

#### Welcome







#### Welcome and introductions



Please put GP name and cypher (not practice code) in chat to facilitate SUMDE payment \*

\* 'front desk' or 'my iPhone' not sufficient...

#### Session Plan



Overall QUB medical course and where Y4 GP fits in

Assessment

Y4 GP learning outcomes and timetabling

Sharing some 23/24 feedback and experiences throughout

\* BREAK \*

Activities to support students to achieve learning outcomes

Practicalities including timetabling, communication channels, payment, top tips

#### Your questions we will address



- When are the students coming? Are there any days/weeks they will not be in?
- What is expected from the tutor/practice?
- How has the student progressed until now and how can we help the student to progress further? What if I have a concern?
- What kind of learning activities will the student be looking for?
- What can they actually be doing in practice?
- What is expected re attendance?
- Any signing off to be done?



## Housekeeping



- Please use the chat function for any questions as they arise
- (Can direct message Jim McMullan/QUBGP)
- Will stop at intervals specifically to address Qs

- Recorded session; resources available through our website:
- https://www.qub.ac.uk/sites/qubgp/



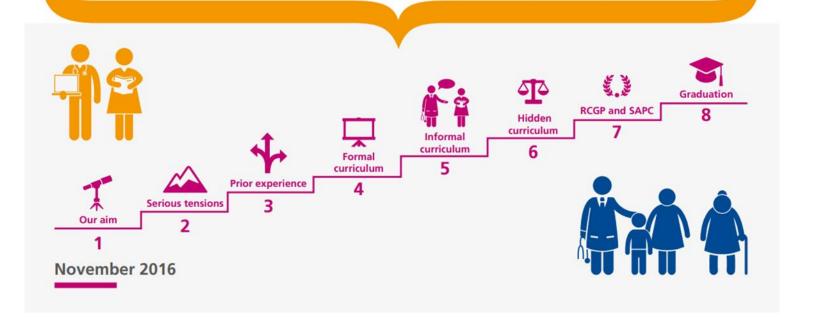
# GENERAL PRACTICE: SHAPE TOMORROW'S DOCTORS





## By choice – not by chance

Supporting medical students towards future GP careers



'There is a direct relationship between the percentage of clinical curriculum devoted to authentic General Practice experience and subsequent career choice'



Alberti H, Randles HL, Harding A, McKinley RK. Exposure of undergraduates to authentic GP teaching and subsequent entry to GP training: a quantitative study of UK medical schools. Br J Gen Pract. 2017



#### Impact on future careers

"I absolutely loved this GP practice and it has made me consider for training" (Y4 student, 2024)

## Overview of QUB medical curriculum



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



#### Where do exams fit in?



POPULATION HEALTH

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

**CLINICAL SCIENCE** AND PRACTICE ACHIEVING GOOD MEDICAL PRACTICE Written finals ('MLA AKT') June after Y4 **TEAMWORK FOR** Clinical finals Spring Y5 SAFE CARE

## GP practices are where patients are at



"The most positive aspect was the volume of patient exposure which we received. I saw more patients on this attachment than any other by a large margin, and this exposure and independence in seeing patients really developed my skills" (Y4 student, 2024)

## GP practices are the place to learn



"I found my time at GP unbelievably useful and had the most amazing time! The staff were so welcoming and supportive and always had time to teach me. Being in the same GP all year was really useful and if I could go back to the same practice next year for placement I definitely would!" (Y4 student, 2024)

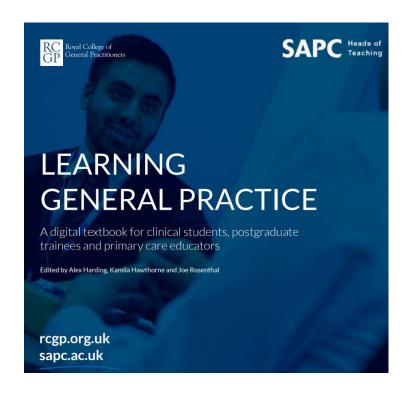
#### Understanding their assessments



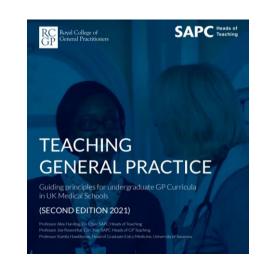
- 'MLA' (Medical Licensing Assessment) national exam for all UK medical schools
- Incoming Y4 will be second QUB cohort; sit 'AKT' (Applied Knowledge Test) June 2025
- ~ 40% questions GP context
- https://www.qub.ac.uk/sites/qubgp/Resources/MLA/
- Progress Testing through Years 1-4
- Y4 clinical OSCE (several GP based stations) late May 2025

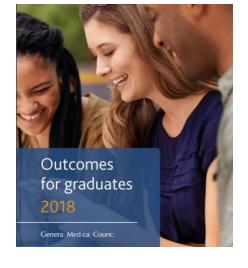


**General Practice across the QUB Medical School Curriculum 2024/2025** Year 3 Year 4 Year 1 Year 2 Year 5 **FAMILY MEDICINE Family Attachment** 5 sessions inc. home visits **FAMILY MEDICINE General Practice Experience 5** sessions **GENERAL PRACTICE ATTACHMENT** 12 sessions **GENERAL PRACTICE LONGITUDINAL CLERKSHIP** 4 x 2 weeks **PREPARATION FOR PRACTICE** (primary and preventative care) 7 weeks











Each year the GP element has a different 'focus' – learning outcomes developed over a 5 yr programme

#### Overall GP Learning Outcomes



- 1. Holistic care (the biopsychosocial model) (includes dealing with uncertainty, prescribing/ adherence/ polypharmacy/social prescribing)
- 2. The physiology of holistic care (includes Medically Unexplained Symptoms)
- 3. The doctor-patient relationship
- 4. Communication with patients of all backgrounds
- 5. Continuity of care and integrated care
- 6. Long-term conditions in i) Diagnostic phase, ii) Maintenance phase, iii) End of life care
- 7. Emergency conditions
- 8. Multi-morbidity and complexity
- 9. The social determinants of health
- 10. Preventing disease and promoting health
- 11. Medical ethics
- 12. Effective delivery of care –

The generalist approach, also includes sustainable healthcare



#### QUB Students and impacts



- ALL STUDENTS HAVE ALREADY HAD SOME NI GP EXPERIENCE
- More graduate students (some health care professionals)
- Wide variation in a cohort of >300 (life experiences, interest, ability, maturity...)
- Part-time working, many in Medical Student Technician/Care assistant roles
- More non NI students, more diverse

#### New resource





HELPFUL LINKS ▼ STAFF STUDENTS ALUMNI

STUDY RESEARCH INTERNATIONAL BUSINESS ABOUT

#### **EDI Training**

UNIVERSITY SITES / QUBGP / RESOURCES / EDITRAINING

Annual Updates MyProgress New Practices MLA EDI training GPCPA CPD Events Remote consulting
---

All GP tutors and examiners are required to have completed training on Equity, Diversity and Inclusion (EDI) at least every 5 years.

QUB and UU Medical Schools along with NIMDTA have created a 40 minute training resource specific to the needs of medical educators in NI. Completing this online course will be accepted as evidence of training by all 3 organisations.

The training module launched on 21/3/24. You can access the course HERE.

Please join the EDI Community where the course is located online, to be notified of future resources as they are added.



#### **EQUITY, DIVERSITY & INCLUSION**



FOR HEALTHCARE EDUCATORS









## Broad course structure/exams/student mix





#### Y4 Co-Led, developed & delivered 1ry/2ry care



4 x 9 week 'pillars'



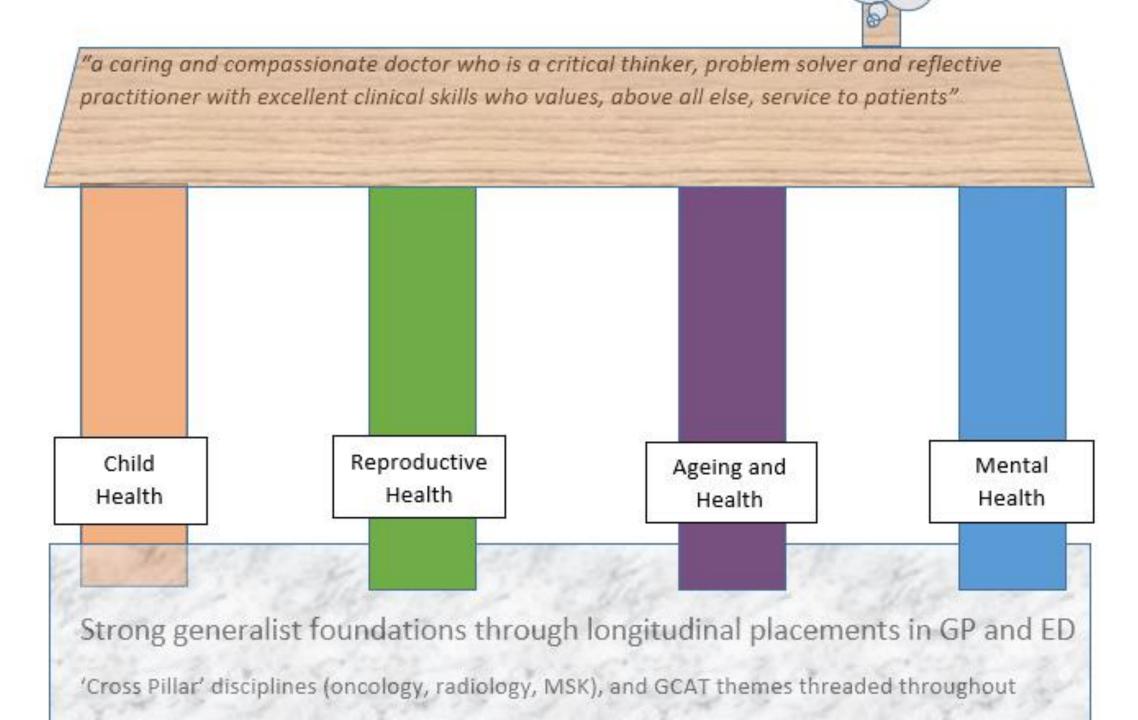
Reproductive health

Child health

Mental health

Ageing and health





#### CHILD HEALTH

SPECIALIST LEAD: DR PETER MALLETT

p.mallett@gub.ac.uk

GENERALIST LEAD: DR CHRISTOPHER DORMAN

christopher.dorman@qub.ac.uk





#### REPRODUCTIVE HEALTH

SPECIALIST LEAD: DR JANITHA COSTA

i.costa@gub.ac.uk

GENERALIST LEAD: HANNAH O'HARA

h.ohara@qub.ac.uk





#### AGEING & HEALTH

SPECIALIST LEAD: DR ENDA KERR: enda.kerr@belfasttrust.hscni.net GENERALIST LEAD: DR MIRIAM DOLAN:

m.dolan@gub.ac.uk





#### MENTAL HEALTH

SPECIALIST LEAD: DR JULIE ANDERSON

iulie.anderson@gub.ac.uk

GENERALIST LEAD: DR JIM MCMULLAN

james.mcmullan@qub.ac.uk









#### Y4 Pillar structure: across care settings



4 x 9 week 'pillars'

Each Pillar:

1 week 'Pillar Teaching' QUB

2 weeks in GP

1 week in ED

5 weeks 2ry care areas

Reproductive health

Child health

Mental health

Ageing and health

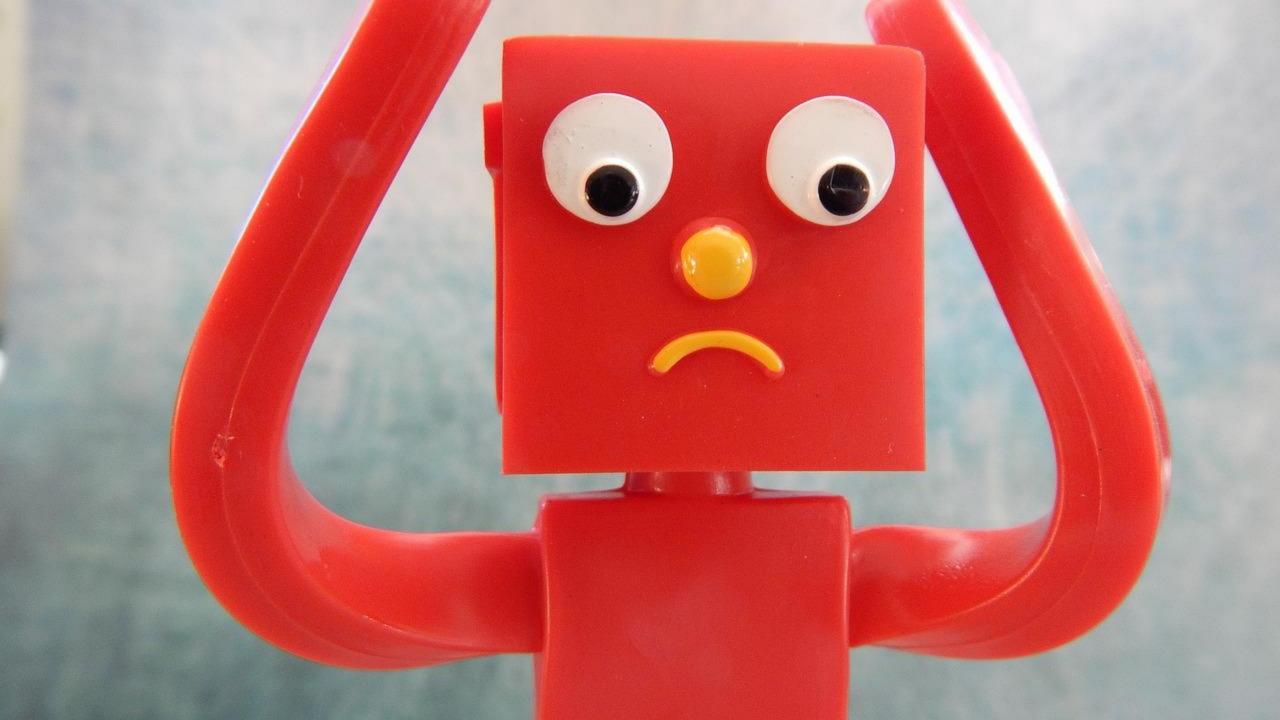
Cross Pillar elements:

sciences') Professional Knowledge ('basic Areas

Radiology, oncology, MSK



	+	T													
	1	-		4		4		4	1			1		4	
Generalization Medicales Medicales	SK MEN A	IL HEAL	ACE	PILLA	CHANGE	PILLAR WEEK CHILD HEALTH	Charles	PILLAR Pather selan	PILLAR WEEK AGEING & HEALIN	NG & HEAL	Consultration	PILLAR W	Canaditation	PILLAR WEEK REPRODUCTIVE REALTH	SQL I II
Control Practice Manual Head	Sec.	4	Martin House	CHEFFIGE	ACE	Carre of Provider	Chichode	Againglabinds	Againglabuse	Ovokog	Conversed Projection	Pape ortains bladb	Ones of Practice	ACE	Pape coluction bladds
Martel Hadilli		WCB.	Described	CHAINME	CHRISTMEN	CHERNAR	Current Practice	Applicable	Applicable	Carre of Practice	ACE	Contrad Practice	Pape challes hadin	Pap other Health	Pape colocition bladds
Mentitled Consultration	Marie Marie		Marrie Hude	Children	CHEHINE	ACE	Contrast Probition	Ageinglichmen	Application	Garwell Frankin	Chroking	Chance of Provider	ACE	Pap ottotim Huddi	Pape collection bladds
Mendinas Mendina	- Open	and Practice	Designation	Ownerd Practice	Charles	CHEHINE	ACE	Oscopia	Garwell Frankin	Applicable	Applicate	VCE	Paper colocities Houlds	Pap otherine Health	General Practice
ACT Mandibad	- Comm	man of Practice	Martin Hadin	Owner of Promition	CHRISTIAN	CHETHORN	Children	100	Corneral Practice	Againgt Faults	Applicable	Pape challes Hadde	Pape colocities Health	Paper charges Houlds	Ownerd Practice
Manufacture Manufacture	the state	97	Cheesed Practice	W	Owned Practice	Chiches	Charles	Owner of Provider	Ovolege	Againgt hude	Againgtohuate	Pape changes blade	Pape colocities Health	Open of Practice	ACR
Mentithals ACE	To State of the St	discussion	Consult Fradon	CHETHAR	General Practice	CHETHAR	Chichiath	General Frankes	ACE	Euglise ortony Lawring	Contraction (Contraction)	Paperdocker blade	Paper colocione Houles	General Practice	Paper charles blade
PILLAR WEEK CHILD HEALTH	EK CHILL	) HEALTH	-	PILLAR	WEEK ME	PILLAR WEEK MENTAL HEALTH	E	PILLARW	PILLAR WEEK REPRODUCTIVE HEALTH	DUCTIVEH	EALTH	PILLAR	WEEK AGE	PILLAR WEEK AGEING & HEALTH	Ξ
Clathum Clathum	Ė	General Practice	CHEFFIGE	General Practice	Durid Hade	Durat hade	ACE	Paper charles Hadilli	General Frantise	Paperobation Hoofits	Paperchalles Hadill	Casto melitri	Contraction of the Contraction o	100	Garwal Fraction
Chartenate ACE		Carre of Practice	Chichoth	Chaire of Promition	Mentalisate	Dend lines	Mental Houle	Papershallon Hadilli	Carre of Promition	ACE	Paperotection Health	Againglibhuith	Againglibhath	Orothog	Onive of Providen
PTCHEHAM PTCHEHAM		TOTALISME	401.4	SHIPMINISHED.	4014	EDWLA	Differential	400.4	PTPspichalli	The chall	- major rivette	- appenditud	- appendix A	401.4	Pillan ble
Chirlings Chirlings		ACE	Cleans of Promition	Shared Hundle	Carried Frantise	Martel blode	Mental Houte	Charte of Provider	ACE	Paperchalles Hadill	Paperdodeline Health	Againgly house	Applicable	Carre of Practice	Ososkop
General Frantise Child Hudde		Children	ACR	Shared House	- Shared House	General Practice	Manual Haddle	VCE	Paperdocine Holds	Pape coluction Health	Care of Practice	Ovokog	Garwell Fraction	Applythese	Application
Control Practice Child Huale		Children	CHREHORE	ACE	- Shared Street	Garwell Fraction	Mand Hade	Paper colocitive Health	Pape collection Health	Pape coluction bladds	Control Practice	ACE	Garwell Fradion	Ageingabhadh	Application
ACE Georgian		CHEHRAB	CHRISINGS	Manual Hause	Owner Females	Durid Hade	Garwell Franks	Paper collection Health	Pape collection Health	Garwell Franklin	ACE	Consed Practice	Overlage	Ageinglichtelle	Application
Chichiath Counties	ration Charle	ali hude.	CHAINME	Mand Hade	ACE	Manual Health	General Praiding	Paper coluction Health	Pape colosibus Health.	General Practice	Pape colocitive Health.	Chance of Promition	ACE	Supplementary Lawring	Castron setter 1
>	VACATION				VACATION	NOI			VACATION	NO			VACATION	NO	
3	VACATION				VACATION	NON			VACATION	NO			VACATION	NO	
DILLAR WEEK	CACFING	A HEALTH	7	WAYTHO	PEK BEDBA	DILLAR WEEK REDRODUCTAVE HEALTH	EAL TH	AV I IIQ	DILLAR WEEK MENTAL HEALTH	TAL HEAL	1	VIIIO	ID MEEK OF	DILLAR WIFEK CHILD HEALTH	,
lapler ories (supper ories Acce		VCE.	Chaire of Providing	Paperdantine Health	Care of Franks	Paperdonne Hadill	Paper other the blade.	Owned Franks	David laids	National Season	ACE	Children	CHAINME	General Practice	CHRISTINGS
Appropriate Appropriates	1	Chroking	General Prosition	Pape challes hadin	Owned Pradice	ACE	Pape coluction bladds	Change of Providing	Durat hade	- april pung	Dend hode	CHARTMARE	ACE	General Practice	CHRISINGS
Apainglabusts Apainglabusts		Carried Practice	ACE	Chaire of Pynelline	Paper charles bladb	Pape charles bladb	Papershalles Holds	Special brank	Carre of Practice	NCB.	Mandillade	CHARINAB	CHARMAN	CHEFFARE	Carine of Providine
Againg Adainst Againg Adainst		General Frantise	Ovokige	General Practice	ACE	Paper charles Hoddle	Pape coluction Houles	Mental House	General Practice	Martin House	Manual House	CHARMAN	CHRESIMAN	ACE	General Practice
Georgia Georgia Pradio	Again Again	- Appropriate	Againglabinds	ACE	Paperotection Health	Paper charles Hould	Chaire of Promition	Mentalinate	Dental Health	Carrier of Promition	Mandifieds	Contrad Practice	CHARTHARD	CHIEFINAR	ACE
PWG DWG	ML4 4	and the	PTABLES	- Bag chall	The chall	They cliebt	PTGF	FTACE	THE PROPERTY.	PTOF	INTERNATION IN	401.4	PTCHENGE	PTCIMINGS	PTCTREEPER
Gerwal Franks Deskip		Againglia hadis	Againgliahmate	Pape colocitive Health	Paperotection Health	General Prosition	ACE	Martellande	Dent Heath	Martel House	Conversed Promition	ACE	Ones of Practice	Childhadh	CHRISTING
General Practice ACE		Agree and a	Courses Courses	Pape colocition bladds	Paper changes bladds	Canad Practice	Pape colocition Houlds	Martel hade	ACE	Mendinan	Corne of Provision	Chichiadh	Owner of Promition	Chichadh	CHESTAGE
PILLAR WEEK REPRODUCTI	REPRODU	CTIVE HE	VEHEALTH	PILLAR	WEEK AGE	PILLAR WEEK AGEING & HEALTH	Ŧ	PILLA	PILLAR WEEK CHILD HEALTH	ILD HEALT	Ŧ	PILLAF	WEEK ME	PILLAR WEEK MENTAL HEALTH	Ŧ
Diffique halls 1000	-	aport holds	History challs	Tatalan malaya Tatalan malaya	Tatalog or the Tatalog of Tatalog or Tatalog	BHACE	HIGH	BHC181190B	SHICHEST PAGE	HIGH	SHICHER HARB	4040	designation	SHIMMAN HORE	894408
Diffique halls (Diff	6	BHACE	Hilliop challs	HENNES	HENNES	Hithodyg	100	- SECTION SAME	BHACE	BHOF	SHICHWISE.	BHO	SHANNING SAME	District Holes	(DOMESTIC PARTY
	VACATION				VACATION	NOI			VACATION	NO.			VACATION	_	ı
Corner of Promition Proproduction	Topo Canada	Openior Health	Pape collection bladds	/ contract to the first to the	Againglibhadh	General Practice	ACE	CHETHORN	CHEFFIGE	Childhadh	Cornered President	Marti Hude	General Practice	VCE	Manual Houses
General Franks	and the same of th	-	Page columbia Headilli	Applicable	Againgthisman	Commend Promition	Grosbig	Children	Children	ACE	Corner of Providen	Martel house	Contra of Promition	Marte House	Date hade
Appropriate halfs Paproballs	appear	1	Oceand Practice	VCE	Consult Franks	appropriedly	/paintitions	Contrad Practice	Cherrone	Charles	Children	VCE	- Long town	Owner of President	- Land
Diffuse fault. (Diffuse of	1		BHACE	HIGH	Bitterdage	ними	ними	894 ACE	HIST	- SPECIAL SECTION SECT	SHICHESTER STREET	SHIPMAN HARE	SHINAM HAR	SHINNINGS.	4040
Paperdoctive Houle Properties	on Houlds Course	man of Practice	Topy columns of building	Occupativation	ACE	Cather orders Lawring	Englant ortony Lasersing	CHEFFARE	Carried Practice	CHAINME	Childhole	Manufillable	ACE	Mentalhouse	Cannot Practice
							SDL	_							
							OSCE	JE JE							
						100	SDL/CATCH UP WEEK	JP WEEK							
						au.	SD	- COLONES							
							MLA	A							



	В		. A		. A			Gro
3 & HEALTH	L E	PILLA	WEEK REPR	ODUCTIVE HE	АГТН	1		21-Aug
ACE	General Practice	Reproductive Health	General Practice	Reproductive Health	Reproductive Health	2	Mon 28 Aug Holiday	28-Aug
cology	General Practice	Reproductive Health	General Practice	ACE	Reproductive Health	3		04-Sep
Il Practice	ACE	General Practice	Reproductive Health	Reproductive Health	Reproductive Health	4		11-Sep
Il Practice	Oncology	General Practice	ACE	Reproductive Health	Reproductive Health	5		18-Sep
g&Health	Ageing&Health	ACE	Reproductive Health	Reproductive Health	General Practice	6		25-Sep
g&Health	Ageing&Health	Reproductive Health	Reproductive Health	Reproductive Health	General Practice	7		02-Oct
g&Health	Ageing&Health	Reproductive Health	Reproductive Health	General Practice	ACE	8		09-0ct
lementary sarning	Supplementary Learning	Reproductive Health	Reproductive Health	General Practice	Reproductive Health	9		16-0ct
		i						
CTIVE HEALTH	EALTH		PILLAR WEEK AGEING & HEALTH	EING & HEAL	E	1		23-0et
ductive Healtl	Reproductive Healt	Supplementary Learning	Supplementary Learning	ACE	General Practice	2		30-Oct
ACE	Reproductive Healtl	Ageing&Health	Ageing&Health	Oncology	General Practice	3		06-Nov
oro Health	PT/Repro Health	PT/A&Health	PT/A&Health	PT/GP	PT/Emer Med	+	Progress Test	13-Nov
ductive Healtl	Reproductive Healtl	Ageing&Health	Ageing&Health	General Practice	Oncology	5		20-Nov
ductive Healtl	General Practice	Oncology	General Practice	Ageing&Health	Ageing&Health	6		27-Nov
ductive Healtl	General Practice	ACE	General Practice	Ageing&Health	Ageing&Health	7		04-Dec
Il Practice	ACE	General Practice	Oncology	Ageing&Health	Ageing&Health	8		11-Dec
Il Practice	Reproductive Healtl	General Practice	ACE	Supplementary Learning	Supplementary Learning	9		18-Dec
			VACATION	NOI				25-Dec
			VACATION	N O I				01-Jan
						][		
AL HEALTH	Ξ		PILLAR WEEK CHILD HEALTH	CHILD HEALTH		1		08-Jan
al Health	ACE	Child Health	Child Health	General Practice	Child Health	2		15-Jan
al Health	Mental Health	Child Health	ACE	General Practice	Child Health	3		22-Jan
ACE	Mental Health	Child Health	Child Health	Child Health	General Practice	4		29-Jan
al Health	Mental Health	Child Health	Child Health	ACE	General Practice	5		05-Feb
Il Practice	Mental Health	General Practice	Child Health	Child Health	ACE	6		12-Feb
T/GP	BH/Mental Health	PT/GP	PT/Child Health	PT/Child Health	PT/Child Health	7	Progress Test	19-Feb
al Health	General Practice	ACE	General Practice	Child Health	Child Health	8		26-Feb
al Health	General Practice	Child Health	General Practice	Child Health	Child Health	9		04-Mar
о неастн	_	<u>a</u>	PILLAR WEEK MENTAL HEALTH	IENTAL HEALT	I	1		11-Mar
H/GP	BH/Child Health	BH/GP	BH/Mental Health	BH/Mental Health	BH ACE	2	Mon 17 Mar Holiday	18-Mar
H/GP	BH/Child Health	BH/GP	BH/Mental Health	BH/Mental Health	BH/Mental Health	3	Fri 29 Mar Holiday	25-Mar
			VACATION	NOI				01-Apr
d Health	General Practice	Mental Health	General Practice	ACE	Mental Health	4		08-Apr
ACE	General Practice	Mental Health	General Practice	Mental Health	Mental Health	5		15-Apr
d Health	ACE	Mental Health	Mental Health	General Practice	Mental Health	6		22-Apr
d Health	Child Health	ACE	Mental Health	General Practice	Mental Health	7		29-Apr
iild Health	BH/Child Health	BH/Mental Health	BH/Mental Health	BH/Mental Health	BH/GP	8	Mon 06 May Holiday	06-May
d Health	Child Health	Mental Health	ACE	Mental Health	General Practice	9		13-May
								20-May
								27-May
								03-Jun
								10-Jun
								24-Jun

## Timetabling practicalities – starts of pillars



- CLEAR communication with student names and dates (inc. days of the week)
- Pillar 1:
  - All students in QUB for Pillar week teaching 19-23/8
  - (B/H Mon 26/8); students at base hospital specialty pillar inductions Tues 27/8
  - Weds 28/8 cycle 1 students start in GP; subsequent returns on Mondays
  - All cycle 2 students will start in GP Mon 9/9
- Pillar 2 (no Bank holiday!):
  - CH/RH/MH students have base hospital induction Mon 28/10 so start GP Tues 29/10
  - A and H students start GP Mon 28/10

#### Timetabling practicalities – Progress Tests



- Progress Tests as key part of assessment strategy
- SBA examinations, format and Qs aligned with AKT ('national written finals')
- Monday 11<sup>th</sup> Nov 2024 (impacted students will start their second block with you Tues 12/11)
- Monday 17<sup>th</sup> Feb 2025 (impacted students start their third block Mon 10/2 so will miss their week 2 Monday)
- (Progress Test 3 scheduled for Tues 29<sup>th</sup> April 2025 will impact small minority only)

## Overall year timetable/Y4 structure overall





#### **BREAK**



\*Please put attending GP name and cypher code in the chat box if you want to be paid!\*



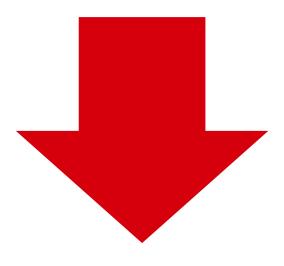
## What to actually do with our Y4 students?





#### We recognise the variety of experience/set ups



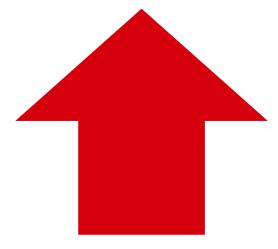


#### Structure

(Lists, mandatory activities, example timetables)

#### Flexibility

(based on experience, what works in your practice)



# Importance of induction and orientation



whole practice involved optimal gp and mdt split
give best contact mobile organise the placements

computer access where to put stuff

emis logins

timetable

expectations clear train them on computers

keep them busy

access

value students in team

think parking and travel

preparation

know their names

communication

flexible start times

seeing lots of patients

know their baseline

get them doing stuff

email in advance

give best contact email

good introduction

contact mobile

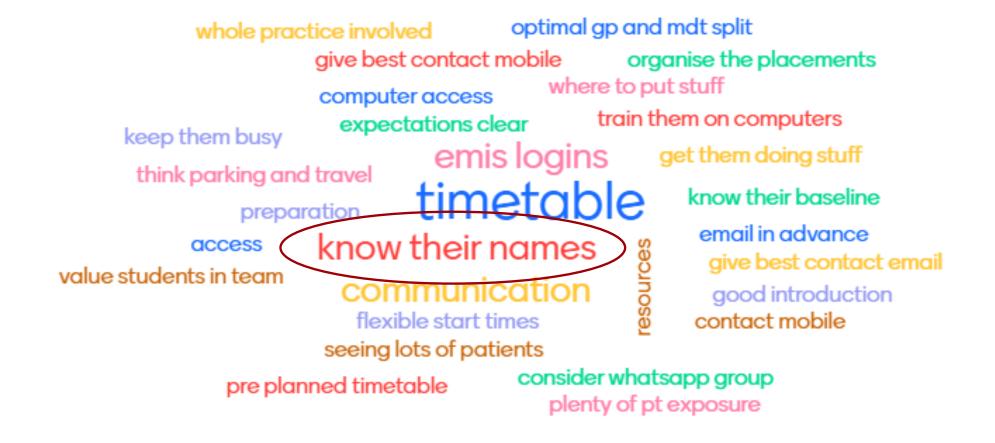
pre planned timetable

consider whatsapp group plenty of pt exposure

# Establish means of contact (e.g. if sick)







optimal gp and mdt split whole practice involved give best contact mobile organise the placements where to put stuff computer access train them on computers expectations clear keep them busy emis logins get them doing stuff think parking and travel timetable know their baseline preparation email in advance know their names access give best contact email value students in team communication good introduction flexible start times contact mobile seeing lots of patients consider whatsapp group pre planned timetable plenty of pt exposure

optimal gp and mdt split whole practice involved give best contact mobile organise the placements where to put stuff computer access train them on computers expectations clear keep them busy emis logins get them doing stuff think parking and travel know their baseline preparation email in advance know their names access give best contact email value students in team communication good introduction flexible start times contact mobile seeing lots of patients consider whatsapp group pre planned timetable plenty of pt exposure

# Induction/ practicalities summary



- Computer system individual logins/student login and training (encourage ownership and transparency) – learning about concise and useful clinical records
- Expectations/ground rules/toilets/belongings/fridges etc
- Who/how to notify of any approved absences/illness etc
- Ideally a space/place for more independent learning activities (BSO WiFi)\*
- Where/how to keep record of people to follow up? (H&Cs/shredding)

<sup>\*</sup>these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

#### The welcome matters



"Everyone at the practice made us feel most welcome and treated just like another colleague and doctors trusted our judgment when consulting with patients and given refreshing independence. All doctors were enthusiastic to have students and embraced what we could do and provided us with a hugely beneficial experience for our medical careers" (Y4 student, 2024)

#### The welcome matters



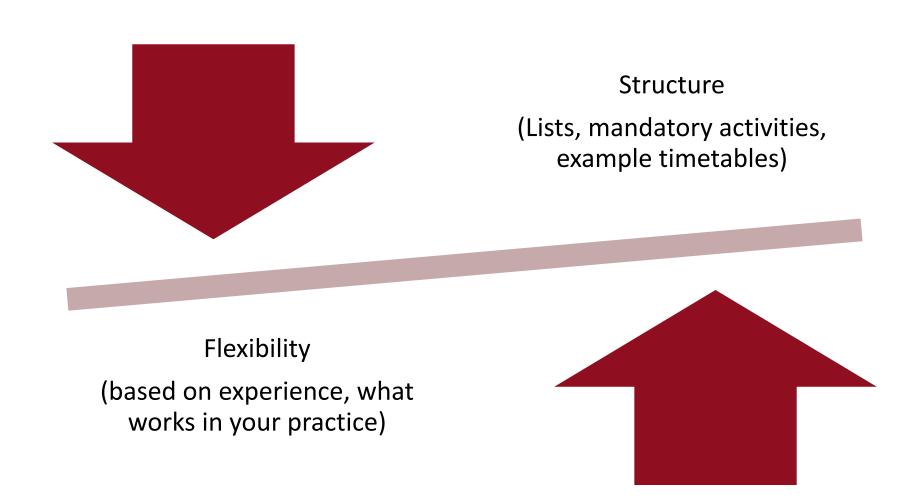
"I feel that I have really developed most as a doctor in GP...

The practice team were amazing, they made me feel so

welcome and part of the team" (Y4 student, 2024)

## What do the students actually need to do?





#### **Main Learning activity**

#### Clinical encounters (>50% time building towards Y5)

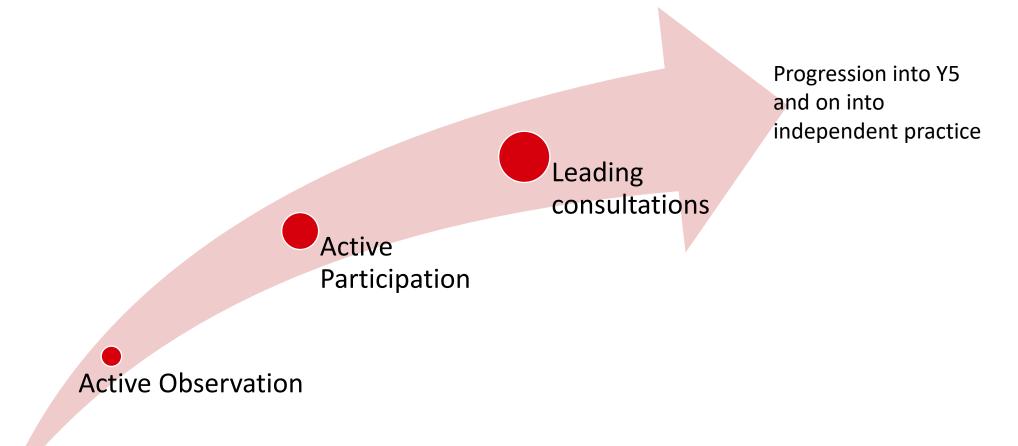
- Mode of consulting can be face-to-face or remote (mix is ideal)
- Selected patients and Chronic Disease/Long term conditions
- Unselected/undifferentiated including triage/emergency

- Increasing level of participation/leading/complexity
- Use the benefits of pairs where possible
- Decreasing level of supervision \*



# Progression





Experiences in Y1-3 and life!

# Active observation



- Lots to learn from different ways different GPs adapt their consulting, and their potentially contrasting approaches to the same patient(s)
- What is prompting the person to contact the GP practice with this issue at this time?
- Any relevant management/referral guidelines? look them up!

\*Students will likely start here – some will be ready to progress quickly\*

\*One-way conversations of limited learning value\*

# Active participation/leading consultations



- Initially 'hotseat' an element 'information gathering'/ focused examination (consider one of a pair for each element)
- May be with GP in room or in another consulting room (space dependent)
- Consider pre-selecting a small number of pts for students to call/see from triage list –
   could see students first
- Consider student 'delegation' of elements of management (potentially encouraging physical activity, practical sleep hygiene, contraception/HRT options – information sharing) – students could call them back/bring them in

# Students really value consulting



"Being able to see patients alone and then have the opportunity to present the main points to the doctor. This really helped develop my confidence in performing my clinical skills and interacting with patients" (Y4 student, 2024)

# Students really value consulting

Very practical and hands on" (Y4 student, 2024)



"Brilliant GP practice, gave us the time to see patients ourselves and discussion about management afterwards.

# Consulting offers unparalleled insights



"Getting the chance to practise clinical skills on real patients with real signs and symptoms. It was also useful to gain insight into the fact that not every patient that presents needs medical treatment, often they just need reassurance and guidance on supportive measures"

(Y4 student 2024)

## Beyond consulting, what can students do?



- 'Clinical skills' short clinics obs, ECG or bloods/ treatment room experience
- Baby/vaccination clinics
- Time with various members of practice team/community based colleagues
- Home/nursing home visits (next slide)
- \* worth being aware of some of the negative feedback around what was perceived as excessive time dedicated to activities perceived as 'non-clinical'\*

\*these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

#### Medical students and Home Visits



Guidance (informed by other medical schools etc) –
 https://www.qub.ac.uk/sites/qubgp/Resources/

- >1 student if not with GP/HCP; 'reactive or proactive'
- No intimate examinations
- NOT mandatory remember students have done this in Y1 and many in Y3
- Students love them!

## What can students actually do?



- Multimorbidity review (in practice/visit a pt met on rotation 1 or 2 could be revisited rotation 3 or 4) how has their health changed? Was this expected?
- Long term condition reviews (asthma, COPD, CKD, diabetes) work with admin to identify patients, student 'mini clinics' where do everything inc BP/BMI, bloods following week could review blood results and recontact patient re agreed plans
- Lab results review? OOH consult phone f/up calls?

<sup>\*</sup>these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

## What can students actually do?



• **Continuity** – recontact patients they've previously encountered (perhaps focusing on patients they've selected to record as their clinical encounters or anyone who had a red flag referral or care needs) – remember more than just the immediate presenting issue that could have real learning value – have they had an MI? appendicitis? Gallbladder surgery? Are they living with IBD?

\*GP is the place to consolidate all their medical/surgical learning which will set them up really well for working – and exams!\*

\*these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

# Continuity as a learning opportunity



"It was good to get first-hand experience dealing with

patients and returning helped as we got to follow up

patients"

(Y4 student 2024)

## What can students actually do?



- Case presentation review select patient(s) known to you with identified significant diagnosis (Ca, MS, other LTC) review records to see how the presentations differ and how clinical pathways and patient experiences can vary
- Tutorial for GP trainee(s) or time for GPNI webinar/PBL part of 'the team' when everyone is learning together
- Consider link with students in other years/UU 'near peer learning' has real value
- Identify and prepare cases for their Case Based Learning, some SDL, consider audit/QI

<sup>\*</sup>these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

# Students thrive on variety



"There was a good balance of being in clinics with GPs and the odd session in the treatment room/vaccine clinics.

There was a good balance of being in and SDL time which allowed me to cement what I had learned during the day into my studies"

(Y4 student 2024)

# Students thrive on variety



"The most positive aspect of my experience was how welcoming the entire staff were... They always made sure to make us feel included and involve us in everything that was happening. I enjoyed the variety that we received on the placement - from reviewing patients ourselves, practising clinical skills in the treatment room, visiting the local nursing home and going out on home visits. I felt that my time spent in XXX was incredibly beneficial to my learning ..."

(Y4 student 2024)

# \*\*Example\*\* timetable: over 9 sessions



Week 1	Morning	Afternoon	
Monday	Induction/GP x	Home visits/multimorbidity reviews	
Tuesday	GP x	PBP	
Wednesday	With district nurse	CBL preparation	
Thursday	Treatment room	GP X	
Friday	OOH follow up calls	CBL session/My Progress review	

Week 2	Morning	Afternoon	
Monday	GP x	continuity calls	
Tuesday	Treatment room	GP Y	
Wednesday	Visits	long term condition reviews	
Thursday	GP X	GP x - 'mini surgery'	
Friday	LTC clinic	VPC/My Progress review	

## What do patients say about students?





"Even a wee phone call back to the patient to check if the x-ray or MRI [they were referred for] happened or check how they are getting on with their antibiotics."

"I'd like to see opportunity for students - make an appointment with students before seeing the GP. Let the student ask more questions - sometimes a (video) call of 10 mins can save the doctor time in their surgery."

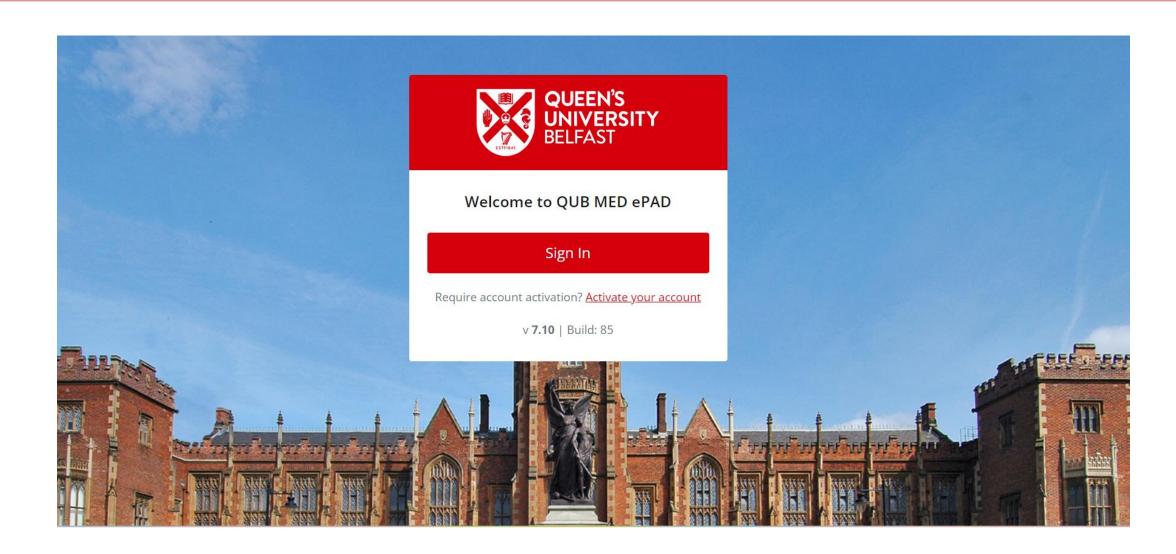
# Other suggestions/core learning activities





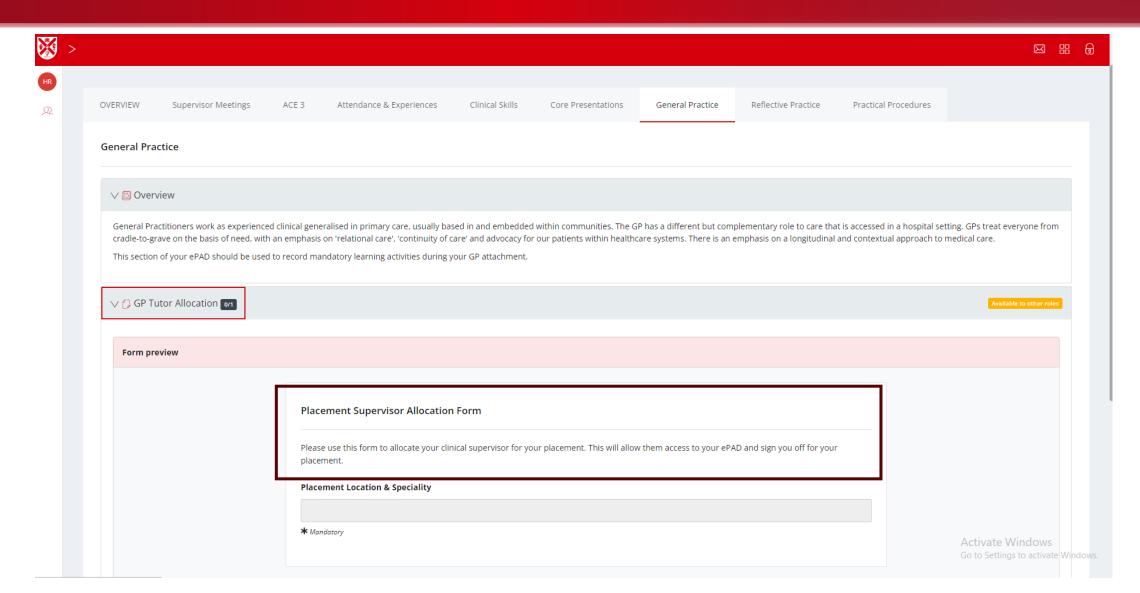
#### Recording learning and progress: MyProgress





# Importance of your email...





## Video and guidance available



- Student led
- Tutor completion is short feedback form at end of each 2-week placement
- MyProgress@qub.ac.uk for queries

https://www.qub.ac.uk/sites/qubgp/Resources/

# What to actually complete?



MyProgress Activity	How many	Who signs off	
Attendance	100%*	Student*	
Experiences: Clinical encounters	16 (4 per 2 weeks)	Student	
(Experiences: Clinical Learning Activities within pillars)	(0-many)	Student	
WPBA: Tutor feedback	4 (at end of each 2 weeks)	<b>GP Tutor</b>	

# Feedback form alignment Years 3-5



#### **Assessment Areas**

Please grade the following skills and competencies

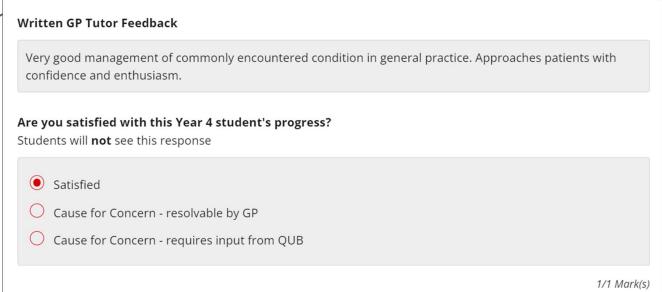
	Exceptional	Very good	Good	Borderline	Po
Adaptive & Flexible Consultation Skills	0	•	0	0	C
Clinical Knowledge & Skills	•	0	0	0	C
Approach to Patient Management	0	•	0	0	C
Responsiveness to teaching and enthusiasm for learning	•	0	$\circ$	$\circ$	C
Appreciation of risk, uncertainty and complexity	0	•	0	0	C
Professionalism (incl punctuality, teamworking)	•	0	0	0	C

# GP placement feedback



 A \*short\* GP report for end of each 2week block – ideally showing progression through the year

Free text comments REALLY helpful



# Concerns/issues



 At the end of placement – use MyProgress feedback form with option to alert gpadmin@qub.ac.uk

• During placement - email <a href="mailto:gpadmin@qub.ac.uk">gpadmin@qub.ac.uk</a> or <a href="mailto:helen.reid@qub.ac.uk">helen.reid@qub.ac.uk</a>

# Feedback both ways.. MCPI





Students complete detailed MCPI feedback at end of academic year



Incredibly rich data



Various domains including leadership, induction, feedback, facilities



Working on meaningful ways to collate and share for improvement

#### Robin Harland Award for Excellence





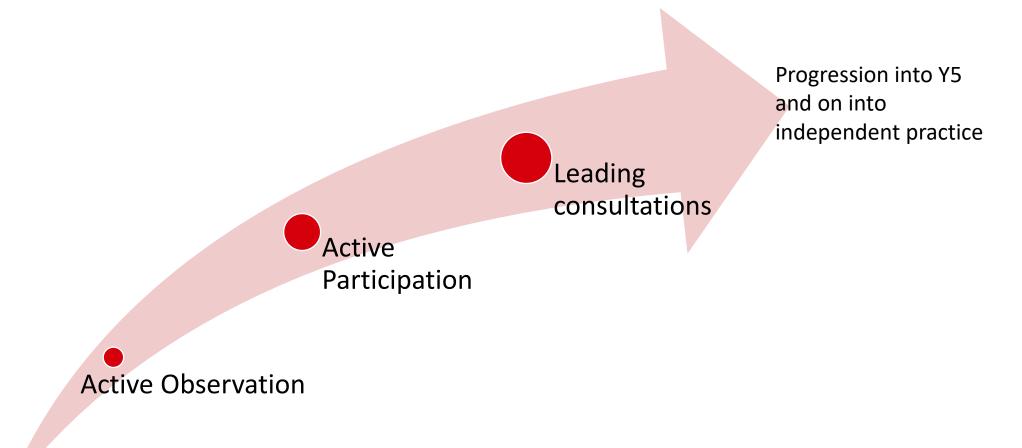
urchview Family Practice wins QUB Teaching Awa d visit from Health Minister, Robin Swann

- Student nominations
- Winner and runner-up announced at Annual Tutor meeting

February 2024

# Assessing progression





Experiences in Y1-3 and life!

### Please self-rate your competency within this consultation

1. First introduction to skill: observing only
2. Working together with supervisor: co-activity
3. Supervisor steps in as needed: direct supervision
4. Supervisor is in the background: direct supervision
5. Supervisor is next door and checks work at the end: indirect supervision
6. Supervisor is next door and checks key aspects of work: indirect supervision
7. Supervisor is at a distance but available by phone: indirect supervision
8. Independent consulting



# Students thrive on supported challenge



"I loved my GP experience this year. I was given lots of opportunities to develop my history taking and clinical skills and was challenged and pushed to become the best student I could be"

(Y4 student 2024)



### Attendance and Absence





QUB Medical School expects 100% attendance for all years.



MyProgress generates (weekly) automated emails to nominated supervisor - no action required if student was present.



If student wasn't present the email explains what to do (MS Form).



Mitigating circumstances for non-attendance (prospective) and x 2 'discretionary days'



Unforeseeable circumstances e.g. sickness -student to fill out form/notify QUB and to promptly notify the practice\*



If student doesn't show up unannounced/ other concerns re attendance – please contact gpadmin@qub.ac.uk

# Recording progress/attendance/issues



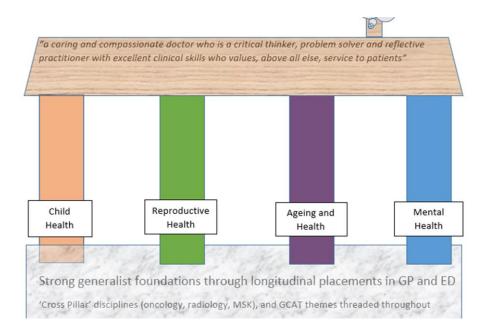


# What about these 'four pillars'?



 Students can complete activities within any pillar during any of the time in GP – we are NOT asking you to devise 4 different pillar specific timetables!

 Students likely to be attuned to their current pillar – ask them...







### Mental Health



- Many of their (student sign off) activities in MyProgress can be achieved in different settings (psych wards/clinics, GP, EM):
- ?Physical health reviews of those with serious mental illness
  - □Observe advice given to patients when starting, changing or stopping anti-depressant medication including potential adverse effects
  - □ Discussion with staff re appropriate prescribing of benzo and Z-drugs (risk/abuse potential)
  - □Complete a risk assessment on a patient you have assessed using a risk assessment proforma

<sup>\*</sup>these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

# Reproductive Health



- Many of their (student sign off) activities in MyProgress can be achieved in different settings (gynae/labour wards/clinics/theatres, GP, EM):
- ? Smear clinic ?LARC observation ?upskill in HRT/contraception options (?identify resources)

- ☐ Measure BP on a pregnant woman
- ☐ Perform and interpret urinary pregnancy test
- ☐ (Bimanual/speculum examination on patient under direct supervision)

<sup>\*</sup>these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

# Ageing and Health



• Many of their (student sign off) activities in MyProgress can be achieved in different settings (wards/clinics, GP, EM):

☐ Medication review – consider polypharmacy, anti-cholinergic burden and de-prescribing (Kardex or GP notes)

☐ Cognitive assessment of an older person

\*these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

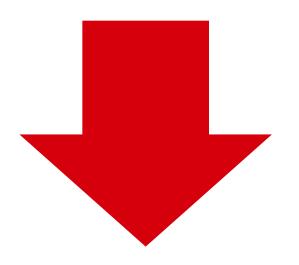
### Child Health



- Many of their (student sign off) activities in MyProgress can be achieved in different settings (paeds wards/clinics, GP, EM):
- Baby clinics, time with Health Visitor, MDT attendance?

- ☐ Examine a newborn baby (either Newborn check or 8 week check)
- ☐ Record a set of patient observations
- □Observe virtual/tele- consultation of infant, child, or young person

<sup>\*</sup>these are only suggestions/ideas we know that practices are different and different things will work in different settings\*

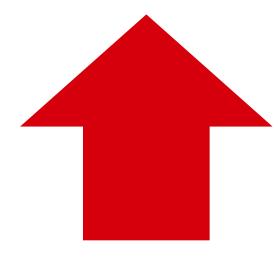


### Structure

(Lists, mandatory activities, example timetables)

# Flexibility

(based on experience, what works in your practice)



# (Pillar based) learning activities





# Ideas for directing more independent learning





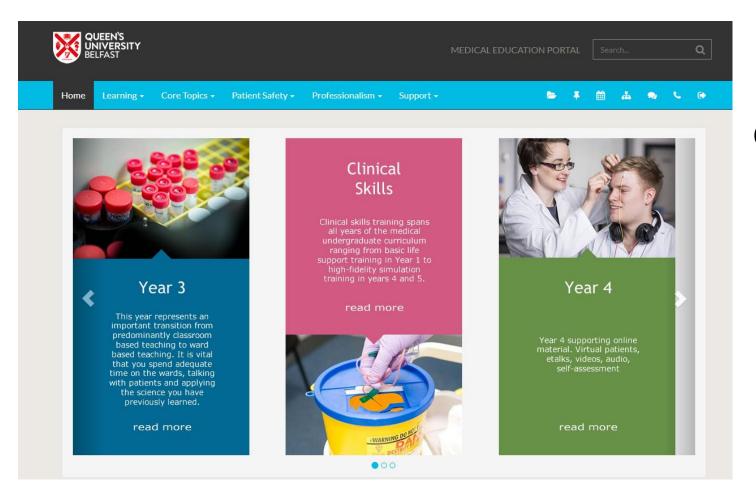
# Case Based Learning (ECHO model)



- 90-minute session for each student during each pillar facilitated by GP Pillar Lead +
   Specialist \*may be during GP time\*
- Student prepared and pre-submitted cases. Year 4 Template. Progression from CBL in Years 1-3
- (Student feedback: move towards real cases... Student progression: shift in focus of clinical reasoning)

# Self-directed learning resources





**QUB Medical Education Portal** 

### Multi-morbidity and complexity

INTRODUCTION

NEED TO KNOW (2)

ACTIVE LEARNING

FURTHER LEARNING

### **ACTIVE LEARNING**



Practices can identify patients with multimorbidity for students to visit at home, to find out what their day-to-day life experiences are. For instance, how they view their lives, their futures, their experiences of using the NHS, their medications, the side effects, etc. How do they value continuity of care? Do they have narratives showing how their care has been fragmented? Do they see multiple health professionals? How many medications are they on, and do they know what each one is for? What functional difficulties do they have?



If the practice runs a multimorbidity clinic, see if you can sit in and try seeing some patients themselves with specific goals in mind.



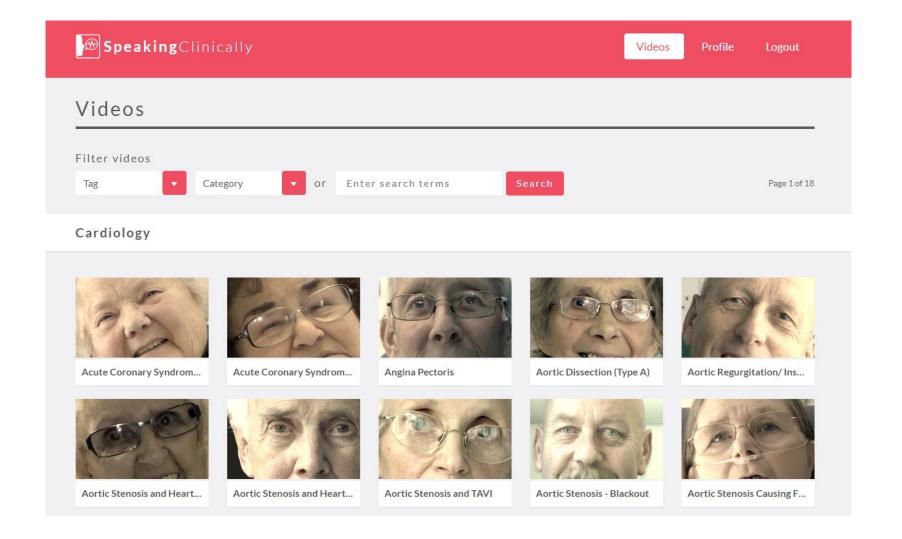
If the practice has a clinical pharmacist, try to get a session learning about how to rationalise and monitor the medications of a patient with multiple morbidity, for example using the STOPP/START tools (11). A toolkit can be downloaded from Cumbria CCG website.





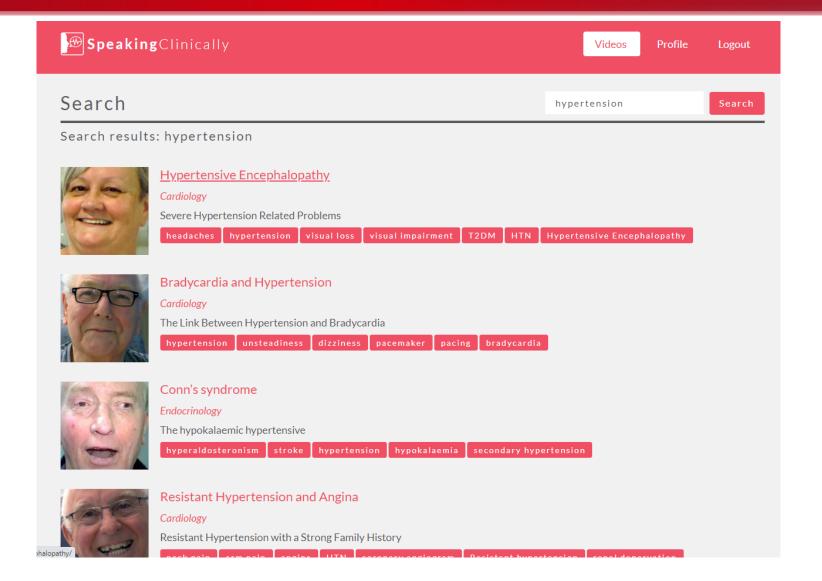
# Self-directed learning resources — Speaking Clinically by clinical area





# Self-directed learning resources: Speaking Clinically by condition





# Self-directed learning resources: Capsule



⊕ CAPSULE	Home	Cases	Quizzes	Staff		
		Overview	Case History	Case Progress		
		Cases comp	oleted			
						6/743
		Completed	by category			
		MEDICINE			SPECIALTIES	
		0%			2%	
		Highs and l	ows			
		Highest s			Lowest score GENERAL PRACTICE	
		95%			90%	

# Self-directed learning resources: VPC





Search for videos...

• Found 65 videos matching your search criteria.



Woman with health anxiety (and a possible neck swelling) - follow-up appointment demonstrating ho...

Holistic care | Continuity of care | Anxiety

Neck lump / Thyroid | Weaning



4th in a series of 4 videos of patient attending for review of chronic pain medication

Continuity of care Shared Decision Making
Opioid dependency Chronic pain



Anxiety and depression / Continuity of care

Anxiety and depression Treatment intensification
Suicidal ideation



Q

Woman with polyarthropathy

Polyarthritis Inflammatory arthritis Polyarthropathy

Joint pain Swollen joint



3 year old with leg pain and headaches. Coexisting maternal health anxiety. One of three consulta...

Minor illness Health anxiety Continuity of care



Transwoman with aches and pains and safeguarding concerns

Hypertension Anxiety and Depression

Post-Traumatic Stress Disorder Gender Identity Disorder

Adult Safeguarding Multimorbidity and complexity



A patient presenting with pain, using an interpreter.

Back pain Neck pain Generalised pain

Language barrier - interpreter



Back pain and assessment of lumps / Health beliefs and bereavement

Grief Bereavement Back pain Health beliefs

# **VPC** by condition





asthma

• Found 2 videos matching your search criteria.



Headache, nasal polyps and asthma / Multimorbidity and complexity

Nasal polyps Asthma Cough syncope Headaches

Fitness to drive Multi-morbidity and complexity



Woman with acute asthma. Discussion of smoking cessation. Use of nebuliser

Asthma Emergency care Clinical assessment
Smoking cessation

Virtual Primary Care:

Search by condition

# VPC by concept/learning outcome







• Found 32 videos matching your search criteria.



A woman presenting with anxiety, poor sleep and thoughts of self-harm.

Anxiety Sleep disorder Suicide risk



A child with fever, vomiting. Assessment for dehydration

Fever Dehydration Vomiting Diarrhoea

Doctor-patient relationship



Fall over one week ago in an elderly man who is on warfarin

Falls in the elderly Anti-coagulants Head injury
Blood blister



Cannabis and psychosis - mental state exam /Communication skills



Knee pain and underlying depression / The doctor-patient relationship

Depression Knee pain

The doctor-patient relationship Communication skills

Verbal and non-verbal behaviour



Anorexia and joint pains / Structure of NHS

Anorexia nervosa Osteoporosis Eating disorder

Virtual Primary Care:

Search by theme

# Example focus; uncertainty and risk



- Some of these more 'conceptual' themes and learning outcomes inevitably seem challenging for students and us!
- Much 'easier' to stick to the safety of long term conditions and single disease guidelines



### Box 2: Suggested practical strategies to address uncertainty and complexity with FM learners at Individual FM placement facilitator level

- Role model that it is "safe" and necessary to express uncertainty
- Never be afraid to say, "I don't know" in response to a patient or student. These
  words invite curiosity, helping learners gain confidence in recognising where clinical
  uncertainty exists, and understand that communicating and sharing uncertainty is
  crucial
- Promote curiosity over certainty by asking "How" and "Why" questions rather than "What" and "When"
- Identify patients with multimorbidity for FM students to see, focusing on their life and health experiences. How do they navigate local healthcare provision(s)? Do they have narratives showing how their care has been fragmented? Do they see multiple health professionals? What medications are they on, do they know what each one is for? What functional difficulties do they have?
- Encourage students to follow the course of individual patients' care, learning more about the natural history of disease and the potential benefit of time as a diagnostic tool in uncertain clinical presentations





# LEARNING GENERAL PRACTICE

A digital textbook for clinical students, postgraduate trainees and primary care educators

Edited by Alex Harding, Kamila Hawthorne and Joe Rosenthal

rcgp.org.uk sapc.ac.uk

How to use Learning General Practice

### THEME 1: PERSON-CENTRED CARE

- 1a. The generalist clinical method
- i The role of evidence in clinical decision-making
- ii Uncertainty in clinical decision-making
- iii Prescribing
- Holistic care (the biopsychosocial model)
- The physiology of holistic care
- The doctor-patient relationship
- Communication with patients of all backgrounds
- Continuity of care
- e. Long-term conditions
- Diagnostic phase
- Maintenance phase
- iii End of life care
- 1f. Emergency conditions
- 1g. Multi-morbidity and complexity

### THEME 2: POPULATION-CENTRED CARE

- 2a. The social determinants of health
- 2b. Preventing disease and promoting health
- 2c. Quality of care
- 2d. Information technology
- 2e. Teamwork and leadership
- 2f. Medical ethics

### THEME 3: EFFECTIVE DELIVERY OF CARE

- The generalist approach
- The history of UK general practice
- The current structure of UK general practice
- The funding of UK general practice
- 3e. The role of general practice in other countries
- 3f. Sustainable healthcare

### THEME 4: SCHOLARLY GENERAL PRACTICE

- Learning in primary care settings
- 4b. Teaching in primary care settings
- ic. Research in primary care settings

### CONTRIBUTORS

**EPILOGUE** 

### 1A-ii

### Uncertainty in clinical decision making

INTRODUCTION

NEED TO KNOW (?)

ACTIVE LEARNING

FURTHER LEARNING

### INTRODUCTION

Uncertainty permeates the generalist clinical method, yet as humans we seem hardwired to find uncertainty uncomfortable and so we seek certainty in our practice. We might anticipate that clinical uncertainty would have been alleviated by recent developments such as evidence-based practice and artificial intelligence, but the opposite appears to be true (1).

Uncertainty is more common in general practice due to the greater prevalence of presentations in the symptomatic, pre-diagnostic phase; delays in ordering and receiving test results; and dealing with complex psychosocial and multi-morbidity issues.

Tolerating this uncertainty can be challenging, as it asks us to balance the need for rapid diagnosis and treatment with effective use of limited resources and resultant delays. A better understanding of uncertainty can therefore better equip us in dealing with these dilemmas and easing professional discomfort.



### Overvie

How to use Learning General Practice

### THEME 1: PERSON-CENTRED CARE

- to The congralist clinical method
- The role of evidence in clinical decision-makin
- ii Uncertainty in clinical decision-making
- III Prescribin
- Holistic care (the biopsychosocial model)
- 1 The physiology of holistic care
- The doctor-patient relationship
- Communication with patients of all background
- d. Continuity of care
- e. Long-term conditions
- Diagnostic phase
- ii Maintenance phase
- iii End of life care
- f. Emergency conditions
- 1g. Multi-morbidity and complexity

### THEME 2- DODLII ATION, CENTRED CARE

- The social determinants of health
- 2b. Preventing disease and promoting health
- 2c. Quality of care
- 2d. Information technology
- Teamwork and leadership
- 2f. Medical ethics

### THEME'S: EFFECTIVE DELIVERY OF CARE

- The generalist approach
- 3b. The history of UK general practice
- 3c. The current structure of UK general practice
- 3d. The funding of UK general practice
- 3e. The role of general practice in other countries
- 3f. Sustainable healthcare

### THEME A SCHOLARLY GENERAL PRACTICE

- Learning in primary care settings
- 4b. Teaching in primary care settings
- 4c. Research in primary care setting

### CONTRIBUTOR

PILOGUE:

### 1A-ii

### Uncertainty in clinical decision making

ACTIVE LEARNING -

### **ACTIVE LEARNING**



Use the virtual primary care (VPC) resource (https://vpc.medicalschoolscouncil.org.uk) to look at online consultations. These can act as source material for the learning activities. You can also search VPC under 'uncertainty' or 'generalist clinical reasoning'.



On placement, you will hopefully have the opportunity to follow the course of patients' care, learning more about the natural history of disease and the potential benefit of time as a diagnostic tool in uncertain clinical presentations.



® Sharing your uncertainty with colleagues can be helpful in a number of ways. Different colleagues may have different knowledge and expertise, that can be beneficial. Or perhaps, presenting a case, analysing and articulating where the uncertainty lies can be helpful. Most importantly, the recognition that others may be equally perplexed by a complex case can be reassuring, and your colleagues may be able to support you in identifying the best way forward.



Talk with your GP tutor about the following:

- During a surgery, focus on the safety netting undertaken by the GP. How specific were they? Was it clear to the patient?
- Identify cases from a day in practice, where understanding a patient from a biopsychosocial perspective (rather than purely a biomedical one) aided diagnosis.
- Ask your GP tutor about how they manage uncertainty. What do they find challenging and how do they try to manage this?
- Identify cases where a GP managed uncertainty without making the patient feel anxious or in doubt of their doctor's abilities. Also think about situations that may affect clinical decision-making, for example language barriers, out-of-hours work, and comorbidities in the patient. How may this affect clinical decisions?

### Overview

How to use Learning General Practice

### THEME 1: PERSON-CENTRED CARE

The general	list clini	ical meth	
i ne general	IIST CIINI	icai metr	าดด

### ii Uncertainty in clinical decision-making

- The physiology of holistic care
- The doctor-patient relationship

- Long-term conditions

- **Emergency conditions**

- Quality of care

- Medical ethics

- The history of UK general practice
- The current structure of UK general practice
- The role of general practice in other countries

# Payments, queries, useful things!



- SUMDE payments quarterly (in arrears; processing dates)
- gpadmin@qub.ac.uk as first point of contact for queries
- www.qub.ac.uk/sites/qubgp/ for all manner of information updated FAQs, handbook/study guide, home visit guidance and confirmation of dates of any exams/training sessions

### STUDY RESEARCH INTERNATIONAL BUSINESS ABOUT Q

### **QUBGP**

UNIVERSITY SITES / QUBGP

News	About Us	Curriculum	Events	Getting In Touch			
Quick lin	ks to resour	rces					
	New Practic	es		Practice Managers	Tutor Updates	GPCPA Events	
Yea	ır 1+2 Family M	ledicine		Year 3 GP	Year 4 GP	Year 5 GP	

The QUBGP website is for anyone involved in medical student education from a General Practice perspective.

We hope you will find the educational resources useful.

To find out more about how to become a QUB Tutor or Teaching Practice click HERE

REQUEST A C
Click here >

Latest Events

# Diary dates



Dates for your diaries **GP Tutor Training/Meetings for 2024-25** 

Year-3-GP Training-session: Tues 3<sup>rd</sup> September 2024 PM

Annual GP Tutor meeting: Weds 4<sup>th</sup> September 2024 PM

Year 1 & 2 Family Medicine Weds 11<sup>th</sup> September 2024 PM

## It is valued!



"Brilliant, felt I developed more as a doctor in GP than the rest of the modules combined"

It was a steep learning curve. I feel more confident in taking histories and examinations. It was always my happy place to return to after a hectic busy pillar"

(Y4 students 2024)

# Any final questions?





## THANK YOU



