GMC conference 2015
Differential attainment: understanding variations in performance in exams and training
#hello my name is...
Overview

- The regulator’s perspective
- Evidence from General Practice
- Developing an evidence base around the causes
- Group discussion
- Feedback and next steps
Understanding progression in training: the regulator’s perspective

Dr Vicky Osgood, Director of Education
Why does the GMC exist?

‘... to protect, promote and maintain the health and safety of the public.’ (Medical Act 1983)

- Our purpose is to protect, promote and maintain the health and safety of the public by ensuring proper standards in the practice of medicine.
- We are the regulator of doctors rather than a professional body for doctors.
The Role of the 21st Century Regulator

**Medical School**
- Set standards and outcomes and inspect medical schools

**Foundation programme**
- Approve entry to the register, foundation programme curricula and the educational environment

**GP/ Specialist**
- Approve specialist curricula, programmes and posts and require assurance about the quality of the educational environment

**Ongoing practice**
- Require on-going assurance of competence and fitness to practice, and support for doctors from their responsible officer
Ensuring fairness in training pathways

- We set high standards for medical education and training in the UK

- We are committed to ensuring that these standards and the training pathways that deliver them are fair

- Since 2010 we have worked with others to understand how doctors progress in training

- In 2013 we commissioned a review of the MRCGP CSA exams
What we are doing

- Sharing data: e.g. publishing interactive reports on our website
- Further data collection and analysis
- Commissioning further research into the causes and possible interventions
Working with others

- Developing guidance for colleges and faculties on providing equality and diversity evidence when making changes to curricula, exams and assessments

- Working with deaneries/LETBs to identify and promote good practice in supporting trainees

- Engaging with our interest groups to shape future research and analysis
Proceed with caution!
Recruitment offers to F2s: 2012-2014

Across all first round applications:

- 77% of women received an offer, compared to 70% of men

- 71% of BME applicants with a UK PMQ were offered a place compared to 81% of white applicants with a UK PMQ

- 50% European qualified doctors and 36% internationally qualified doctors were offered posts
Exam data 2014

- 71% of candidates from a UK medical school passed (during the year looked at) compared with 43% of IMGs.

- Women are more likely to pass their exams across specialties, medical schools and post graduate training, compared with men.

- For UK graduates, across all exams, white candidates are more likely to pass their exams (76% pass rate) compared with their BME counterparts (63.5% pass rate).
Next steps
Early identification of areas for development in GP training

Prof Fiona Patterson, Helen Baron, Safiatu Lopes
Context & Rationale

• Esmail & Roberts (2013) found significant differences in failure rates between different groups of doctor in the MRCGP Clinical Skills OSCE (CSA) examination

• They suggested exploring the relationships with GP specialty recruitment data to understand this better
Research Objectives

• The specific aim of this project is to explore the extent to which we can identify early those doctors who are likely to struggle in training and whether there are any indicators within the selection tests that can help target support.

• *Predictors* examined are GP selection tests and English language skills (IELTS)

• *Outcomes* are CSA and AKT performance (1\textsuperscript{st} attempt)
GP Selection Process

**SJT (Situational Judgement Test)**
- Measures ability to **apply appropriate judgement in work-relevant situations**
- Focuses on non-academic/professional attributes:
  - Empathy & Sensitivity,
  - Professional Integrity,
  - Coping with Pressure

**CPS test (Clinical Problem Solving)**
- Measures ability to **apply clinical knowledge** in relevant context and **make clinical decisions** in everyday practice

**SC (Selection Centre)**
- Candidates who pass the SJT and CPS go through to the GP SC
- Comprises of **one written test and three simulations**
Data Collection

• The GP National Recruitment Office (NRO) selection data for all applicants who sat GP selection between the years of 2008 to 2011.

• The Royal College of General Practitioners MRCGP examination performance data for all applicants who sat the exams between the years of 2008-2013.

• Sample sizes
  – AKT and CPS: 10,860  
  – SJT and CSA: 8,012

• Research Caveats: Changes with the AKT/CSA and GP Selection Process since 2008.
Does *language ability* (i.e. IELTS scores) relate to the likelihood of passing the MRCGP examinations?
Exam Pass Rates & IELTs Scores

- Trainees with **poorer language skills less likely to pass** at first attempt (e.g. approx. 75% with IELTS scores of 7.0 do not pass the CSA).
- Particularly acute for CSA with low IELTS.
- **Reading** and **understanding** subscores have the strongest relationship with both exams.
Do selection scores (i.e. GP SJT/CPS) relate to the likelihood of passing the MRCGP examinations?
Exam Pass Rates & Selection Test Scores

• “Borderline” candidates pass the selection tests but are still considered below average
• Borderline performance at selection is associated with poor exam performance
• Borderline on CPS unlikely to pass AKT at 1st attempt
• Borderline on SJT unlikely to pass CSA unless very good scores on CPS
Progression by Entry Level

- Similar differences exist at selection and at outcome stage.
- Emerging evidence of added value of training for borderline groups.
- Some evidence that group differences reduce over the course of training.
- Further analysis required.
Next Steps

• Look in more detail at IELTS findings
• Examine progress of ‘borderline’ candidates who initially fail the AKT and/or CSA
• A path analysis to identify the associations between the various predictors of poor performance.
Thank You

Any questions?
Understanding differential attainment across medical training pathways: A review of the literature

Project team:
Dr Sam Regan de Bere
Dr Suzanne Nunn, Dr Mona Nasser
The objectives of the review

- To establish an evidence base for differential attainment in the UK and other comparable countries
- To identify any research methods pertinent to identifying and/or understanding the causes of differential attainment in UK postgraduate medical education
- To examine interventions that have been effective in reducing differential attainment that may be applicable to UK postgraduate medical education
- To rate the quality of evidence as a ‘springboard’ for future work
Research design

1. Develop the research protocol

2. Identifying the relevant literature

3. Narrative synthesis
   1. Identify themes
   2. Look for patterns
   3. Tell the story
Areas of interest in the published literature

Areas of interest in the ‘grey’ literature
The story so far …..

- There is a great diversity of literature
- The dominant narratives are ethnicity in relation to high stakes postgraduate examination (MRCP and CSA)
- The impact of other characteristics and environments are less comprehensively explored
Food for thought

The impacts of educational arrangements, environments and cultural contexts
Types of support and the potential role of social networks
Understanding the complexity of interacting factors
Discussion questions

1. What forms of support work best in helping medical students and trainees to overcome barriers to progression?

2. What should the priorities be for the GMC in addressing differential attainment?

3. In five years’ time, what would success look like?