UNIVERSITY OF BRISTOL
MEDICAL SCHOOL

Academic Unit of Primary Health Care

GP Teachers Workshop for 4th Year COMP 2 Course

Engineers House, Clifton
4th March 2008

Report by David Memel and Andrew Blythe

Introduction

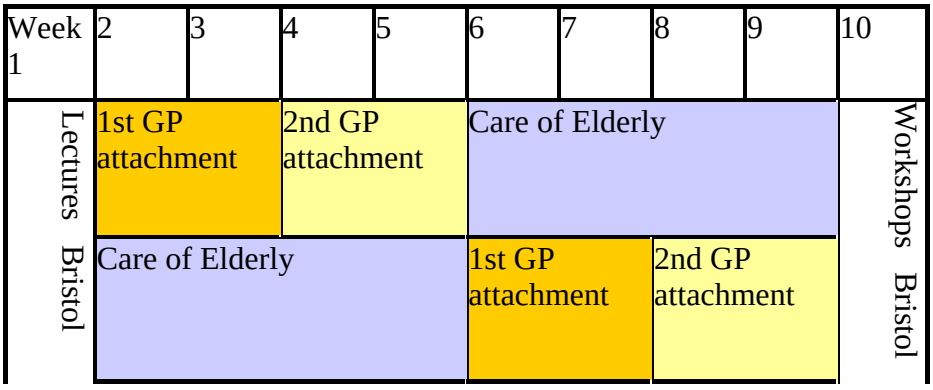
This year's COMP2 Workshop looked at three different topics. After an overview of the course and new developments, we looked at:

- **Learning Environments**
- **Medical Student Health**
- **Teaching about Core Problems in Primary Care**

Overview of COMP2 and Primary Care Teaching

Jane Sansom and Andrew Blythe

GP attachments have been a key feature of year 4 at Bristol's MB ChB course for many years. Since 2004 these attachment have formed part of a unit referred to as Community Orientated Medical Practice 2 (COMP2). This unit encompasses teaching in Dermatology and Care of the Elderly, as well as Primary Care. The basic outline of this unit is shown in the table below.



Dermatology teaching takes place throughout the 10 weeks and usually takes the form of tutorials or special teaching clinics.

The number of medical students at Bristol University continues to rise. There are now 260 students in year 4, compared to 170 in the academic year 2004-05.

2004-05	2005-06	2006-07	**2007-08**	2008-09
170	200	230	**260**	270

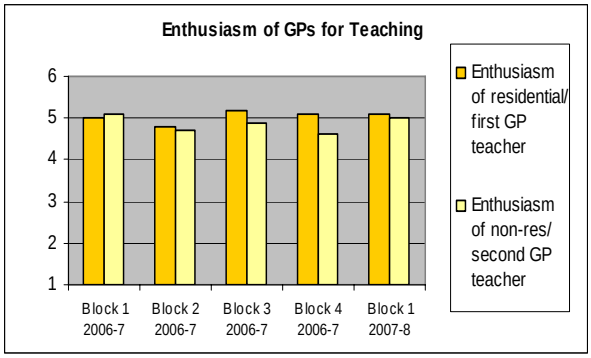
These students are dispersed amongst 7 academies. Each academy operates like a mini medical school and delivers the same curriculum. In each academy there is a GP Lead who co-ordinates the GP attachments. These GP leads are:

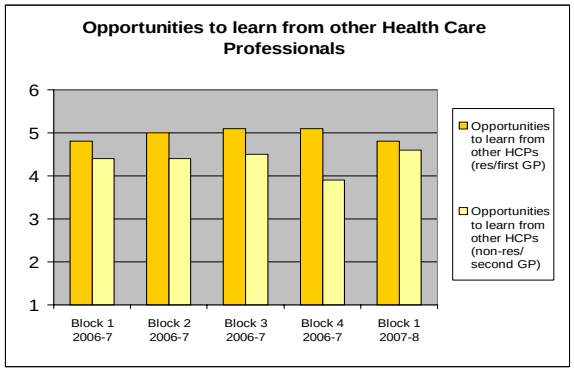
Academy	**GP Lead**
Gloucestershire	Martin Nicholas
North Bristol	Barbara Laue
South Bristol	Kate Reading
Weston super Mare	Paul Seviour
Swindon	June Morris
Bath	Sue Frankland
Somerset (Taunton) Somerset (Yeovil)	Sue Neville Jill Wilson

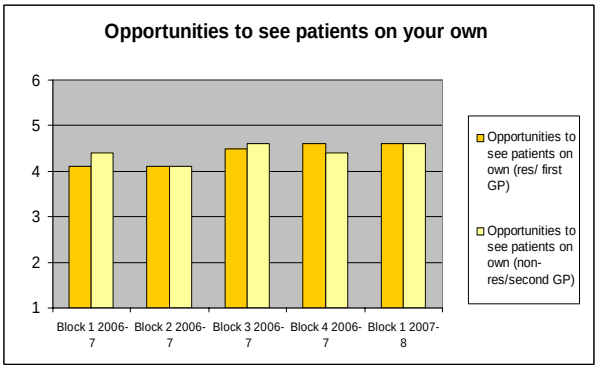
Until September last year all students were sent on one residential GP attachment (usually in a rural area) and one non-residential placement. The residential placement was always first and was longer than the non-residential attachment. However, the expansion of the medical school, together with a shift in the pattern of GP working, has created the need for a different model.

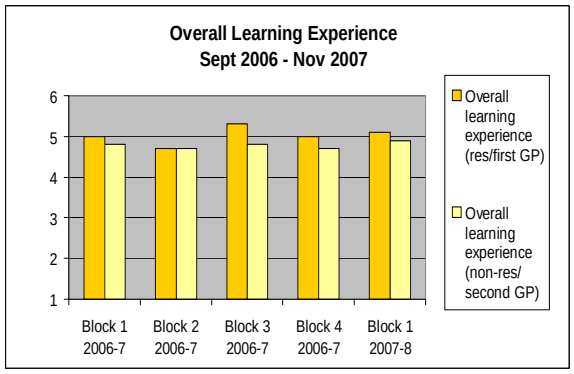
This year we have made the GP attachments of equal length and have removed the necessity for one of them to be residential. Each attachment now consists of 15 sessions (one session being half a day) spread over a fortnight. The rest of the fortnight is filled with dermatology teaching and time for the student's project. We have asked GPs if they can provide residential or non-residential attachments and have asked students want they would like. We have been able to satisfy almost all students' wishes and the result is that for this current academic year just over half of the 259 students will have one residential and one non-residential GP attachment. A handful will have two residential attachments and the rest will have two non-residential attachments. A few students are combining the two attachments to create a 4 week attachment at a single practice.

Students really enjoy their GP attachments. The tables below summarise the feedback that we have received from students over the last 15 months (Key: 1=absent; 2=poor; 3=satisfactory; 4=good; 5=very good; 6=excellent):









A Core Curriculum for Primary Care

The knowledge required by GPs is vast and somewhat daunting for 4th year medical students, some of whom will only have had one year of clinical experience before going out of their GP attachments. At the end of the 10 week course we cannot expect the students to know about all the conditions managed in Primary care and we need to tell them what they will be examined on. So, over the last few years a list of core clinical problems in Primary Care as evolved within the Bristol course. These problems are really just a list of 17 presenting complaints, such as "I feel tired" or "my back hurts". For each problem we have identified some clear learning objectives which are listed in the student handbook.

At the end of each 10 week unit we ask students which of the 17 core clinical problems they have seen and learned about. So far this academic year all students have seen and learned about the management of depression and high blood pressure during their GP attachments. The least witnessed presentations have been weight loss and itchy rashes, which only 79% of students claim to have seen.

The Logbook
Last year we introduced a logbook for students to complete during their GP attachments. These logbooks have been a success.

- The logbooks help students to reflect on what they have seen
- They encourage students to perform consultations by themselves
- They help the students to prepare for the exam ahead.

Professional Behaviour Form
At the end of each GP attachment it is essential that the GP teacher completes a professional behaviour form with the student and returns it to Melanie Stodell at the Primary Care Teaching Office.

Learning Environments
Dr Anne Stephenson

We were delighted to welcome Anne Stephenson, who is Senior Lecturer and Head of Undergraduate Teaching in Primary Care at King's College, University of London. As well as editing one of our core textbooks, she is currently our external examiner in Primary Care.

She presented our keynote lecture on Learning Environments, after which we explored how to cultivate a learning environment and community in our General Practices.

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Learning environments

Anne Stephenson

Department of General Practice and Primary Care
King's College London School of Medicine at Guy's, King's College and St Thomas' Hospitals

Bristol Medical School COMP2 GP Teachers Workshop
Tuesday 4th March 2008

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'Medical school is best thought of as a learning environment and reform initiatives must be undertaken with an eye to what students learn rather than what they are taught''

Hafferty F. Beyond curriculum reform: confronting medicine's hidden curriculum. *Academic Medicine* 1998;73(4):403-407.

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Outline

- Traditional curricula
- The learning environment
- The teacher as learner
- The learning community
- Staying creative and viable

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Traditional curricula

- Teaching rather than learning
- Transmitting knowledge
- Hierarchical structures

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"I view the clinical training enterprise as a powerful bureaucracy with which I have had some fascination, valuable but not usually pleasant encounters. Much of the unpleasantness has had to do with my own flaws, but much had to do with the culture and social structure of the healers, which I have had the privilege to observe at close quarters".

Konner M. *Becoming a doctor: a journey of initiation in medical school.* New York: Viking Penguin, 1987.

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The learning environment

- Formal curriculum
- Informal curriculum
- Hidden curriculum

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Hidden curriculum

The importance of role modelling

"...and they witness inappropriate professional behaviours and attitudes in qualified staff that they model themselves on and almost all of that good training can be undone very quickly"

Stephenson A, Adshead L, Higgs R. The Teaching of Professional Attitudes within UK Medical Schools: Reported Difficulties and Good Practice. *Medical Education* 2006;40:1072-1080.

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The good doctor

- A lived experience
- Central is the relationship with the patient
- Technical knowledge and humanistic skills

Duncan, P, Cribb A, Stephenson A. Developing 'the good healthcare practitioner': clues from some involved in medical education and training. *Learning in Health and Social Care* 2003;24:181-190.

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The learning environment not only is a manifestation of the curriculum but also is 'a determinant of the behaviour of the medical school's students and teachers'.

Genn JM. AMEE Medical Education Guide No. 23 (Part 1): Curriculum, environment, climate, quality and change in medical education – a unifying perspective. *Medical Teacher* 2001;23(4):337-344.

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So far…

Traditionally medical education has focused on

- 'What is taught' not 'what students learn'
- Acquisition of knowledge, not skills and behaviour

This harms students, teachers and ultimately patients

Recently a focus on the wider **learning environment**, - the matrix that inhibits or nurtures learner growth -

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The community-based learning environment

Twelve tips for community-based medical education

- Conveying values
- Role modelling good practice
- Inducting students into a new culture
- Teaching the formal curriculum
- Providing protected time for teaching and learning
- Supporting and guiding students
- Assessing clinical practice
- Making practical resources available
- Being educationally trained
- Providing a team perspective to patient care
- Celebrating working at the margins and being leading edge
- Being socially accountable

Howe A. Twelve tips for community-based medical education. Medical Teacher 2002;24(1):9-12.

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The teacher as learner

'Some have difficulty seeing themselves as competent and in need of learning at the same time'

Boud D, Solomon N. I don't think I am a learner: acts of naming learners at work. Journal of Workplace Learning 2003;15(7/8):326-331.
David Boud at http://www.education.uts.edu.au/ostaff/staff/david_boud.html

We all experience *'having to juggle the competing demands of clinical service, administration and management, training and supervision of postgraduates and clinical audit alongside their teaching activities'* (Professor John Spencer)

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Enriching the learning environment

'Knowing is fundamentally a social act'

Etienne Wenger
http://www.ewenger.com/

Lave J, Wenger E. *Situated Learning. Legitimate peripheral participation* 1991. Cambridge: University of Cambridge
Wenger E. *Communities of practice: Learning, meaning and identity* 1998. Cambridge: Cambridge University Press.

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The learning community

'…a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their understanding and knowledge of this area by interacting on an ongoing basis
...As they spend time together, they typically share information, insight and advice. They solve problems. They help each other. They discuss their situation, their aspirations, their needs. They think about common issues. They explore ideas and act as sounding boards to each other
...they become informally bound by the value that they find in learning together'

Wenger E, Arnold McDermott R, Snyder W. *Cultivating Communities of Practice: A Guide to Managing Knowledge* 2002. Harvard: Harvard Business School Press

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Features of the learning community

- Learning not 'from talk' but 'through talk'

  Wenger

- Provide experiential and reflective learning

  Boud

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A learning community is not only about learning and knowing

'... also it is about being together, living more meaningfully, developing a satisfying identity and altogether being human'

Wenger

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A healthy learning community

- Helps solve problems
- Hears stories
- Keeps up with change
- Avoids local blindness
- Reflects on practice and improves on it
- Pushes boundaries of the field

Wenger

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A healthy learning community

- Has both ideas and structure
- Has both local and outside support
- Master-apprenticeship model is important
- Mutually negotiated learning is important
- Requires relevance, trust and time
- Is embedded in a system of communities

Wenger

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Staying creative and viable

'Unless medical schools become (such) learning organisations, their quality of health and their longevity may be threatened'

Genn

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Learning capability

1. Innovation **and** 'imitation'
2. Content **and** process
3. Individual **and** collective knowledge
4. Formal **and** informal learning
5. Incremental **and** transformative processes
6. Design **and** delivery
7. Individual **and** group learning

Anthony DiBella , Edwin Nevis, Janet Gould, Society for Organisational Learning (SOL)
http://www.solonline.org/res/wp/learning_sys.html

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Facilitating learning capability

1. Awareness and understanding of the environment
2. Shared understanding of the performance gap
3. Evaluation
4. Curiosity
5. A climate of openness
6. Ongoing learning
7. Appreciation of diversity
8. Multiple advocates
9. Involved leadership
10. A systemic approach

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Summary

- Traditional curricula
- The learning environment
- The teacher as learner
- The learning community
- Staying creative and viable

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Structuring Small Group discussions

- Cultivating a learning environment
(Using Amanda Howe's twelve tips)

- Cultivating a learning community
(Using Wenger's ideas on healthy learning communities)

- Cultivating the learning capability of your teacher network
(Using SOL orientations and facilitating factors)

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KUMEC

http://www.kcl.ac.uk/depsta/medicine/gppc/kumec/protected/

http://www.kcl.ac.uk/depsta/medicine/gppc/

Medical Student Health

To discuss this important topic, we welcomed Dr Fiona Hayes, a GP at the Students' Health Service, Bristol University, and Dr Tim Lovell, Acting Clinical Dean

Overview
Fiona Hayes

- Students' Health Service, Bristol University is a GMS practice, contracted to Bristol PCT. We have 13,685 patients with 5.75 FTE doctors and a large practice nursing team including 2 nurse prescribers. Dedicated service to students only. The Medical School is now the largest faculty within the University and so medical students are making up a larger proportion of our list.

- Medical Students all seen by Occupational Health nurses during first term of first year Screened for hepatitis B, hepatitis C and HIV. Also bloods sent for rubella, measles, mumps and varicella serology. If susceptible students are immunised. Since 2005 all students are now sent a pre-entry health questionnaire to complete which is looked at by OH prior to admission Since 2007 entry this questionnaire has to be countersigned by students GP, as a pre entry requirement.

- Medical Students present with a variety of health issues and a little knowledge is often a dangerous thing ie. "medical student malignant melanomas"! Risks of infection to patients often an issue in clinical years eg. rashes, impetigo, diarrhoea and vomiting.

- Chronic diseases are also more prevalent in Medical student population due to widening participation. We have an in house diabetes clinic run several times a term with a Professor of Diabetology providing a secondary care clinic in our building. Other chronic diseases are all well provided for (epilepsy, rheumatology problems etc).

- Mental Health issues are an increasing problem and if contained during first 2 years of course often become a bigger issue during the third and fourth years when the work pressures increase. Main problems seen are depression, anxiety and eating disorders. Either managed by ourselves with input from Student Counselling Service or if more severe then referred to community mental health team and also Eating Disorders Service (tertiary referral).

- If medical problem is preventing student from functioning then there is an option to suspend studies for a period so as to get further intensive help for problem Student will then need to be assessed to be fit to return to medical course and this is done through occupational health or further specialist assessment arranged by medical school. Not done by Student health as we are the GP and there is a potential conflict of interest.

- GMC Fitness to Practice Guidelines are very important and students need to be aware of them.

- Loss of personal tutor system means that students are often very vulnerable and isolated when on attachments in clinical academies There are nominated GP practices that they can register with if needing ongoing help whilst away from Bristol. This time is often

very difficult for students with chronic illnesses and mental health problems, who may have to return to Bristol for medical appointments.

- GPs in role of teacher on clinical attachments is in ideal situation to pick up on any potential problems (especially with regard to any fitness to practice issues) and report these concerns back to medical school. Perhaps check with students at the beginning of attachment to find out any problems they may have.

Management of Student Health within the Medical School
Tim Lovell

- Traditionally Medical School teaching was mainly in Bristol, but with the development of Academies, students spend a lot of time in the clinical years away from Bristol. Each Academy has links with a local General Practice to provide GP care to students.

- There is a potential conflict of interest between the role of GP Teacher and doctor. By all means chat to students about health problems, but do not treat them.

- If you have concerns about a student's health affecting their performance discuss initially with the Academic GP Lead for the course (Andrew Blythe for COMP 2) or with the Clinical Dean. Write concerns on the Professional Behaviour Form

- There are committees within the Medical school dealing with Disability and Health, and Fitness to Practice.

- Medical Students with health problems are like other patients but they have professional responsibilities

- Medical students' responsibilities are covered under the GMC's document "Good Medical Practice". This includes a responsibility to be registered with a GP outside the family, and to seek medical treatment if they think that they have serious condition that they could pass on to their patients, or that could affect their judgement or performance.

- There are various options for students with health problems including remedial help and suspending studies until the following academic year.

Teaching about Core Clinical Problems in Primary Care
Andrew Blythe

During each GP attachment we ask the GP teacher to give the student 2 tutorials. Usually students will ask for a tutorial on one of the 17 core clinical problems. How should you approach this?

Getting the right perspective
Patients present with symptoms not diseases but medical student teaching tends to be parcelled up in lectures about particular diseases. The amount of teaching that students receive on a particular disease can be quite out of proportion to the prevalence of that disease. This makes it difficult for students to gauge what they are likely to see in general practice and

what they are unlikely to see. The problem is made worse by the fact that in hospital students tend to chase patients with interesting signs and this gives them a false perspective of how diseases present.

When our students graduate we want them to have a perspective on medicine that is not too distorted and we want them to have a feel for what is common. We want them to know what the commonest explanations for a given set of symptoms are. And we want them to know how important, but perhaps rare, diseases present most commonly. After all the main function of GPs, if not all doctors, is to pick out patients who might have a serious illness.

When students see a patient with a particular problem, such as back pain we want them to know

- What are the possible explanations for this back pain
- What serious diseases must they not miss
- What questions should they ask to make sure they don't miss these things
- Where can they find up to date information about the investigation and management of back pain.

The presentation of disease

Experienced GPs know what the commonest explanations are for a set of given set of symptoms in a particular circumstance. Students need help in acquiring this knowledge. For instance when a GP sees a 22 year old student complaining of tiredness the GP will know that psycho-social factors are the most likely cause. By contrast a medical student will put rarer causes like hypothyroidism, diabetes and Addison's disease at the top of their list of possible causes. Medical students know a lot about depression and think of that diagnosis if the patient presents with a low mood but not if the patient presents with tiredness.

Similarly students know that alcohol misuse is common but they do not always think of it when they see its commonest effects such as heartburn or repeated fractures. This is because they are taught about alcohol misuse within the context of psychiatry or liver disease and they don't expect to find alcohol misuse presenting in other ways.

The red flags you must not miss

A lot of the time heartburn is just down to alcohol misuse or obesity but sometimes there is serious pathology, such as a peptic ulcer or upper gastrointestinal malignancy. We must teach our students when to suspect these diseases and we must teach them what questions to ask in order to avoid missing these things. It is vital that the students learn to phrase these questions in an appropriate manner. Here the role of the GP teacher is invaluable. In the true style of an apprentice a student will collect phrases and questions used by her GP teacher and will add these to her own repertoire.

Where can you find up to date information

In the COMP2 course we recommend 3 books to our students

Edited by Stephenson, A. **A Textbook of General Practice, 2nd Ed**. London: Arnold; 2004. This book is good at explaining what general practice is all about. It discusses the organisation of general practice, prescribing, chronic disease and health promotion. It does not provide a lot of information on the management of particular clinical problems.

Hopcroft, K and Forte, V. **Symptom Sorter. 2nd Ed.** Oxford: Radcliffe; 2003.

This book presents clinical topics in a manner that reflects the nature of our course. Each chapter title is a symptom, such as back pain. The authors present a list of possible causes of each symptom in order of likelihood and list the red flags that must not be missed.

Simon, C, Everitt, H, Kendrick, T. **Oxford Handbook of General Practice. 2nd Ed.** Oxford: Oxford University Press; 2005.
This book is cheap, small, easily carried in a pocket and incredibly comprehensive.

Blackboard
Increasingly students, like GPs, are turning to the web for up-to-date information. The University has its own online learning environment called Blackboard**.** All our GP teachers have access to Blackboard. It contains all our course handbooks, study guides and an increasing amount of other resources including some on line tutorials
To get onto the Blackboard site

Type www.ole.bris.ac.uk .
Then use the Guest login "med021".
The password is "primcare".

The NHS **Clinical Knowledge Summaries** (formerly known as Prodigy) are also an excellent learning resource. Go to www.cks.library.nhs.uk. There you will find step by step guides to most of the common clinical problems presenting in general practice. When it comes to instructions on the treatment of common problems, Clinical Knowledge Summaries beat most textbooks hands down. The summaries are extremely comprehensive and always up to date.

Structuring a Tutorial
A tutorial is not very different from many consultations. It is a one-to-one exchange of information. First the teacher establishes a rapport with the student. How is the student feeling generally – is she struggling or is she restless? Next the teacher checks what the student expects from the tutorial. Is the student looking for answers to particular questions or is she seeking to gain an overview of a particular topic?

Now, the teacher is ready to assess the student's level of knowledge and understanding on the chosen topic by asking some questions or by discussing a recent case. This is like taking a history. Lots of open questions are the key.

The central nugget of the tutorial is the presentation of new information or the demonstration of a new skill. This is analogous to the offer of a treatment. Careful explanation and some repetition is needed. Afterwards the tutor needs to check the student's understanding and then agree upon some goals in order to put the newly acquired knowledge/skill to good use.

Finally, the tutor gives some feedback to the student and asks her what she found useful about the exercise. She might have ideas for improving future tutorials.

Establish rapport

Assess knowledge and understanding

Provide new information
&
Demonstrate new skill

Check understanding

Set goals

Feedback

Small Group Work looking at Three Core Problems

We then broke up into three groups looking at ways to teach

- **Diarrhoea**
- **Tired all the time**
- **UTI**

For this report we will present the group discussion and learning resources from the group discussing diarrhoea.

Teaching students about diarrhoea & gastroenteritis

a) If you identify this as a learning need at start of attachment:

Tell colleagues
Travel clinic
Triage nurse/doctor
Ask student to ask pharmacist
On-call surgery
District nurse
Health visitor
Websites
Patient information leaflets
BNF. When to give what
Handwashing (what sort of example are you setting as teacher?)

Core knowledge – when to refer/investigate
Core skills
- mixing oral rehydration solution.
- taking stool sample
- digital rectal examination

Read up on oral rehydration
Ask student to make up some Dioralyte
Key questions:

When would you admit someone with diarrhoea?
When would you refer someone with diarrhoea?
When would you send a stool sample?

Look up stubs of patients with notifiable diseases

Ask students about cases they have seen
Set some scenarios for discussion

b) 30 minute tutorial on diarrhoea

Preparation
- Give resources – web-based & books
- Specific patients already seen

Standard scenarios – all acute & chronic
- Small child
- Young adult
- Elderly

Matrix for each
- Causes
- Assessment
- Red flags
- Management. Emphasize practical management

c) Opportunistic teaching after consultations about diarrhoea

Patients – Paediatrics
- Adult
- Elderly
- Travel

Known patients with UC, Crohns
IT – GP notebook
Nurse travel clinics
Geographical context
Diarrhoea in communities
- Local – nursing homes, hospitals, schools
- World

Public health info
Notifiable diseases

Learning Resources on Diarrhoea

Symptom Sorter 2nd Edition
By Hopcroft K & Forte V. Radcliffe Medical Press 2005
Pages 22-24 *Diarrhoea*

NICE guidelines on referral for suspected cancer: lower gastro-intestinal cancer
http://www.nice.org.uk/nicemedia/pdf/cg027niceguideline.pdf

Patient Information Leaflet: Barium Enema
http://www.cks.library.nhs.uk/patient_information_leaflet/barium_enema

Patient Information Leaflet: Diarrhoea
http://www.cks.library.nhs.uk/patient_information_leaflet/diarrhoea

Oxford Handbook of General Practice 2nd Edition
By Simon C, Everitt H & Kendrick T. Oxford University Press 2005
Pages 452-453 *Gastroenteritis/food poisoning* ND

Health Protection Agency
List of notifiable diseases
http://www.hpa.org.uk/infections/topics_az/noids/noidlist.htm
Factsheet on Salmonella
http://www.hpa.org.uk/factsheets/pdf_files/salmonella.pdf
Hand washing technique
http://www.hpa.org.uk/infections/topics_az/handwashing/handwashing.pdf

CKS Guidance
http://www.cks.library.nhs.uk/gastroenteritis
http://www.cks.library.nhs.uk/gastroenteritis/view_whole_guidance#NodeIdn179064n179118n179139

BNF
Chapter 1.4 *Acute Diarrhoea*
1.4.2 *Anti-motility drugs*
Chapter 5. Table 1. *Summary of antibacterial therapy. Gastro-intestinal system*

Microbiology Request Forms & Reports from Laboratory

CKS Patient Information Leaflets
CKS Patient Information Leaflet on Clostridium Difficile
http://www.cks.library.nhs.uk/patient_information_leaflet/clostridium_difficile

BMJ Learning Module
Irritable Bowel Syndrome: advances in diagnosis & management