C25

A new curriculum for the next generation

Neil Kennedy

Director CME

3-9-19

Before we get on to anything else ….

- Thank U
- UU

QUEEN'S UNIVERSITY BELFAST

Rationale

No ‘overall’ review since 1996

Population is changing:

- Older, multimorbidity

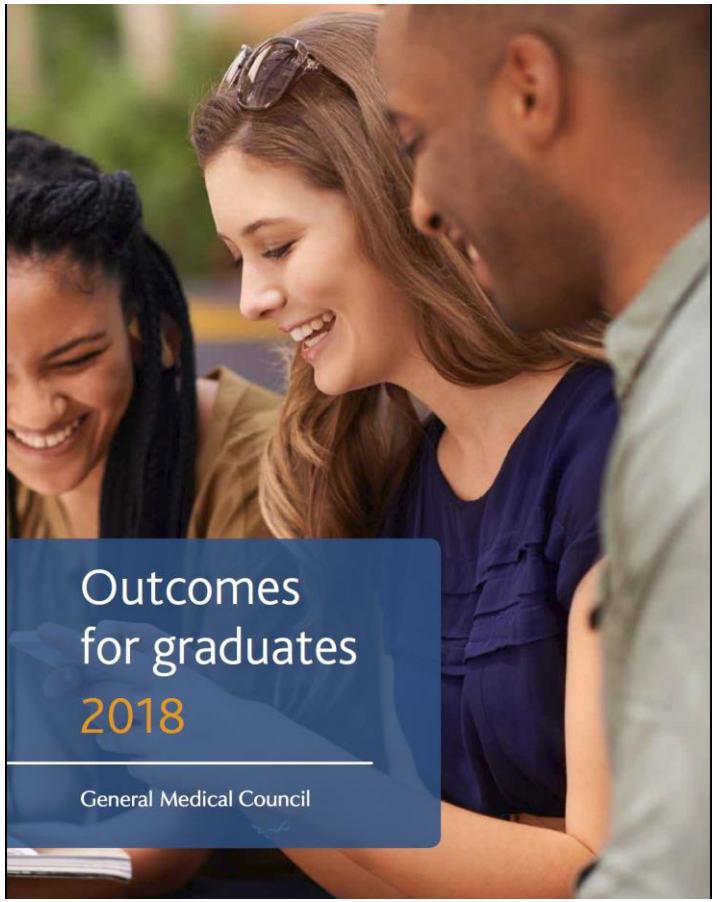
Models of medical care are changing:

- Bengoa report – Systems not Structures

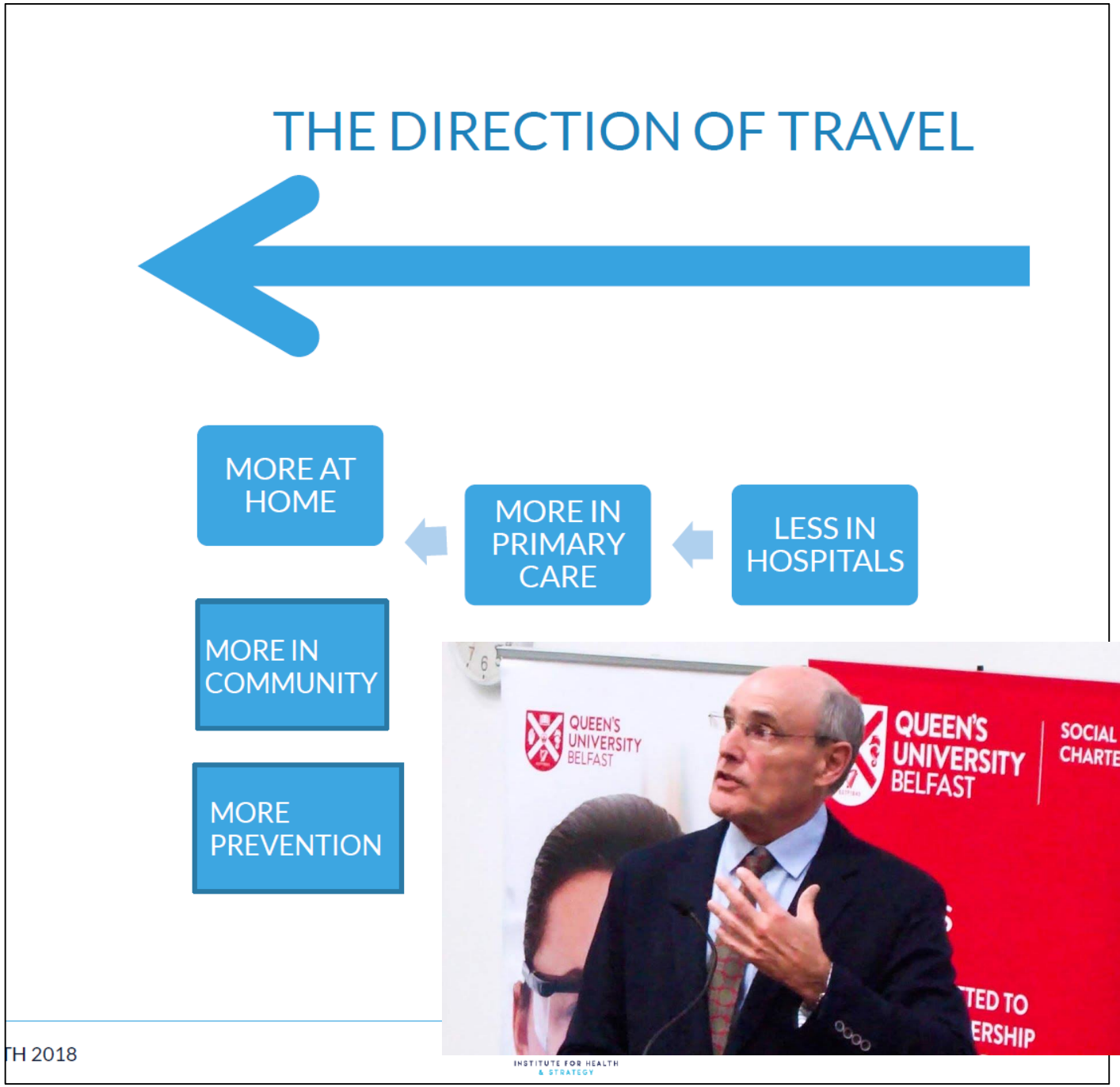
Expectations of GMC are changing:

- Outcomes for Graduates 2018
- Medical Licensing Assessment 2022

Recommendation of GMC visit April 2017



QUEEN'S UNIVERSITY BELFAST



The Bengoa Report

More prevention / population health

Blurring of primary / secondary care divide

Focus on new ways of doing things, quality improvement

Need for medical leaders

QUEEN'S UNIVERSITY BELFAST

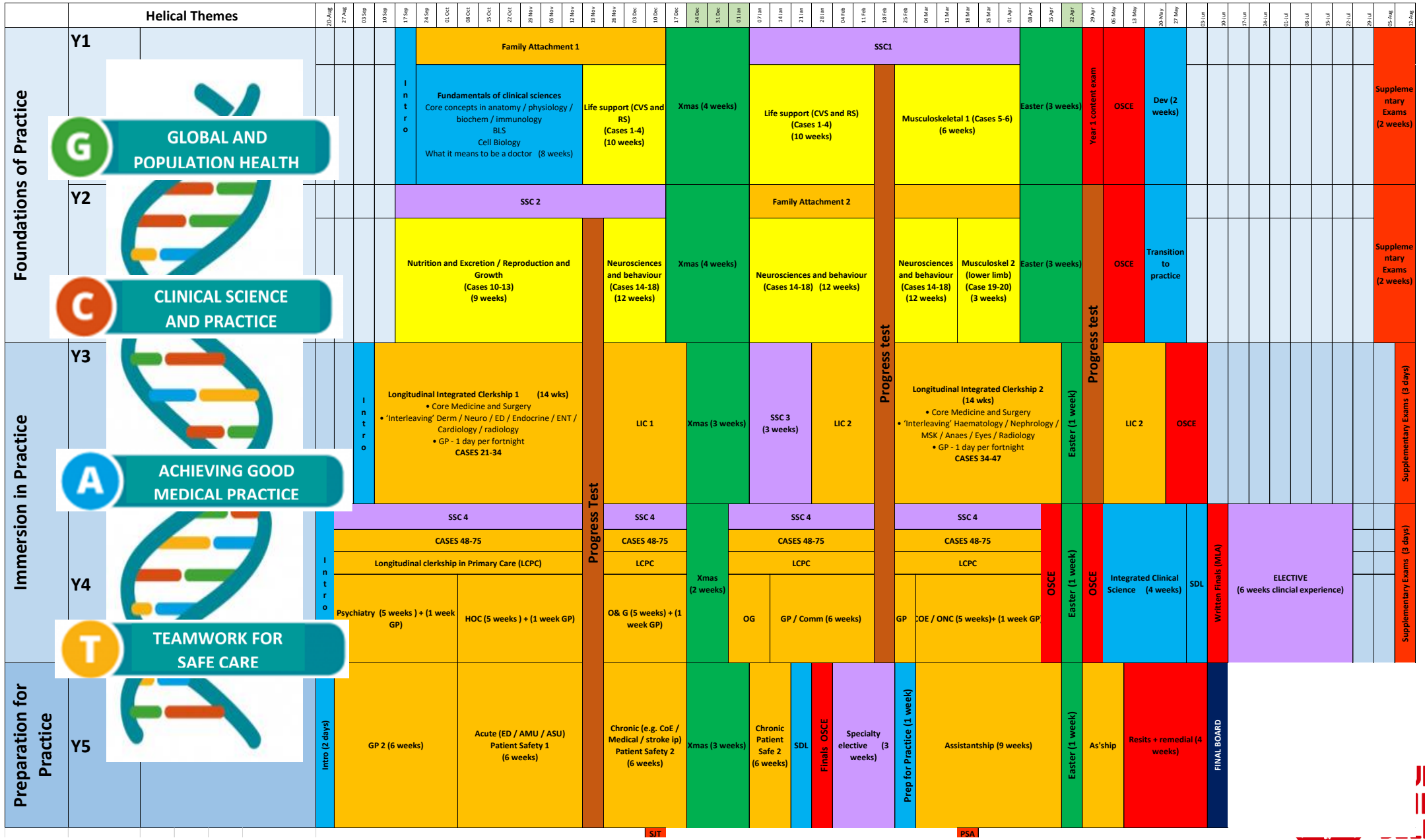
Review process

- Extensive stakeholder engagement process

- We should retain:
  - Early clinical contact
  - Cadaveric dissection
  - Final year assistantship

- Areas for improvement:
  - Integration within and between years
  - Integration of biomedical and public health science with clinical science
  - Time in primary care
  - Reduce ‘silos’ of learning
  - 3rd year - students need a ‘home’

QUEEN'S UNIVERSITY BELFAST



Significant changes

1. Phases – Foundation Y1-2 / Immersion Y3-4 / Preparation Y5
2. Vertical Themes – GCAT
3. Integrated systems based teaching year 1+2
4. New quality improvement project year 4
5. Case based learning year 1-4
6. Longitudinal clerkships year 3 and 4
7. More time in general practice – 25%
8. Assessment – Progress testing

QUEEN'S UNIVERSITY BELFAST

Phase	Year of Study	Focus
Foundations of Practice	1 and 2	Integrated biomedical and behavioural science teaching focusing on body systems Case-based learning
Immersion in Practice	3 and 4	Workplace learning. Longitudinal Integrated Clerkships (LIC) • year 3 centred on secondary care • year 4 centred on primary care. Case-based learning
Preparation for Practice	5	Consolidation of learning in primary care, acute care and chronic care Assistantship

Structure of C25

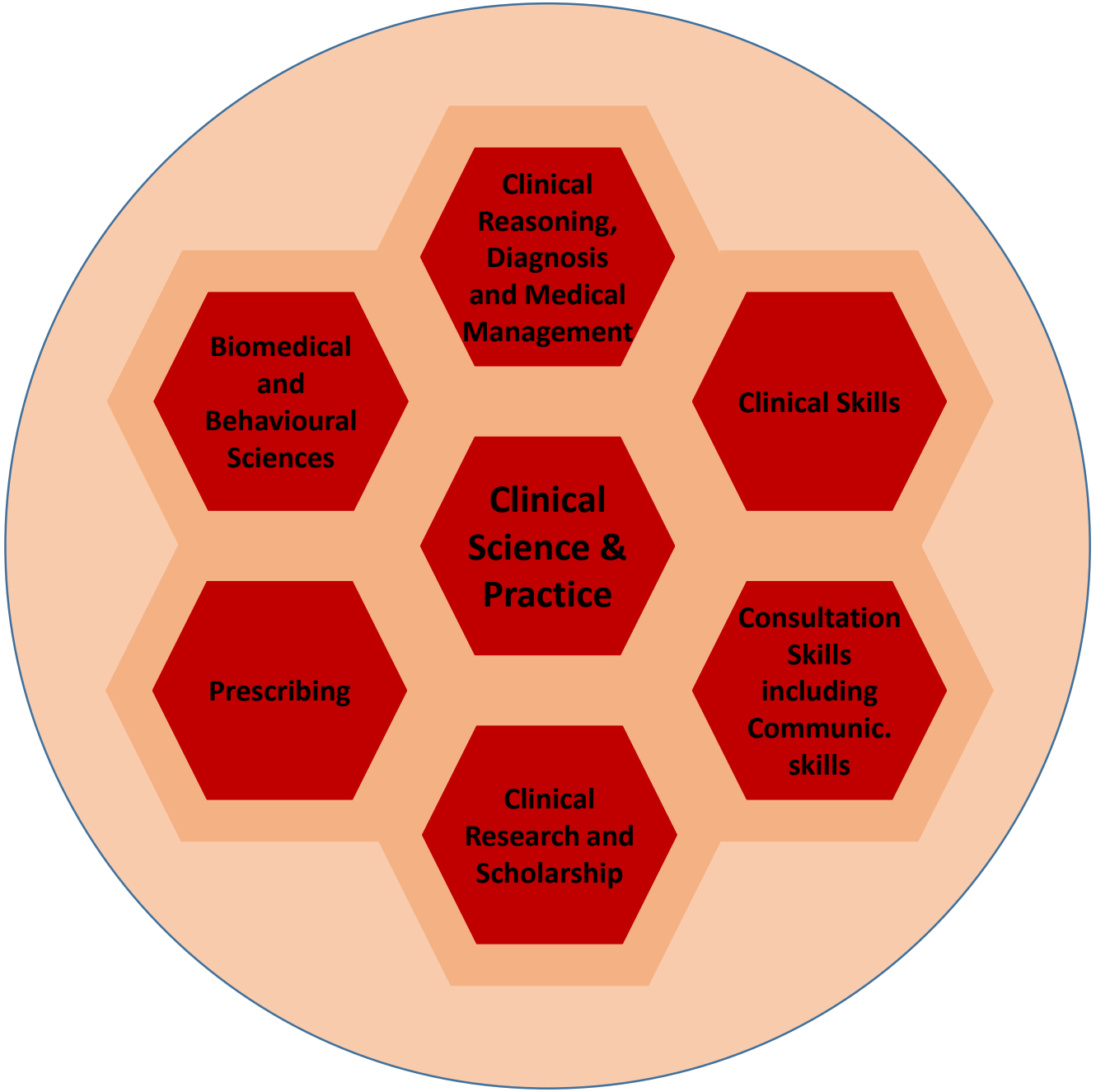
QUEEN'S UNIVERSITY BELFAST

Four Helical themes of ‘Curriculum DNA’

G

Four Helical themes of ‘Curriculum DNA’

C

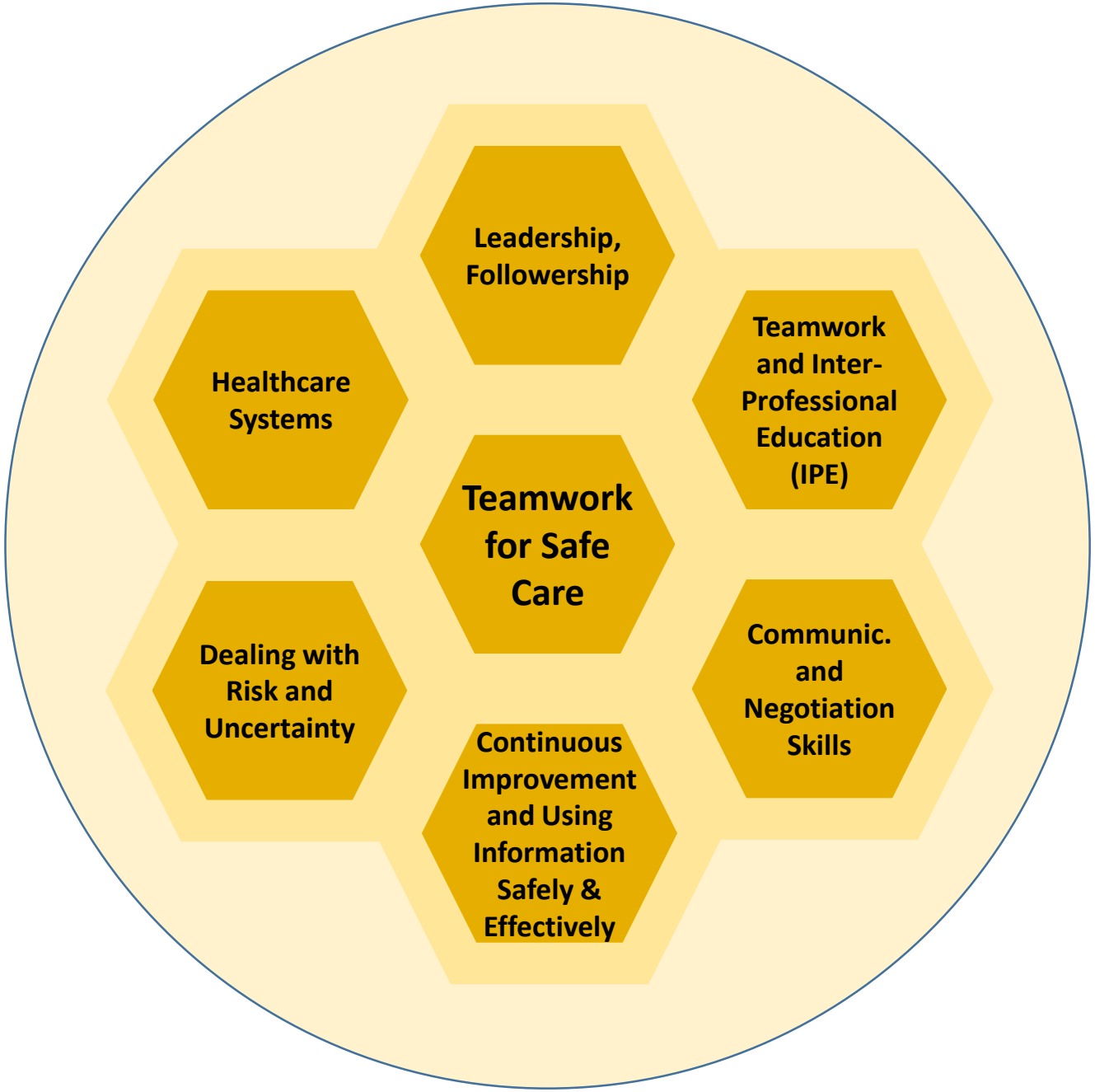


Four Helical themes of ‘Curriculum DNA’

A

Four Helical themes of ‘Curriculum DNA’

T



Years 1 and 2

- **Integrated** systems based teaching – biomedical, behavioural, public health, clinical science
- Foundations module
- 5 systems modules:
  - Cardiovascular / Respiratory / Haematology
  - Musculoskeletal 1
  - Gastrointestinal / Renal / Endocrine / Reproductive
  - Neurological (includes mental health)
  - Musculoskeletal 2 (includes skin)
- Retain cadaveric dissection and early clinical contact / FAMILY ATTACHMENT
- Case-based learning

QUEEN'S UNIVERSITY BELFAST

Case based learning

- Groups of 8-10
- 2 hour group learning Monday week 1, Thursday week 1, Thursday week 2
- 2 week cycle - Clinical scenario trigger – written / video based
- Facilitated ‘guided learning’ (NOT PBL)
- Students brainstorm on what they know (or not) and decide on learning tasks
- Students create shared learning resource
- Learning outcomes given to the students at first meeting
- **Remainder of week**: lectures / tutorials / practical work aligns with case

	M	T	W	T	F	M	T	W	T	F
Year 1 AM										

QUEEN'S UNIVERSITY BELFAST

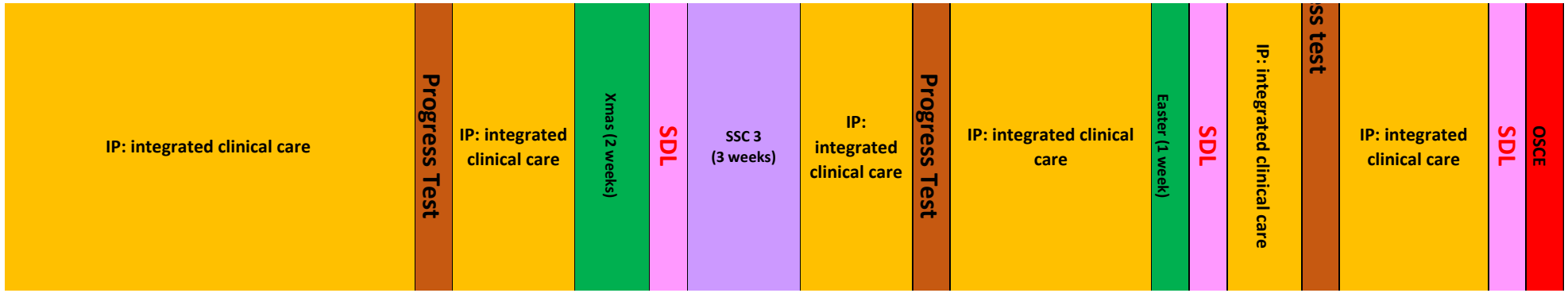
For example – year 1

- 5 year old with recurrent wheeze / non-compliance with Rx
- Learning outcomes include:
  - Histology and anatomy of lower respiratory tract / sympathetic innervation / α +β receptors / β antagonists / flow-volume loops / inflammatory process etc
  - G – hygiene hypothesis / particulate pollution
  - C – communication with a child
  - A – raising concerns
  - T – role of health visitor
- Didactic / practical teaching that week may cover some of these LOs

QUEEN'S UNIVERSITY BELFAST

Year 3 – Longitudinal Integrated Clerkship in secondary care

- Integrated care module: 14 week clerkships in Belfast Trust: 14 weeks in another trust
- Medicine / surgery and subspecialties / emergency medicine
- Weekly case based learning
- 2 days per month in primary care (15 days a year)



QUEEN'S UNIVERSITY BELFAST

Why longitudinal clerkships?

- Belonging – students want to be part of a team
- OFG objectives: ‘Understanding complexity’ and ‘Dealing with uncertainty’
- Existing curriculum has excessive focus on inpatient, hospital based care
- Reduce variability of student learning through cases
- ‘Spaced’ learning / ‘interleaving’ – improves knowledge retention

QUEEN'S UNIVERSITY BELFAST

Back to school…

School timetable

Monday	Tuesday	Wednesday	Thursday	Friday
Maths	English	Biology	Drama	Chemistry
French	Maths	Physics	PE	English
Art	Drama	Chemistry	German	Maths
Biology	IT	English	French	Physics

Block Rotations

Maths (8 weeks)	English (8 weeks)	Biology (8 weeks)	Drama (8 weeks)

QUEEN'S UNIVERSITY BELFAST

For example – year 3

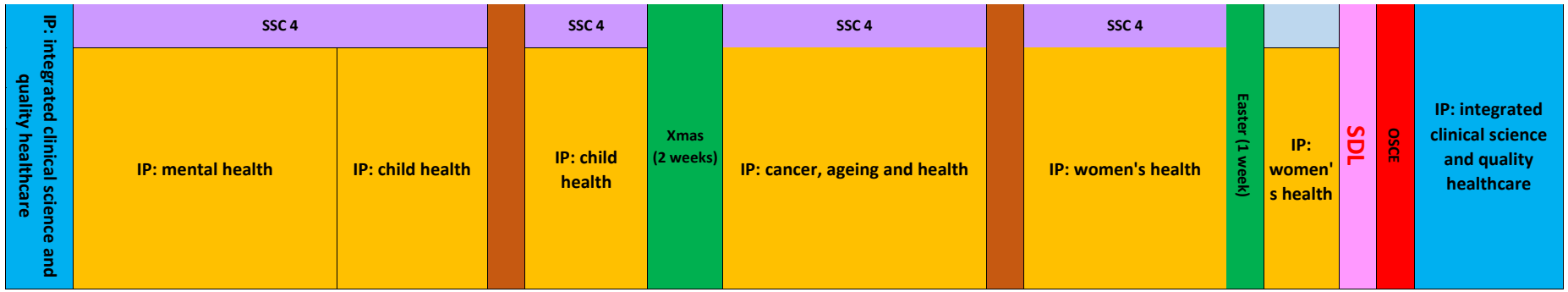
- 60 year old with COPD, pulmonary hypertension, life-limited

- Learning outcomes:
  - Respiratory symptoms and signs in COPD / pathogenesis of COPD / treatment of COPD / signs of pulmonary hypertension etc.
  - G – evidence-based smoking reduction strategies
  - C – lung compliance / alveolar gas exchange / flow-volume loops
  - A – ethics of end-of-life care
  - T – accessing home oxygen therapy

QUEEN'S UNIVERSITY BELFAST

Year 4 - LIC primary care and life cycle

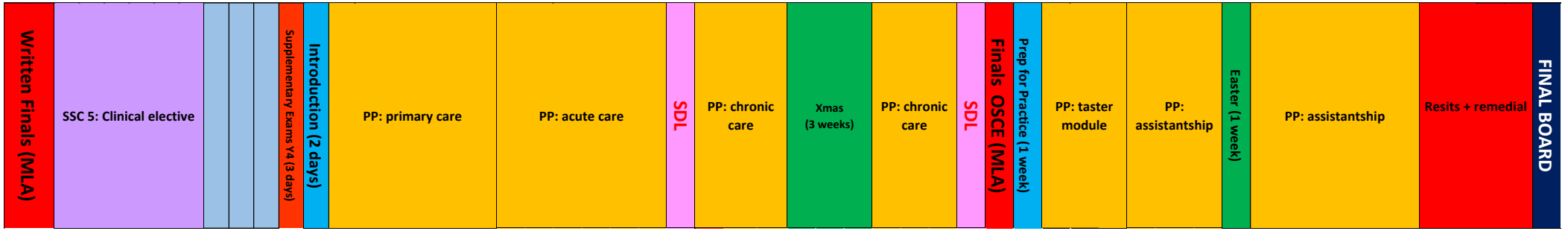
- 4 rotations x 7 weeks in Child Health / Women's health / Mental Health / Cancer Ageing and Health
- Each block co-designed and co-delivered in primary and secondary care
- 8 weeks of GP (4 x 2 weeks within each rotation)
- Integrated clinical science and quality improvement teaching:



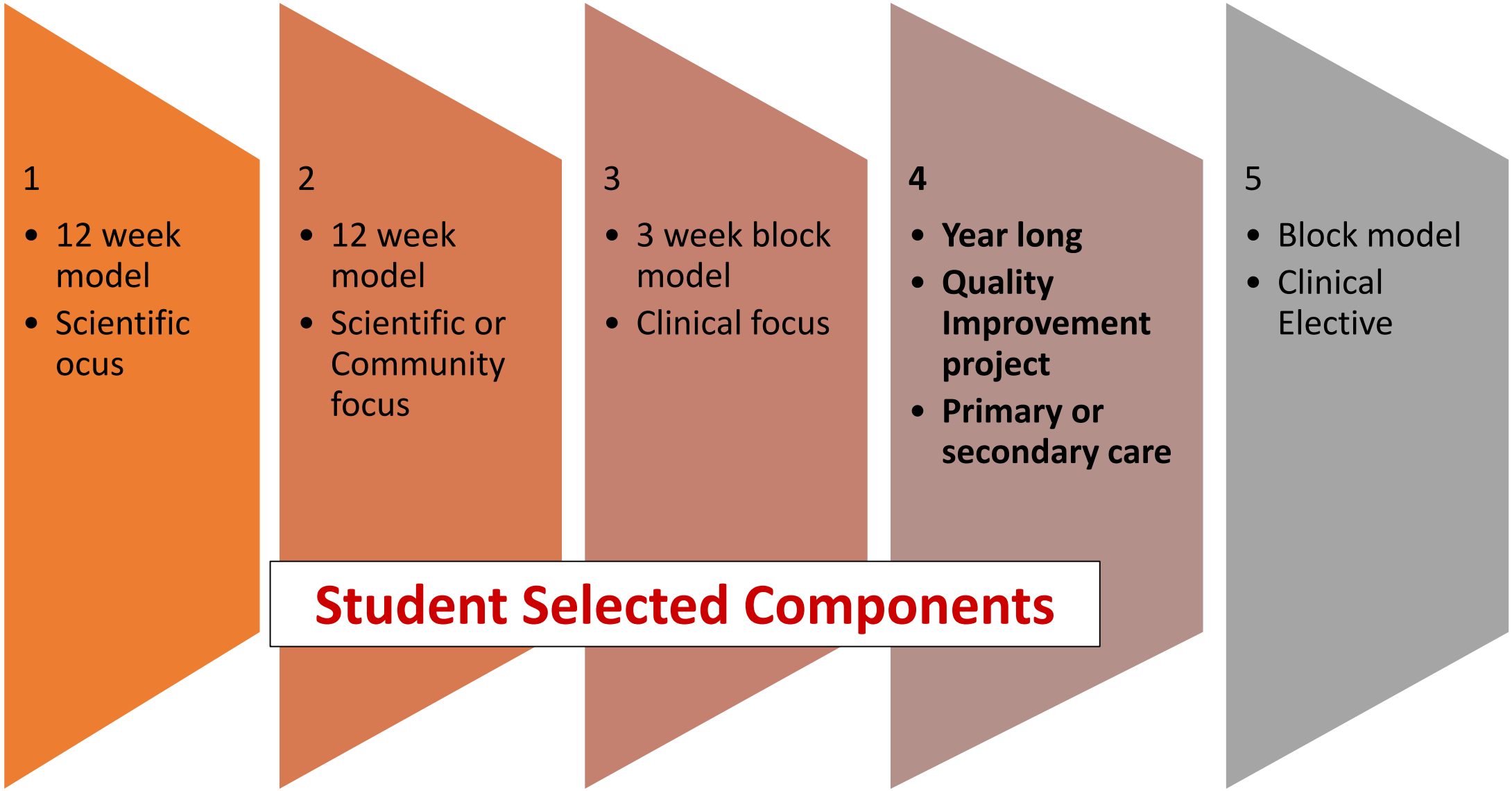
QUEEN'S UNIVERSITY BELFAST

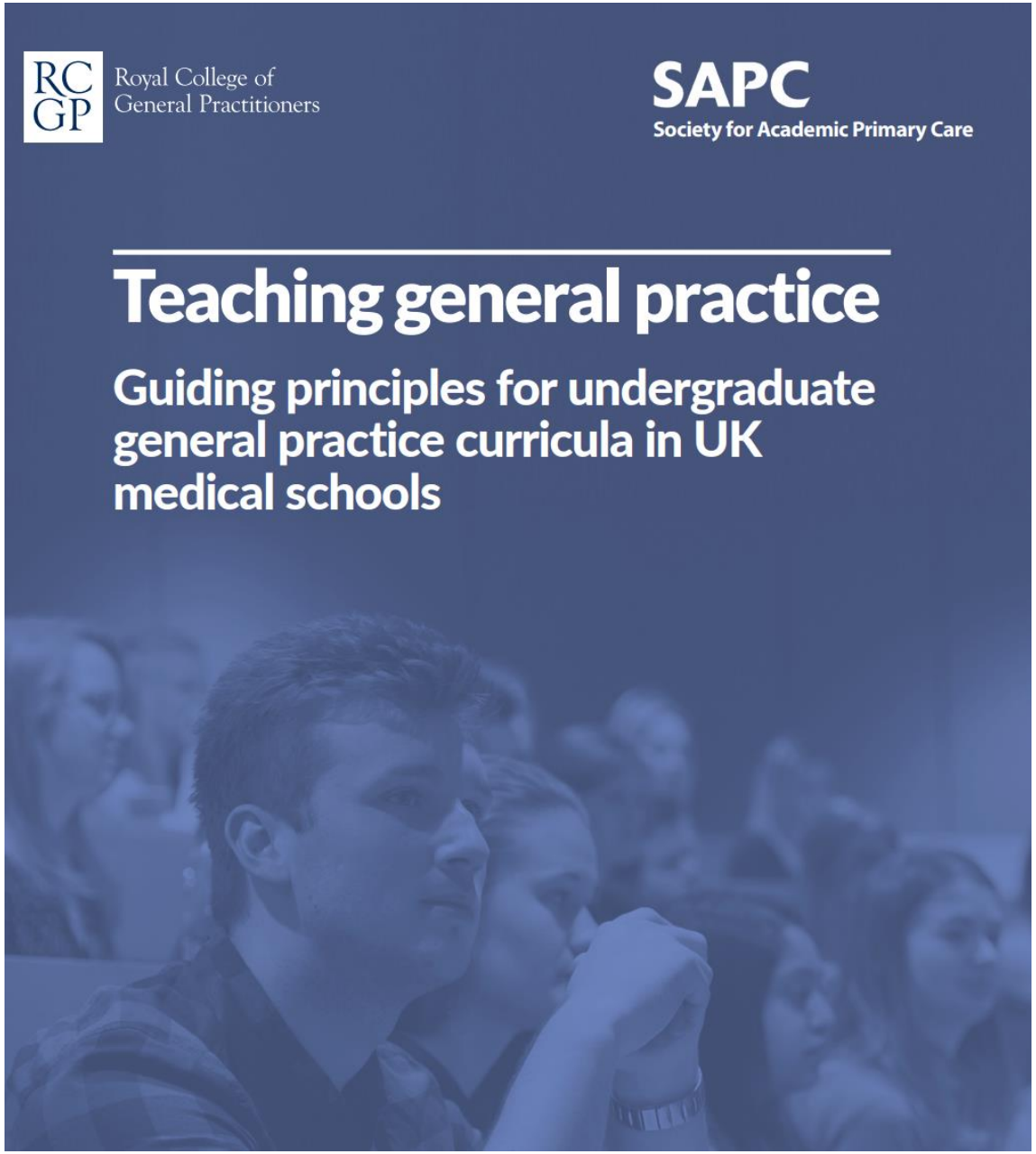
Year 5 – preparation for practice

- Written finals at transition to year 5
- Clinical elective
- 3 clinical blocks x 6 weeks - acute care / chronic care /primary care
- 3 week ‘taster’ placement
- 9 week assistantship (Including 1 week GP)



QUEEN'S UNIVERSITY BELFAST


1
• 12 week model
• Scientific ocus
2
• 12 week model
• Scientific or Community focus
3
• 3 week block model
• Clinical focus
4
• Year long
• Quality Improvement project
• Primary or secondary care
5
• Block model
• Clinical Elective
Student Selected Components



Primary Care

In every year of the curriculum

Weighted to years 4 and 5

22 weeks of primary care

(25% of core clinical placement)

QUEEN'S UNIVERSITY BELFAST

Summative testing

- Individual modules in-year are pass/fail (attendance, logbook)
- Synoptic knowledge test at end of year 1
- Progress testing for years 2 – 4.
- OSCEs at year end are summative years 1 - 4
- “Finals” are also GMC Medical Licensing Assessments
- Written “Finals” at transition to year 5 (end of year 4)
- OSCE “Finals” Spring of year 5

QUEEN'S UNIVERSITY BELFAST

Progress testing, outline

- Longitudinal, repeated assessments of functional knowledge
- Pitched at graduate-level applied knowledge
- Multiple times per year (2 - 4)
- All years sit same paper; different set-standard
- Result accumulated over the year for progression
- Progress demonstrated over years
- Many new curricula are using this system

Exeter, Plymouth, Kings, UCL, Manchester, Bristol, Cardiff, Swansea

QUEEN'S UNIVERSITY BELFAST

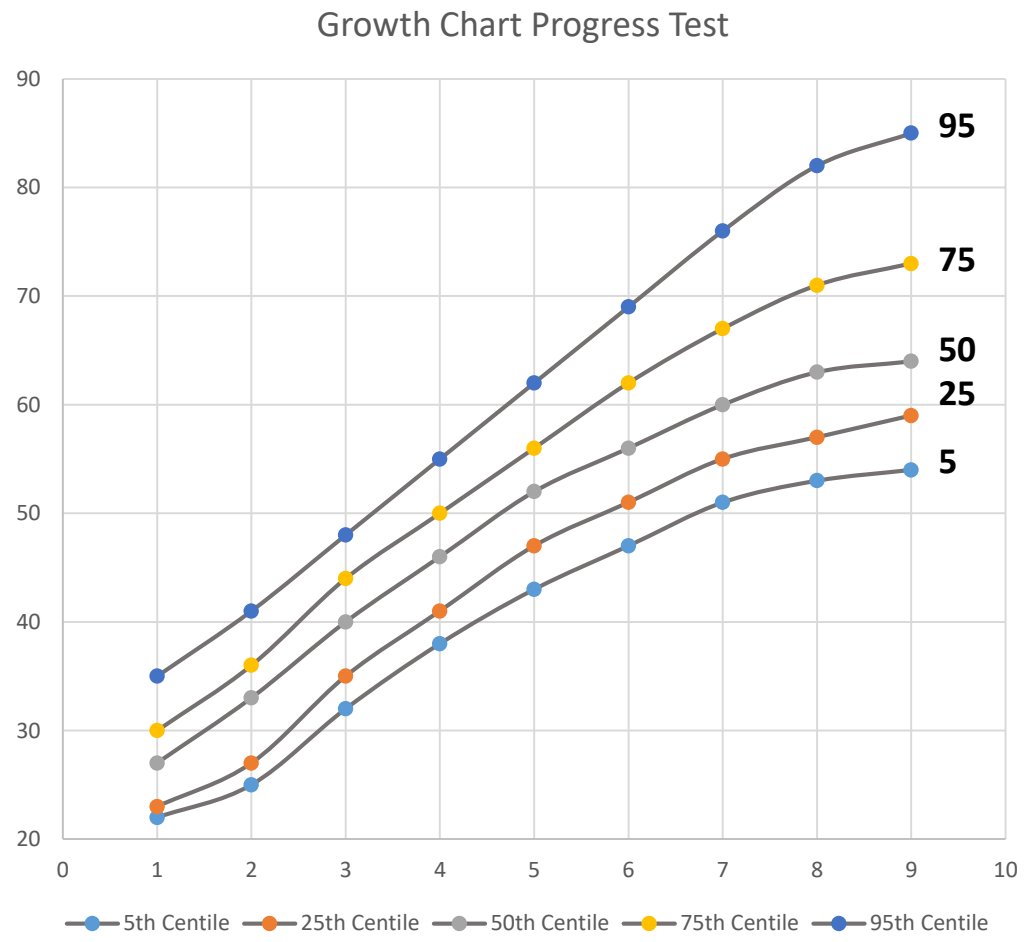
Progress testing, benefits

- Shown to reduce exam stress, makes cramming irrelevant
- Evidence it encourages deeper learning
- Integrates learning between years
- ‘primes’ learning for students: focuses teaching for lecturers
- Students see early years material through to finals, vice versa
- Students can see their progress over years, by test and subject
- Avoid ‘Learn Assess Forget’ - LAF

“Assessment *for and of* learning”

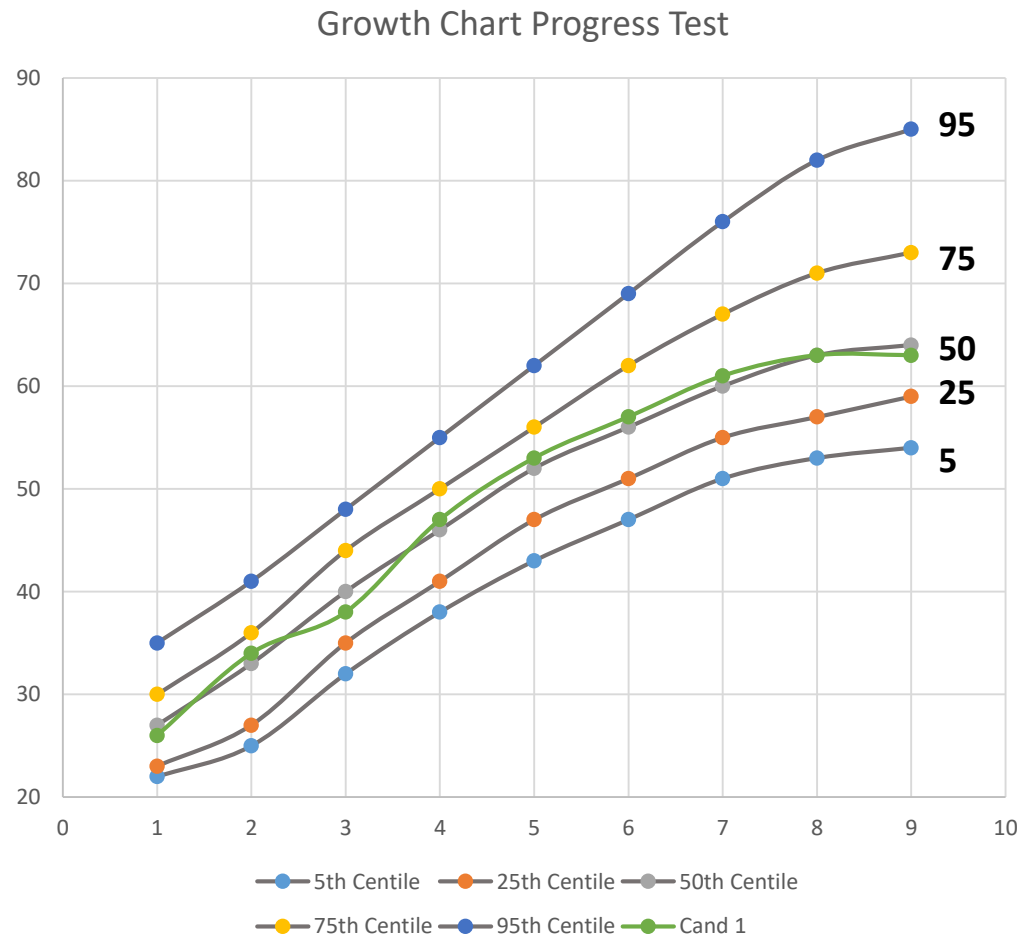
QUEEN’S UNIVERSITY BELFAST

Progress test feedback – “Growth” Chart - Raw scores



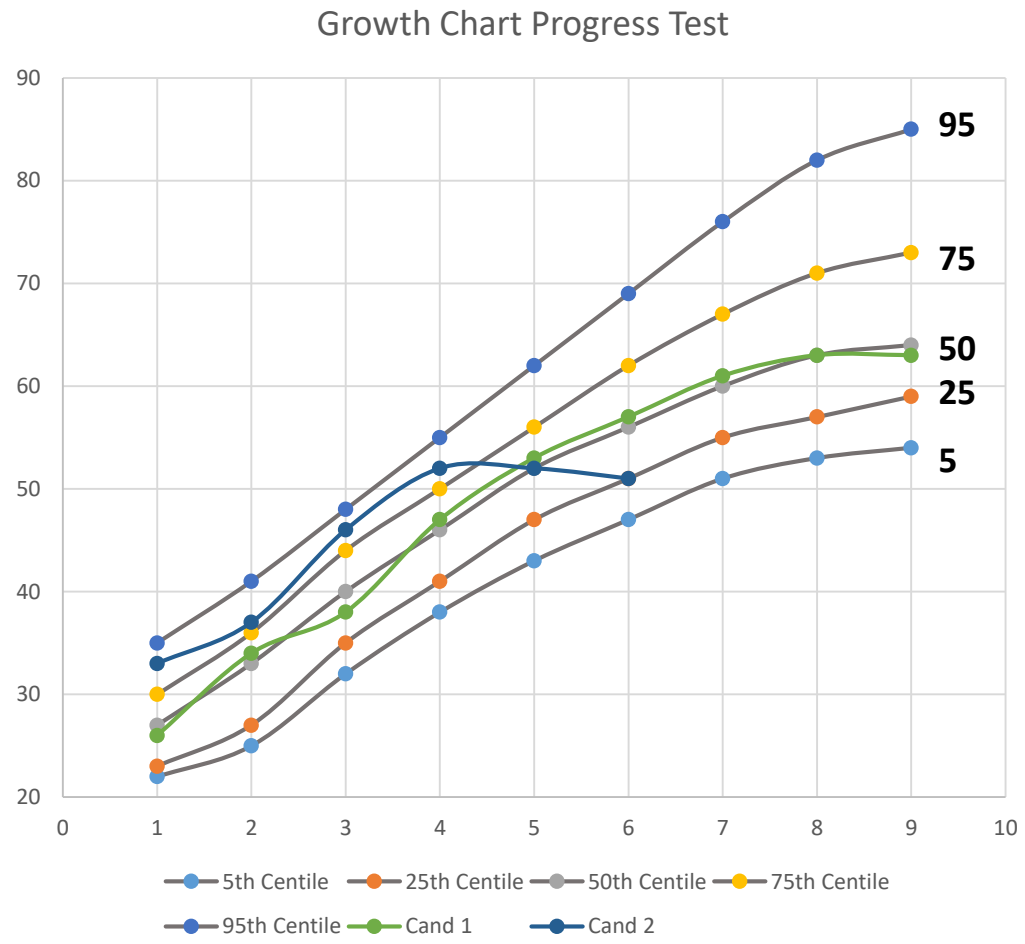
QUEEN'S UNIVERSITY BELFAST

Progress test feedback – “Growth” Chart - Raw scores



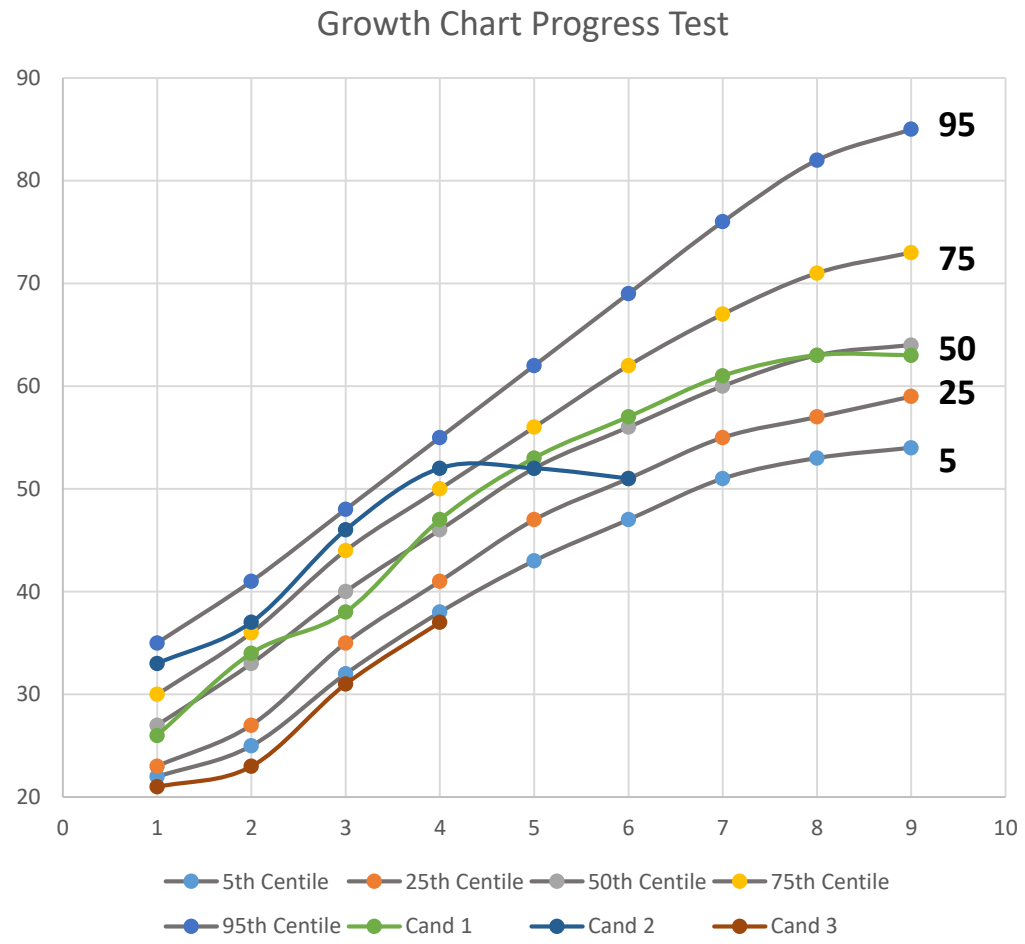
QUEEN'S UNIVERSITY BELFAST

Progress test feedback – “Growth” Chart - Raw scores



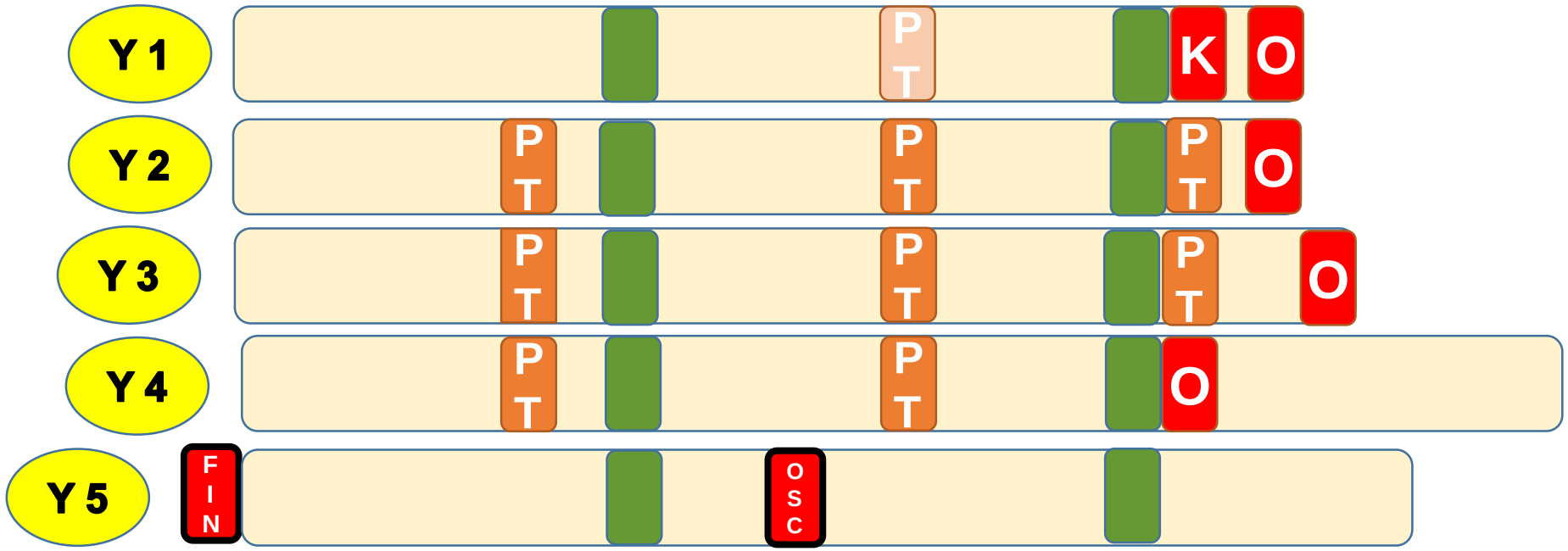
QUEEN'S UNIVERSITY BELFAST

Progress test feedback – “Growth” Chart - Raw scores



QUEEN'S UNIVERSITY BELFAST

Key assessments in the new QUB curriculum



PT	Progress Test – years 2-4
K	Year 1 Knowledge test
O	OSCE
FIN	Written finals = Medical Licensing Assessment
OSC	Clinical finals = Medical Licensing Assessment

QUEEN'S UNIVERSITY BELFAST

> We only get exposure to really busy practices where everyone is really stressed out/overworked. Every GP I've met has told me not to do general practice".
>
> Medical Student

(Some of the) Challenges

- Capacity
- Rooms
- Transport to placements
- Progression in primary care centred learning
- GP bashing

QUEEN'S UNIVERSITY BELFAST

Lots of ways to get involved

- Case writing
- Leading Case based learning in years 1-4
- Question writing for progress testing – we need lots of questions set in primary care
- QI projects and assessment
- Provide fantastic clinical placements

QUEEN'S UNIVERSITY BELFAST

New curriculum – same vision

"The Queen's medical graduate is a caring and compassionate doctor who is a critical thinker, problem solver and reflective practitioner with excellent clinical skills who values, above all else, service to patients."

QUEEN'S UNIVERSITY BELFAST