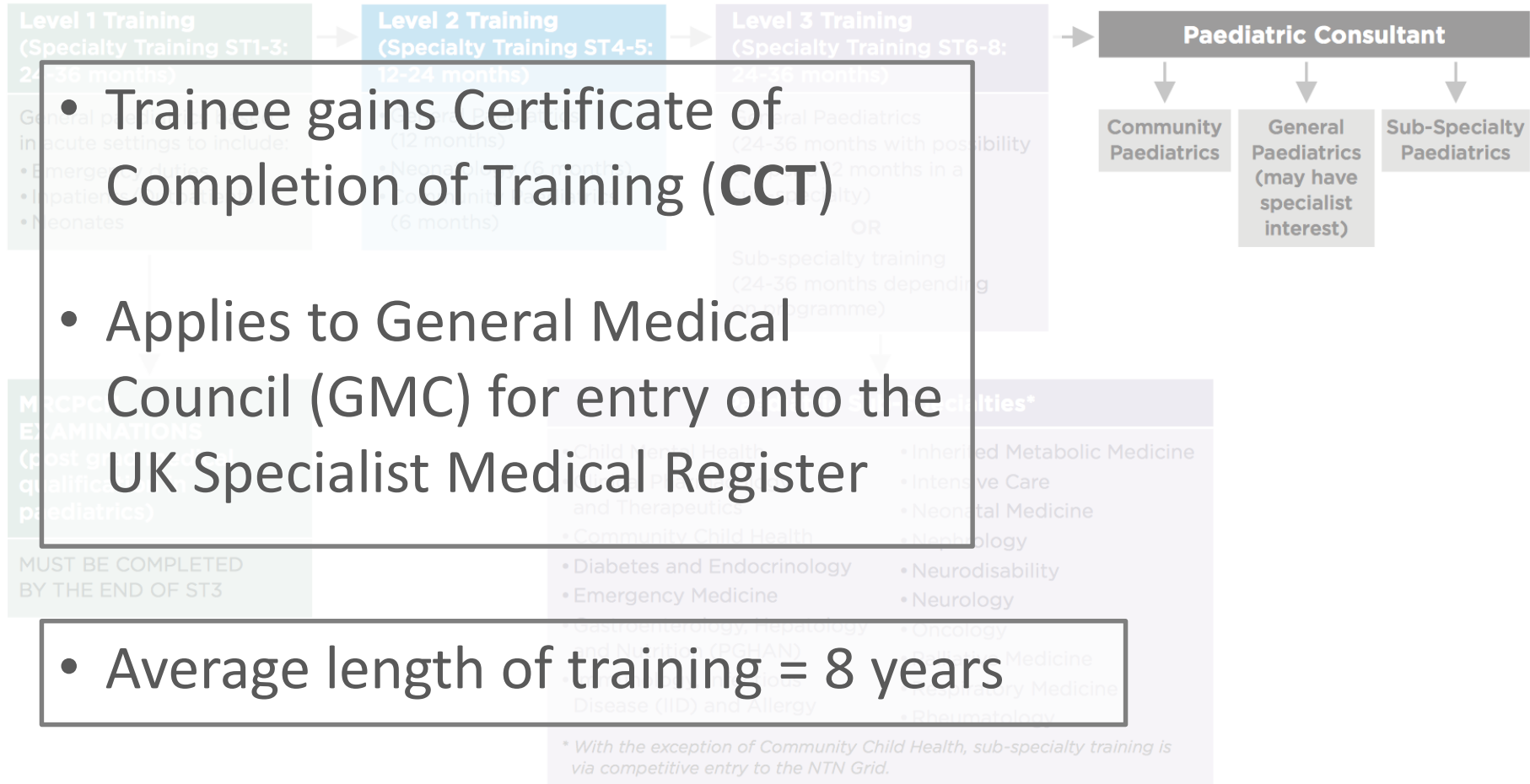
# Level 2



# Level 3



# Completion of Training



- Trainee gains Certificate of Completion of Training (CCT)
- Applies to General Medical Council (GMC) for entry onto the UK Specialist Medical Register
- Average length of training = 8 years

BANKSY – a famous Bristol street graffiti artist



# Exams & Assessments

## Annual Review of Competence Progression (ARCP)



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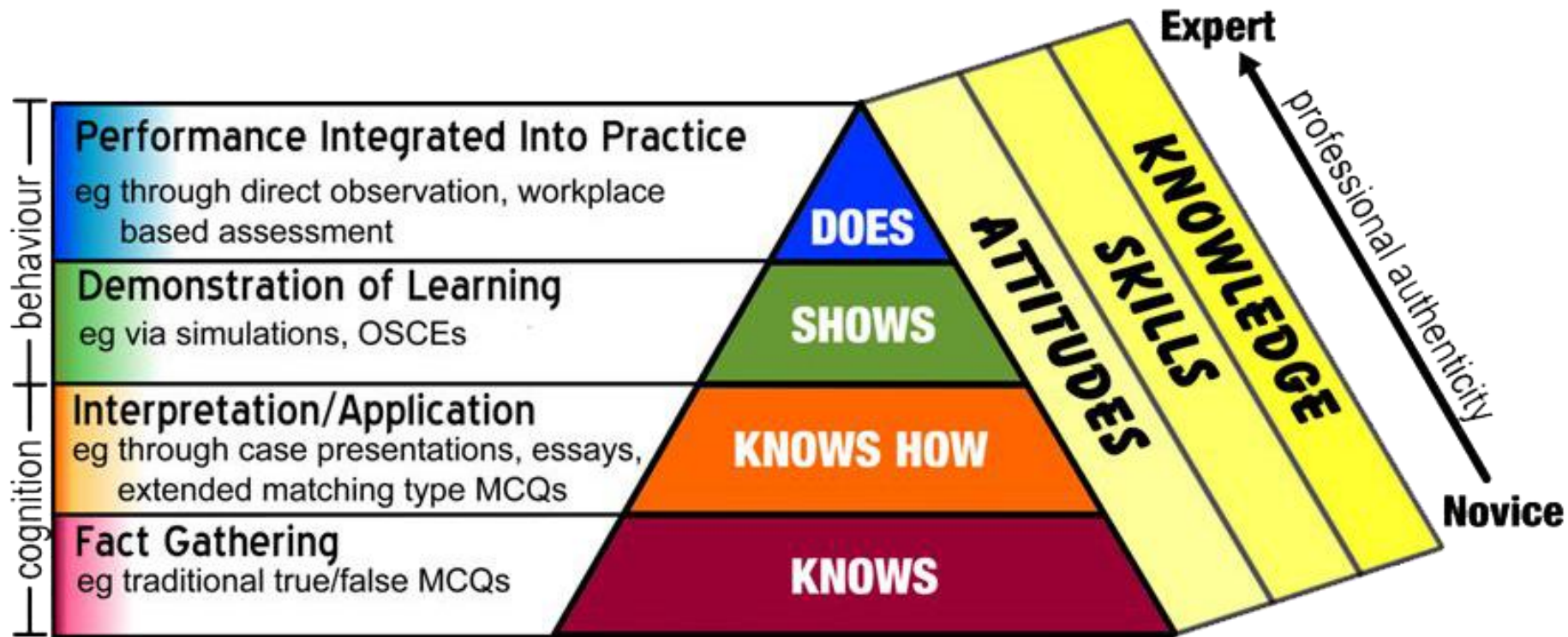
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# Annual Review (ARCP)

- Each year, the regional programme panel review evidence of performance:
  - Educational Supervisor report
  - Trainee's learning e-Portfolio (curriculum)
  - Workplace-based assessments
  - Multi-source feedback



# Workplace-based assessment



Based on work by Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9); 63-67  
Adapted by Drs. R. Mehay & R. Burns, UK (Jan 2009)

# Clinical Evaluation Exercise (mini-CEX)

- Mini-CEX is a structured assessment of an observed clinical encounter. This “snapshot” is designed to help provide feedback on skills essential to the provision of good clinical care.



# Case-based Discussion (CbD)

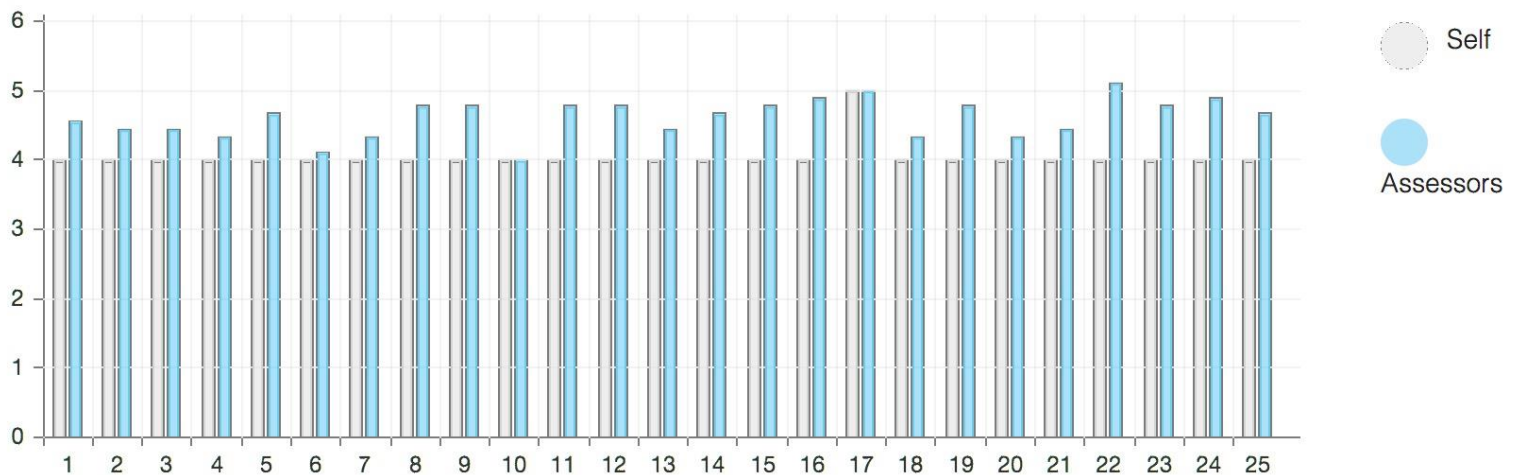
- Structured discussion following a trainee's involvement in a clinical case; designed to assess clinical reasoning – can also explore wider issues, such as ethical principles, etc.



# Multi-source feedback (MSF)

- Collects opinions of colleagues, seniors & nurses on a trainee's clinical performance and professional behaviour. It provides data for reflection and self-evaluation on performance

This graph shows all fields with values average across all the assessors



1. Ability to Diagnose Patient Problems/Ability to diagnose patient problems
2. Ability to formulate appropriate management plans
3. Ability to Manage complex patients/Ability to manage complex patients
4. Awareness of limitations

# Annual Review (ARCP)

- Outcome

- 😊 Progression to next training year
- 🙂 Progression with conditional targets
- 😞 Remedial targets required before repeat ARCP
- 😫 Removal from programme



**SS Great Britain** - first iron steamer to cross the Atlantic in 1845,  
designed by Brunel, now in a museum dock in Bristol harbour



# Exams & Assessments

## MRCPCH Examination

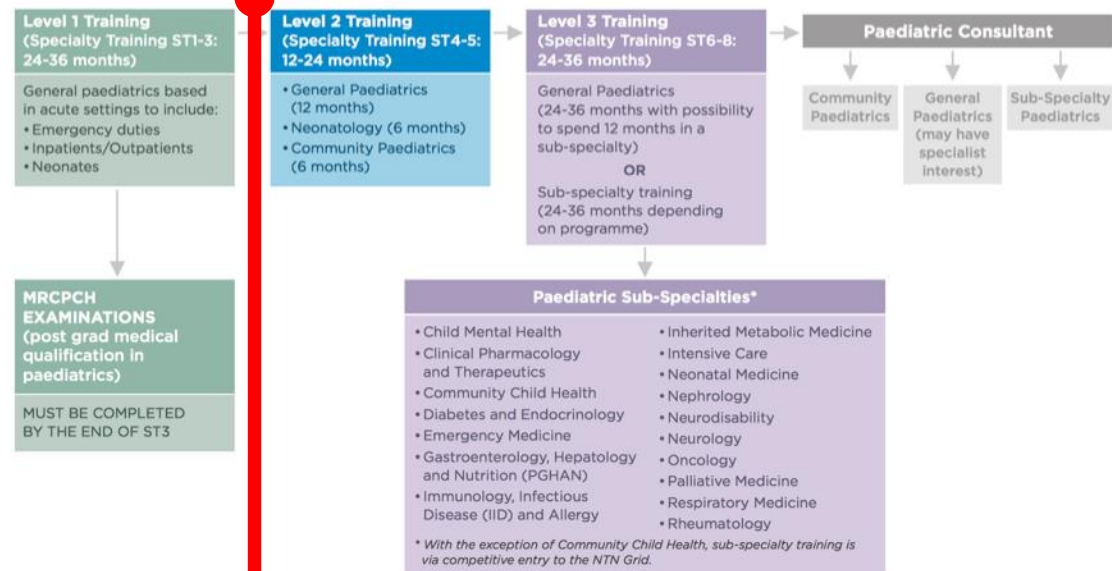


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# MRCPCH Examination

- Theory exams (computer-based tests):
  - Foundation of Practice (FOP)
  - Theory and Science (TAS)
  - Applied Knowledge in Practice (AKP)
- Clinical exam
  - MRCPCH Clinical



# Foundation of Practice (FOP)

- Aims to assess knowledge, understanding and clinical decision making abilities
- Computer-based test (2.5 hours).
- Questions are a combination of:
  - best of five - 61 questions
  - extended matching - 14 questions



# Theory and Science (TAS)

- Aims to test the basic scientific, physiological and pharmacological principles upon which clinical practice is based, and to test the principles of evidence-based practice.
- Computer-based test (2.5 hours).
- Questions are a combination of:
  - best of five - 61 questions
  - extended matching - 14 questions



# Applied Knowledge in Practice (AKP)

- Aims to assess knowledge, understanding and clinical decision making abilities, and have reached the standard needed to enter level 2 specialist training.
- Two computer-based exams of 2.5 hours each, which take place on the same day.
- The questions are typically a combination of:
  - best of five
  - extended matching
  - n from many

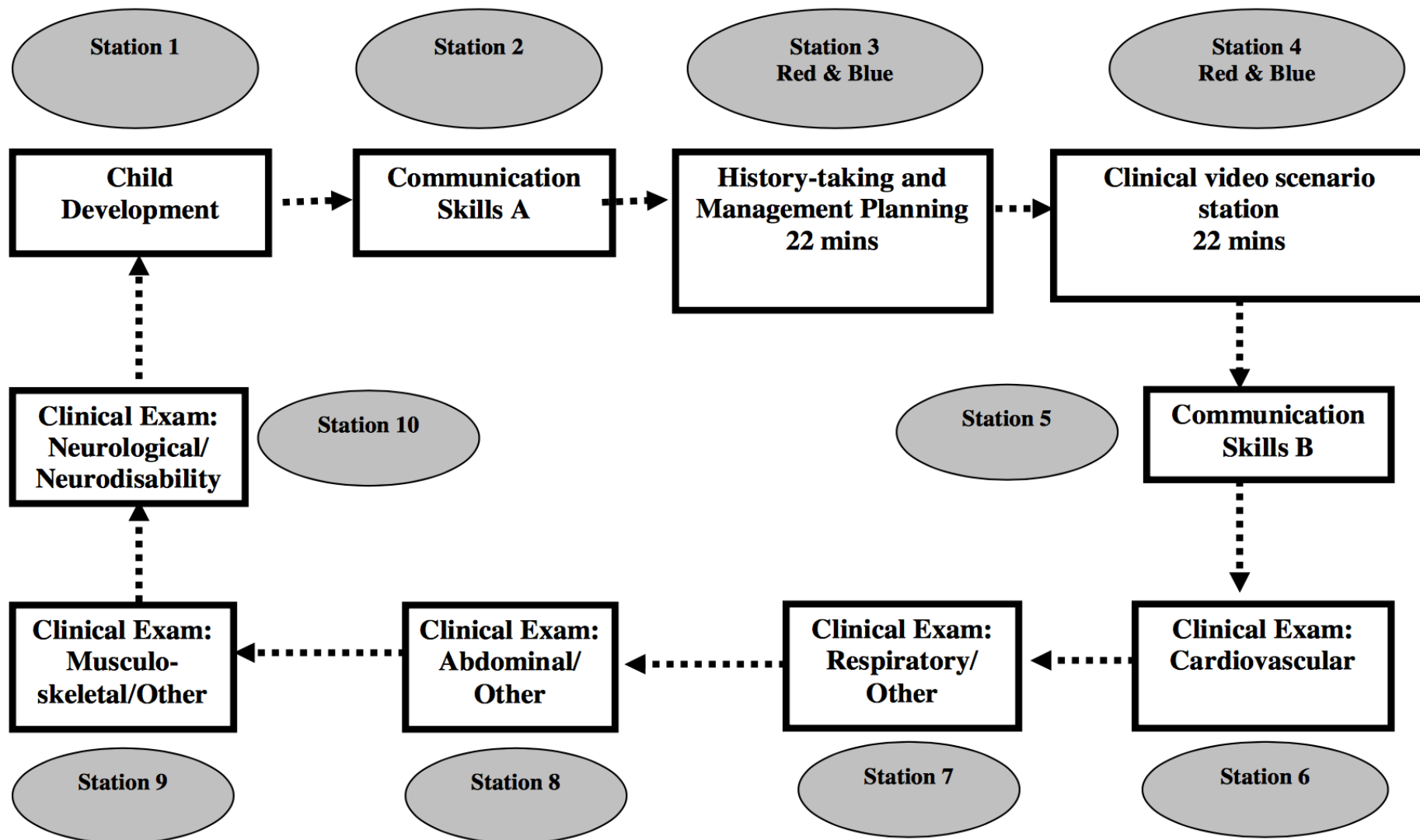


# MRCPCH Clinical

- Objective Structured Clinical Examination (OSCE) style format.
- It comprises ten stations, which test candidates in:
  - child development
  - communication skills
  - history-taking and management planning
  - recognition and diagnosis of clinical signs and symptoms
  - physical examination skills



# MRCPCH Clinical



All stations of 9 minutes' duration, except Stations 3 and 4 which are each 22 minutes in length

# MRCPCH Clinical

- Example of communication station

**You are:** A specialty registrar (ST4) working in a District General Hospital

**You will be talking to:** Helen Jones, the mother of Tony, 5-years old.

**Setting:** The side room on a paediatric ward.

**Background information:** You have been asked by your SHO to review Tony, a 5-year old boy with signs of suspected meningitis. He has been miserable for a few days, is off colour, feverish and has a headache. You decide that he needs a lumbar puncture.

**Task: To seek verbal consent for this procedure.**

4 min preparation, 9 min communication with actor



# Colourful houses overlooking the harbour-side area of Bristol



# Exams & Assessments

## START Assessment

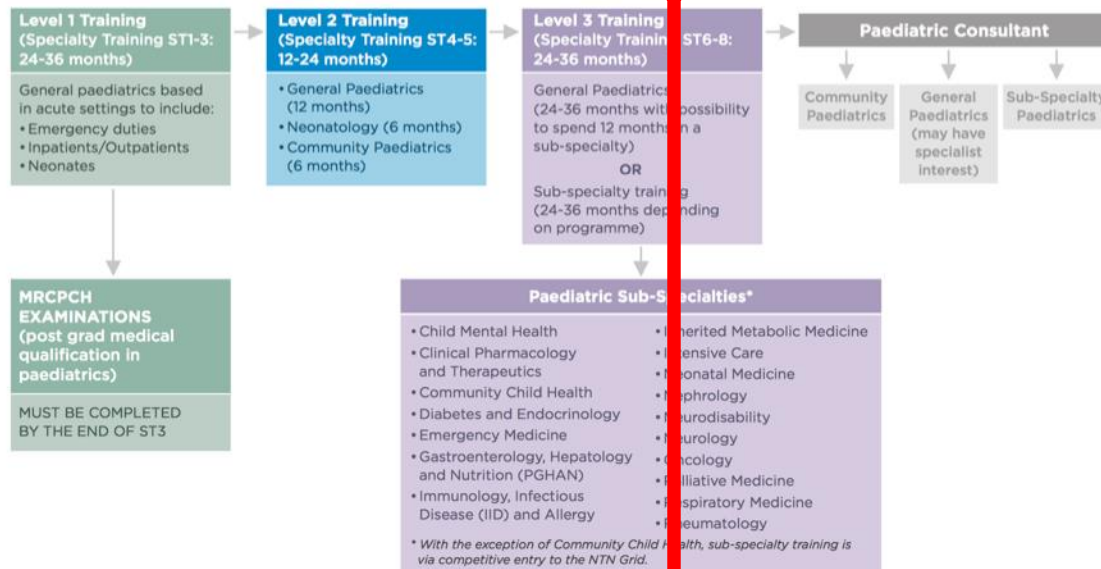


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# START Assessment

- Specialty Trainee **Assessment of Readiness for Tenure**
  - **Formative assessment**
  - Penultimate year of training (ST7)



# Subspecialty neonatal trainees views on being prepared for the consultant role

*Arch Dis Child Educ Pract Ed* 2012;**97**:68–71. doi:10.1136/archdischild-2011-300915

Ben N J Shaw,<sup>1</sup> Ben J Stenson,<sup>2</sup> Alan C Fenton,<sup>3</sup> Gillian Morrow,<sup>4</sup> Jeremy Brown<sup>5</sup>

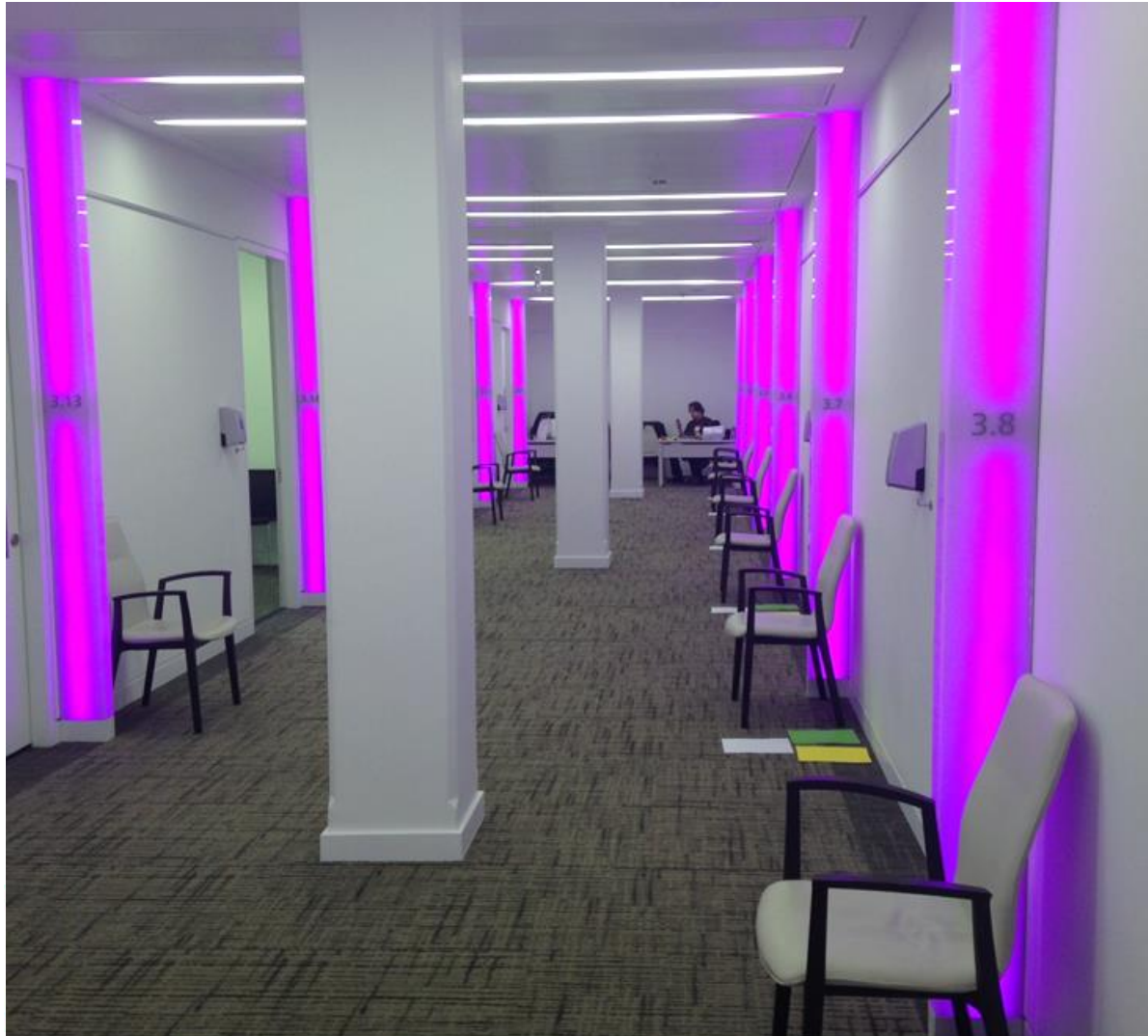
- ▶ In the UK in neonatal paediatrics, the trainees feel generally confident about managing ill babies when they become consultants.
- ▶ These trainees, however, feel unprepared for the aspects of the consultant's role related to management and leadership.
- ▶ Higher specialist training in neonatology needs to improve to allow opportunities for non-clinical training.
- ▶ Suggestions to improve competence in non-clinical skills for subspecialty trainees are shown in the practice box in the supplementary file.

# START Assessment

- Specialty Trainee **A**ssessment of **R**eadiness for **T**enure
  - **Formative assessment**
  - Penultimate year of training (ST7)
- Provides formative feedback to trainee and supervisor
  - Centralized assessment centre
  - Development points addressed prior to final ARCP



# START Scenarios



Assessment centre



# START Scenarios

1. Conflict and Risk Management
2. Critical Appraisal
3. Ethics
4. Logistics and organisation
5. Safe Prescribing
6. Safeguarding
7. Teaching
8. Handover/Ward Round
9. Scenario-based Discussion 1 - Acute
10. Scenario-based Discussion 2 – Chronic
11. Scenario-based Discussion 3 - Behavioural
12. Scenario- based Discussion 4 - Neonatal



# Safe prescribing (PREPARATION TIME)

- Knowledge and skills in safe prescribing
  - management
  - prescription
  - pharmacology
  - advice and explanation
- Open book (BNFc)
- Medicine for Children Committee involved



# Critical Appraisal (PREPARATION TIME)

- Ability to critically read research paper
- Set in clinical context
- Meets Standard 25 of curriculum
  - understanding of research methods and methodology...
  - understanding and application of complex methodological approaches in research in paediatrics...
- Able to discuss critically and demonstrate understanding



# Chronic scenario-based discussion

- You have just taken over as consultant of the week; on the ward round, your colleague recommends that you should start Dexamethasone for lung disease on one of the infants.
- The infant is four weeks of age and still ventilator-dependent, having been treated for RDS at 24 weeks gestation.
- The parents are present on the ward round.
- How would you approach this situation?

# START Teaching scenario

4 min minutes preparation

8 min teaching to volunteer medical students

How to take a history in paediatrics

How to examine a child

Safeguarding: what features might raise concerns



4 Assessments  
( 8 minutes each)

4 Assessments  
( 8 minutes each)

# Professional conversation with guided questioning



4 Assessments  
( 8 minutes each)

Preparation  
time



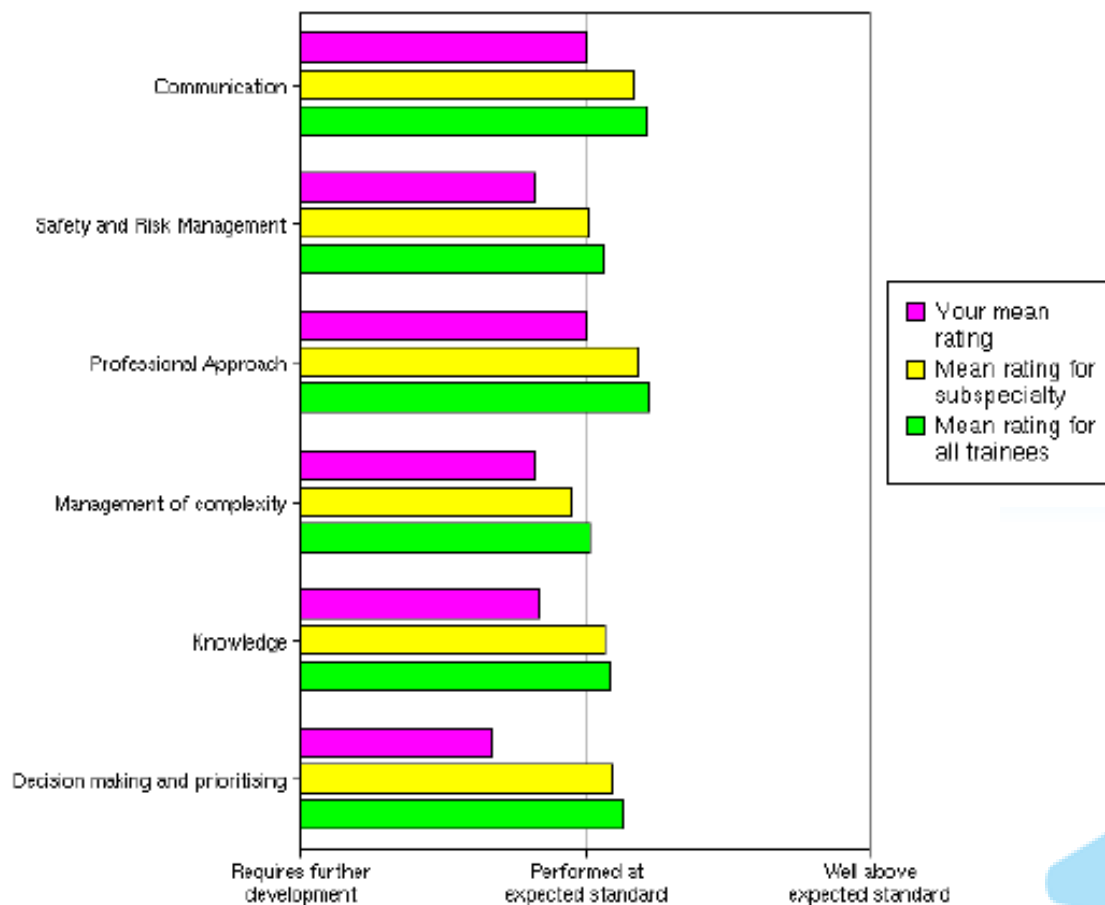
**START**  
**Benchmarking Standards**  
**Global rating**

| Significant concerns                                                                                                                                                                      | Development needed to achieve competence                                                                                                                                                                                       | Meets competence                                                           | Above competence                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Areas of performance highlight concerns about patients safety, significant knowledge gaps, very poor communication or competence below the expected level of a newly appointed Consultant | Performance in some areas not at the level of a new Consultant. While some may have been rated as "Meets competence", there are enough concerns in one or more domains making further development in specific areas necessary. | Skills displayed overall are at the level of a newly appointed Consultant. | Good, very good or excellent skills displayed which are above or well above those of a new Consultant. |

# START Feedback

| Station                         | Consultant Skills Domains        |           |                          |                       |                            |               | Performance                              |
|---------------------------------|----------------------------------|-----------|--------------------------|-----------------------|----------------------------|---------------|------------------------------------------|
|                                 | Decision making and prioritising | Knowledge | Management of complexity | Professional Approach | Safety and Risk Management | Communication |                                          |
| 1. Critical Appraisal           | ✔                                | ●         | ✔                        | NA                    | ✔                          | ✔             | Meets competence                         |
| 2. Safe Prescribing             | ✔✔                               | ✔         | NA                       | ✔✔                    | ✔                          | ✔✔            | Above competence                         |
| 3. Ethics                       | ●                                | ✔         | ●                        | ✔                     | ✔                          | ✔             | Development needed to achieve competence |
| 4. Handover                     | ●                                | ✔         | ✔                        | ✔                     | ●                          | ✔             | Significant concerns                     |
| 5. Scenario Based Discussion    | ●                                | ●         | ●                        | ●                     | ✔                          | ●             | Significant concerns                     |
| 6. Scenario Based Discussion    | ✔                                | ✔         | ✔                        | ✔                     | ●                          | ●             | Meets competence                         |
| 7. Scenario Based Discussion    | ●                                | ✔         | ✔                        | ✔                     | ●                          | ✔             | Development needed to achieve competence |
| 8. Scenario Based Discussion    | ✔                                | ✔         | ✔                        | ✔                     | ✔                          | ✔             | Meets competence                         |
| 9. Conflict and Risk Management | ●                                | ✔         | ✔                        | ✔                     | ✔                          | ✔             | Meets competence                         |
| 10. Logistics & Organisation    | ✔                                | ●         | ✔                        | ✔                     | ✔                          | ✔             | Meets competence                         |
| 11. Teaching                    | ●                                | ✔         | ●                        | ●                     | NA                         | ✔             | Development needed to achieve competence |
| 12. Safeguarding                | ✔✔                               | ✔✔        | ✔✔                       | ✔✔                    | ✔✔                         | ✔✔            | Above competence                         |

## Consultant Skills Ratings



Caravaggio  
Galleria Nazionale d'Arte Antica



# START Feedback exemplar

You were able to prioritise the patients who required the most urgent attention and showed an understanding of the range of skills within your clinical team.

You were challenged by the restriction in bed availability and this became an issue for the children waiting in Emergency who needed admission.

As you approach the end of your training, you should seek opportunities to 'act up' and be put in a situation where you can rehearse senior level decision-making with the support of an overseeing consultant.

Evidence of further development would be in the form of a LEADER case based discussion and reflective notes.



# START Feedback exemplar

## Observation / reflection / judgement

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## Developmental objectives

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# START Feedback exemplar

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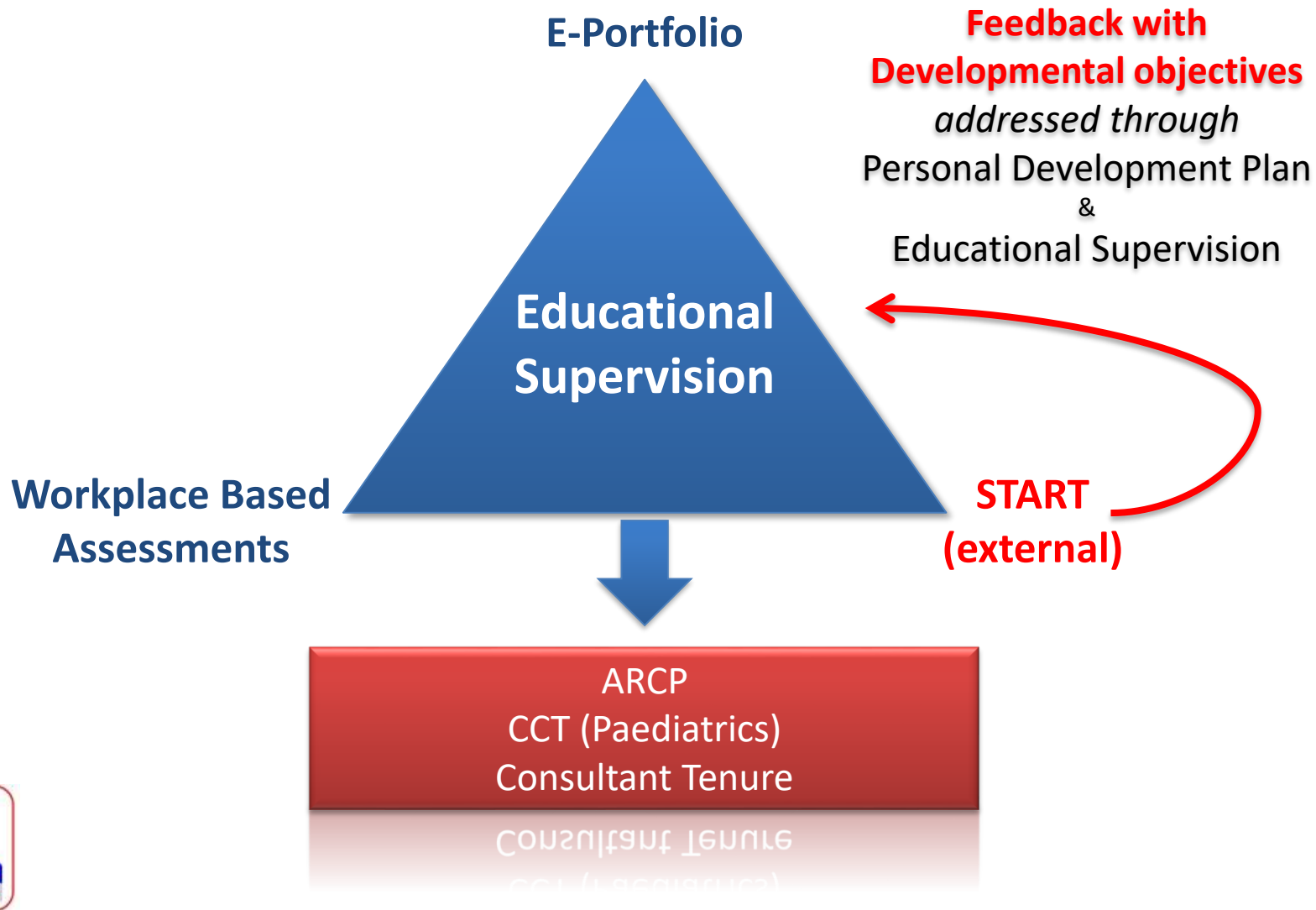
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# Purpose of START feedback



“Wallace & Gromit” – a famous plasticine cartoon duo,  
created by Aardman Animations®, based in Bristol

A  
CLOSE  
SHAVE

1999

“Wallace & Gromit’s Wash-n-Go  
window cleaning service?”



# Curriculum review

Revision 2017



**RCPCH**

*Leading the way in Children's Health*

# The present curriculum (2010)

## 160 pages



### Curriculum for Paediatric Training

### General Paediatrics

#### Level 1, 2 and 3 Training

Sept 2010

Revised and Approved by the GMC. For implementation from 1<sup>st</sup> August 2016.



## General competences

|                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Be able to examine the newborn baby appropriately and with sensitivity                                                                                                                  |
| Be able to perform an accurate assessment of the baby at birth                                                                                                                          |
| Have the knowledge and skills to be able to assess and initiate management of babies presenting in the neonatal period with problems (in acute, postnatal ward and outpatient settings) |
| Be able to initiate appropriate resuscitation when required                                                                                                                             |
| Know and understand the effects of antenatal and perinatal events on outcome                                                                                                            |
| Know and understand the pathophysiology of the effects of prematurity                                                                                                                   |
| Be able to recognise and outline the management of some common disorders                                                                                                                |
| Be able to initiate diagnostic tests for common disorders                                                                                                                               |
| Understand the principles of mechanical ventilation and resuscitation                                                                                                                   |
| Be able to perform a reliable assessment of fluid status and initiate appropriate fluid management                                                                                      |
| Understand the principles of parenteral nutrition                                                                                                                                       |
| Understand the principles and importance of nutrition in the neonatal period                                                                                                            |
| Have experience of basic practical procedures and tests and be able to understand the results                                                                                           |
| Understand the principles of prescribing for newborn babies and breastfeeding mothers                                                                                                   |
| Understand the life-threatening nature of some of these situations and when to call for help or look for personal support                                                               |
| Know when and how babies are transferred for specialist levels of intensive care                                                                                                        |
| Understand the implications for families of babies with neonatal problems                                                                                                               |
| Begin to develop strategies to communicate sympathetically with parents                                                                                                                 |
| Understand the long-term sequelae of prematurity and begin to recognise those at risk                                                                                                   |
| Know about the retinopathy of prematurity and its prevention and treatment                                                                                                              |
| Be able to recognise and manage common disorders                                                                                                                                        |
| Have the knowledge and skills to be able to assess and manage babies presenting in the neonatal period with problems (in acute, postnatal ward and outpatient settings)                 |
| Know and be able to describe the effects of antenatal and perinatal events on outcome                                                                                                   |
| Know and be able to describe the pathophysiology of the effects of prematurity                                                                                                          |
| Be able to initiate diagnostic tests for common disorders and to interpret and explain results to parents                                                                               |
| Understand the principles of and initiate mechanical ventilation and resuscitation                                                                                                      |
| Be able to perform a reliable assessment of fluid status and adjust fluid management                                                                                                    |
| Understand the principles of parenteral nutrition and be able to prescribe safely                                                                                                       |
| Be skilled in practising and be able to teach basic practical procedures                                                                                                                |
| Be able to prescribe safely for newborn babies and breastfeeding mothers                                                                                                                |
| Recognise the life-threatening nature of some of these situations and the need to call for help or look for personal support                                                            |

[illegible]

# General Medical Council (GMC)



Promoting excellence  
standards for medical education and training

Working with doctors Working for patients



# GMC Concepts

- **Generic Professional Capabilities**





# GMC Concepts

- Generic Professional Capabilities
- **Outcomes-based**



**Cake Analogy** – outcomes based capability compared to competencies – “a good cake means the baker is capable”



**Cake Analogy** – “a poor cake means that we must look more closely at the underlying competency”



# Problems in the kitchen?



Interpersonal skills



Safe practice

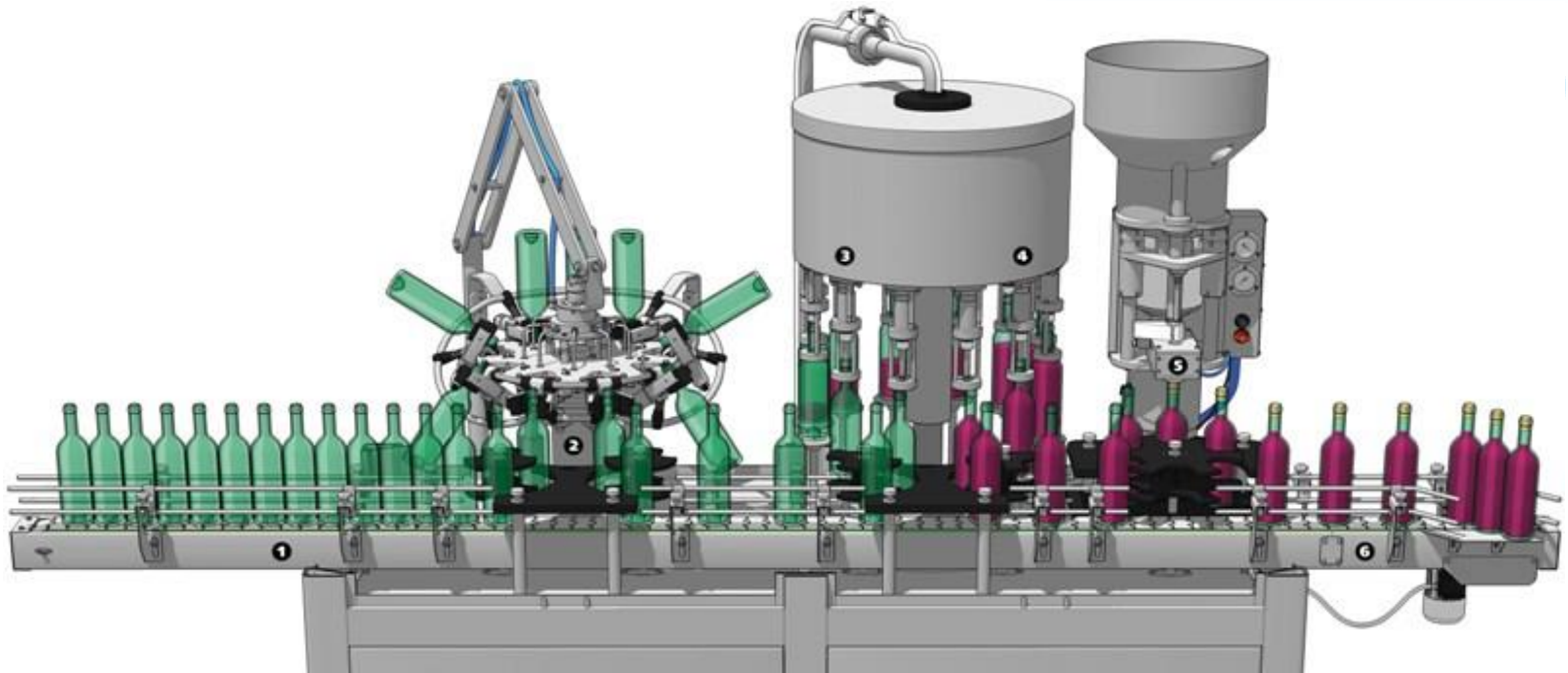
# Challenges in assessment

- Assess higher-level capabilities in broad areas of practice
- **Entrustable Professional Activities**
  - Acute paediatric take
  - Diabetes out-patient clinic
  - NICU service weeks
  - etc



# Training for the future

- Need a more flexible, adaptive training structure
  - Sustainable training workforce
  - Create space for excellence
  - Move between different training programmes
  - Meet patient needs



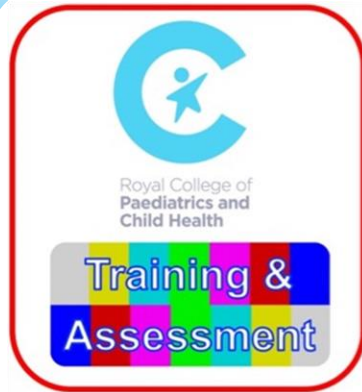
**Briswool 2016** - A three-dimensional woollen model exhibition of Bristol which took 250 volunteers more than three years to create





# RCPCH

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## Thank you

