

# WELCOME TO: DARK ART OR SHARP SCIENCE?

A workshop on workforce planning in NHS Scotland

During the session please have a think about these key questions:

*1. What should we all do to improve the sustainability of top quality staff in Scotland's medical workforce?*

*2. In your role, what have you / could you do to improve recruitment and retention of medical staff in Scotland?*

*What are the main barriers that you face? How can we work to overcome these barriers?*

# **Projecting future workforce needs - Dark art or sharp science?**

Dr John R Colvin

Senior Medical Advisor, Scottish Government Health Workforce

Scottish Medical Education Conference 5<sup>th</sup> May 2017



# **Principles of workforce planning**

**We need to do modelling and plan for future workforce**

**We need to know that this will be wrong**

**We need to include flexibility and sensible confidence limits**

# Scottish Shape of Training Transition Group

**Pre 2009-** no national modelling

**2009 to 2013-** ‘Reshaping’

**Since 2014 –** ‘Transition Group’

*‘To promote a sustainable medical workforce in Scotland, dealing with a range of tactical and strategic issues pertaining to the medical workforce’*

# **Scottish Shape of Training Transition Group**

## **Sustainable medical workforce?**

- Planning and modelling
- Effective implementation
- Improving recruitment/retention
- Valuing the people

# Scottish Shape of Training Transition Group

- Medical Workforce Modelling- Profiles
- Setting training intakes/establishment
- Recruitment/retention
  - Improving net flows
  - Oversight of medical recruitment
- Supporting sustainable service
  - Flexible recruitment options
  - Reducing rota gaps

# SSTTG- Requirements

- **Data** – many sources
- **Intelligence**
  - Demographic and societal issues
  - Policy– ShoT, S7DS, H&SC Delivery plan
  - Strategic and tactical aspects
  - Specialty specific issues
  - Regional challenges
- **Engagement**
  - Understanding the systems
  - Strategic engagement
  - Challenging unintelligence



# SSTTG-Data

- Undergraduate and Foundation flows
- NHS Education Scotland
  - Trainee progression and choices
  - National Recruitment CT/ST interface
  - CCT projections & choices
  - GMC -Trainee Progression; UK-MED
- Consultant posts
  - Retirements- ISD
  - Recruitment - External Advisor Office, Scottish Academy
  - GMC –revalidation- LRMP
- Colleges
- Regional Workforce Groups
- e-rostering

# **SSTTG –Intelligence and Engagement**

- SG Health Workforce
- NHS Education for Scotland
- Academy of Medical Royal Colleges and Faculties in Scotland
- BMA Scotland
- NHS Board Chief Executives Group
- Scottish Association of Medical Directors
- Regional Planning Directors
- NHS Board Human Resources Directors Group
- Directors of Medical Education

# SSTTG- challenges

- Recruitment & retention of trainees –UK undersupply
- Loss of Scottish Graduates and Foundation
- GP recruitment
- Consultant recruitment
- International dimension
- Disconnect between views of profession, employers and workforce planners

# Scottish Shape of Training Transition Group

## Specific issues

- Improving accessibility and utility of Profiles
- FY/Specialty interface – most specialties fill, particular challenge in GP and psychiatry
- Inadequate recruitment @ ST3+
- Retaining our own graduates, post-foundation and CCT doctors

# Scottish Shape of Training Transition Group

## Opportunities

- Improving our own supply
- Sustainable service/rotas
- Spending more effectively
  - Reducing locum spend
  - Improving output
  - Improving training environment

# Scottish Shape of Training Transition Group

Some outcomes so far

- Trainee establishment based on future supply not current rota requirements
- Year on year increases in training numbers
- Adjustments between programs
- Improved supply and support in LtFT training/OOPE/vacancies
- Promoting flexible solutions – LAT/CDF/IMTF etc
- Developing support for rota management
- Improved fill of training establishment

# Trainees' perspective on workforce

**Rota gaps** - major negative impacts; noted on GMC NTS

- Reducing gaps
- Professionalism Compliance Analysis Tool (PCAT) pilot. Improving working patterns; promoting professionalism and excellence through training. Identifying rota patterns that are conducive to a good training / service balance

**Jobs market** – number, quality and range of options for consultant posts

# Scottish Shape of Training Transition Group

- Credible data and intelligence- building medical supply demand modelling – Medical Specialty Profiles
- Clarity of position – training establishment/ modelling
- Effective Engagement
  - National engagement
  - Regional cohesion
  - Active support for effective local engagement
- Improving trainee working patterns and gap management
- Supporting active recruitment (retention)- valuing workforce



# Medical Specialty Profiles

- What are Medical Specialty Profiles?
- How are they created?
  - Data
  - Context and judgement – ‘intelligence’
- What do they look like?

# What are Medical Specialty Profiles?

- Provision of accurate up to date specialty specific medical workforce data
- Build on the assumptions of the “Reshaping” process
- ‘Owned’ within the Shape of Training Transition Group
- Aim to support:
  - Assurance of supply
  - Setting of trainee establishments
  - Supporting recruitment/retention
  - Evidence to Migration Advisory Committee
  - Gap management strategies
  - Supporting policy and strategy development

# How are they being created?

- Data
  - Trainee – NES -TURAS
  - Consultant – ISD & External Advisors Office
  - Other valid sources, Colleges, Regional Workforce Groups etc
- Philosophy
  - Collaboratively and iteratively – dynamic
  - By specialty - 55+ profiles
  - Data plus ‘Intelligent’ narrative (professional input)
- Modelling assumptions

Retirals (age 61) x participation change (1.4-1.6) + 1% growth

## Specialty

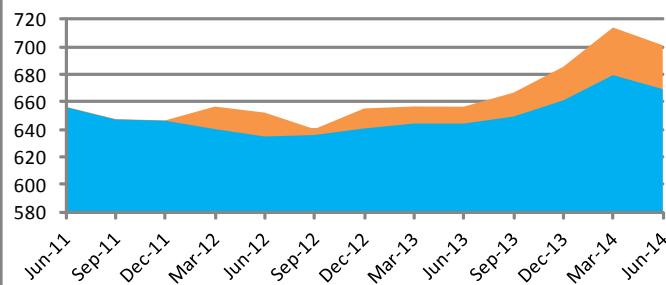
Anaesthetics

## Consultant Data

Consultant Establishment - WTE (1)

Date	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14
Establish	656.0	647.1	646.2	656.1	651.7	639.8	654.8	656.2	656.1	666.2	685.0	713.4	700.5
In Post	656.0	647.1	646.2	640.1	634.7	635.8	640.6	644.2	644.1	649.2	661.0	679.4	669.2

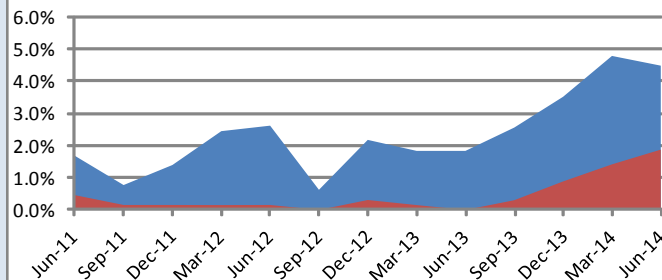
Consultant Establishment/In Post (WTE)



Consultant Vacancies - WTE as % of Establishment (1)

Date	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14
Total	1.7%	0.8%	1.4%	2.4%	2.6%	0.6%	2.2%	1.8%	1.8%	2.6%	3.5%	4.8%	4.5%
6M+	0.5%	0.2%	0.2%	0.2%	0.2%	0.0%	0.3%	0.2%	0.0%	0.3%	0.9%	1.4%	1.9%

Consultant Vacancy Rate - WTE as % of Establishment



Competition for Consultant Vacancies July 2013 - Feb 2014 (2)

% of Interview Panels Cancelled as No Candidates	15.0%
% of Interview Panels Running with Competition 1:1 or Less	20.0%

## Specialty

Anaesthetics

## Trainee Data

% not Continuing in Medicine in Scotland after CCT - 2013 (3)

30-38.3%

Specialty Training Fill Rate (3)

Year	2011	2012	2013	2014	Establishment
% Filled	81%	78%	76%	74%	96%

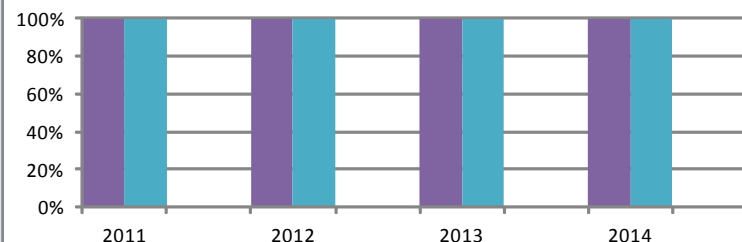
% Specialty Training Posts Filled



Core Training Fill Rates (3)

Year	2011	2012	2013	2014
Core Anaesthetics	100%	100%	100%	100%
ACCS - Anaesthetics	100%	100%	100%	100%

% Core Training Posts Filled



## Specialty Summary Calculator

Select Specialty: **Anaesthetics**

### Trainees

Core Training Fill Rate (2014)^	
Core Anaesthetics	100.0%
ACCS - Anaesthetics	100.0%

Anaesthetics Specialty Training^	
Fill Rate (2014)	96.0%
Unfilled Posts as % of Establishment (May 2014)	4.8%
Total Gaps as % of Establishment (May 2014)	21.4%
In Programme Attrition Per Annum (2010-2013)	5.9%
% Trainees not Continuing in Medicine in Scotland after C	30-38.3%

### Consultants

Anaesthetics Consultants	
Vacancy Rate (Jun 2014)*	4.5%
Interview Panels Cancelled as no Suitable Applicant~	15.0%
Panels Run With Competition Ratio of 1:1 or Worse~	20.0%

### Variables

In Programme Attrition	5.9%
Leaving Scotland at End of Programme	34.2%
Average Retirement Age	61
Participation Factor	1.4
Growth Rate	1.0%

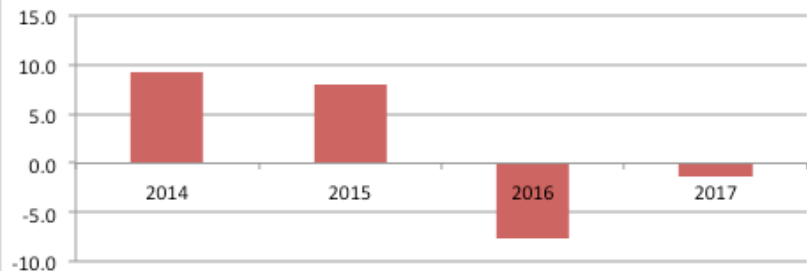
### References

\* Figures from Information Services Division of NSS

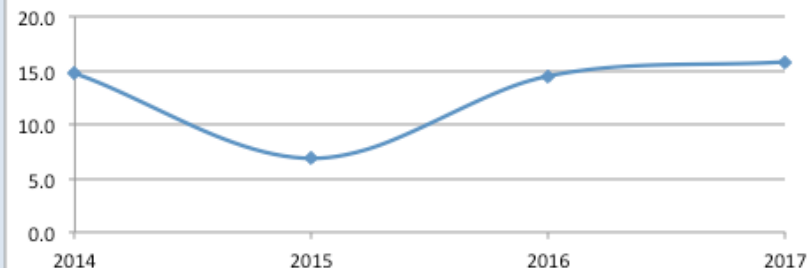
~ Figures from External Advisors Office at RCPE

^ Figures from NHS Education for Scotland

### Projected Over/Under Supply (WTE)



### Cumulative Projected Vacancies (WTE)



## Specialty Summary Calculator

Select Specialty:

Anaesthetics

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Panels Run With Competition Ratio of 1:1 or Worse~	20.0%

### Variables

In Programme Attrition	5.9%
Leaving Scotland at End of Programme	17.0%
Average Retirement Age	61
Participation Factor	1.4
Growth Rate	1.0%

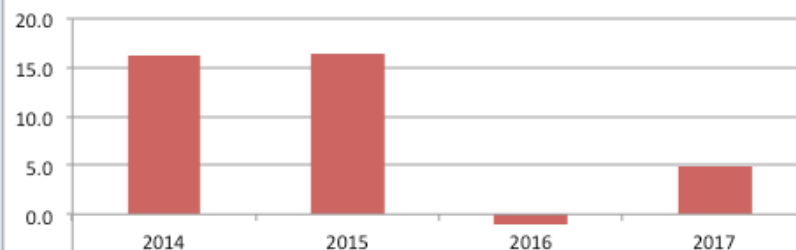
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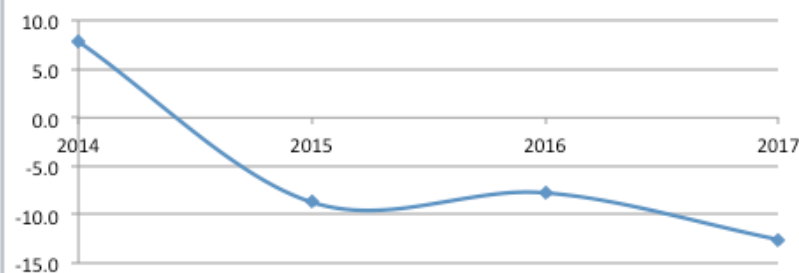
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^ Figures from NHS Education for Scotland

### Projected Over/Under Supply (WTE)



### Cumulative Projected Vacancies (WTE)











# Meeting the challenges

- Recruitment & retention of trainees –UK undersupply
- Evidence for change not translated into planning and implementation
- Uncertainty:
  - Future demand
  - Financial constraints
  - Retirement behaviours
  - Non-medical roles
- Improving connection between profession, employers and workforce planners
  - Effective implementation
  - Future needs/current pressures
  - Service/training synergy

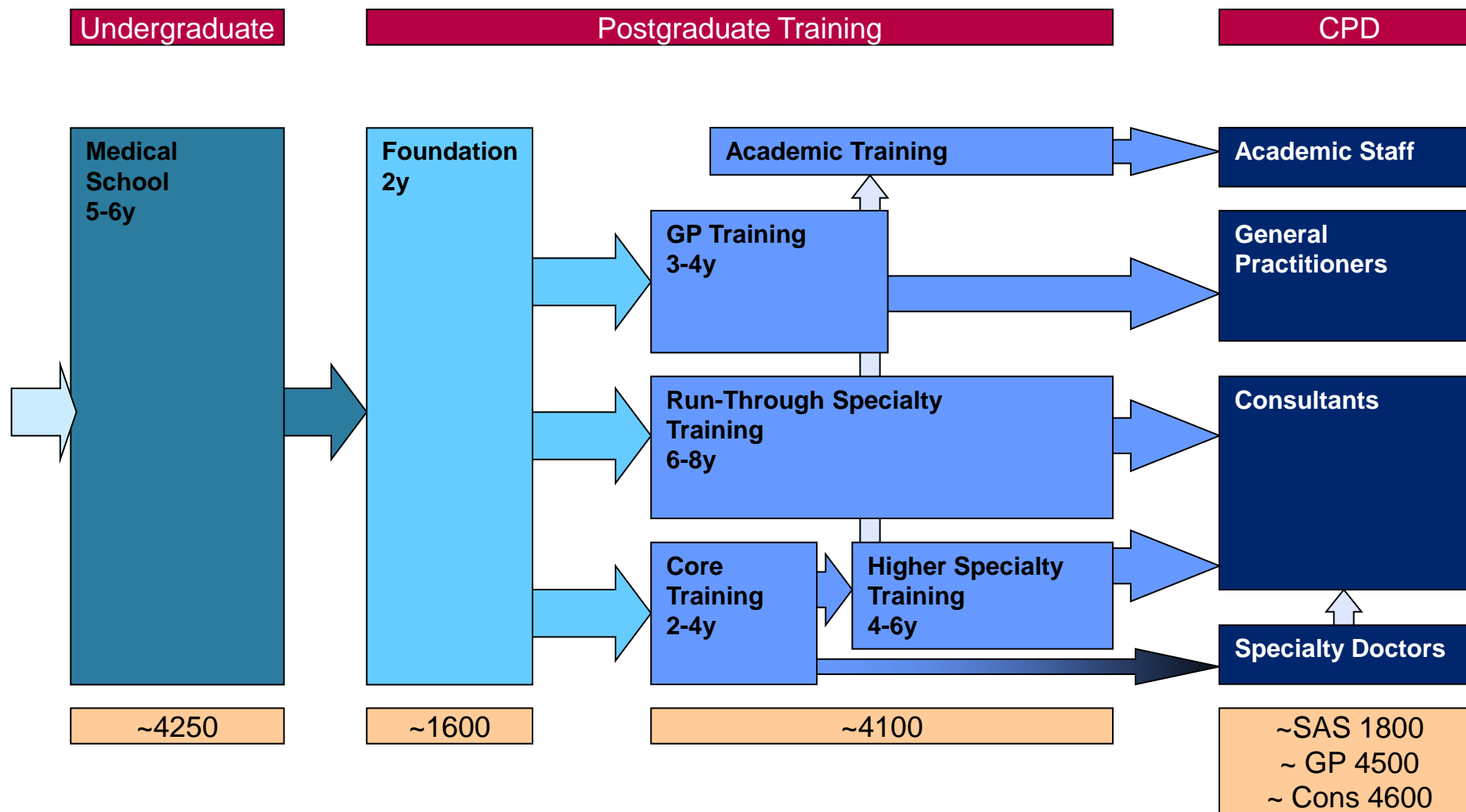
# Scottish Shape of Training Transition Group

- Credible data and intelligence- building medical supply demand modelling – Medical Specialty Profiles
- Clarity of position – training establishment/ modelling
- Effective Engagement
  - National engagement
  - Regional cohesion
  - Active support for effective local engagement
- Improving trainee working patterns and gap management
- Supporting active recruitment (retention)- valuing workforce

# **NES and Deans' perspective on medical workforce planning**

**Professor Bill Reid**

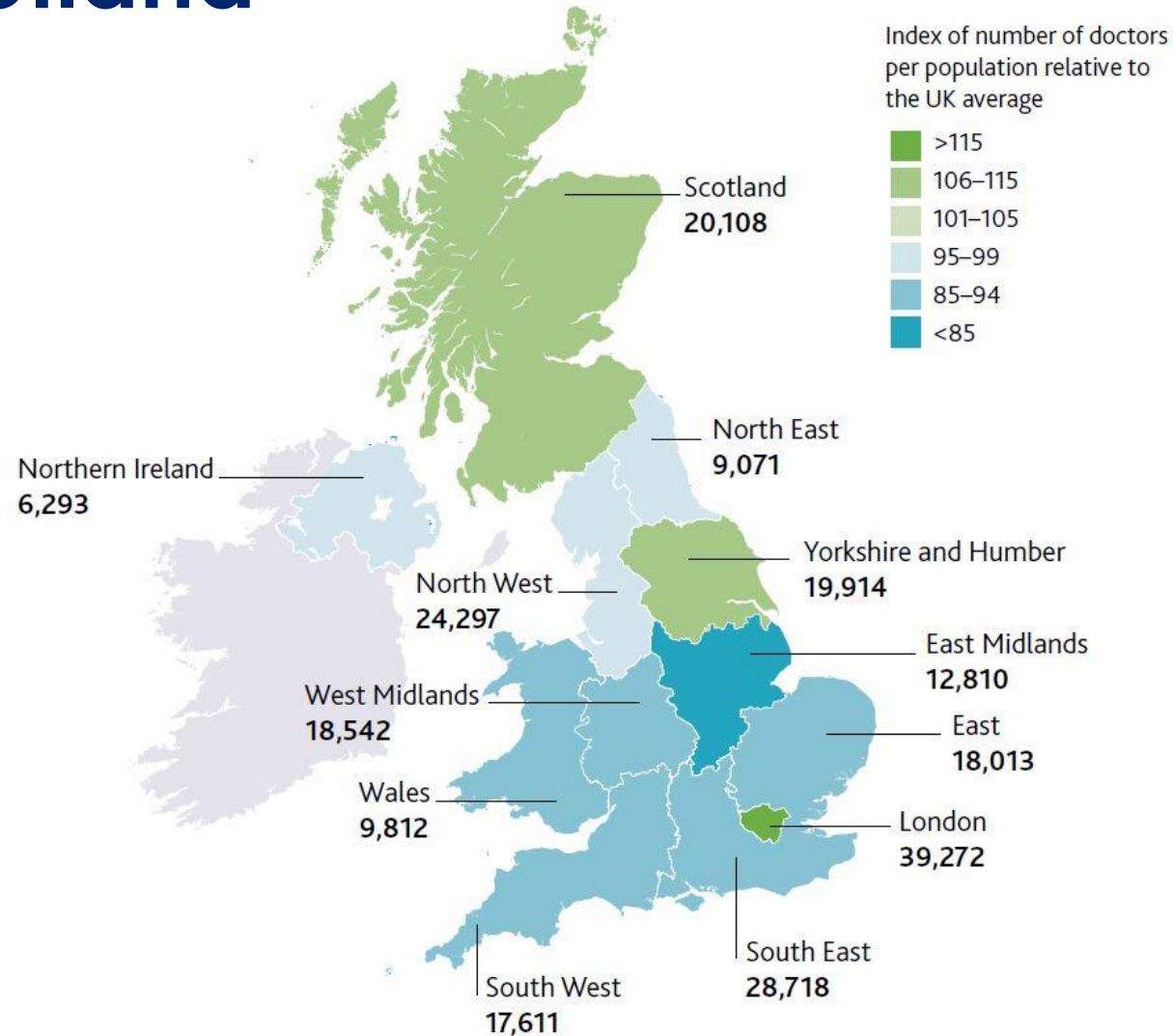
# The Current Shape of Training : 2016



# Overview

- The GMC have published data which demonstrates that Scotland has more licensed doctors per head of population on both the GP and specialist registers, and that we also have significantly more medical undergraduates and doctors in training per capita compared to the UK as a whole.
- <http://www.gmc-uk.org/publications/somep2016.asp>

# Scotland



32 % of UK Land Mass  
8.3% of UK Population  
9% of UK GDP

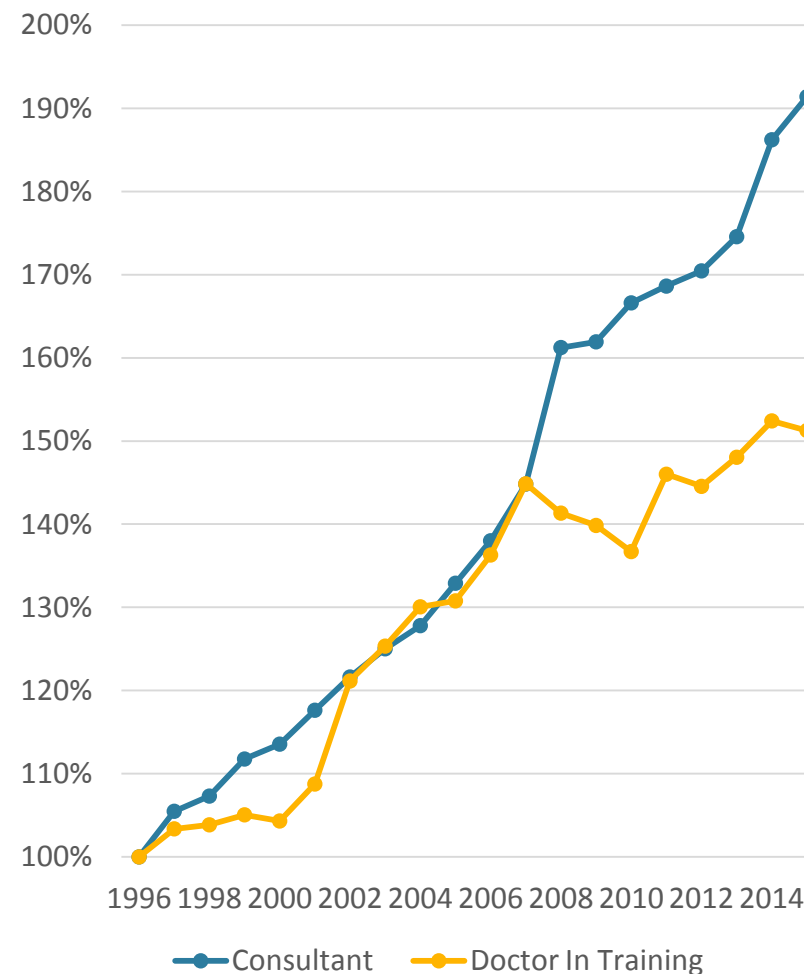
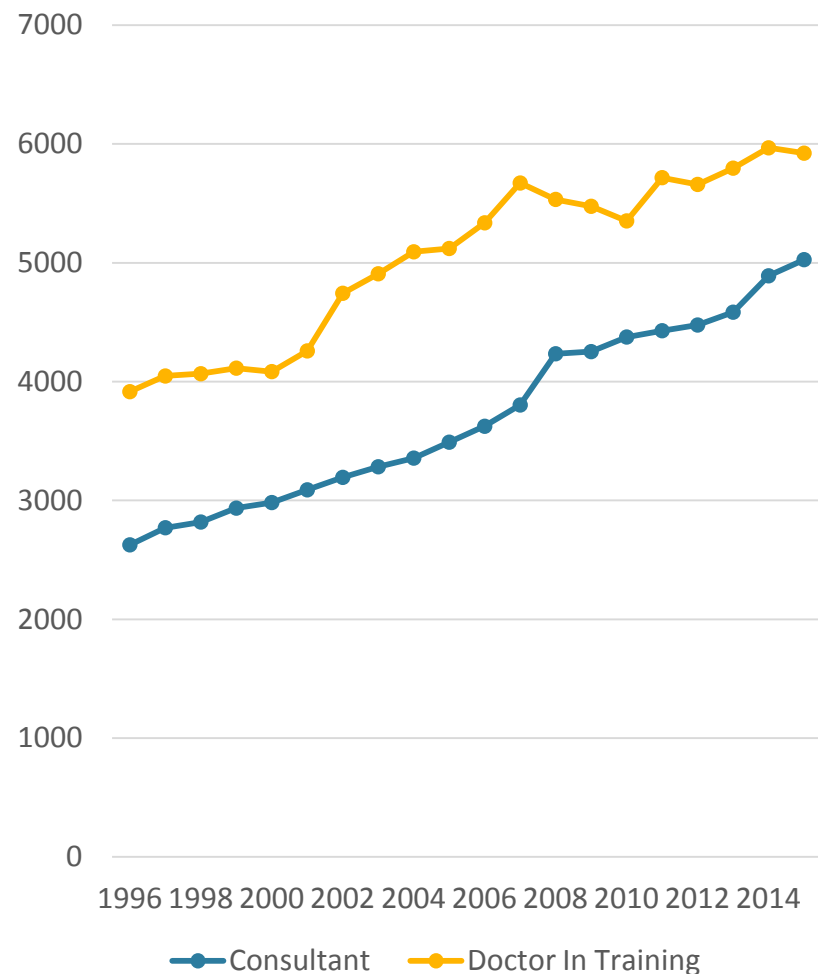
9% of UK licensed doctors<sup>1</sup>  
12.6% of UK medical students<sup>1</sup>  
9% of postgraduate trainees<sup>1</sup>  
12.6% of clinical academic staff<sup>2</sup>  
11.8% of UK health research spend<sup>3</sup>

Data from : 1 GMC SoMEP 2014,2015; 2 MSC; 3 UKCRC

# Workforce growth

- ISD have published data which suggests that the consultant workforce in NHSS has increased by almost 100% between 1996 and 2015 (from 2626 to 5026), but that over the same timeframe, the trainee workforce has increased by only 50% (from 3915 to 5922).
- <http://www.isdscotland.org/Health-Topics/Workforce/>

# Secondary Care Medical Workforce Change

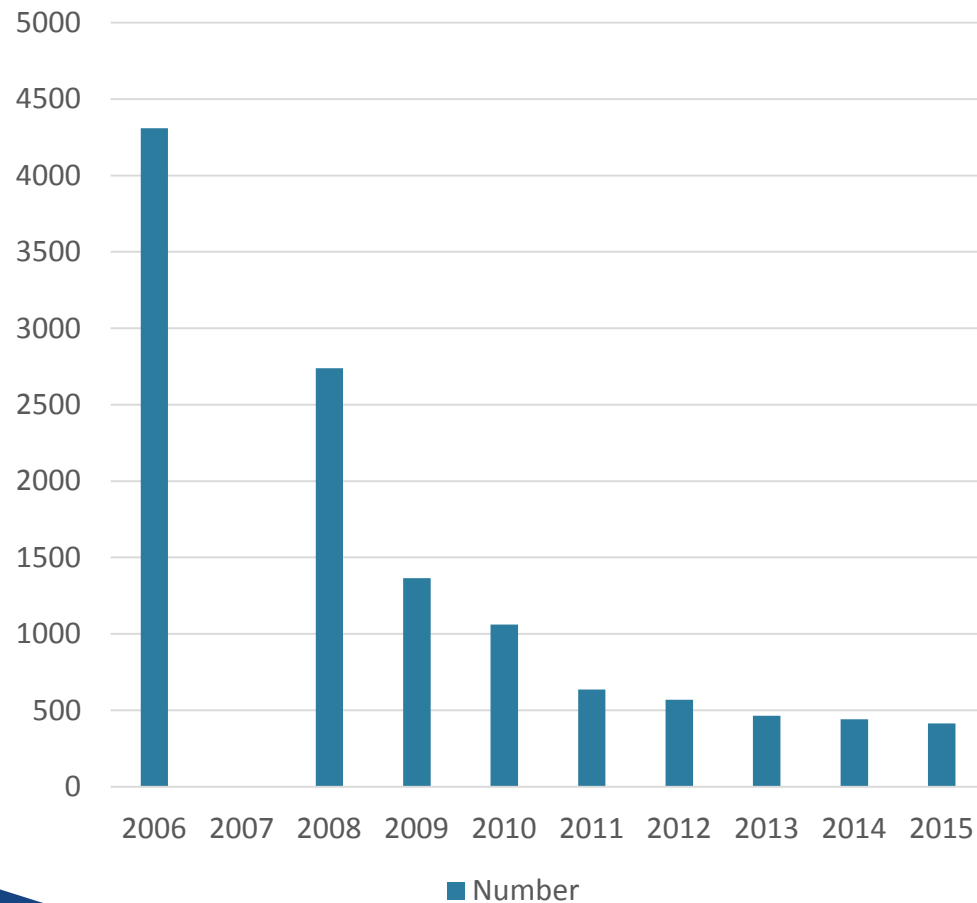


Data from : ISD Scotland

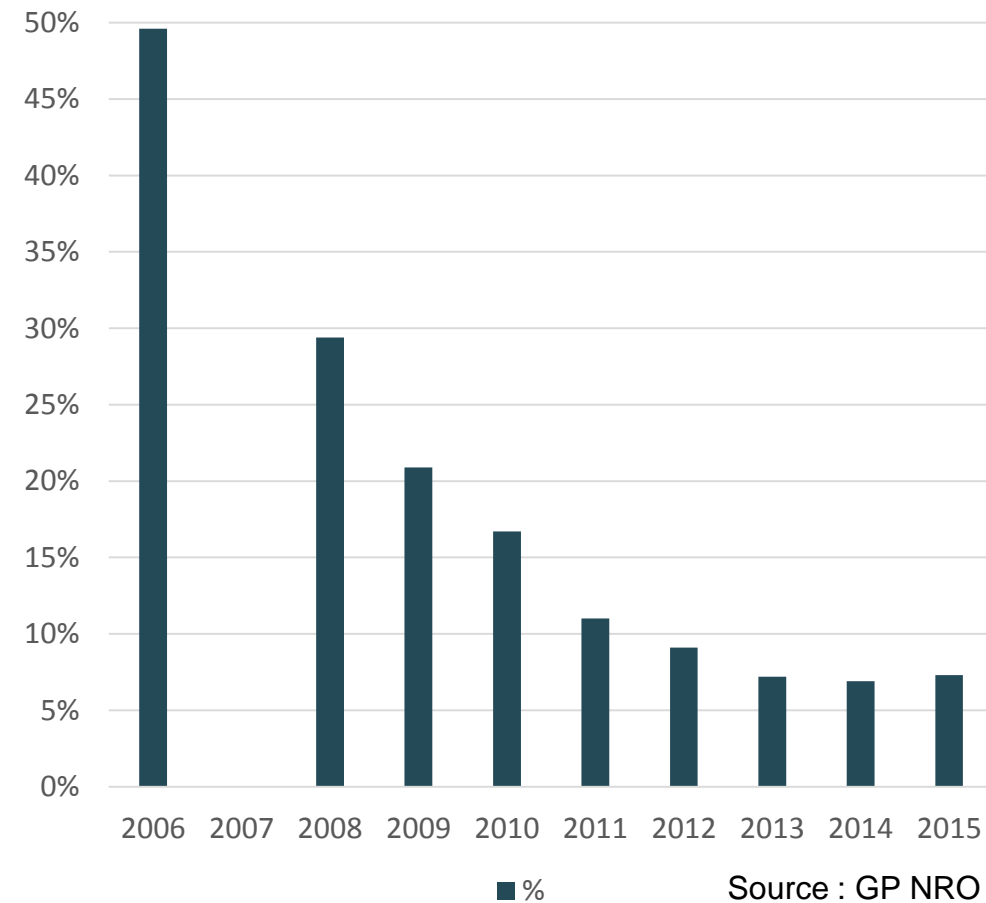


# Impact of the abolition of permit-free training

Number of Applicants



% of All Applicants



Source : GP NRO Data, 2015

# Graduate Supply into Foundation

- This year (2017), for the first time, the UK foundation programme office is anticipating that there will be insufficient graduate applicants to fill the UK foundation programme, and is predicting some 440 vacant foundation posts across the UK.
- [http://www.foundationprogramme.nhs.uk/download.asp?file=2017\\_Undersubscription\\_Statement\\_V5.pdf](http://www.foundationprogramme.nhs.uk/download.asp?file=2017_Undersubscription_Statement_V5.pdf)

# Cross Border Flow - LRMP

Primary Medical Qualification From	Designated Body (so working in)		Total
	Scotland	RUK	
Scotland	12,287	9,121	21,408
England	2,762	116,250	119,012
NI	253	5,085	5,338
Wales	101	6,312	6,413
<b>All</b>	<b>15,403</b>	<b>136,768</b>	<b>152,171</b>

From GMC LRMP Dec 2016 : all doctors currently on the register who have qualified from a UK medical school, and are currently (2016) connected to a designated body (and so working) in the UK.

# StART Alliance Project

- Set up to Attract and Retain medical trainees
- All round the table – service, training, trainees and HR
- Concerted effort – social media, web activity
- Evaluation
- New strategy – more targeted

# StART Alliance Project

5


Campaign report

Series highlights

## NHS Education for Scotland Best content

The refugee doctors starting new lives in Scotland: 'I can't imagine being anywhere else'

As NHS Education for Scotland initiative is helping displaced doctors to continue practising medicine




**MOST VIEWED:** *"The refugee doctors starting new lives in Scotland: I can't imagine being anywhere else"* **10,370 page views**

**LONGEST DWELL TIME:** *"How NHS Scotland is supporting LGBT staff and patients"* with an average time spent per visit of **6 mins 24 seconds**.


How NHS Scotland is supporting LGBT staff and patients

Healthcare staff in Scotland discuss the importance of their inclusivity initiatives



The refugee doctors starting new lives in Scotland: 'I can't imagine being anywhere else'

As NHS Education for Scotland initiative is helping displaced doctors to continue practising medicine




**MOST SOCIAL INTERACTIONS:** *"The refugee doctors starting new lives in Scotland: I can't imagine being anywhere else"* **4,585 social interactions (not including twitter)**

Scotland Deanery | NHS Education for Scotland

SEARCH

Scotland Deanery  
Scotland - home of medical excellence

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### Scotland Deanery

We are the Scotland Deanery, working in partnership with Health Boards and GP Surgeries to train doctors to be the senior clinicians we need to treat Scotland's people in the future. Our job is to ensure that these doctors are given the right opportunities and experience to equip them to be highly effective and capable practitioners delivering the best care possible.

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Your Development

Trainer Information

About Our Team >

Study Leave >

Less Than Full Time Training (LTFT) >

Clinical Skills Managed Educational Network (CS MEN) >

Death, Dying and Bereavement >

Faculty Development Alliance >

Quality Management >

Medical ACT >

Report a Concern >

10:30 09/05/2017

# Data from webpages

9 | Campaign report | UK and worldwide user numbers

NHS Education for Scotland  
UK user numbers



# Data from webpages



# Key Messages

- **Significant supply-side problems into specialty training**
- **Barely sufficient medical graduates from UK schools to fill foundation programmes**
- **Insufficient foundation completers to fill an expanding pool of UK (or Scottish) ST1 places**
  - Even if all graduates enter foundation, and all F2 completers enter specialty training
- **Only 50% of graduates from Scottish medical schools are in training in NHSS 4 years later**
  - (About 75% of graduates from English schools are in training in NHSE 4 years later)
- **Significant mis-match between service need and graduate ambitions**
  - Only 17% of graduates from one Scottish school make applications to GP training
- **Overseas qualified doctors are a diminishing part of the training population**



# **Regional workforce perspective**

**Derek Philips, Regional Workforce Planning Director**

# Regional workforce planning role

- What's a region?
- Cover all staff groups
  - Medical workforce planning
    - From implementing MMC (2006-7) to current shape of training
    - Regional solutions to regional trainee issues
- Regional service planning
  - Cancer, REDU, etc
- Regional 'hot spots' or projects
  - 'Age as an Asset', Medical Workforce Risk Assessment, Age profiling, Health Visitors
- Leading/supporting national workforce planning
  - Shape of Training, NMWWP, N&M commissioning, ISD
- Regional Workforce Group - Regional Planning Group

# Links with national workforce planning

- Boards' workforce projections  
(don't include medical workforce projections)
- Involvement in national workforce groups
  - Shape of Training Transition Group
  - NMWWP Project
- Involvement in national Reviews
  - Maternity and Neonatal
- Feeding regional work into national agenda
  - Radiotherapy – Clinical Oncology, Med Physics and Therapeutic Radiographers

# National workforce planning – where next?

We do pretty well in Scotland and getting better but need to think about...

- ‘Top down’ as well as ‘bottom up’
- Sustaining what we have v what we need in future
- Medium to longer term planning horizon
- More multi-professional service based modelling
- Proactively considering ‘external’ factors which impact on supply & demand i.e. pension changes, Brexit
- Building the future workforce reality into service planning
- How we capitalise on Regional H&SC Delivery Planning

***‘It is better to be approximately right than  
precisely wrong’***

John Maynard Keynes

***‘The future ain’t what it used to be’***

‘Yogi’ Berra

# Medical Workforce Planning- National Specialty Perspective

Eddie Wilson

# My role/input.

- Chair NES Anaesthesia, Intensive Care and Emergency Medicine STB.
- RCoA Scottish Board Workforce Lead.
- Invited member RCoA Workforce Advisory Group.
- RCoA Workforce Census (2015) Delivery Group.
- College has a significant track record around workforce planning in Scotland and UK wide.
- Mutually beneficial to have cohesive College and STB input.

# What do we need from National Workforce Planning?

- Positive relationship with national workforce planning. ✓
- Lines of communication to influence discussion and decisions around workforce planning. ✓
- Recognition of regional differences and the challenges they bring. ✓



# What can Specialty Input Provide?

## Data from a variety of sources:-

- Historical perspective.
- Data on progression through training.
- Data on attrition (in training and post-CCT).
- Data around current establishment including vacancy (ISD, Census Data).
- Retirement projections and modelling.
- Data from Consultant appointment committees (number of appointments, replacement posts, new posts, applicant numbers etc).
- Projections of growth? (CFWI, ICNARC)

How can specialties influence workforce planning?

- Engage in the process.
- Use all available sources of data.
- Present consistent and coherent data.
- Remain credible.

# What have we gained?

(Our STB Specialties)

- Mitigating and largely avoiding projected significant decreases in training numbers.
- Increase in Core Anaesthesia numbers.
- Signs this year of improved ST3 Anaes fill rate.
- Significant progress around ICM funding as a new CCT specialty.
- Focus on EM input at beginning of training (ACCS EM 100% fill rates) in a run-through specialty.

# What could be better?

- A more cohesive input around workforce planning between those with training and service responsibilities.

# Supporting recruitment, retention and return

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Emily Broadis FRCS(PaedSurg)

Scottish Clinical Leadership Fellow

Scottish Government Health Workforce

# Awareness and Focus

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## Focussed work streams

- Exploration of FY/CT/ST Interface
- International Medical Training Fellowships
- Mapping of work streams related to health and wellbeing, work environments and medical staff support

## Continued effort to discover work going on in research and clinical fields

- Ensure up to date with relevant issues e.g. doctor choices
- Identification of areas of good practice and recommendations
- National overview of generic issues e.g. rota gaps

# Improving options at the FY/CT/ST Interface

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- Reduction in numbers of FY2 moving into Specialty Training
- Recognition of increase in number of 'other' posts

	Specialty training in UK	Other in UK	Outside UK	Career Break	Left the profession
2013	64.4%	14%	11.9%	9.4%	0.3%
2014	58.5%	20.6%	9.3%	11.3%	0.3%
2015	52%	23.8%	10.8%	13.1%	0.3%
2016	50.4%	21.7%	12.7%	13.1%	0.6%

The Foundation Programme Career Destination Report 2016

# FY/CT/ST Interface

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- In 2016 approximately 59 posts in Scotland at FY2 completion
- Exploration of the reasons doctors choose these posts
- Consideration of aspects in these posts which could be incorporated into specialty training posts
- Discussing whether there is a need for an increase in opportunity for interface posts

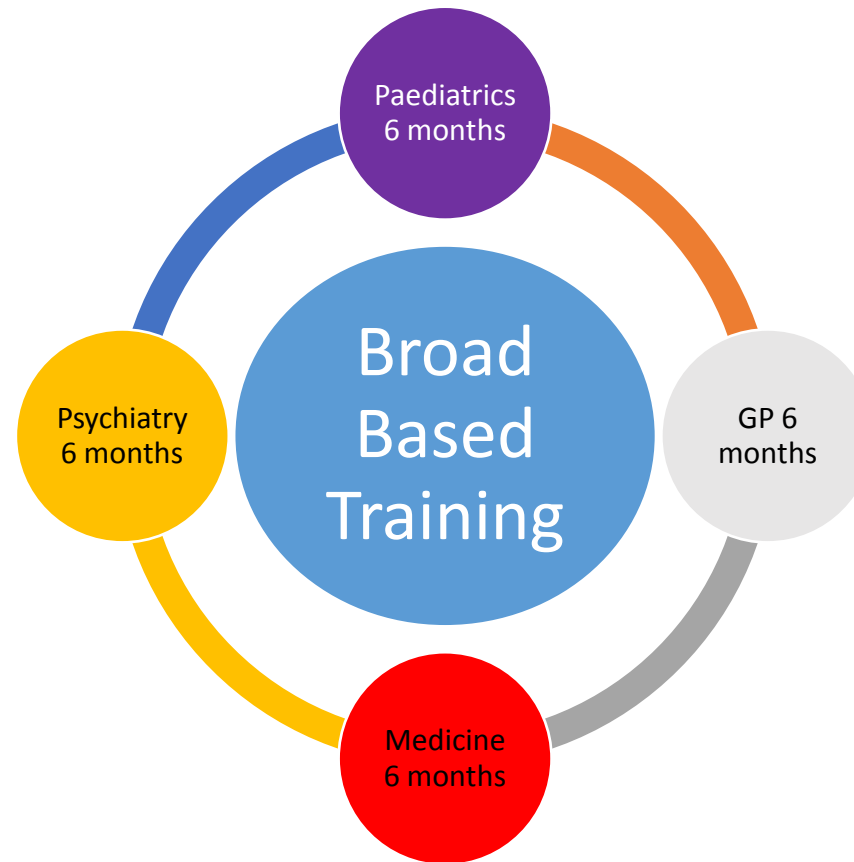


### Why apply?

- Opportunity to gain greater experience and knowledge in these specialties
  - Opportunity to gain greater understanding of what a career in these specialties entails
- Opportunity to gain further time to make your career decision

### Who is it for?

Those with FY2  
(or equivalent)  
qualifications



*"A lot of our colleagues are having to focus on their specialty exams where we've got two years of relative freedom to be able to focus on other areas of interest that will contribute to being more rounded"*  
BBT trainee

### What is it?

- 2 year training programme
- Option of *direct* entry into year 2 of any of the 4 specialties on completion of BBT
- 10% of each placement spent in one of the other specialties

*"So in acute medicine I understand the GP's view. ... So I know what to put on the discharge summary... to make sure this patient gets the best out of community. The same for GP... I understand... the acute medical team and what needs to be done from their point of view... I think that's really, really important understanding"* BBT trainee

There will be 12 places for BBT across NHS Tayside, Highland, Lanarkshire and Greater Glasgow and Clyde starting Aug 2018. More info on [www.scotmt.scot.nhs.uk](http://www.scotmt.scot.nhs.uk)

# International Medical Training Fellowships

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- One to Two-year flexible advanced training opportunities
- First cohort commenced in August 2015
- Approval by NES Specialty Training Boards
- Salary provision by Health Board with service commitment ideally aligned to training needs

## Advertisement/Awareness

International Careers Fair  
MTS Website  
BMJ Careers  
Royal Colleges  
Health Boards/Clinicians  
Colleague/Friend

## Recruitment

NES Recruitment  
Medical Colleges MTI Scheme

## Visa

*Tier 5*  
Government Authorised  
Exchange (e.g. MTI)  
*Tier 2*  
Certificate of Sponsorship  
*No Visa*  
EEA Nationals and Switzerland

## Trainee Requirement

IELTS result >8.5  
Learning outcomes which  
align with the overall Strategic  
Health Plans and  
requirements of their Country  
of Origin (for Tier 5 Visa entry)

## Support Structures

Human support  
Finding accommodation  
Adjusting to UK climate (e.g.  
winter clothes allowance)  
Registering a bank account

Human resources  
Occupational Health Checks  
Tailored Induction Programme

Department/Training environment  
Recognition that the trainee  
will have come from a different  
working environment and a  
realistic expectation to create  
appropriate support for the  
trainee in order to maximise  
their benefit and also the  
departments experience of  
training them

GMC Welcome to UK Practice

International Medical  
Training Fellowship

Recognition of time taken to apply and meet entry requirements to UK

'Lag time' from arrival into Scotland, commencement of post and preparation for service provision

# Benefits of IMTF



## Health Board and Department

Service provision for rotas with high locum spends resulting in financial savings and potential for improved trainee satisfaction due to reduced pressure to fill gaps  
International dimension brought to the department  
Opportunity for long term interdepartmental relationships to develop  
Opportunity for trainees to learn about different practices in other parts of the World if they do not have the opportunity to work abroad themselves



6 out of 6 IMTF (2015) said they would recommend the scheme to a friend or colleague

## International Medical Training Fellow

Opportunity to experience working in the a different health system/the NHS  
Exposure to facilities which aren't available in their home country  
Learning to work in a more structured way using clinical guidelines  
Opportunity for further training, good experience in a specific area they wish to be exposed to



## NHS Scotland

Opportunity to improve the reputation for Scotland as a place to come for high quality training  
Clear demonstration of support for training doctors from LMICs  
Increased prospects for the development of World wide medical relationships  
Exposure of the workforce to the 'International dimension' and shared learning



## Country of Origin

*Particularly relevant for LMICs*  
Increased capacity building  
Potential for interdepartmental relationships and support

# Summary

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- Recognising trainee choices and responding to these
- Recognising that trainees value the time to explore
- Listening to trainees and recognising them as an asset

During the session please have a think about these key questions:

*1. What should we all do to improve the sustainability of top quality staff in Scotland's medical workforce?*

*2. In your role, what have you / could you do to improve recruitment and retention of medical staff in Scotland?*

*What are the main barriers that you face? How can we work to overcome these barriers?*