

Year 1 Clinical Contact Tutor Guide

MB21 EC in Human Health and Wellbeing

The gastrointestinal system

EXPLAINING

Centre for Academic Primary Care

2018-19



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How to use this guide:

This guide starts with the background to the students learning. **The busy GP teacher will find *all you need to know for the session in the session plan on pages 5 & 6*; it outlines the learning objectives, the types of patients to find for students to visit at home, some tasks the students can be set when they are sitting in observing you consult and some discussion points you can raise with your students at the end of the session.** The subsequent pages (page 5 onwards) is copied from the background information provided to the students. It is interspersed with questions you can pose your students if you want to direct discussion in this way.

Dear GP tutor

Thank you for taking students for their Clinical Contact during their Gastrointestinal Case Based Learning (CBL). You should have been sent a link to the overall GP Tutor guide in the Human Health and Wellbeing block which gives you an overview of case-based learning in Year 1 of MB21 and an overview of the Effective Consulting course with links to general information you need to run the sessions.

This is a short guide to running a session in the Gastrointestinal case (you will be sent a link to similar information in each case 2 weeks before the students are due)—and you can also find these on our website <http://www.bristol.ac.uk/primaryhealthcare/teaching/teaching-in-practice-by-year/one/>

We would like the students to be as hands on as possible when they are with you, especially in terms of talking with patients and “presenting” them back. At this stage, they are being introduced to the concept of the medical history—they should have a broad idea of the areas to cover, but they won’t be expected to know the “right” questions to ask about a symptom. They should also be starting to present back a coherent narrative about a patient they have seen to you and the group. This week they will cover “explaining” in their Effective Consulting session—they should be thinking about how you explain information to your patients. How much information do you give? And how do you check your patient’s understanding?

Please try and maximize the amount of time students spend talking directly with patients. Sessions in GP are quite flexible; you may have 1-2 students sitting in a reduced surgery with you and the rest out on home visits, or you could have all the students on a home visit in pairs with a tutorial/debrief at the end, or instead of a surgery you could bring a patient or two into the surgery to meet you and the group. It is helpful if they can practice some clinical skills now such as urinalysis or checking BMI.

I hope it goes well and you enjoy having the students.



Dr Juliet Brown, Year 1 GP lead

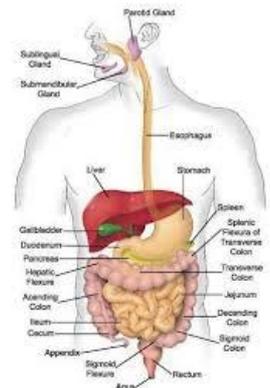
Gastrointestinal—overview of the case

In the gastrointestinal case, the students will consider a 55-year-old man, Vikram. He is physically inactive and has put on weight, his wife is concerned. They find out that he weighs 90kg despite being 5'10" tall. Vikram's wife Saira goes to the NHS website and calculates that Vikram falls in the "obese" category:

<http://www.nhs.uk/Tools/Pages/Healthyweightcalculator.aspx>

Vikram is consuming 3,000 kcal per day and agrees to change his diet.

Saira, aged 52, works as a nurse and sometimes doesn't eat on a shift. She can still fit her size 8 clothes that she wore before her children were born. She avoids cow's milk as it gives her diarrhoea. She visits her GP at the end of a 12-hour shift with symptoms of a UTI and is found to have Ketones + on urinalysis.



Lectures:

- **Plenary Introduction and introduction to global and public health in the case.** WHO nutritional requirements for children and adults inc in pregnancy and breastfeeding. Addresses variation in diet across the world, Climate Change, global burden of disease, and different models of health care systems.
- **Introduction to EBM and Nutrition in the case** Describe concept of a "healthy diet" including calorie requirements, basal metabolic rate, glycaemic index. Describe clinical assessment of nutritional status in adults (inc. BMI) and children (inc. height and weight centile charts). Describe the use of the MUST screening tool in the assessment of patients.
- **Motility and regulation** mechanics of swallowing, normal colonic and anal function, GI tract motility, GI tract hormones and their functions.
- **Secretion and digestion** physical and chemical digestion, normal gastric secretions.
- **Absorption** of products of digestion and of water, oral rehydration therapy.
- **Structure and function of the liver** relationship between the GI tract and the liver
- **Metabolism - the fasted state** role of peptides and hormones in hunger and satiety, glucose metabolism and production of ketones. Role of the pancreas.
- **Metabolism - the fed state** role of insulin, and of vitamins. Inborn errors of metabolism.
- **Embodying Health** the importance of cross-cultural and temporal variations in 'ideal' and 'normal' body shapes, impact of social norms. Difference in perspective between patients' and doctors' concepts of healthy bodies inc. eating disorders. Biomedical and social models of the human body. The concept of embodiment
- **The debate:** Should public health address dietary, refined sugar or eating behaviour to combat childhood obesity epidemic?
- **PPD: Cost of Medical Education:** Individual, education institutions, NHS and public costs

Practicals:

Gastrointestinal practical anatomy and histology:

GI tract structure and function.

Helical Themes:

- Behavioural and social science
- Learning and teaching
- Evidence based practice
- Global and public health

Gastrointestinal session plan

EC focus of the fortnight: Explaining

Drawing on the information gathered and formulated, describe how to develop a shared understanding with the patient of their condition, its causes, and next steps.

Global EC ILOs

- Describe how the underlying anatomy of the abdomen and urinary tract can be assessed clinically
- Outline how the underlying physiological processes of the gastrointestinal and urinary tracts can be assessed clinically
- Describe the importance of developing shared understanding in the clinical encounter

Clinical communication ILOs

- Describe an approach to asking sensitive questions (e.g. about bowel and bladder function)
- Describe some of the features involved in explaining ideas and developing shared understanding (chunking, checking, clarity and the use of aids) in the clinical encounter
- Practise explaining clinical information to patients, relating this to information gathered, clinical formulation, and the patient's ideas, concerns and expectations.

Patient Perspective ILOs

- Describe the importance of eliciting and confirming the patient's understanding
- Describe how the patients' ideas, concerns and expectations inform health professionals explanation of clinical problems

Gastrointestinal Session Plan Primary Care	
Check in. Review of last session and run through session objectives	10 mins
Tutor time: <ul style="list-style-type: none"> • For students on home visit, or if you are bringing patients in prepare the students to meet the patient—briefing on any important information • Set tasks to achieve e.g. <i>the focus this week is on forming a shared understanding between patients and their doctors, asking sensitive questions, and how doctors can give effective explanations to patients.</i> 	10 mins
<p>Meeting a patient or observing surgery Home visit in 2/3s, bringing patients in or observing clinic (if sitting in on GP consultations use the following as observation tasks)</p> <p>Tasks for students:</p> <ol style="list-style-type: none"> 1. Continue to build on your skills of talking to patients. You can use the templates to reflect on your own conversations with patients, or while observing your GP or colleague talking to patients. 2. Observe and note how you or your GP approached any sensitive topics e.g. weight or bowel habit. 3. Consider the anatomical and physiological processes of the gastrointestinal/abdominal systems that can be assessed clinically e.g. pulse, skin pigmentation, bowel habit, urine, body mass index. 4. Think about the patients you met today. If you observed consultations when was it important that a “shared understanding” was reached e.g. did the doctor have to ask additional information to understand terminology that the patient used? Did the patient and doctor agree on a plan of action? If you’ve been on a home visit does the patient have a good understanding of their condition? Do you think the patient you spoke to agrees with their doctors’ perspectives or do they have a different perspective? 5. Think about the patients you met today. What information did the patient’s need? What is important to think about when you explain something to a patient? <p>*OPTIONAL TASK: If the students return early from the home visit get them to look up an information leaflet on a topic relevant to the patient they’ve seen. What types of information does it contain that might be useful to a patient? How are explanations presented e.g. in text or pictures, what language is used?</p>	1.5-2 hours
<p>Discussion time</p> <p>Topics to discuss considering the patient/s you have encountered</p> <ol style="list-style-type: none"> 1. Addressing sensitive areas of the medical history—top tips 2. What we mean by reaching a shared understanding with our patients (e.g. of the nature of the problem, or our management plans) 3. How to give effective explanations to our patients. What resources help e.g. decision-making aids or information leaflets. 	Approx. 45 mins
Feedback and Close:	5 mins

Exploring sensitive topics with patients

The gastrointestinal system covers several topics that students and patients may perceive to be sensitive areas;

- Weight
- Bowel habit
- Urinary symptoms
- Alcohol intake
- Chance of pregnancy (and sexual history) you will cover this later in the course.

Medical student anxiety may stem from not being used to asking about these topics, not knowing how to word questions or not knowing how patients will react. Patient anxiety may stem from embarrassment, worries about being judged, worries about confidentiality or being uncertain of the relevance of the questions they are being asked.

Techniques that decrease anxiety include:

- Explain why you are asking—you may need to address confidentiality
- Ask permission
- Talk in factual terms (not judgmental terms)
- Ask about specifics not generalisations

Preparing the patient and setting the context	<p>“I need to ask you about your lifestyle to better understand your situation”</p> <p>“I need to ask you about your bowel habit to better understand how your gut is working”</p>
Asking permission	<p>“I always ask about alcohol intake because it has an important impact on overall health. Would it be okay if I ask you about your alcohol intake?”</p> <p>“Is it okay if I ask you some questions about your lifestyle?”</p>
Ask factual, specific questions.	<p>“How often do you open your bowels?”</p> <p>“Has your weight changed recently?”</p>
Avoid generalisations and judgmental questions e.g. “Do you eat a healthy diet?” “Do you get drunk”	<p>Instead:</p> <p>“Talk me through what you eat in a typical day?”</p> <p>“How many drinks containing alcohol do you typically have on a single occasion?”</p>
Normalise	<p>“Sometimes people notice blood in the stool or after they’ve opened their bowels, is that something you’ve ever noticed?”</p>
Assume the behavior is already happening (normalizing) but be careful as these are leading questions...	<p>“How often do you have a drink containing alcohol in an average week?”</p>
Closed questions and a “menu” of responses	<p>When asking sensitive questions closed questions can help relieve anxiety about how to answer as can giving a menu of responses. “Do you open your bowels; every day, several times a day, or do you go for a day or more without opening your bowels?”</p>

Explaining (taken from the student guide)

Drawing on the information gathered and formulated, describe how to develop a shared understanding with the patient of their condition, its causes, and next steps.

There are various points in the consultation that will require you to explain things to patients. You may explain:

- Your thinking during the consultation, especially what you think is going on “Well, I don’t think it sounds like your symptoms indicate anything serious, but I think we are going to have to do some further tests to make sure.”
- Why you want to do something, such as an examination or get a blood test.
- The risks of a procedure to gain consent from a patient.
- How to do something, such as get a urine specimen
- What is likely to happen if you don’t do anything. An example is explaining the natural history of a condition. For instance, a viral sore throat typically resolves within a week.
- Different options for treatment including not treating. Patients should understand what the pros and cons of different treatment options are, and where there is uncertainty.

Understand the patient perspective and ideas, concerns and expectations.

Explanation is not just telling the patient what is going on or what the options are and expecting them to sit and listen, it is a two-way process. The explanations you give for any of the above depends what you have already discussed. It is based on your understanding of the patient’s perspective.

Example: I once had a patient who was unhappy with my explanation of his stomach pains. I realised I hadn’t found out what he thought was going on. It turned out that he had accidentally swallowed a whole almond a few days previously without chewing it. He had become worried that this had become lodged in his intestine and was causing the pain, he expected that he would need an endoscopy. I could never have guessed this, but once I knew his concerns I could tailor my explanation to how the gut worked and reassure him.

Jargon:

It’s really important that you give explanations to patients in plain, straightforward language. Imagine you are talking to a family member who is not a doctor. Patient information leaflets such as those on www.patient.co.uk or patient support group websites for specific conditions are useful resources to look at to learn how to give simple explanations of sometimes quite complex problems. It can also be helpful to use the patient’s own words.

Find out what the patient wants to know and decide what they need to know.

Later on, when students learn more detail about various conditions it’s very common to hear them launch into lengthy explanations about the patient’s problem before finding out what the patient wants to know.

Why should you find out what the patient wants to know: Suppose you are meeting a friend in town. You think you are nearly at the café you are meeting at but you can’t quite remember if you need to turn left or right so you consult a map. A kindly passer-by stops and presumes you are a tourist and that you need to know where you should go next. They start telling you about Bristol’s road lay out, history and all the major landmarks you should visit and in which order. You can barely get a word in and feel a bit overwhelmed by all the information they give you. They leave and you realise you still don’t know where the café is because they didn’t ask what it was you needed to know.

A simple “Would you like me to tell you about...” or “I would like you to do a urine specimen, it’s important it’s done properly to avoid contamination can I talk you through how to do it?” works well. It gives the patient the opportunity to say if they don’t want the information. You never know, they might be a nurse on a urology ward and really not need you to explain how to take a urine sample.

When you hear doctor’s give explanations to patients listen to see if the doctor identifies the patient’s starting point. An example would be: “From what you’ve told me and from examining you I suspect you have something called irritable bowel syndrome...if I say irritable bowel syndrome what does that mean to you?”

There are also numerous examples in medical practice of information that the patient needs to know, but doesn’t know that they need. They need to have been told the risks of a procedure before they can consent. They need to know what to look out for if their condition gets worse, what to do, and where and when to get help. You might hear doctors use [signposting](#) before they give information:

“Having talked with you and examined you I think it is very unlikely that you have appendicitis, which is something you were concerned about. However, early on it can be hard to tell, and we need to discuss what to look out for...”

Chunking and checking:

How we give patients information is important. Firstly, we need to check what information the patient wants and what their current understanding is.

We want to give information in a way that they will understand and recall. Particularly when we give a lot of information or complex explanations it helps to break it down into smaller “chunks”.

“I am going to tell you 3 things about...The first is”

Also start with a simple “chunk” of information and check the patient has understood it before moving on.

Checking is really asking the patient if they have any questions about what they are being told. One way to check if a patient has understood what you’ve talked about is to ask how they would explain it to their family or friends.



Shared understanding

When we talk about “shared understanding” with patients we are usually talking about shared decision making, helping patients understand their options and deciding together on the best way to proceed. All the way through an interview with a patient you want to check you are both “on the same page” e.g. you understand what the patient means, they understand what you mean, and that you encourage the patient to contribute or ask questions. The medical history is a meeting, not an interrogation! Part of a shared understanding is eliciting the patient’s perspective and relating your explanations back to their understanding of the situation. It is also being sensitive to the patient’s verbal and non-verbal reactions as you talk and checking in with them:

“I can see you look a bit puzzled? Have I confused you?” “Hmmm, I sense there is still something bothering you. Am I right?”

Use of visual aids and leaflets

Sometimes it helps to look at something together when giving explanations. A chart such as a Body Mass Index (BMI) chart clearly shows what is considered a healthy BMI and what isn’t. It can be easier to show the patient where they are on the chart rather than verbal explanations alone.

Discussing stool consistency with patients can be helped by using the Bristol stool chart see here: https://www.bladderandbowel.org/wp-content/uploads/2017/05/BBC002_Bristol-Stool-Chart-Jan-2016.pdf

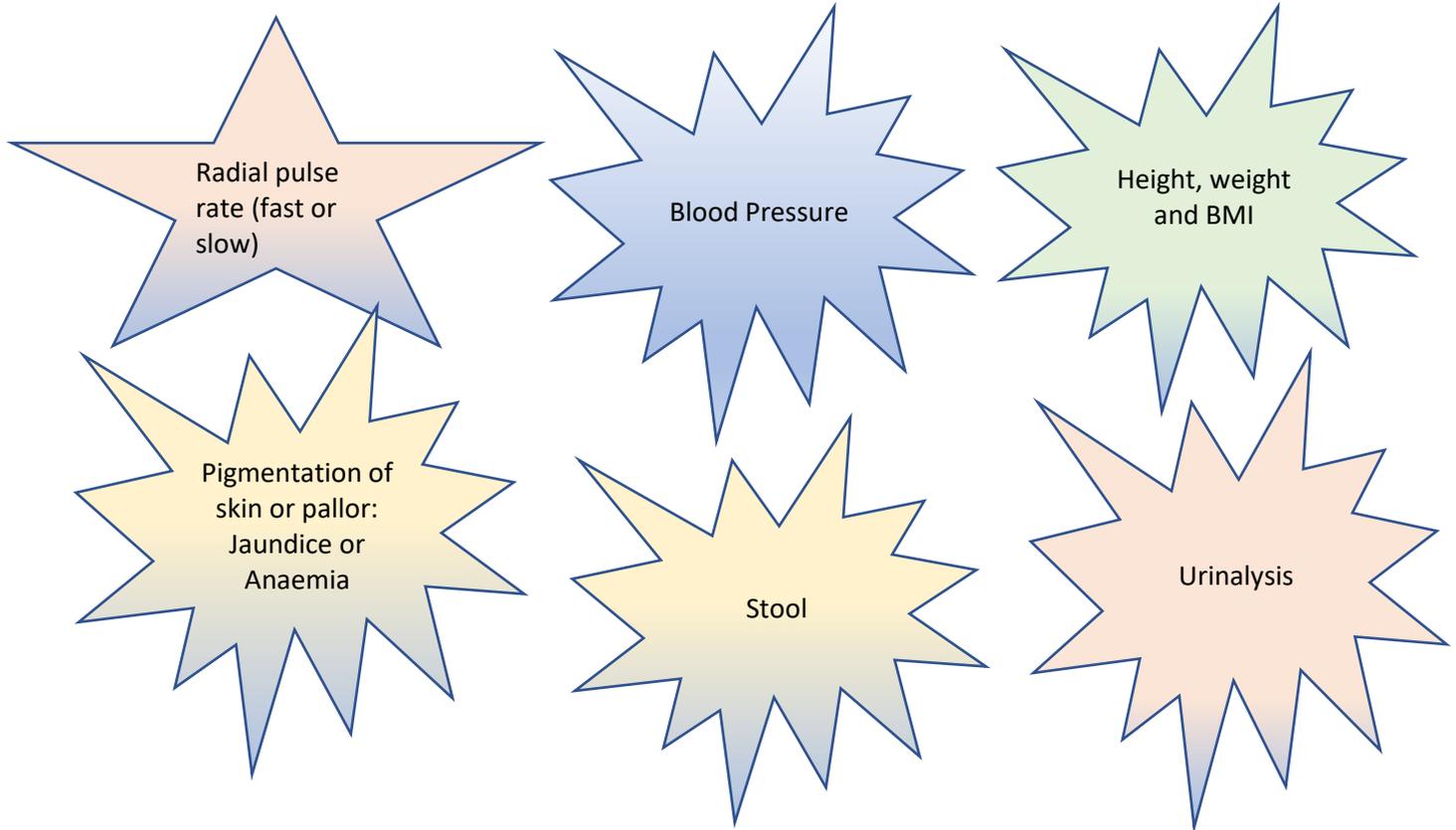
Likewise, patient information leaflets such as healthy diet sheets can be gone through together to back up your explanations.

Motivating patients to make lifestyle changes

Another reason we might give explanations to patients is to motivate them to make changes in their life. If patients understand that their nutrition, habits or lifestyle are causing some of their symptoms or puts them at future risk they may be more motivated to make changes. This is something you will cover in more detail later in the course.

Clinical assessment of the gastrointestinal tract

You will be introduced to pathology and symptoms such as abdominal pain in Year 2. In Year 1 you are looking at how the normal gastrointestinal system and abdominal organs are structured (anatomy) and how they work (physiology). We want you to think about how gastrointestinal processes, and abdominal organ function can be assessed clinically.



GP Tutor task:

The students should not expect you to teach them a gastrointestinal examination, they will cover an introduction to the examination during their hospital placement, and they can watch videos (links at end) if they are keen! If you get a chance show them how to do a urinalysis or talk through a stool chart or BMI chart. If you do any examination or clinical skills you can use the following notes.

The clinical examination.

(Do not examine patients without a tutor present. You may not cover examination on GP placement, but this will be introduced on your hospital placements.)

- Describe the structure and components of the clinical examination

Once you have obtained verbal consent from the patient you should ask them whether they would like a chaperone present. Make sure the patient is comfortable. Before you start, make sure you wash your hands.

You will notice within all the systems we follow the following order:



1. Observation around the patient, look for clues to help you work out what is going on – a patient in hospital may have a “Nil by Mouth” sign by the bed, or a drip, nasogastric tube or catheter.
2. General appearance Look at the patient from the end of the bed:
 - a. Do they appear to be in pain or unwell?
 - b. What is their general appearance? Do they look underweight or overweight? Consider their complexion—particularly do they look yellow? (jaundice—see picture below. If they look pale you want to consider anaemia (they may not be absorbing iron properly from the gastrointestinal tract, not getting enough iron in the diet or losing blood). To check you should look for conjunctival pallor by pulling down the lower eye lid while they look upwards.
3. Look at the hands and nails. You will learn a systematic approach to examining the hands and nails and all the things you need to look for in Year 2. For now, just consider what you can observe, your tutor will point out anything that may be significant.
4. Radial pulse. Refer to your notes for the cardiovascular and respiratory sessions. For the abdominal examination it’s important to note if the patient is tachycardic. A fast heart rate may indicate many things such as an infection e.g. appendicitis or fluid loss (dehydration) or blood loss.
5. Examination of the abdomen. The patient should be lying as flat as they can comfortably with their arms by their sides, the abdomen exposed, and abdominal muscles relaxed.

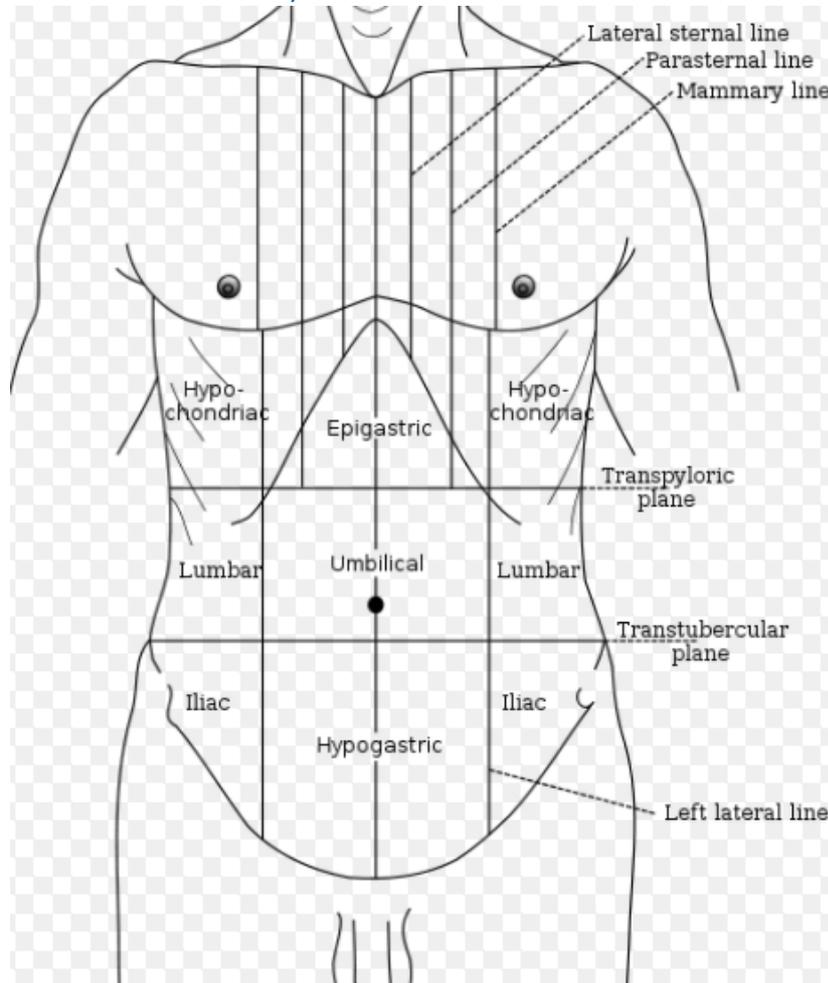


Remember...**INSPECT**, **PALPATE**, **PERCUSS**, **AUSCULTATE** You will learn how to do these things in a systematic way in Year 2 (you can look in Macleod’s Clinical Examination for detail). For now, we want you to be aware of what you can observe when you look at a patient and think about what you are observing. To start with, think about the anatomy you have learnt. What is the surface anatomy of the abdomen?

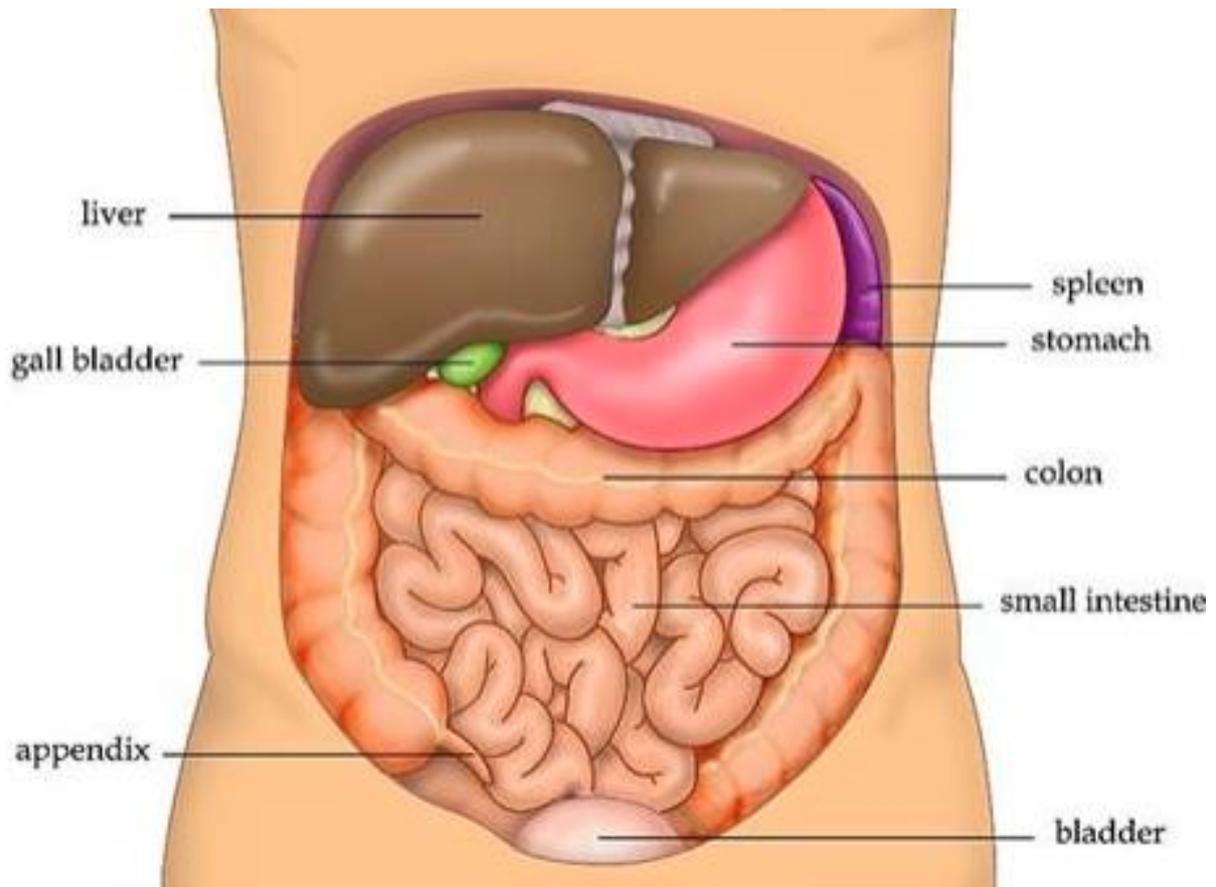
Inspection

What can you see? You might see abdominal distension, visible lumps, scars, excoriations (scratch marks indicating itch). Is the abdomen moving with the breath? Is the movement symmetrical? You can ask the patient to take a deep breath in, or cough to assess pain with movement.

Surface Anatomy—a reminder



The hypogastric area is also called the suprapubic area. The abdomen is often talked about in terms of left and right upper and left and right lower quadrants, but when you learn to palpate (feel) the abdomen you should feel in all 9 areas. You will, in time, be taught to palpate the abdomen. You start away from the site of a patient's pain and feel gently and superficially in all areas for tenderness or obvious masses. Then you examine all areas with deeper palpation feeling for deep areas of pain, masses or palpable organs. For now, you just need to consider the different areas and the underlying structures:

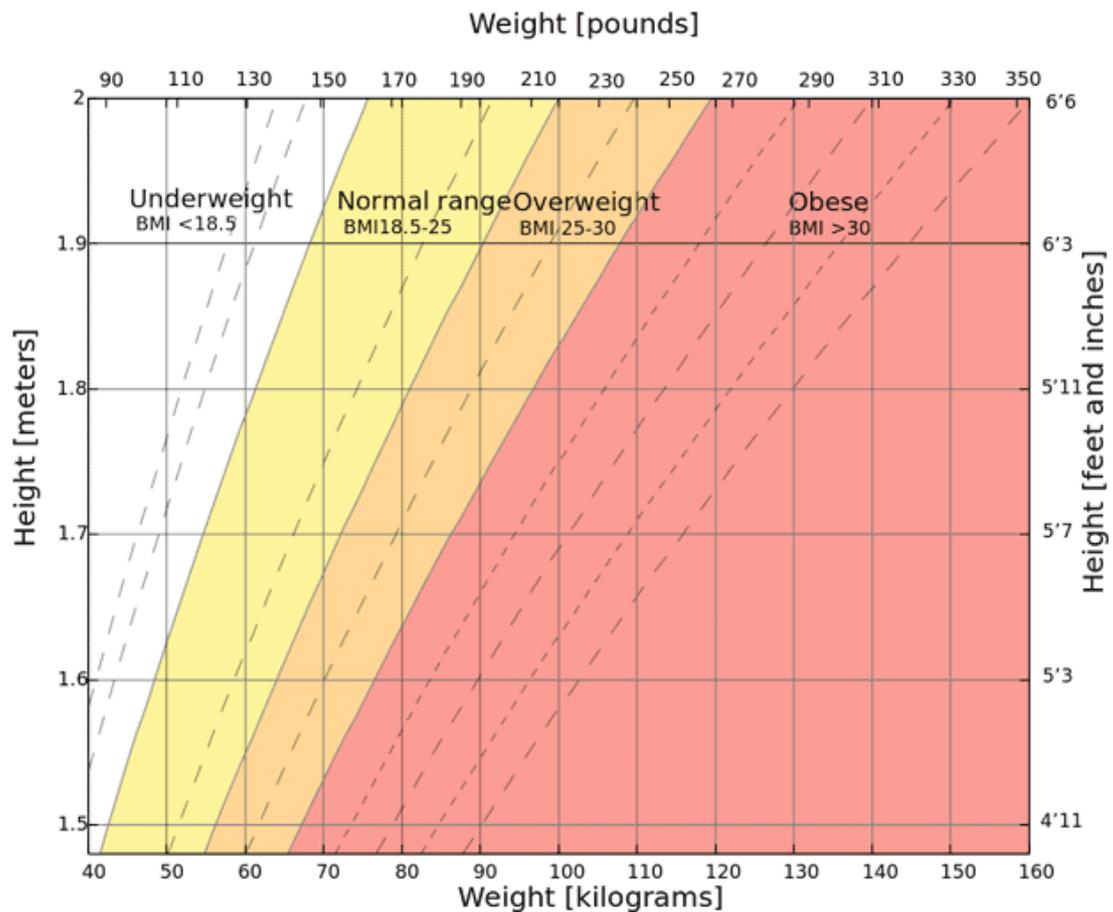


1. http://commons.wikimedia.org/wiki/File:Anatomy_Abdomen_Tiesworks.jpg 20/7/12

Body mass index

This is a measure of whether someone is a healthy weight for their height. It needs plotting on a regular basis to give an objective measure of someone is gaining or losing weight. It is calculated by dividing body weight (in kilograms) by height squared (metres²). You can find a BMI calculator here: <https://www.nhs.uk/Tools/Pages/Healthyweightcalculator.aspx>

It is a simple, inexpensive screening test but there are problems with it. It is a proxy measure of body fat but it doesn't measure actual body fat or distribution of fat. It is less accurate if a patient has a high muscle mass e.g. athletes or has loaded with water (anorexic patients may drink excess amounts of water before weighing) In children BMI must be interpreted relative to age and sex.



Urinalysis

Dipping a urine sample with a multistix test detects several substances in the urine including glucose, proteins, red cells, ketones and by products of bacteria such as nitrites. It is used to help investigate for urinary tract infection, and test for and monitor diabetes, kidney disease, high blood pressure, liver disease and other conditions such as metabolic disorders. It is also used for monitoring in pregnancy.



An explanation to patients about what a urine dipstix test is can be found here:

<https://patient.info/health/urine-dipstick-test> and how to collect a mid-stream specimen of urine here: <https://patient.info/health/midstream-specimen-of-urine-msu>

The following table is taken from the MB16 Consultation and Procedural skills (CAPS) logbook for students from Year 3 onwards. It gives a clear run through of how to do a urinalysis.

<https://www.ole.bris.ac.uk/bbcswebdav/institution/Faculty%20of%20Health%20Sciences/MB%20ChB%20Medicine/MB16%20Store/assessments/CAPS%20Logbook.pdf>

1. Introduce yourself, explain procedure to patient and obtain consent
2. Prepare equipment
3. Check that reagent strip has not passed expiry date.
4. Ask patient when urine sample was passed.
5. Put gloves on
6. Observe colour and opacity
7. Remove reagent strip from bottle, replace lid immediately and check that test pads are the correct colour at the start.
8. Dip the reagent strip into the sample of urine, ensuring that all the test pads are covered.
9. Remove reagent strip immediately, as you do so drag the back of the test strip against the sample pot to remove excess urine.
10. Replace lid on urine sample bottle.
11. Hold the stick so the urine does not run into individual test squares, wait the appropriate time before reading each result.
12. Use stopwatch to record time accurately and hold colour key next to the reagent strip*.
13. Decide if urine sample needs to be sent to laboratory or if the patient needs to do a MSU and then dispose of reagent strip and gloves. Dispose of urine in sluice or return to patient.
14. Wash hands
15. Explain results to patient and decide what further action is necessary.
16. Record results accurately in notes.

GP TUTOR TASK:

Debrief

- Discuss the patients seen today.
- Students who have been on the home visit should now start to be able to “present” the case back to you. Students who have observed a patient in clinic can present a patient you have seen together back to their colleagues.
- Students are unlikely to be able to present the case in the way you would present a medical history, instead ask them to try and “tell a story from beginning to end”.
- What is the patient’s understanding of their condition or situation?
- How would you explain the condition to someone that knew nothing about it?
- Is there any further information they need?
- Were there any topics that felt difficult or sensitive to raise with the patient?

Student Resources:

Your main text book for Clinical Contact is Macleod’s Clinical Examination. This can be accessed through the reading lists and library link on blackboard [here](#). Before Clinical Contact this week, you will find it helpful to read the following sections:

Handwashing page 4

Chapter 2: History taking; pages 6-9; and Gathering information on pages 11-20.

Chapter 3: General Examination; pages 42-47.

Chapter 8: The Gastrointestinal examination; Anatomy pages 166-8. Wind, flatulence, abdominal distention and altered bowel habit and constipation p173-4. The history p176-8. The physical examination p178-82 (up to palpation only)

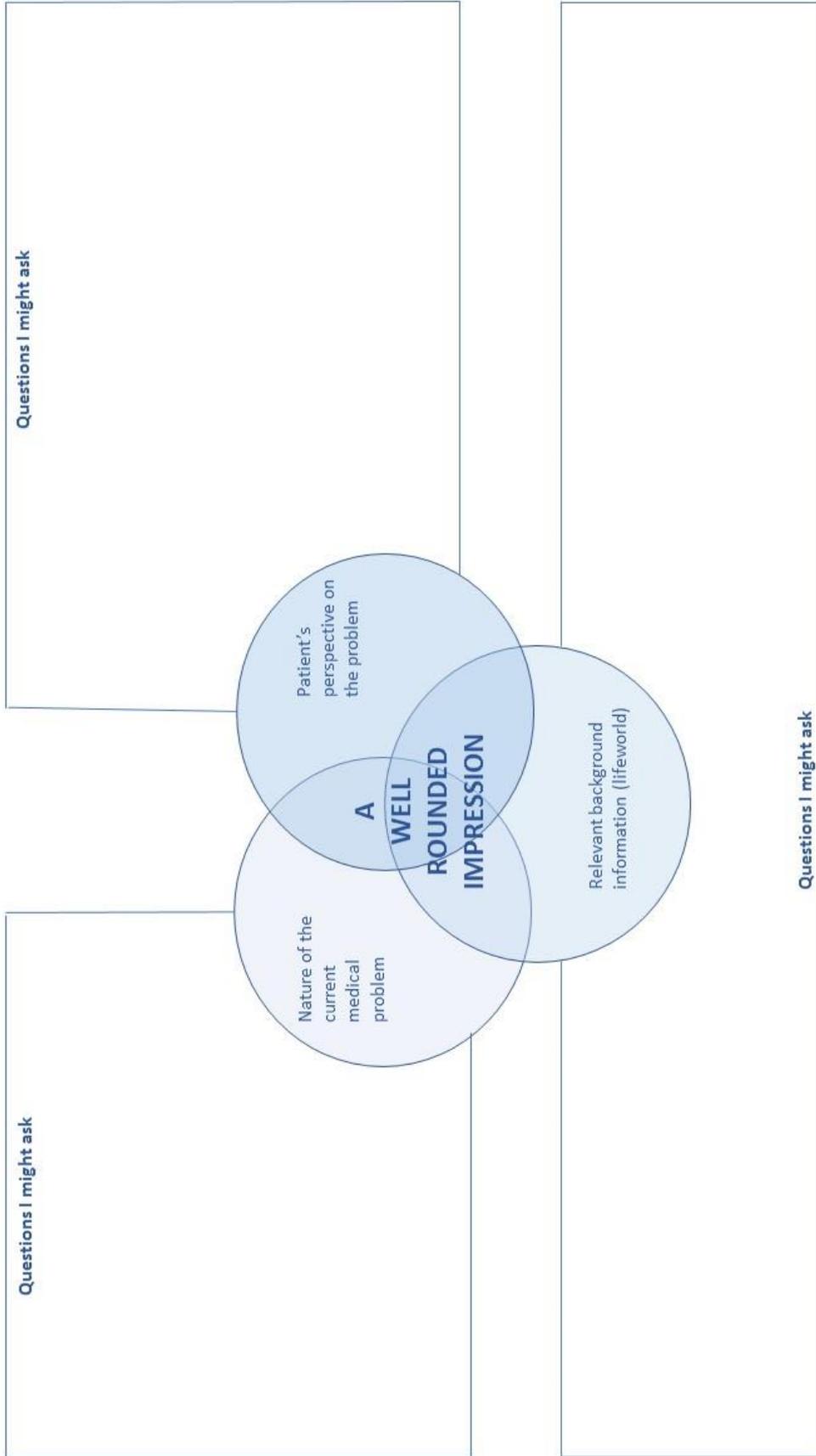
Appendix 1: Templates

Nature of the current medical problem			Presenting problem	
			Current health and current health problem	
			History of presenting problem	
			Background to the current problem	
				Systems review
				More about the nature of the patient's overall health
				Past medical and surgical history
				Patient's previous health issues
				Drug and treatment history
				Current and past treatments and interventions Prescribed medication Allergies Over the counter meds Other interventions
		Relevant Background / lifestyle	Social history	
			Social history: occupation, smoking, alcohol, accommodation, etc	
			Other background information	
			Risk factors – modifiable, and non-modifiable	
Patient perspective on the problem			<i>Assessment of wellbeing, lifestyle and relevant background</i> - <i>Connectedness (family, friends, community, self)</i> - <i>Physical and Mental wellbeing (sleep, healthy eating, exercise, emotional health)</i> - <i>Daily life (finance, work, environment, fun)</i>	
			Ideas, concerns, expectations, impact, emotion (ICEIE)	
			Ideas the patient has about their health and condition	
			Things the patient is hoping to happen in the consultation today	
			Concerns that patient has about the consultation, their health, their condition or anything else	
			Impact that the patient feels this is having/ will have on their health, or more generally	
			Emotions around the consultation (anger, fear, relief etc)	

As you progress through your medical degree you will be introduced to the concept of a 'medical history': the formalized way in which we clinically record and present information both verbally and in writing. P11-20 and 32-39 of McCleod's Clinical Examination (13th Ed) provide an outline of content and format.

You are not expected, nor encouraged, to have clinical conversations with patients in this checklist fashion. The template here is provided to illustrate how GATHERING information through history overlays with a more traditional clerking structure. Remember, Gathering is broader than just 'history' it includes other sources of information, previous results, examination findings etc.

How to use this template: use this as an observation and reflection tool. Did you, your peers or your GP gather this information? How was it obtained? What worked well?



	My thoughts:
What do I think the nature of the medical problem is?	
Why?	
What do I think the relevant background and lifestyle information is?	
Why?	
What do I think the patient thinks about what's going on? (ICEIE)	
Why?	
Is there anything that doesn't fit?	
Is there anything else I'd like to know? (either from the patient, from the Dr, from the records, or from another source such as a text book)	
What words or phrases might I use to explain this? How did the doctor explain this? What skills were used?	