Cumberland Lodge
exchanging views, inspiring minds

Cumberland Lodge Away Day Report

Introduction

There have been a number of recent triggers to the review of undergraduate medical education curricula and general practice components (Park, 2015). These include GMC Outcomes for Graduates (GMC, 2018), the Wass report highlighting the relationship between workforce provision and careers with undergraduate experiences (HEE, 2016), and a recent national 'Teaching General Practice Curriculum Guide' (Harding, 2018). UCL is keen to develop its medical education curricula to fulfill national policy requirements. First and foremost, it aims to support students engaging in good quality placements, as well as providing opportunities for informed discussions about general practice work and careers. In conjunction with staff-student liaison committees, UCL has re-structured its year 5 curriculum to include a 6-week General Practice component. Alongside student user consultation groups and GP tutor engagement, this 'away day' aimed to provide a space for department staff, student representatives and collaborators, to consider development opportunities and inform subsequent teaching and learning planning.

The PCPH Medical Education Team spent a whole day together at Cumberland Lodge on Monday 19th November 2018. There were a range of participants including administrative and organisational staff, student representatives, GPs and three invited speakers:

- Dr Martina Ann Kelly, GP, Associate Professor and Director of Family Medicine, University of Calgary, Canada
- Dr. Kay Leedham-Green, GP and Medical Education Research Fellow, Imperial College and King's College
- Dr Graham Easton, GP and Senior Clinical Teaching Fellow, UCL Medical School; Hon. Clinical Senior Lecturer, Imperial College London; Medical Journalist and writer.

Participants:

Sophie Park, Joe Rosenthal, Will Coppola, Melvyn Jones, Surinder Singh, Kingshuk Pal, Neelam Parmar, Shoba Poduval, Besheer Abbaro, Hallie Cook, Sandra Soria Medina, Kristina Narvet, John Barber, George Choa

Programme:

9.00 – 9.30	Arrival and Coffee
9.30 – 9.45	Intro and Welcome (Sophie)
9.45 – 10.15	Value of General Practice UG Medical Education (Martina)
10.15 – 11.00	World Café: 'The Big 5'
11.00 – 11.30	Coffee
11.30 – 13.00	Stimulating Ideas (Neelam / Kristina, Graham, Kay)
13.00 – 14.00	Lunch
14.00 – 15.30	Logic Model Development (team)
15.30 – 16.00	Tea
16.00 – 16.50	Group discussion and feedback (team)
16.50 – 17.00	Close and thanks (Sophie)

Session 1:

Welcome and Introduction (Sophie Park)

Sophie began by welcoming everyone and highlighted the rich range of perspectives, experience and expertise within the room.

Aim of the day: to focus on year 5 development, but also its relationship to other general practice placements; other disciplinary learning; and a range of external policies shaping the curriculum. Some relevant documents included in a 'Resources Pack' (see links at the end of the report) including GMC Outcomes for Graduates 2018, Teaching General Practice: Guiding principles for UG general practice curricula in UK medical schools 2018, and the Astana Declaration 2018.

In particular, the day aimed to explore together the nature of general practice knowledge (or disciplinary knowledge) we share with students; and the processes used to facilitate student learning. The purpose of the presentations and iterative small group discussions was to promote critical engagement, reflection and dialogue from the group, drawing upon a range of perspectives, in relation to the development of the year 5 course.

Sophie shared the PCPH Medical Education team 'mission' which includes articulation and promotion of 'Generalism' as a specialty or expert field of knowledge; community outreach through capacity building and patient engagement; and promoting innovation and collaboration through interface with the MBBS team and other institutions, as well as maximizing the integration of teaching and research activities.

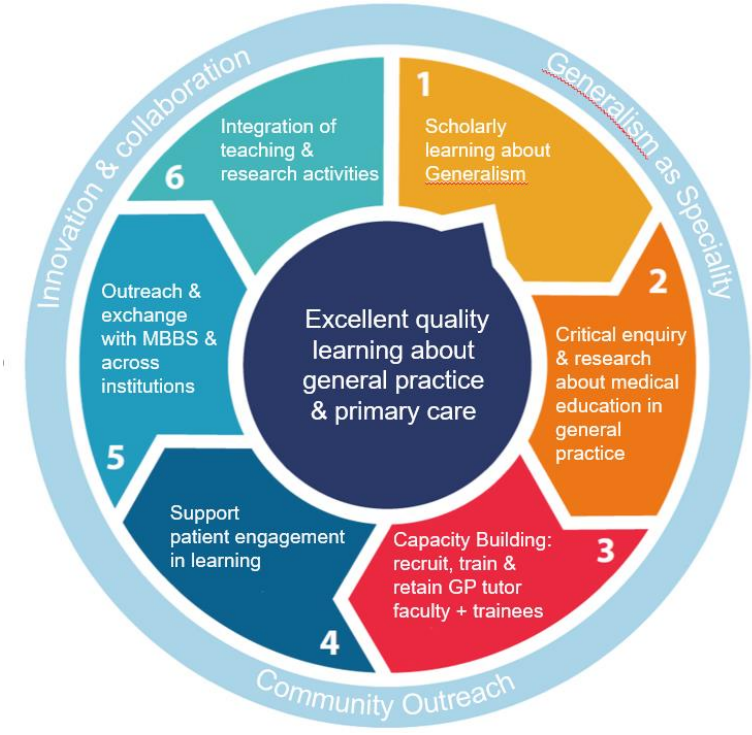
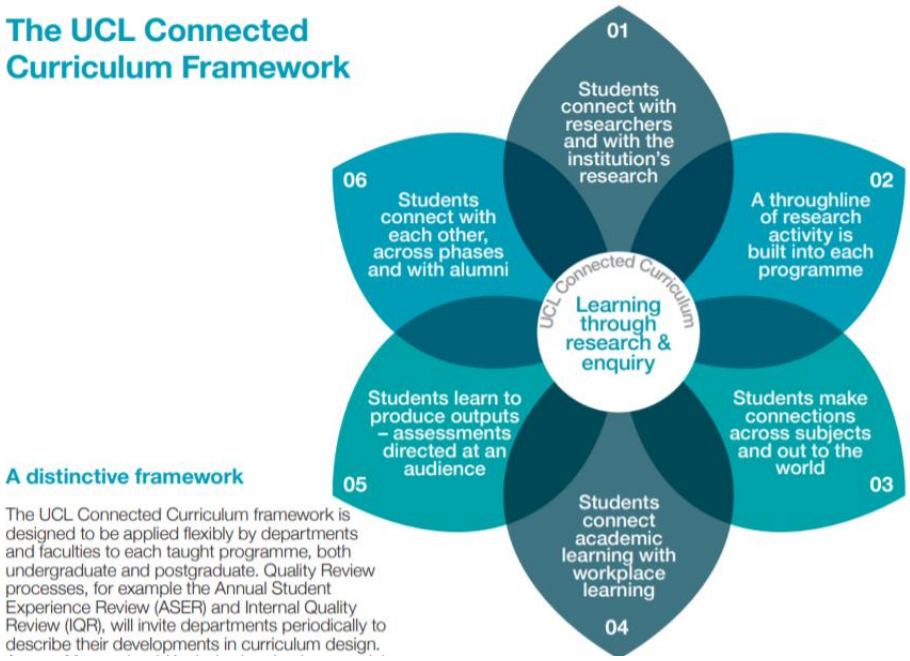


Figure 1: UCL Primary Care Medical Education Mission (with thanks to Geoff Wong for permission to adapt image)

The UCL Connected Curriculum was highlighted as a relevant priority to support both the implementation of high quality and contemporary evidence (about both topic and learning process) into the curriculum development, as well as promotion of student engagement in research activities through the teaching activities devised. This includes promotion of critical engagement with workplace-based learning experiences using a range of knowledge lenses, and discussion and evaluation of a range of evidence within seminar teaching.



There have been a number of recent policies and recommendations re-shaping how primary care and general practice is thought about and practised, including 'The future of primary care: creating teams for tomorrow' (Primary Care Workforce Commission, 2015), 'Understanding pressures in general practice' (2016); 'General Practice: forward view' (NHS England et al, 2016), and 'Innovative models of general practice' (Baird et al, 2018). These highlight how fluid and dynamic the nature of general practice knowledge and work is.

One important fundamental feature of general practice expertise is articulated by Iona Heath (2011) in her Harveian Oration. In this, she highlights the boundaries between stressful life experience, illness, disease, and disease requiring specialist care. She draws attention to the efficient gatekeeping role of primary care at the 'point of referral' into specialist care, but also the gatekeeping processes inherent in the other boundary points which determine how, when and if something becomes problematised and/or medicalised during the consultation (Abrams 2018 *in press*).

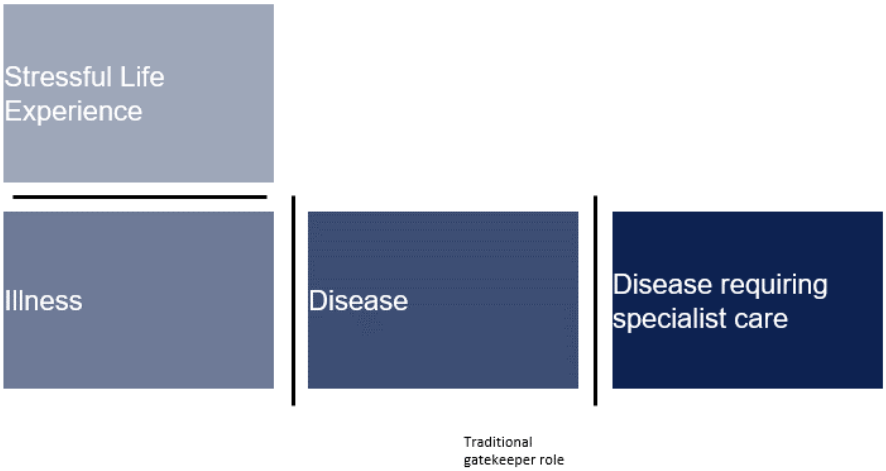


Figure 2: Boundaries encountered in General Practice Consultations (Heath, 2011)

How we organise the interface between patient and other services in primary care has a fundamental impact on the nature of expertise and work required by the GP. For example, fig. 3 outlines the traditional model where patients are universal, comprehensive and unselected. Whereas fig. 4shows the potential complexity of distributed systems where the patient is expected to select and navigate a range of primary care services including General Practice with related implications for health equalities in access; and integration and continuity of services (Abrams 2018 *in press*).

Figure 3: a 'traditional' UK model of primary health care

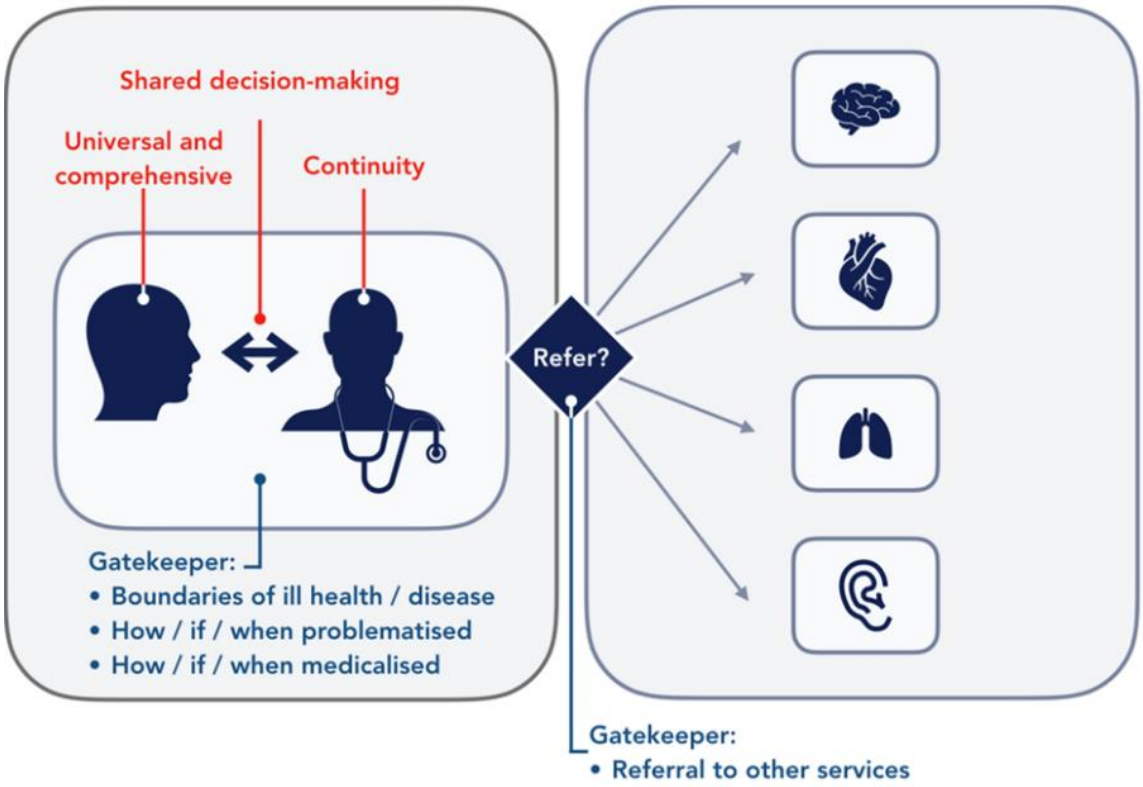
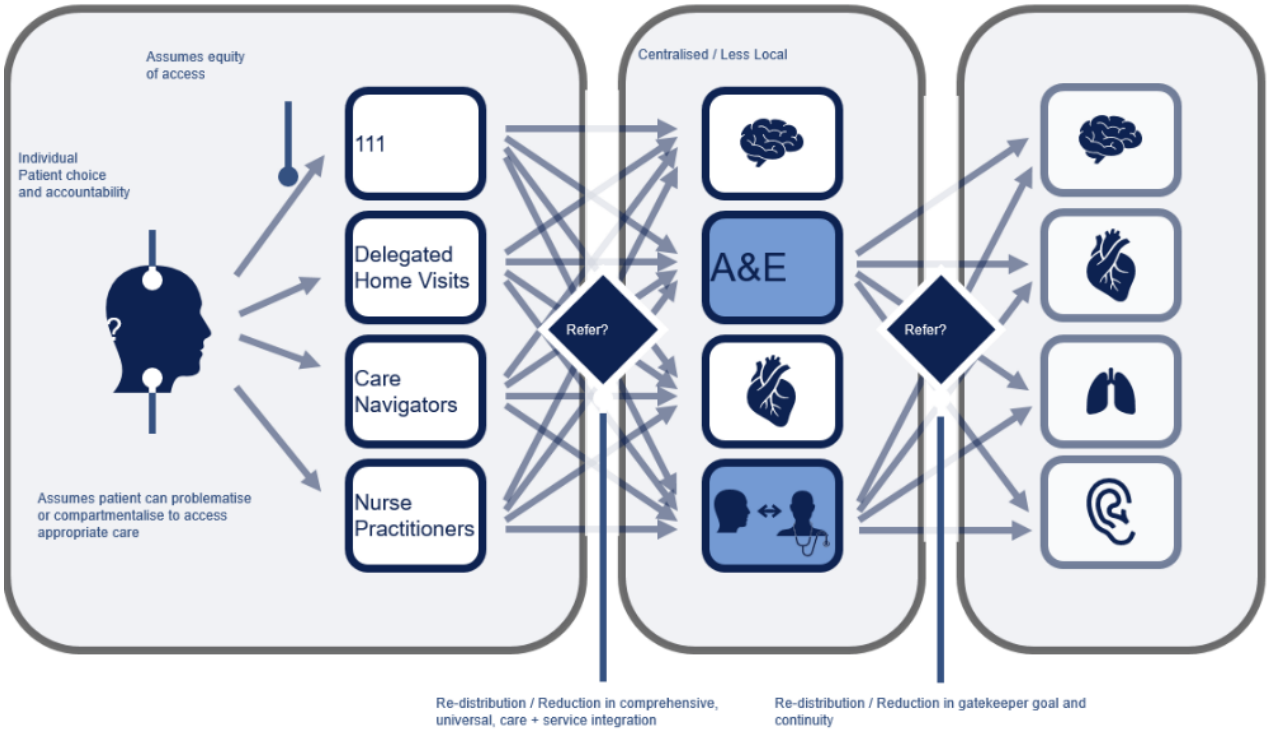


Figure 4: Individual's accountability and responsibility for their health and access to health care



Session 2

What's the value of Family Medicine in UG Medical Education (Martina Kelly)

Martina led the second session, which examined the nature and value of Family Medicine knowledge in undergraduate (UG) medical education. Martina began with a reflexive introduction to her own career journey, context and perspectives and invited the audience to consider their own.

Next, Martina discussed the historical way in which general practice departments have grappled for curricula timetable space by offering to deliver a multitude of topics for students whenever possible. This has however often led to General Practice being regarded as low status (e.g. 'only teaching those topics not taught by hospital medicine such as communication') and lack of articulation about what general practice disciplinary knowledge actually is.

Historically, the distinction between hospital and primary care arose through a division of work whereby 'the physician and surgeon retained the hospital, and the general practitioner retained the patient.' (Stevens, 1966).

Martina introduced a patient as a vehicle to demonstrate the additional value which patient familiarity, continuity and knowledge brings, shaping the negotiation of biomedical management in general practice. She shared (with the patient's permission) a list of a particular lady's diseases and medications. Next, the 'additional' knowledge she had through her iterative conversations with this lady including her previous high-functioning career; role of significant carer for her sick grandchildren and support she provided to her two daughters, also grappling with a variety of healthcare needs. The interface between patient contextual knowledge and biomedical was highlighted using a particular instance: when this lady fractured her shoulder and was declared 'unfit' for surgery. Martina reported the significant trust placed in her by the patient to work with her (in addition to co-ordination of various specialist interactions and referrals) to de-medicalise and minimise various treatments required, in order to enable this patient to access surgery, fully aware of the risks this procedure presented for her mortality. A successful surgical outcome, enabled the patient to continue her important family contribution through maximising her function (while perhaps not fulfilling the numerical perfection of individual disease markers for diabetes etc.) (Kelly, 2018).

Martina then invited us to consider how best to articulate general practice explicitly to students, without using opaque 'buzz' terminology such as ''whole person care'; 'adaptive'; 'community based'; continuity'; 'uncertainty'; complexity'; 'efficient'; 'co-ordinated'. She invited us to consider the disciplinary nugget as 'care of the patient':

'We must not say: I will care for you as long as you don't get too complicated, or as long as you don't get AIDS, or become an alcoholic, or become housebound, or as long as you are not dying. Not should I say I will care for you, but I only do psychotherapy, or palliative care, or addiction medicine. A patient we make a commitment to should feel assured that they will not be abandoned whatever may befall them. At its best, the relationship will be one of trust; though trust has to be earned and it is fragile as well as precious. But it means we have to be very good at relationships, and that requires emotional intelligence. Relationships require work (and we can teach that).' (McWhinney, 2000: 135)

A patient's concerns, therefore determine the focus of the visit and biomedicine is used to support this, however peripheral to the consultation, within shared negotiations and decision-making about priority setting and management plans:

- Our commitment is to the person 'no matter what befalls them'
- Sense making, problem solving & shared decision-making.

General practice involves a commitment to the whole and making sense of that whole (McWhinney, 2000). The interface between illness and disease is where the huge undifferentiated burden of human distress and suffering meets the classifications of scientific medicine, which have been developed with the aim of enabling humanity, to a still very limited extent, to understand and control the experience of illness. As a GP, we hold the border between subjective illness and the disease categories recognised by biomedical science; of confining people within those categories only when such labelling will be positively useful to them; and of deliberately minimising exposure to the harms of medical technology.

'Health', 'heal' and 'whole' have the same linguistic roots, drawing attention to the importance of healing as drawing together 'whole-ness'. Drawing upon the analogy of a rose and our human reaction to it, not as component petals, stamen etc., but as a visually appealing 'flower', Martina reminded us that the role of the GP might not be eradication of disease, but seeing and/or restoring the 'beauty' of an individual. Our practice is, therefore, underpinned by our relationship with the patient (and subsequent decisions about how, when, and if particular knowledge is exchanged):

'*Living organisms have properties possessed by no machine: growth, regeneration, healing, learning, self-organisation, self-transcendence. At its most successful, medicine works by supporting these natural processes. Healing is to restore a sense of wholeness…. The essence of our clinical method in general practice is that the body, the emotions, and the patient's experience of illness are attended to in every case, the degree of attention obviously depending on the individual circumstances. The patient-centred clinical method requires us to make a clinical diagnosis and to attend to the patient's experience*.' (McWhinney, 2000: 137)

'Understanding' is not an easy concept to define or articulate, but better explained as a co-constructive rather than didactic exchange of knowledge:

'Rather than a to-and-fro interaction between separate individuals, understanding is inter-subjective; a dyadic meaning-making embedded in the experiential flux of the world. There are no absolute truths or certainties: the question and investigation remain open, transforming over time as part of a dialectic inter-relationship between self, world and other. As human beings, self, other and world are intertwined. Understanding as a form of connection isn't transferred but co-produced.'

General practice expertise next requires the interpretive process of 'putting it all together':

'*Interpretive medicine is the critical, thoughtful, professional use of an appropriate range of knowledge in the dynamic, shared exploration and interpretation of individual illness experience, in order to support the creative capacity of individuals in maintaining their daily lives.*' (Reeve, 2010)

'*Medical generalism lies at the heart of delivering person-centred care, where patients are known as persons in the context of their own social world*. '(Ronald et al, 2011)

'The goal of whole person care is to enhance, and certainly not diminish an individual's health related capacity to maintain their daily living.' (Reeve and Cooper, 2016)

Various ways of achieving this interpretive synthesis have been described including:
Recognition of two necessary elements of generalist care as:

- An organizational system that supports integrated care (continuous, comprehensive, coordinated, accessible) and
- Individually tailored clinical decisions about the potential benefit and harm of medical intervention for health related issues (Heath, 2009 & Reeve, 2010 *in* Lewis, 2014).

Another approach has been described as medical generalists employing a distinct form of clinical reasoning based on capacity for interpretative practice and scholarly integration of multiple sources of data (medical, patient, professional narratives) in creating a defendable decision about a) what is wrong and b) what needs doing (Reeve, 2010).

Seminar 3

Spot the Thinking: Exploration of Disciplinary Learning (Sophie Park)

We then went on to a collaborative exercise using 'spot the thinking' cards produced by Prof Joy Jarvis to facilitate discussion about the particularity of general practice disciplinary knowledge (ways of doing and ways of knowing). This included a number of blank cards, so that groups could construct new elements as required. This was done as a 'world café' exercise. The group began in pairs by discussing and agreeing their 'top 5 elements of general practice knowledge'. They then joined another group of two and discussed in a group of 4, then as a group of 6, etc.

We then wrote up all the elements from the groups:

1. **Being Curious** or 'attentive curiosity' – critical problem solving and identifying a solution(s); active noticing; free-thinking without boundaries; being creative
2. **Researching** – 'evidence base' (literature; experiential; heuristic range of resources); complex range of research methods used + related variety of knowledge and truth drawn upon
3. **Connecting** – interface between patient, specialities, knowledge forms
4. **Managing uncertainties and complexity** – open-minded / on-going learning; acknowledgement and tolerance of 'not knowing' (distinct from 'ignorance')
5. **Reasoning** – framing and synthesizing; clinical knowledge + range of other knowledge(s)
6. **Resourcefulness** – 'the wall' image; limited supply of technology and rationing; problem-solving; agreeing what's feasible / possible to investigate; achieve within management plan.
7. **Framing problems** – sense-making; reasoning; synthesizing. Negotiating when, how and if to problematize or medicalise at a particular moment in time.
8. **Contextualising** – how rules relate to the particular (or not)
9. **Inter-disciplinarity / co-ordination / integration of services** – 'conductor of the orchestra'; managing connection of referrals / services / patient journey.

As a group, we discussed the commonalities, differences and distinctions between these. This produced agreement on what our top 5 knowledge elements should be, namely:

- **Managing patient complexity** (different knowledge, conditions, experience, 3D perspectives)
- **Managing system efficacy/complexity** (service organisation, inter-disciplinary, co-ordination, leadership, future career, capability & resilience)
- **Attentive curiosity** (noticing, caring, narrative)
- **Framing problems** (diagnostic/clinical/reasoning; to treat or not to treat, over-investigation)
- **Ways of knowing** (research, evidence used; how to evaluate, use, synthesise, implement, apply and produce)

Session 4:

Stimulating Ideas: Course Structure

This session (after coffee) was entitled 'Stimulating Ideas'. First Neelam and Kristina presented the overall structure of the new Year 5 curriculum, including 3 core teaching week sessions; 6 weeks of general practice placement (with 2 Friday peel out CPP days at end of week 3 and 6); 1 half day assessment session at the end of the block; and additional specialities in primary care teaching sessions elsewhere in the year:

Core GP

Core GP now

- 1-2 students per tutor
- 2 sessions per day for 13 days (overall duration 4 weeks)
- Teaching days: every day except Wednesday (with some days timetabled elsewhere for specialty placements)
- 9 rotations per academic year (minimum commitment – 3 rotations per practice)
- 40 students in each rotation
- Child Health and Derm placements included in 4 weeks Core GP

Core GP 19/20 onwards

- 1-2 students per tutor
- 2 sessions per day per day
- 6 weeks in total
- 6 rotations per academic year
- 60 students in each rotation

Changes to Specialty teaching:

Stimulating Ideas: narrative (Graham Easton)

Graham, an experienced journalist and 'story teller', shared his expertise about the role of narrative in general practice encounters. He talked about the 'story stew' of general practice encounters and their co-constructed nature. He drew on Labov's work about the structure of stories as a meaningful way for students to analyse the different elements of a consultation interaction, their sequence, connections and consequences:

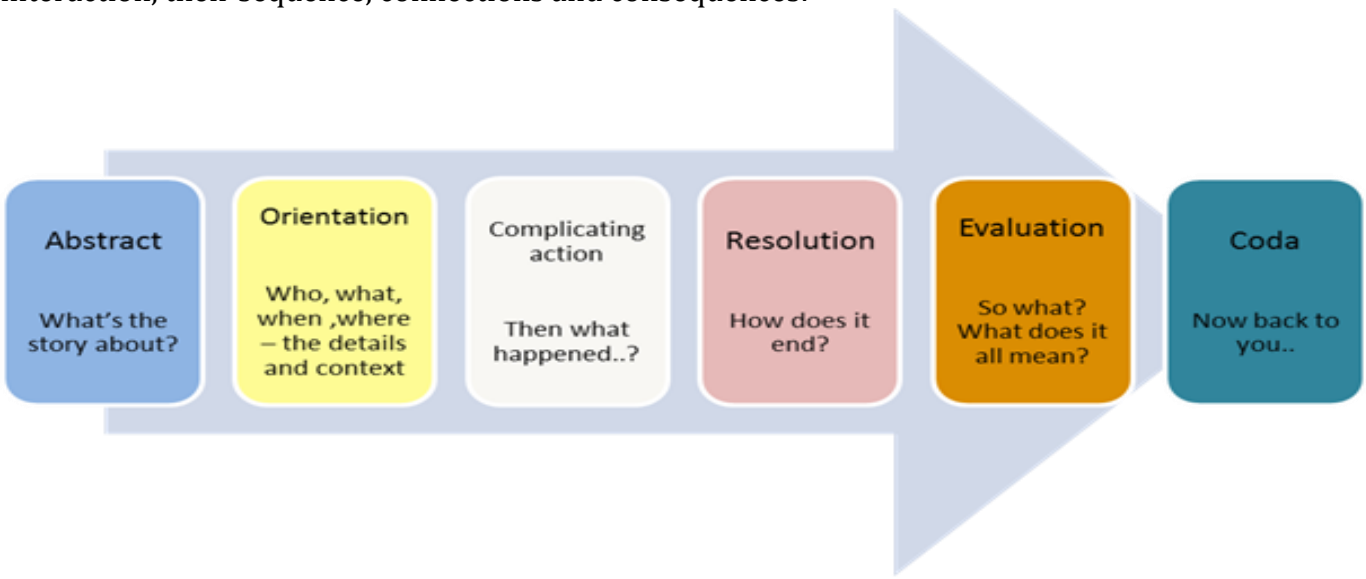


Figure 5: Labov's story sequence (Labov, 1967)

Graham showed us a range of data demonstrating the importance of examining narrative. Firstly, the number of seconds before a registrar interrupts their patient compared to GP expert, inviting medical students to measure this in practice and its impact (Danczak, 2015). He also shared an in-depth conversational analysis of two contrasting interactions where one doctor interrupted and ignored the relevance of a patient story, while the other attended to this and its biomedical relevance to the diagnosis and management (Clark & Mishler, 1992)

Graham invited us to broaden our 'question vocabulary' with students, making explicit the different sorts of questions (beyond open and closed) including:

- Linear
- Strategic

- Circular
- Reflective
- Trading
- Following feedback

(Launer, 2002)

Finally, he invited us to explore with students the use of metaphor (Skelton et al, 2002), how metaphors differ between patient and clinician, and the potential impact of using shared metaphors in patient care.

How Students Learn (Kay Leedham-Green)

Kay Leedham Green then led the final component of this session before lunch. This session began by looking at 'drivers' for learning. Primary drivers included capability, opportunity and motivation. Secondary drivers included time and space to learn, informal and formal opportunities, and both internal and external individual factors (Michie, 2011). Kay reminded us that from the outset it was important to remember that teachers and students have different construction of learning perspectives (Biggs, 2003):

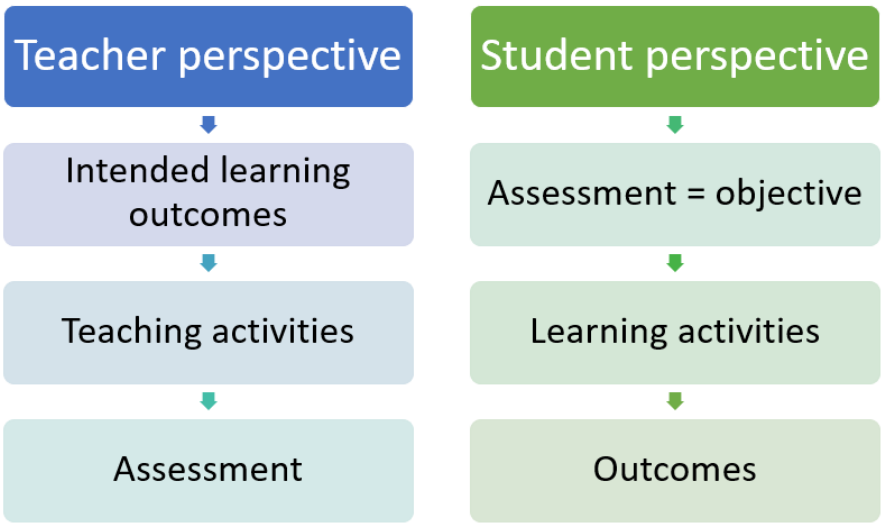


Figure 6: Teacher and student perspectives on learning

She invited us to consider the relationship and overlap between what is taught, learnt and assessed in relation to the dynamic concept of 'the good doctor', and how to shape learning towards future-proofed models, rather than current or past perceived needs.

Kay shared Dweck's (2007) work about 'mindset' – a flexible rather than fixed state determining how students are likely to engage with their clinical workplace based learning and feedback:

Dornan et al (2007) highlight the importance of 'supported participation' for students, and the moral imperative for clinicians to dedicate time to teaching which is good for their own performance as clinicians and clinical practice.

Kay shared her insights that many of the verbs used in the new GMC Outcomes document relate to much higher levels of Blooms taxonomy, requiring important reflexive engagement in discussions about future meaningful medical student assessment (and thereby learning) processes (Anderson et al, 2000):

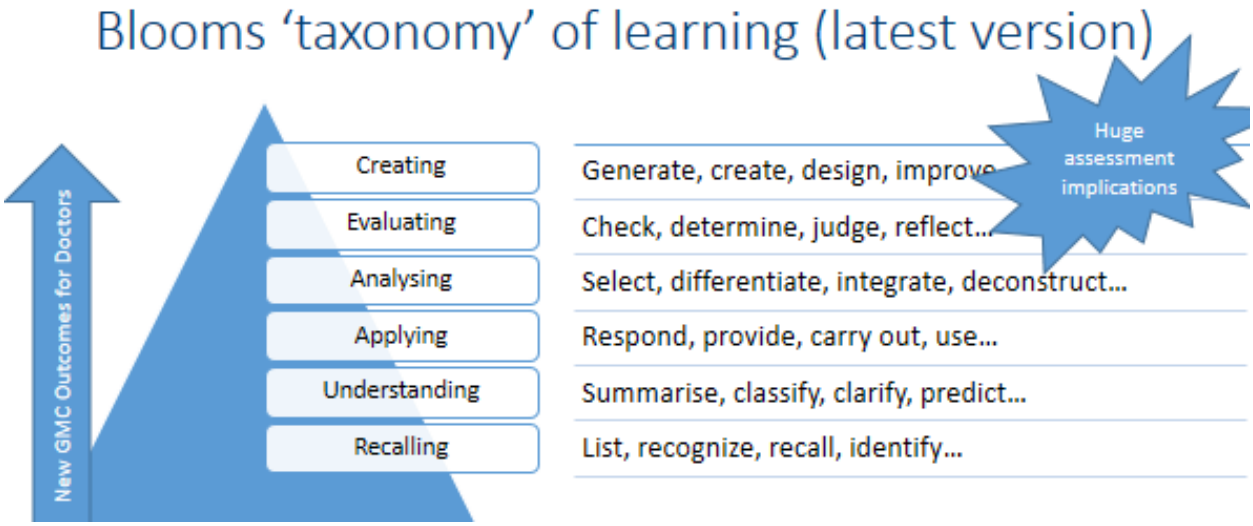


Figure 7: Blooms' taxonomy of learning in relation to GMC Outcomes for Graduates 2018

We then explored a range of different educational theories and their relevance for our general practice learning. First the recent work of Henk Schmidt (pending publication) examining systems one and system two thinking in becoming a medical expert. System one thinking (*intuitive pattern recognition*) is used by clinicians for familiar or recurring instances of clinical reasoning and has been shown to be 'safe' for simple cases, however system two thinking (*systematic deliberation*) is better for more complex challenges. While students may see clinical reasoning practised in an intuitive way, they need to learn clinical reasoning in a deliberate way. As educators we need, therefore, to attend to 'deliberate reflection' on clinical reasoning even for simple cases when

teaching (Schmidt & Mamede, 2018). For novice students, Kay used examples of 'clinical reasoning case proformas (HYMS) and Kings College London 'illness scripts' (see Appendix 1) to facilitate students' hypothetico-deductive approaches to learning e.g. writing out the range of differential diagnoses and how these are ruled in or out. For more expert students, systems 2 diagnostic strategies such as case-based clinical reasoning can be taught e.g. using Murtagh's questions:

- What is it likely to be?
- What do I need to exclude?
- What is easily missed?
- Is my patient trying to tell me something else?

The first approach uses *whole case* reflection to make visible 'deliberate thinking', while the second (for more advanced students) can use *unfolding patient case* vignettes.

Becoming a communicator requires deliberate practice. The ability to elicit a history/communicate effectively is not innate, **it is learnt** (BEME 2):

- To become skilful requires '**deliberate practice**' (Ericsson, 1993)
- **Frameworks 'cognitive schemata' act as a springboard** to more intuitive ways of communicating (Kinderman & Humphries, 1995)

Some practical applications include using:

Advanced communication frameworks

- Motivational interviewing incl. PAPA
- Conversations inviting change
- Non-violent communication

Feedback

- Students and teachers learning about f/b together (e.g. Imperial Simulation Training)
- Self-regulation vs directed questions vs corrective vs judgemental feedback

Cognitive apprenticeship model (e.g. conversations inviting dietary change Kings College London)

- Pre-reading/e-learning; simulation and deliberate practice with feedback; clinical opportunities with near support; articulate and reflect on progress; independent practice + OSCE.

Becoming a collaborator is well role-modelled in the general practice setting, enabling students to experience as a legitimate peripheral participant how teams communicate, organise and work together (Lave & Wenger, 1998).

Practical collaborator learning examples include:

Student involvement in workplace inter-professional practices e.g. MDTs (students have time to prepare complex cases)

Quality improvement projects

Team students up with practice nurse / practice manager to address a genuine clinical problem identified within the practice.

Project submission to SQUIRE reporting guidelines. RCGP quality improvement tool kit. QI conference and prize event (e.g. Kings College London).

Old problems through fresh eyes

How do you see professionals working together in the NHS? Evaluate, analyse drivers and make suggestions for change (500 word essay - portfolio) (e.g. Kings College London)

Becoming a manager is extremely important, but challenging and involves facilitation of active learning wherever possible, or teaching techniques such as Team-based Learning (TBL) and SECOs. These techniques place students in 'the hot seat' enabling them to negotiate a clinical encounter in real-time, engage with a range of options available to patients, and learn to identify,

select and implement potentially relevant evidence (e.g. guidelines, research). So, for example, encouraging students to learn *how* to use and assess relevant and utility of NICE guidance, rather than memorizing the current version.

Practical applications include:

Making the implicit explicit

- Role model evidence-based medicine in practice (show how you use guidelines/resources)
- Role model patient involvement (e.g. medicines adherence strategies, explaining pros/cons of treatment options, shared decision-making)
- Explicitly describe how you manage uncertainty
  SECO clinics: safe, effective clinical outcomes (e.g. Keele, KCL) – high fidelity whole consultation simulations. Could also use local teaching practice networks or HUBs (e.g. Newcastle) to facilitate SECOs with real patients, in clinical setting.
  Evidence-based medicine exams: moving away from MCQ towards open book short answer questions
- Still machine markable (e.g. Imperial)
- Team based learning (e.g. LKC)
- Immediate feedback, with students' right to appeal each question they get 'wrong'

Becoming a scholar is increasingly being recognised within primary and healthcare as maximising the implementation and improvement of healthcare systems (e.g. equity of healthcare access; patient education and empowerment; efficient, lean and sustainable use of resources), rather than pursuing a specific biomedical solution or breakthrough or additional treatment for a specific disease.

Finally, before lunch Kay introduced the 'Logic Development Model':

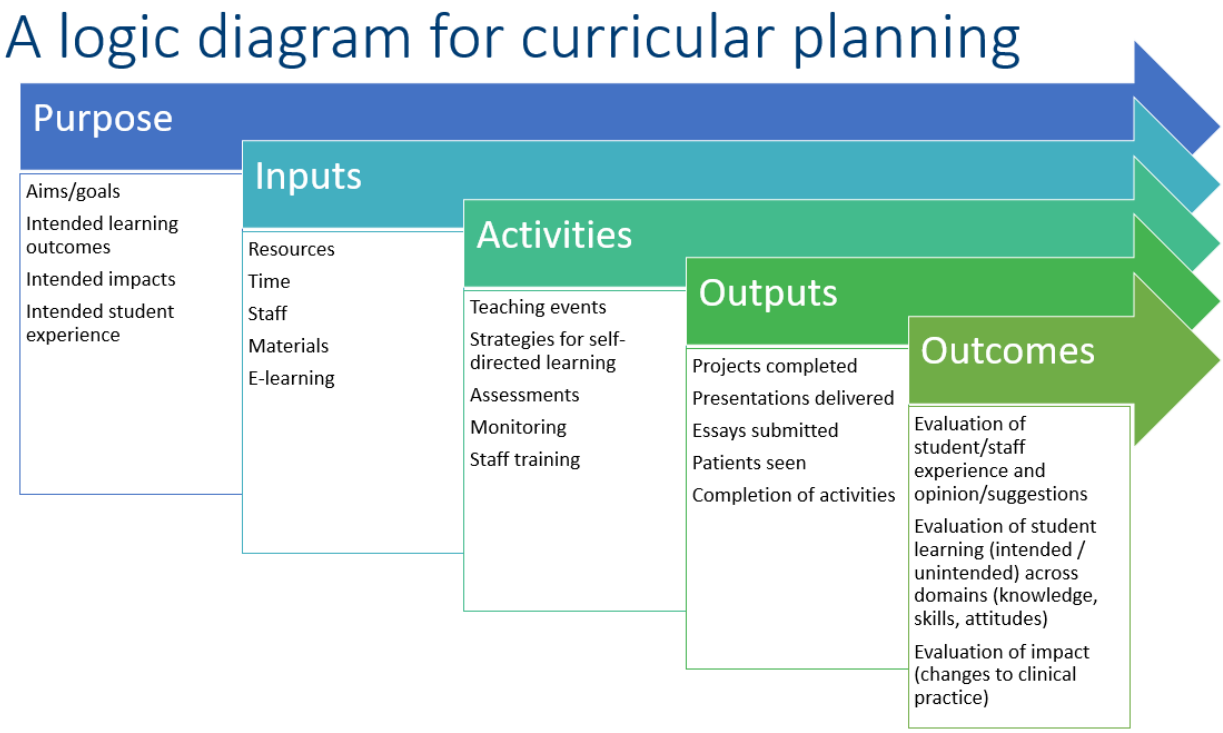


Figure 8: A logic model for curricula planning

Co-production using a Logic Development Model

In the afternoon, we formed three, then two groups, to discuss each of the five topic areas (identified and agreed in the morning as important learning elements of general practice disciplinary knowledge), and related practical ways to teach and facilitate learning about this

topic. After tea, we presented each of these models to each other and individual staff committed their names to develop and support various elements of interest in each of the five areas. We then reflected individually upon 1-2 learning points and 1-2 areas we might aim to include in our future clinical or teaching practice.

Our five topic plans are summarised below:

1. Managing complexity within the consultation

Purpose	• Defining complexity and helping students to recognize and demonstrate an understanding of some principles of managing complexity in primary care SS • Defining complexity to include multi-morbidity, integration of care, whole-person and relational medicine integrating the biomedical *and* bionarrative
Inputs	• Tutor development
Activities	• Some didactic teaching sessions MJ • Patient experience e.g. patient with at least 3 (chronic) illnesses. • Long case study JR • Compare single disease guidelines with managing multi-morbidity / polypharmacy (see NICE guidance multi-morbidty). Insight into by whom and how guidelines are made. SP
Outputs	• Presentation patient case in small groups (summative assessment completion e.g. end of block, or to GP tutor)
Outcomes	• Student feedback • Formal evaluation • PPI – include patient feedback in some way

2. Attentive Curiosity

Purpose	• Lateral thinking 'outside the box' / explicit • Enable students' critical engagement when observing / participating in consultations • Micro-ethnography to 'sitting in' • SLE of patient narrative (metaphors, language used etc.) • What was said / why / power dynamics • How did patient react / what was their understanding? • ICE meaningfully identified and addressed?
Inputs	• Recorded video consultation +/- simulated actor scenario • Observing real consults in pairs and can discuss and compare • Example videos on intro core GP? • Sitting in checklist (see iBSc consultation module) KP • Microguide for student sitting in (active observation) • Would need some teaching or guide on feedback / peer marking. • Comics (visual / non verbal insight into patient experience)?
Activities	• Video consultation analysis – watch in steps (SP – using consultation module iBSc activities) • Real v. simulated patient to facilitate 'time out'

	• Essay task - narrative story of consultation / creative writing (or feedback letter to clinician) • Evolving stories – follow up consults (how episodes relate) • Check list e.g. what you noticed (through a general practice disciplinary lens); how many pauses; body language + how these facilitated or blocked reaching a solution or biomedical diagnosis. • Group work during seminar • Look at consultation from Patient / Dr / student perspectives • Present to peers • Session on narrative and ways of seeing consultation as production of story
Outputs	• Presentations (start in pairs and observe real practice) • Peer marking of essays (3 different feedback comments and feedback on feedback – was it constructive etc.) • Could be discussed at final feedback day • Limit word count to max 500 words. • Write up a narrative (limited word count) • Write up to include how would impact on future practice.
Outcomes	• Need peer marks – all need to be satisfactory • Experience with ethnography observations (and using a legitimate research methodology to analyse the consultations) • Could submit written piece to journal. • Peer marking system anonymised. On-line. ¾ other narratives to mark. Will, Hallie, Neelam, Sandra

3. Managing Systems Complexity / integration / efficacy

Purpose	• To demonstrate the interface and inter-relationship between services and inter-disciplinary teams involved in patient care. • Develop an understanding of the roles and nature of work each member of the team has (e.g. admin, healthcare workers, reception) • Working collaboratively and patient advocacy
Inputs	• Can use co-existing chronic care case identified for 'curiosity session'. (demonstrate different elements of care – patient and system complexity) • GP tutor to identify patient for students to mindmap.
Activities	• Ask students to produce a mind-map of a patient journey (complex history + involves in >1 service): what services are they using; have interacted with; how referrals written; get familiar with file. • Identify a 'care gap' and suggest an action to address this – need to run past GP and if in agreement, they will ask student to do. • Identify what services are available; ease of access; how inter-relate (e.g. health, transport, social, access) • Spend time with each team member involved discussing role + disciplinary lens (ways of doing and ways of knowing – use spot the thinking cards to demonstrate distinctions between professional lenses??) • 2-3 visits: who are you; what is happening; what are you going to do about it • Identify a gap in patient care and change / improve it (advocacy; care / patient centredness; can go via tutor; working collaboratively with healthcare professionals; can involve contact with patient; letter to patient?). Will

Outputs	• Submit a mindmap (of a complex patient under multiple services. Identify an area where their care could be improved • letter/ contact to patient – involve the patient in the process – e.g. elicit their opinion, patient suggest additional resources, parts of their support systems. MJ • Did you make a difference – how?
Outcomes	• Could connect with year 6 GPA • Submit via e-portfolio (anonymised) • Needs to be submitted (but not assessed) • GP tutor involvement (did students recommendations make a difference to the patient / their care?)

4. Ways of Knowing

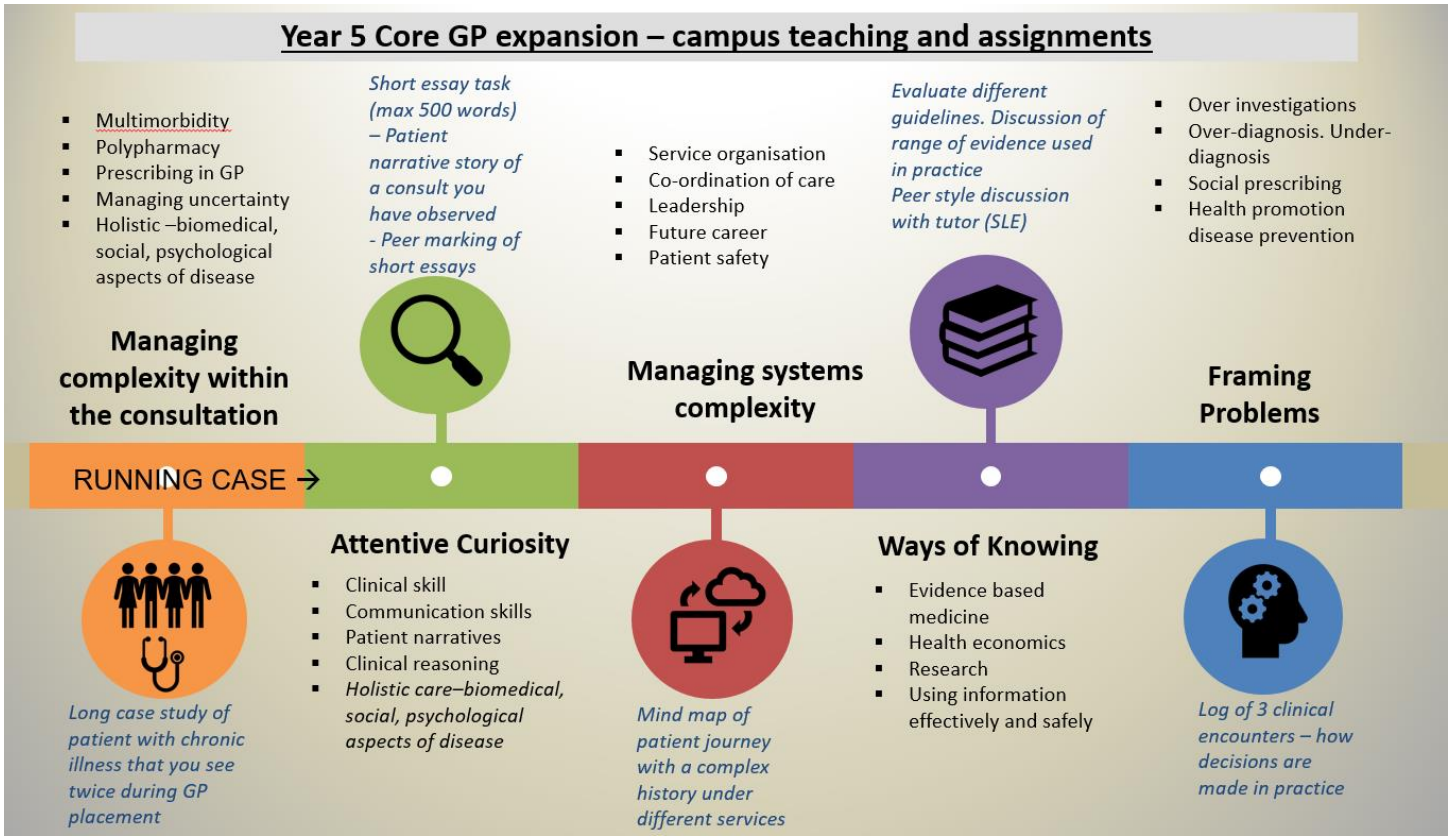
Purpose	• Understanding the range of evidence used in general practice (see GMC outcomes) • Appropriate integration, implementation and communication of evidence • Using evidence to produce quality improvement processes (QiPs) ? better year 6 • Highlight / showcase range of high quality evidence produced in relation to primary care work • Identify ways of not knowing
Inputs	• Facilitator • Sets of data / evidence • Preparation of session KP • King's Fund report / Greenhalgh paper re: quant v qual
Activities	• Critical evaluation of how NICE v. SIGN guidance on a topic might how differ -with different priorities / lenses (e.g. economic outcomes valued v. patient outcomes) (no right way – but acknowledge knowledge is socially constructed). SP with CC • Martin Marshall type lecture on implementation science (how evidence can be applied and produced in relation to clinical setting) • + discussion of range evidence observed in practice informing consultation (e.g. experiential (family and patient + professional), research, policy, CCG guidance, inter-professional expertise etc.) SP • 'Information Gap' exercise with students – solve the case (each student has different form of knowledge which includes particular form of information) – how do students value and utilize each. Reflect on student experiences possessing each type (e.g. quant v qual etc.). KN
Outputs	• Produce an evaluation plan • Present a QI plan in group (or move to year 6) • Clinical observation and feedback re knowledge / information use +/- identify ways in which observed clinicians have negotiated 'not knowing' with patients (lingard paper) – not known by me; not known by science etc.
Outcomes	• Peer evaluation (discussion with tutor about evidence used in practice) – student to produce a 150 word summary of peer-style conversation with tutor. • SBA assessment • Student feedback / de-brief.

5. Framing Problems

Purpose	• To enable students to understand problem-setting processes used in general practice

	• Understanding implications of how problems are set • Triple 'bottom line' £, social cost (e.g. taking appt from someone else through follow up), environmental cost of travel to appointments, thinking about implications and sustainable, lean healthcare systems.
Inputs	• Actors + staff • Sheet for 3 case logs / on-line format Shoba • Literature (e.g. Iona Heath re: boundaries + pros and cons of problem setting / medicalising) SP
Activities	• Log of clinical encounters – how patient and clinician identified, selected, negotiated problems +/- found solutions / set plans for particular issues. • Session with actors • On-going running / unfolding case (e-learning). Different decisions about problem-setting at different points shape possible outcomes / solutions / costs etc. KP
Outputs	• Completed logs (3 cases) • E-learning completion – mapped patient journey and potential costings (economic cost to healthcare provider; patient; their employer; investigation costs; medication; illness behaviours; patient harms of Rx etc.) • Attendance sessions
Outcomes	• Debrief • Discussion of cases with tutor • On-line evaluation

This has been further developed into the diagram below.



Next steps

The overall structural changes to this course have been developed in conjunction with staff-student committee. However, we also wanted to explicitly embed student users in developments. We are very grateful to our student rep for contributing to the day. We next plan to engage student

user groups in discussion of these plans, as well as discussion with GP tutors at our annual GP tutor conference. We hope to evaluate this course development using action research. This away day has also facilitated discussions between Calgary and UCL medical schools at a time when they are both refreshing their general practice curricula, supporting exchange of ideas and collaborative opportunities.

We hope that this project will contribute to a field of emerging work supporting articulation of contemporary general practice knowledge, and related ways in which to facilitate students' learning about this discipline.

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Prof Joy Jarvis: Spot the Thinking, Cards to Explore Disciplinary Learning

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Resources

GMC Outcomes for Graduates 2018

Teaching General Practice: Guiding Principles for Undergraduate General Practice Curricula in UK Medical Schools

Sustainability NHS

Astana Declaration 2018

Gunn's essential dimensions of a primary care generalist medical practitioner

Components of a logic model

UCL Connected curriculum

Wass Report: By choice not by chance

Bristol-led 3D 'Multi-morbidity study': Lancet article 2018

Society of Teachers of Family Medicine (STFM) National Clerkship updated Curriculum

RCGP postgraduate curriculum summary

Canadian undergraduate Family Medicine Curriculum and 'Rethinking undergraduate medical education: a view from Family Medicine'

Chris Salisbury 'James Mackenzie' lecture 2018

BEME review Clinical and community contributions to medical education (Tim Dornan)

BEME Systematic Review of General Practice Medical Education (Sophie Park)

Appendix 1 – Example Illness Script (Kings College London)

Faculty of Life Sciences and Medicine
GKT School of Medical Education

Patient 'illness scripts'

As part of your MBBS Stage 2 GP Longitudinal Placement, you are expected to write up interesting patient presentations after each teaching clinic, as well as any problems that patients from your patient bank present with. You may use this proforma to support your work, although alternative approaches, such as narrative, are also acceptable. A minimum of 10 illness scripts need to be completed satisfactorily and submitted via KEATS to complete the associated portfolio entry. You will be expected to discuss one of these patients at random at your final consolidation day.

PATIENT DEMOGRAPHIC: Click here to enter text.

DATE SEEN: 23/01/2018

STUDENT NAME: Xxx

Patient's reason for presentation

Migraine ongoing for 2 weeks

History of presenting complaint

Biomedical perspective (sequence of events; symptom analysis; relevant system review)
Patient perspective (ideas, concerns and expectations, impact on life)
H/O Migraine previously, recently gotten worse, symptoms being explored to see if has noticeable aura preceding migraine. Took Paracetamol + codeine but did not feel better, also took Ibuprofen. Accompanied by nausea.

What was your initial impression and why?

Known migraine, but increasingly severe and has become ongoing and chronic, 2 previous weeks of headache

Relevant background information

Works on computer for a lot of job, has 5/6 coffees a day and works varying shifts so has irregular sleeping pattern as a result

Past medical history (problems and approximate dates)

Click or tap here to enter text.

Current medication

Zolmitriptan, was switched from Sumatriptan as it was making her very drowsy and causing sleep.

Family history

Click or tap here to enter text.

Social history

Does not smoke, very occasionally drinks, socially but otherwise doesn't.

Examination & investigations

Click or tap here to enter text.

Impression

What is it likely to be / what do you need to exclude / what else could it be?
Chronic migraine, need to exclude medication overuse headache by checking used medication, need to exclude Subdural/subarachnoid haemorrhage, brain lesion, infection, trauma, vascular causes, brain tumour, stroke

Agreed plan

Management, follow up and safety netting
Trying to keep to more regular routine, try to slowly cut down number of coffees to 3 as excess caffeine may lead to more headache, although small caffeine dose may soothe symptoms. Therefore agreed not to try cut out coffee completely as change in rhythm likely to cause rather than solve problem. Avoid Paracetamol + codeine as may worsen nausea

Reflections

What do you feel about this case? Why?
Comment on the consultation dynamics and subtexts
How can you deepen your understanding?
What have you learnt? What will you do differently?
Difficult for patient as chronic migraine can be debilitating, stops usual daily activities, pain prevents them enjoying daily life. May be difficult to manage as treatment may be more effective by changing lifestyle factors (which itself is a difficult task) or by adjusting medication. May need time to try out different treatment options to see which is best for the individual.
Was good to see how GP managed by safety netting, the rapport was good. Can deeper understanding by reading up on Migraine. Learnt some details on how to manage migraine and what aura is and learnt that paracetamol + codeine shouldn't be given to relieve migraine as causes nauseating effect.

Condition write-up

As part of your learning, it is helpful to write up conditions as you encounter them. For each illness script, we suggest you choose one associated condition to write-up. We strongly suggest that you try to cover the core conditions in your GP learning outcomes (on KEATS). You may use this proforma to support your learning. Helpful resources include patient.info and emedicine.medscape.com.

CONDITION: Migraine

WHEN/IF SEEN: Click here to enter text.

STUDENT NAME: xxx

Description (what is it)

Moderate to severe headache, primary headache disorder felt as a throbbing on one side of the head.

Epidemiology (who gets it, and how common is it)

1 in 7 in UK suffer, affects twice as many women as men, affects all social classes and age groups (even young children)

Aetiology (why do they get it)

Caused by a combination of triggers/stressors, which on their own usually are tolerated but can be overwhelming in combination and trigger a migraine. Every individual has their own different triggers, quite a unique condition for each individual

Pathology (what goes wrong)

Not clear or fully understood but believed to be a neurovascular disorder, with differing opinions on the main cause being neuronal or vascular. Another theory is increased cerebral cortical excitability and abnormal control of pain neurons in trigeminal neurons of brain stem. Low levels of serotonin (5HT). If aura experienced (visual, sensory or motor disturbances), due to cortical spreading depression where burst of neuronal activity occurs followed by a period of inactivity, occurring due to NMDA receptor activation, causing calcium entry into cell. When depolarization travels to underside of brain, nerves that sense pain in the head and neck are triggered.

Symptoms (what might the patient notice)

Self-limited recurrent severe headache and aura (in 15-30% of people, who also experience migraine without aura). Migraine can go through phases, prodrome (food cravings, altered mood, irritability, depression, euphoria, fatigue), aura (sensory, visual, motor disturbances), pain, postdrome.

Differential diagnoses (what other conditions have similar symptoms)

Primary headaches: Tension headache, cluster headache. Secondary headaches: Subarachnoid haemorrhage, exertional headache, crash migraine, brain lesion, infection, trauma, stroke/TIA, temporal arteritis, acute glaucoma, meningitis.

Signs (what examination is helpful and what might it show)

Migraine without aura can be made according to "5, 4, 3, 2, 1 criteria" – 5/ more attacks, 4-3 days in duration, 2 or more of: unilateral, pulsating, moderate or severe pain intensity, worsened by or causing avoidance of routine physical activity, 1 or both of: nausea and/or vomiting, or light/sound sensitivity.

Diagnostic criteria (how is a formal diagnosis reached, with reference(s))

Using signs and symptoms from history and background, neuroimaging if needed.

Investigations (what tests are helpful and what might they show)

MRI or CT head to look for tumours or bleeding in the head. Lumbar puncture to test for meningitis, or bleeding in brain, sedimentation rate to see if cause of pain is inflammatory.

Management (options for treatment with reference(s), current advances)

Lifestyle – stress reduction, making routine more regular, medication, Medication – analgesics e.g. NSAIDS, Triptans.

Prognosis (expected outcomes of treatment options, including no treatment)

Benign condition but may cause lost productivity as migraine prevents usual routine activities. Migraine with aura is considered a risk factor for ischaemic stroke. Outcome of treatment to prevent or manage severity and regularity of migraines.