Chapter 1 **What to learn in community settings**

With Ann O'Brien

Introduction

Medicine is best learned from patients, and patients overwhelmingly engage with healthcare in their own community settings. Increasingly modern healthcare is structured to occur in community settings, and it necessarily follows that much of medicine can, and we believe should, be learned in these settings. This chapter highlights aspects of the undergraduate syllabus common to many medical schools that you will have the chance to learn in primary care and the community as you progress through your undergraduate curriculum. In Chapter 2 we focus particularly on public health and health promotion aspects of medicine, and in later chapters we explore the practicalities.

Helping you appreciate all that you can learn while on a community placement will motivate you to make the most of your time. This is important because some topics will only be covered during your time in the community and hence it's useful for you to know how these learning opportunities may present. There are additionally many opportunities for you to see how community-based medical education complements and puts into perspective the science and theoretical learning you do at university and also your hospital-based experiences.

How to Succeed on Primary Care and Community Placements, First Edition.
David Pearson and Sandra Nicholson.

By the end of this chapter you should be able to:

- be aware of what areas of your curriculum can be covered within the community
- understand how early attachments lay the foundations for later clinical placements
- appreciate how this book will help support you to make the most of such learning opportunities

Making the most of your community time whether you eventually become a general practitioner (GP), hospital physician or surgeon is time well spent as what you learn in this setting will make you better clinicians.

> It is important that medical students receive clinical experience in a range of healthcare settings. The healthcare system in the UK is varied, increasingly decentralised and subject to change. A varied medical education and clinical experience can help students adapt to these differences and changes when they graduate. Clinical placements should start early in the undergraduate curriculum.
>
> Furthermore:
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> Placements should reflect the changing patterns of healthcare and must provide experience in a variety of environments including hospitals, general practices and community medical services.
>
> (GMC Tomorrow's Doctors, 2009)

This chapter is divided into four sections: early years, middle years, later years and further opportunities which reflect the range of community attachments occurring within an undergraduate medical curriculum. Each section outlines what you and your tutors might expect such a placement, at that time of the curriculum, to deliver. You will have different opportunities depending on how your medical school delivers its curriculum, but there is often a common core syllabus with similar aims and learning objectives. Although much of this book focuses on a UK perspective, the principles and many examples are of relevance if you are a student studying outside of the United Kingdom. Community placements are designed to provide increasing clinical exposure and responsibility across the years as you become more knowledgeable. Equally the concept of longitudinal integrated clerkships (LICs) is gathering momentum in medical education; primary and community care will tend to have a disproportionate role in delivering these longitudinal experiences and the advantages they are

thought to bring. Ultimately all these placements aim to help you to prepare for independent clinical practice.

Take a look at what some of the world's leading medical educationalists have to say about what competencies a doctor should have (CanMEDS Framework; http://www.royalcollege.ca/portal/page/portal/rc/canmeds/framework) or what the UK's General Medical Council has to say (http://www.gmc-uk.org/education/undergraduate/tomorrows_doctors.asp):

> The curriculum will include practical experience of working with patients throughout all years, increasing in duration and responsibility so that graduates are prepared for their responsibilities as provisionally registered doctors. It will provide enough structured clinical placements to enable students to demonstrate the 'outcomes for graduates' across a range of clinical specialties, including at least one student assistantship period.
>
> GMC (2009) Tomorrow's Doctors; Para 84

Early years

Meeting patients, learning how and why some people become ill, and how to help them were some of the reasons why you wanted to become doctors. The social and psychological aspects of health and illness are well covered during community attachments. You will therefore be able to learn about how patients' lives and work affect their health and experience of disease.

This is one of the important learning outcomes stated by GMC:

> Explain sociological factors that contribute to illness, the course of the disease and the success of treatment including issues relating to health inequalities, the links between occupation and health and the effects of poverty and affluence.
>
> GMC (2009) Tomorrow's Doctors:
> Outcomes 1 The doctor as scholar and a scientist

TASK

Why not take another look at the GMC's document 'Tomorrow's Doctors, 2009' or its equivalent alternatives such as the Scottish Doctor or the CanMEDS (for links, see reference section) and see what you need to know and what can be covered during your community placements.

Meeting your first patient as a medical student can seem daunting, and you may also feel that your patient may have unrealistic expectations of what you know and can do. Early patient contact often occurs within primary care and the community and sets a student's mind at ease, increases your confidence and begins to make you feel like you are learning to be a real doctor, ensuring your theoretical knowledge is grounded in a patient-centred holistic framework.

> Early on, it is easy to fixate on skills you think you lack, or believe that you must have answers for the patient, or be able to diagnose illness. In reality, this is an opportunity to develop innate skills that underpin this diagnostic ability. Learning how to talk to patients, empathise with their problems and appreciate the impact of illness on their life without a diagnostic or history taking agenda may be the most valuable thing you develop in your entire medical career.
>
> (Final year medical student)

What to learn during early patient contact

Community placements are an opportunity for you to meet patients early on. Often referred to as early patient contact (EPC), these placements focus on authentic patient interactions, encourage you to appreciate the psycho-social aspects of medicine and contribute to your growing understanding of the varying roles of different health professionals involved in multi-professional team working (Dornan and Bundy, 2004). Opportunities will be available for you to actively engage with patients in a safe clinical environment, helping you to reflect on developing your communication skills and attitudes towards patients and illness. This is an important task which should complement your growing scientific knowledge. Becoming a doctor requires you to learn from a structured curriculum that balances learning to know with learning to care.

Benefits of early patient contact:

- Brings alive your scientific learning
- Encourages confidence in students
- Sets the scene for later clinical learning
- Develops a patient-centred approach

TASK

Introduce yourself to a patient by explaining who you are and that you would like to find out how their health affects them. Consider how you should best approach this interaction with a patient and whether there are any ethical issues involved such as confidentiality.

Community-based EPC provides you with a learning environment which integrates scientific and clinical education. With a more holistic view of medicine you will be able to better appreciate the clinical context of the underlying biomedical principles you are learning about elsewhere (Dahle *et al.*, 2002). Your early clinical exposure contextualises the science you need to learn in order to fully understand the clinical scenarios, which you will engage with later on in your training (Dornan and Bundy, 2004). If you have been enthusiastic and engaged with earlier clinical opportunities that highlight the centrality of patients, you will feel better prepared and more confident when you start your clinical placements later. Primary care often reflects opportunities to meet with patients, who in their own environments, feel empowered to talk with you, and share their experiences with you, more so than when they are hospitalised.

TASK

Speak to your community tutor. Explain what you have recently covered at medical school. Your tutors should understand the content of your curriculum but their experiences at medical school may be very different compared to yours. Then discuss how the medical science that you are learning can be applied to the clinical situations you see each day.

Professionalism and personal growth

Learning to be a doctor requires more than just factual knowledge or even the application of the appropriate clinical skills. It requires the embodiment of attitudes and behaviours akin to being a professional doctor. Being a good doctor is about who you are, how you treat your patients and colleagues, and how you recognise your own shortcomings

and do something about them. Your early community placements will give you time to observe good professional behaviour in a variety of healthcare professionals. Your tutors will also help you think through why you wouldn't want to copy some behaviour, which you think is not good.

TASK

Take a moment to think about what it means to be a doctor. Look up what the General Medical Council (GMC) has published about what is expected concerning the professional standards of doctors. Their publication 'Good Medical Practice (GMP)' will help you think more deeply. This can be accessed from http://www.gmc-uk.org/guidance/good_medical_practice.asp

It's never too early to have read through the statements made in the UK GMC's guidance on what it means to be a good doctor outlined in GMP. You will be able to see ethical dilemmas (http://www.gmc-uk.org/gmpinaction/) and be able to discuss with both your tutors and peers the issues involved. Similarly if and when issues of conflict arise you will have the chance to learn from these situations and think about the theoretical principles you have learned in the classroom.

Each section of this chapter outlines areas of the syllabus covered within the community that can specifically help you learn how to become a good doctor. Early contact, with patients and healthcare teams, sets the scene for you in your early training and provides essential medical role models. Think about who it is you wish to emulate and also which behaviour or attitude that you would not wish to copy and why?

> This environment whether good or bad offers a variety of examples from which you can derive good practice. Every good or bad example one encounters (though in an ideal world they are all good) should be analysed and reflected on to help you adapt your practice to the ideal you hope to attain. When you see a patient confused as management has not been clearly explained, this is an example of how important it is to take the time to go through things that might not necessarily seem complex to you, but can to a patient. Even negative experiences can be used for positive change to your practice
>
> (Final year student)

Early patient contact provides exposure to real ethical and medico-social dilemmas which you can explore with your tutors. These opportunities raise the potential to integrate your theoretical teaching with real world medicine. A wide variety of domains of medical professionalism are appropriate for you to have practical experience of and learn about during your early community placements. Direct EPC brings these into stark relief compared to classroom teaching. For example, the demonstration of respect for patients (or an ability to reflect on its absence), modelling of good teamwork and leadership, the reinforcement of seeing how doctors' social responsibilities are actually put into practice, are all useful and very practical day-to-day issues that you will come across in the community (see also Hilton, 2004). Being honest with patients and admitting what you don't know, but how you will deal with this and still help them, is one of the earliest aspects of medical professionalism you will need to learn.

Medical professionalism:
- Central to being a good doctor
- Early patient contact provides opportunities to experience professional challenges
- Reflect on good role models

Early community placements also provide ample opportunity for encouraging and practising reflection, essential skills for lifelong learning in medicine. Reflection – the conscious weighing and integrating of views from different perspectives – is a necessary prerequisite for becoming a safe and successful medical professional. Reflecting on educational and clinical experiences in medical practice, including one's own behaviour, is crucial (Boenink *et al.*, 2004). Early patient contact gives you authentic material to reflect on early in your careers. Tutors can encourage and support this process.

TASK

Ask your tutors to help you reflect by sharing and discussing any reflective learning logs that you are commonly asked to complete during your attachments. Consider discussing with your peers or other learners, together in small groups, your draft reflective writing.

Community-based teaching often occurs in small groups and allows individual feedback. Discussing cases and your experiences with other students helps you reflect and also gather a consensus opinion about what is the 'right thing to do'. However remember to maintain patients' confidentiality – no names or other patient-identifiable data, and consider the environment for such a discussion, probably not the bus on the way home.

Patient perspectives on health and healthcare

Seeing patients from the very beginning of your training provides early opportunities to explore what patients believe about health and illness. You should consider how patients' beliefs may affect what and when patients present with their symptoms, and which symptoms warrant a patient even wishing to see a doctor. GPs are true general physicians and these attachments are an ideal opportunity to understand how patients' views affect both their diagnosis and treatment. You will be able to see first-hand how GPs and other healthcare professionals influence patient compliance with medication, long-term follow-up and adherence to management plans.

> Patients come from different backgrounds and all sorts of walks of life. It is remarkable the health beliefs and lifestyle practices patients can have! Talking to patients from different walks of life can give you an appreciation of the different things people can believe and an insight into different walks of life
>
> (Final year medical student)

Seeing patients within their own homes and communities gives you a particularly unique and valuable opportunity to understand the complexity of health and illness and what effect they have on patients' lives. The relevance of cultural and social perspectives that influence patients' health beliefs, are highlighted within this context (Helman, 2007). Learning medical science within a community clinical context will help you develop a social awareness. Understanding why patients present with symptoms when they do, and what expectations they have of the healthcare service they receive, will help you develop a patient-centred model of practicing medicine. Understanding how patients' expectations

of different healthcare professionals vary and how this affects who they visit, and what services they use, should encourage you to visit, and learn about, a variety of community services available in your area.

Some medical undergraduate curricula use LICs to foster within medical students a greater sense of the patient being at the centre of the care that they receive. LICs depend on medical students having the opportunities to follow individual patients as they access a variety of healthcare services and interact with the patient through the stages of presentation, investigation, diagnosis, referral and treatment. Community services present appropriate settings for LICs acting as the focal point even as patients access hospital and tertiary care, as required (Ogur and Hirsh, 2009).

TASK

You will have plenty of opportunities to observe healthcare professionals talking with patients. Use this time to consider which aspects of their consultation styles foster a patient-centred approach and how this can benefit both patients and the healthcare professional. Listen to how patients' ideas, concerns and expectations are elicited and addressed.

Social and psychological aspects of health

> Medical graduates should be able to: Explain sociological factors that contribute to illness, the course of the disease and the success of treatment – including issues relating to health inequalities, the links between occupation and health and the effects of poverty and affluence.
>
> Tomorrow's doctors (2009) Para 10 (d)

The UK GMC recommends that medical students appreciate both the social and psychological impact of illness on patients' lives and the close association between sociological factors and the onset of ill health. In community placements you will see first-hand how a variety of issues may have an impact on health, for example, poverty, unemployment and homelessness. Attachments to voluntary organisations while on community placements, or GPs with interests in specific areas, such as homeless patients can widen your experience and understanding of how

socioeconomic deprivation may affect health. For example, you will notice that many patients seen in community placements, such as homeless shelters may also have drug, alcohol or mental health problems. Why is that? Debate the connection with your community tutor or fellow students. Identify the factors in the patient's 'life history', for example level of education, employment history, social class, family background, cultural background, which impacts their illness experience and coping mechanisms.

Key psycho-social aspects:

- Understanding how the health beliefs of patients may affect their attitude and behaviour towards illness and healthcare
- Appreciating the significant socio-demographic determinants of health and illness

Take a look at the United Nation's 8 World Development Goals (http://www.un.org/millenniumgoals/). In September 2000 world leaders came together at United Nations Headquarters in New York to form a new global partnership which aims to reduce extreme poverty with a series of time-bound targets that have become known as the Millennium Development Goals. These initiatives highlight how healthcare is defined by more than just discrete illness, it is multi-factorial. In the United Kingdom and worldwide, the individual's living condition, education, opportunities and support system are huge factors that affect a person's health. Try to explore a real timeline of patients, from birth to date, to really understand the impact of the social setting upon patients' health.

Early clinical placements will allow you to explore from the start of your career how similar medical conditions can affect different patients

TASK

Early placements in general practice and the community provide numerous opportunities for you to begin practice by taking social histories from patients. Take the opportunity. Consider how the information you have gleaned may have affected the patient's health. Consider how they cope with their illness and treatment options. Discuss and consider why this information is important with your tutors.

in different ways at different times. Also you will learn about why people might become ill and how housing, poverty, loneliness, poor diet, employment and crime might affect health and vice versa.

> Take the time to explore a patient's living situation and take note of the adaptations they have made to their daily life to cope with their illness. Often these changes go unmentioned as they have become second nature but you can often spot real challenges they face! Moreover you can see the impact simple home additions from occupational therapy can have!
>
> (Final year student)

TIP

Try and see and talk with as many patients from diverse backgrounds as possible. Explain to patients and seek their consent to discuss with them their social, cultural or psychological background. Talk to colleagues in confidence. Why is it important we know this background?

Learning clinical method (history taking and examination)

At the beginning of your clinical training you will take a long time to take a full history and fully examine a patient. There will be opportunities for you to do this individually and often in pairs within community settings. The components and the communication processes underpinning taking a professional and coherent full history can be learned and practised within general practice. You will have an opportunity to receive feedback from your tutors and peers, which you can use to improve your clinical skills. General practice also has a long history of using recorded consultations in learning and teaching; seize this opportunity if you are offered it – you will find watching yourself conduct histories – an invaluable learning tool.

Students, who have specific sessions within general practice, may have several patients invited for an afternoon to be clerked by you; students take turns to interview and examine patients in an agreed sequence. These sessions are often themed to cover specific learning objectives from modules.

TIP: GETTING THE MOST OUT OF SEEING PATIENTS

If you are currently undertaking a cardiorespiratory module and patients have been invited for you to interview and examine, it would be expected that you understood which broad question areas to explore with patients, for example, asking about chest pain, breathlessness and cough. In addition you should have read through an examination guide that introduces how to examine the cardiac and respiratory systems.

You will not be expected to do these tasks at a consultant level from the start but anticipating the basics means that you can make the most of your time with the patients and learn from the GP tutor. So, clinical methods can be learned in general practice from the very beginning of your medical training with simple histories and very basic examinations to start with, building up to full patient clerking during your clinical years and then honing your skills before finals in the later years. Overall, the main emphasis will be on learning about medicine within the context of your patients' lives.

Now is the time not only to consolidate taking a routine history and performing an appropriate examination but also to consider how the patient's symptoms and signs fit within the context of a more holistic appreciation of medicine. This means developing your understanding of what fosters a patient-centred approach, and how your knowledge and skills in gathering relevant information and eliciting signs from patients, needs to then lead onto formulating a shared management plan with patients.

> Flick through common examinations before firms so when you have to do one you have an idea of what to do fresh in your mind!
>
> (Final year medical student)

General practice is a great place for seeing patients with multiple and diverse medical conditions. Many medical schools have introduced portfolios for you to complete as you progress through each academic year. Portfolios help you to prepare for the types of assessments and self-evaluations you will need to complete as doctors. More information about portfolios and the kind of documentation and reflection that you can include from your time in general practice is discussed in Chapter 9.

Clinical and procedural skills

> Be Proactive! Lots of surgeries take bloods for testing and have specific phlebotomy clinics. Offer yourself up to take bloods! A day spent doing this is never wasted! The same with Flu jabs in the winter!
>
> (Final year medical student)

Many near-patient tests and other investigations occur within the general practice setting and many of these will be required to be signed off for your portfolios. Being hands-on with practical medical skills increases your confidence and helps make you feel part of the team. Most of the following can be achieved in general practice sessions:

Urinalysis
Blood pressure reading
Peak flow and spirometry
Electrocardiogram (ECG, performing and reading)
Subcutaneous and intramuscular injections
Venepuncture
Minor operations such as cryotherapy

Often GP surgeries run clinics where patients come in purely for these tests, injections or to have their blood taken, and it is a great place to learn and practice these skills. Often, given the size of the list, they welcome your help completing these lists yourself once trained in that skill. We will explore this in more detail in Chapter 5.

TASK

Sit with your tutor and consider the practical and procedural skills you need to learn.

Are there any gaps? If so plan how to get these done while in general practice.

Having a completed portfolio will be a really satisfying way to finish your attachment!

NB Whilst you will start learning clinical history taking, examination and skills in early years you will continually revisit them and hone these skills across the years at medical school. The learning doesn't stop at graduation either!

Middle clinical years

Learning clinical medicine in primary care

In the middle years of your training you will spend the majority of your time within a clinical setting. Often this will be in an acute medical environment, such as hospital wards and outpatient clinics. However, time within the community, such as GP placements and other outreach clinics, complements your experience and is an important component of your education. It is important that you make the most of this time. The way care is delivered to patients has radically changed over the past 10 years with more and more patients being diagnosed and treated solely within the community. This indicates not only a significant increase in the diversity of workload for primary care physicians within developed countries but also a greater provision of community health services worldwide. With an ageing population, advanced healthcare worldwide, and the increasingly recognised importance of health promotion and the prevention of diseases, your community-based education is therefore a very important component of your clinical experience. Some have argued that 'the future of a sustainable health system would seem to rest in primary care as never before' (Barker, 2010).

Most patients' care is predominately coordinated within the community. Hospitals, secondary care services and specialised tertiary referral centres are good learning opportunities to see the acutely unwell patients and those who require specialist care, but your learning also needs to be focused on where the majority of patients are found, and how their conditions are managed. General practice and community settings provide invaluable opportunities to see patients with long-term medical conditions who are well enough to spend time with you discussing their presentation, symptoms and management, and most importantly are likely to be prepared to be examined. Furthermore you will miss out and not see a variety of clinical conditions nor appreciate how patients are appropriately managed if your only exposure to patients is within acute settings. Community attachments provide essential opportunities for you to learn and participate in patient care that is designed to occur within the context of patients' lives. This emphasises the importance of home, work, carers and overall the practice of medicine that has at its heart patient-centredness. For example,

middle-year clinical experiences often provide attachments for medical students to learn about contraception, community antenatal clinics to better understand the routine care provided for pregnant women, and attachments to hospices, or voluntary nursing services, that care for the terminally ill within their own homes and communities.

The management of common long-term conditions such as cardiovascular diseases, obstructive airways diseases, asthma and diabetes are good examples of where patients may never be seen within a hospital setting but have a significant morbidity that is managed successfully within the community. This is a worldwide phenomenon as long-term conditions become more prevalent and 'health care systems worldwide are faced with the challenge of responding to the needs of people with chronic medical conditions such as diabetes, heart failure and mental illness' (World Health Organization, 2002).

Your placement in primary care and community settings will, therefore, help you understand how care within the community is organised and relates to the secondary care hospital services. There will be opportunities to engage with patients who present with acute symptoms, understand the variety of initial presentations of new long-term diagnoses, and how primary care gives you a unique insight into how to differentiate between common non-serious conditions and possible significant pathology.

General practice attachments provide opportunities to see patients with common conditions, both acute and long-term, that have not presented during your highly specialised hospital firms. Primary care in particular presents many opportunities for you to learn from patients not only about their conditions but also about how these conditions are individually best managed.

Long-term conditions are diagnosed and are actively managed in the community – only referring to secondary services for specialist investigation or advice. These represent a significant proportion of the workload of community healthcare professionals. Some of the most important common long-term conditions that you will see in general practice are as follows:

Osteoarthritis, backache and other joint problems
Hypertension
Coronary artery disease, angina and heart failure

Asthma and chronic obstructive pulmonary disease
Diabetes and its complications
Chronic renal failure
Thyroid disease
Inflammatory bowel conditions
Skin conditions, such as eczema, psoriasis
Mental health conditions, such as depression, dementia

If your medical school hasn't emphasised which conditions you should prioritise then talk to your GP tutor to plan how best to utilise your time. Most student concerns originate from either not being given the opportunity to clerk patients themselves or that the 'right' patients are unavailable. As the majority of illness and its management occurs in the community you should have ample opportunities to see patients. Take a proactive approach and make the most of the opportunities that arise for you to see, talk with and examine patients that present. This includes at this stage exploring how their condition is managed and how this affects them, their families and work. If you do feel that you aren't seeing the appropriate patients then you do need to discuss this with your GP tutor and also your central department if issues are not resolved.

> There are lots of illnesses to learn about and they can seem daunting and complex. By reinforcing how to learn about illness with an understanding and relationship with a real patient, you can develop an in depth long-term understanding of not only the illness and its symptoms and management, but also the complications of treatment, risk factors and its potential impact of the other aspects of daily life
>
> (Final-year student)

While medical schools will have articulated a community timetable that fits with your university and hospital teaching modules, do not let this dissuade you from seeing patients who present acutely with new, interesting symptoms and possibly accompanying signs. In many countries, primary care physicians act as the gateway to other care, encouraging a coordinated patient-centred approach. Many patients who develop a serious illness initially present to a family doctor. You will therefore have many opportunities to see and understand how GPs evaluate patients' symptoms and differentiate between minor self-limiting illness and possible significant morbidity, and begin to do this for yourselves. Sick patients come to the GP and you need to appreciate

how best to recognise these patients and how to help them. Many attachments will have opportunities for you to attend 'out of hours' and emergency work. This will also stand you in good stead when you are later asked to assess acutely unwell patients on the wards.

Examples of common acute conditions are febrile illness such as upper respiratory infections, chest infections, possibly urinary tract infections and simple ENT conditions. Knowing how to recognise these conditions and being able to offer simple advice is essential and will make you feel like a proper doctor. Acute abdominal pain is a common condition, and knowing how to quickly assess such a patient and be able to differentiate between the possible multiple common non-serious causes while also excluding the more significant conditions is necessary.

TASK

Look up and reflect upon 'red flag symptom and signs' that GPs look out for.

These indicate the possible presence of serious pathology, sometimes cancer, and encourage primary care physicians to consider referring these patients on to specialist services and/or further investigation.

See, for example, http://www.gponline.com/education/medical-red-flags.

What guidance is there to help healthcare practitioners decide what to do? Understanding the underlying principles that dictate the speed and route of entry to secondary care isn't about making you into GPs, but helping you recognise significant symptoms, disease progression and appropriate standards of management. Observing initially when you first come to general practice is an amazing chance to see a whole consultation; introduction, presentation of the history, examination and management plan including possible investigations and treatment. An opportunity to see everything all together! Chapter 4 goes into more depth concerning what you can learn about and during the consultation. However for now let's have a further look at how you can practise specific clinical skills within general practice.

Learning about specialities in primary care

Students commonly have rotations through different medical and surgical specialties during their penultimate clinical year. General practice attachments during these rotations give you insight into the common

presentations and long-term management of conditions found within these specialties, and inform you of how generalists and specialists work together to care for patients. There are several areas that you really will only see nowadays in the community, for example, the routine normal care of pregnant women and the surveillance of normal child development. Although your hospital firms will give you excellent exposure to the potential acute illness that infrequently occurs during pregnancy and childhood and teach you how to investigate, diagnose and treat these conditions, it is essential that you appreciate what is normal and physiological first. Thereafter you can begin to learn about what can go wrong and how best to diagnose and manage common conditions that relate to the medical specialties that usually first present in the community.

Child health

Primary care and community placements provide a safe learning environment for you to familiarise yourselves with talking to children, their families and understanding parents' concerns. Child health is fascinating but many students may find such subjects intimidating.

Fortunately you can practise talking with children and their parents during general practice sessions and at community clinics, such as those for child vaccination. These opportunities, alongside some guidance from your tutors, will show you how to differentiate between what's normal and physiological or pathological. Similarly such clinical exposure reinforces which conditions are common, important for you to know about, as opposed to the much more serious but rarer disease which you are more likely to come across in hospital settings.

Understanding normal child development, how this is monitored and the healthcare professionals involved is a good start. Learning about national vaccination programmes, parental concerns and the public health

TASK

Consider how to assess children and what to think about when an acutely ill child is brought in to be seen. Spend some time with the duty doctor and nurse practitioner, if your practice has one, both of whom will be responsible for triaging and assessing children. Familiarise yourself with national guidelines for assessing unwell children, such as the UK's NICE guidance.

issues associated with such initiatives is also possible. Common childhood illness such as upper respiratory tract infections, earache, tummy ache and diarrhoea and vomiting frequently present in general practice and provides you with opportunities to learn to differentiate between what's self-limiting minor illness and what needs further attention.

Talking to more than one person during a consultation is common during community sessions. Young children obviously bring a carer with them which tends to be a parent, but not always. So try not to make assumptions and always introduce yourself and find out who you are speaking with. Chapter 4 discusses more in detail concerning how best to handle such consultations. Observing how different healthcare professionals speak to children and their carers, handle parental concerns, deal with multiple agendas and sometimes lots of people in the consulting room can be a very useful learning experience for you. Paediatric community attachments are excellent opportunities for you to learn about Safeguarding Children Principles and the practicalities of protecting our most vulnerable patients.

Women's health

Women present more frequently to their doctors, and routine consultations for contraception for example, provide valuable opportunities for healthcare professionals to promote the health of women. Health screening initiatives such as the national cervical screening programme and mammography can be learned about in the community. You will see women who attend for screening and be able to discuss with them their understanding of such initiatives.

TASK

Consider the epidemiology of coronary artery disease in women compared with men and discuss why it may be that diagnosis and investigation of such disease in women may be delayed?

Women present more commonly with issues concerned with mental health and general practice gives you lot of opportunities to learn about how to manage patient's symptoms of anxiety, depression, alcohol excess and less commonly issues pertaining to domestic violence.

Women's health concerns more than just gynaecology, though general practice presents excellent opportunities for you to learn about contraception, menstrual problems and pregnancy and unwanted pregnancy. Women's health raises awareness of not treating women as men in terms of diagnosing illness and also prescribing medicines. Some conditions are more common in women, for example, gallbladder disease, and some drugs are metabolised differently, requiring care on deciding dosage.

Men's health

Men similarly have specific health-related issues that present in the community. Health screening for hypertension and other risk factors associated with an increased risk of heart attack and stroke are important aspects of male health promotion. Patient concerns with testicular self-examination, erectile dysfunction and prostate disease screening are common GP presentations. Excessive alcohol consumption and smoking are issues that affect men's health and can be addressed effectively within primary care.

Looking after older people

Many patients, seen by their GPs, are elderly and these patients give students a good insight into how older people manage their health, cope with their symptoms and deal with their disabilities. There are

TASK: LEARNING ABOUT COMPLEX PATIENTS

Ask your GP tutor to identify an elderly patient with several long-term conditions.

Meet and interview the patient with a focus on these specific areas:

- Think about all the needs the patient has. Which of these are being met well and which are not?
- What are the patient's priorities? What do they see as essential to be able to do in life? Are these priorities the same as those the doctor and primary health care team (PHCT) focus on?
- Who is involved in their care? How often do they see those people?
- What challenges are there for patients with several long-term conditions?

Discuss the patient's care with your tutor.

Start by telling the patient's story in a narrative style.

What challenges for the patient have you identified, and what thoughts have you to make care more effective for this patient?

more than three million people aged over 80 living in the United Kingdom, and this number is expected to almost double by 2030 (Kings Fund, 2012). More than 37 million people in the United States, born before 1964 (60% of the population), will have more than one long-term condition by 2030 (American Hospital Association, 2007). Older adults are increasingly at risk of developing long-term conditions, and by the age of 75 a majority of patients will have two more such conditions (often many more). This presents great challenges when managing and organising their care, and with attendant polypharmacy.

In the United States, 1 out of 3 adults aged 65 years or older fall each year, and falls are the leading cause of injury-related death for this age group. Gaining a better understanding of what a patient requires to remain safely at home, including what support their carers require, is important for you as students to grasp so that you can safely discharge patients from hospital when the time comes and engage effectively in planning their on-going care which will be primarily community based.

Many of our elderly patients are both on a variety of and multiple medications. Any drug review of an elderly patient provides ample opportunities for you to learn or revise pharmacological treatments for common conditions, such as hypertension and diabetes. The care of elderly patients presents opportunities to learn about how GPs are responsible for integrating the provision of care for these patients that frequently involves multiple agencies and multidisciplinary healthcare professionals.

TASK

Take a look at the Centre for Disease Control and Prevention (CDC) Healthy Aging website (http://www.cdc.gov/aging/)

This website provides an enormous amount of information about helping elderly Americans lead healthy enjoyable lives, much of which is directly applicable to many other international contexts.

Mental health

A variety of common conditions that affect the mental health of our patients are managed within primary care. GPs are trained to screen for and treat, for example, any associated depression that may accompany

long-term chronic conditions, such as rheumatoid arthritis. Diagnoses of cancer and terminal illness may also precipitate symptoms of depression and anxiety which require treatment. Primary care therefore presents opportunities to understand not only common mental health conditions but also how they co-exist with other conditions and affect the lives of patients.

Depression and anxiety present in primary care and the associated morbidity of such conditions has been underreported. There are a variety of screening tools that facilitate making such a diagnosis and helping doctors and nurses decide on subsequent management. You should be aware of and familiar with using patient health questionnaires (PHQ-9) and general anxiety disorder (GAD) scores.

Later clinical years

Towards the end of your training you will appreciate time in general practice as it gives you lot of opportunities to practise for final examinations and revise conditions for which you may have had insufficient time or opportunity to study. Additionally the nature of the doctor–patient interaction facilitates learning about and preparing you for your own independent practice. You will have time to now consider the patient and put all that you have learned into practice. Primary care provides opportunities for clinical 'apprentice style' attachments that encourage you to take on more responsibility for the care of patients with appropriate supervision. This means seeing patients on your own, initiating a management plan and following up patients yourself.

> In the final year, students must use practical and clinical skills, rehearsing their eventual responsibilities as an F1 doctor. These must include making recommendations for the prescription of drugs and managing acutely ill patients under the supervision of a qualified doctor
>
> GMC (2009) Tomorrows Doctors Para 109

Now is the time to consider primary care as a specialty and also decide what knowledge and skills you should learn to better understand how, as a junior doctor, you will need to effectively communicate with primary healthcare professionals. This is equally relevant whether your current career preference is general practice or an alternative.

Learning about primary care

Hopefully you would have had several worthwhile attachments in general practice throughout your medical education to date. However a later placement, either before or after final examinations, gives you time to explore general practice as a career option. There are also specific aspects of primary care itself that all students should learn before graduation whether they plan at this stage to become GPs or not. Effective communication, as demonstrated within teams based at a GP surgery and also wider fields such as with district nursing and palliative care teams, is paramount. How GPs communicate with their hospital colleagues in referring patients and the referral process itself is also an essential prerequisite for all junior doctors, so that they can appreciate the context of the many referrals they receive from the community. Similarly, understanding how receiving clear, relevant and helpful written information from hospitals, in the form of legible or electronic patient discharge summaries, can facilitate the effective transfer of a patient's care back to the GP and help prevent further readmission.

Majority of healthcare takes place in the community and medical students need to be aware of how this is organised and the role primary care has in structuring an efficient affordable NHS, both for the present and the future. The cost of medical interventions, treatment and medications are high and general practice can help you to appreciate how to cost-effectively treat your patients without sacrificing the high quality care we all wish to provide. Therefore during your primary care placements relevant audits and time taken to understand local and national care pathways are valuable assets to your learning.

Learning about prescribing and management plans

Many students feel inadequately prepared in prescribing when they first qualify. General practice and community pharmacy attachments staged throughout your curriculum can ensure that you have plenty of both theoretical teaching and practical experience in prescribing. While medical school will provide the basic underpinning pharmacology teaching every clinical encounter within general practice can illustrate a drug or prescribing issue for you to learn about. GP tutors will supervise you practising writing prescriptions, entering the medication onto the electronic patient record and encourage you to review patients'

medication. This encourages you as a student to consider the potential drug interactions, side-effects and risks of any additional medication you may think is necessary. We will explore this more fully in Chapter 5.

You will learn about groups of drugs and their uses. We suggest you actively look for patients with the relevant conditions to interview about their medication. These encounters allow you to integrate your knowledge and deepen your understanding about medications, their uses, side effects, interactions and how patients view their medications.

TASK

Many of you will be given a project to do that involves researching a chronic disease and exploring the experience of patients, their carers and how such conditions are managed within the community. This would also involve reviewing local and national guidance on management, prescribing and referral pathways. This also gives you the chance to help the practice that you are attached to by sharing any updates on good practice and reviewing any audits that you may complete as part of your project.

For example, monitoring blood pressure readings of patients treated for hypertension is a common task within general practice. What is the most commonly prescribed antihypertensive in the practice? Does this fit with local and national guidance on prescribing for treating hypertension? If not can you think of some reasons why this may be so?

General practice facilitates students' practical prescribing by encouraging students in their final years to see patients on their own and begin to initiate their management. Perhaps the earlier part of your training concentrated on listening to patients, learning about taking a clinical history and becoming competent at clinical examination, now is the time to really hone your skills at discussing and explaining to patients the issues that are of concern to them and jointly agree a management plan. This will often include prescribing decisions, and also self-care, support, referral and follow-up plans.

All treatment and management decisions will always be fully supervised, but suggesting to a GP tutor what you think should be the next steps in terms of investigation and/or medication and then issuing the prescription and/or laboratory blood forms or imaging for the GP to sign off can be very satisfying. Later year attachments in general practice

expect students to be ready to take on the whole process of seeing patients, making a diagnosis and agreeing a management plan.

Learning in the community 'out of hours'

The increasing access to care and services for patients across the world has brought about a change in provision of settings and accessibility. There has been a long history of provision of out-of-hours primary care services in the United Kingdom, delivered by general practitioners and supported by the Accident and Emergency departments at hospital. There is also some evidence that difficulty in accessing in-hours services in English general practice is associated with increased use of out-of-hours primary care services, regardless of age, gender, ethnicity, deprivation, presence of chronic disease and employment status (Zhou *et al.*, 2015).

As students, you should be encouraged and supported to see the delivery of patient management and care. The general practice may be situated in a health centre or polyclinic, your tutor may be a clinician who continues to work in the local emergency or 'out-of-hours' centres. These centres are not commonly visited by students for learning, yet they provide a rich variety of clinical expertise and care to patients. These settings will offer chances to you to learn from a variety of health professionals working there and you come to understand the importance of good interprofessional communication and excellent clinical skills in settings that do not have the full diagnostic service support available in hospital. Senior students will need to recognise the importance of understanding and managing clinical risk in these situations. Attendance at these clinical settings and discussion with tutors will develop these skills.

Acute medical conditions in both adults and children are generally seen more often than surgical conditions in both out-of-hours and walk-in centres. Skills in identifying accurately the acutely ill patient are needed to avoid missed or delayed diagnoses. The ability to 'read' unusual signs or symptoms is crucial, together with an empathic approach to a consultation that is unsupported by prior knowledge of the patient or their past records. Additionally, you need to recognise that a healthy level of suspicion for the unusual

is an important clinical skill, especially when seeing non-indigent individuals. This is not always easy — you need to develop the skills to recognise the symptom or sign that doesn't fit; that comes from experience.

> This experience supplemented my SSC in Emergency Medicine that I did previously in the year. It was in my GP out of hours session that I saw patients being triaged. This will be useful for my FY2 jobs in A + E and general practice, but I don't think it will directly help me in my FY1 jobs – except perhaps to give me an appreciation of the route of the patient from presentation to ward admission
>
> Medical student attending out of hours centre; sourced from O'Brien (2011).

TASK: LEARNING IN OUT-OF-HOURS SETTINGS

As a final year student ask your tutor to arrange a session in an 'out-of-hours' centre. Shadow the doctor or advanced nurse practitioners on duty to experience the challenges involved.

Consider the quality of experience for both the patient and the clinical staff.

Explore patients' reasons for the choice of healthcare site.

Consider the areas of clinical and personal risk when consulting in out-of-hours settings. What approaches might reduce those risks?

Explore with your practice tutor the patients seen out-of-hours (electronic notifications are sent in daily). Discuss issues raised with your tutor and peers.

Further opportunities

Selected student components and electives

Most medical schools offer student selected components (SSCs) as part of each year's curriculum. These will give you opportunities to experience aspects of medicine outside of the core curriculum. SSCs may run over a period of only a few weeks or may be integrated into the week. Electives usually provide a longer independent period of study, with many UK students choosing to go overseas. Many students from outside the United Kingdom choose to come and experience British general practice.

Many GPs have specialist interests alongside maintaining their core GP roles which can interest students. GPs with a special interest (called GPwSI in the United Kingdom) have undergone further specialist

training and often wish to use this knowledge showing students how general practice and hospital specialties can work together to optimise the care of patients. Attachments in community-orientated ophthalmology, dermatology and other minor specialties can provide useful SSCs for you when your main curriculum is often so full that you have limited time to follow either interests of your own or areas which you feel have been neglected. GPs may work in areas of social deprivation and be responsible for specific drug, alcohol and rehabilitation programmes, caring for the health needs of the homeless, refugees and/or people who have been subjected to torture.

As medical students, you may wish to spend more time in primary care than your core curriculum allows. Selecting to spend your elective in general practice, either abroad or in the United Kingdom, will give you opportunities to explore what primary care and community provision provides for patients. You can, for example, compare how general practice works in different geographical areas, comparing practices between urban and rural settings. The comparison may be eye-opening, and help you decide whether you wish to practice in either of these settings.

Rural, remote health and other interesting placements

Providing primary care services in remote and rural areas is challenging. The pattern of disease is different from urban areas; and, because of the distances from hospital, the range of services provided also tends to be wider. Rural practitioners often provide emergency care, and in some remote areas they may have to manage critically sick or injured patients for a number of hours before these patients can be transferred. To allow patients to remain near their family and to avoid long and arduous journeys there is a need for home or community-based services, such as palliative care or rehabilitation. Many remote and rural areas have community hospitals, and in some areas GPs run acute hospitals that provide emergency and inpatient care with remote tertiary support (MacVicar *et al.*, 2012).

In the UK setting such rural placements will be seen mainly in parts of Northern England, Wales and Scotland. More dramatic examples of remote practice are seen in Canada, Australia and New Zealand and other more sparsely populated countries. You should try to spend some time in a rural clinical setting in order to experience this very different

approach to community-based care. If you are not in a medical school with such placements available, consider arranging student selected time or an elective placement in such a setting.

While for some of you a placement in a remote or rural setting may be something new and exciting, others may wish to explore other aspects of primary care medicine or general practice. The beauty of it is the variety, both for students' experiences and as a career. Explore the options available with your medical school and use your time and elective opportunities wisely. A list of interesting placements would include prison medicine, working with refugees and asylum seekers, primary care for the homeless or other hard to reach groups and of course a whole range of options in less developed countries.

Audits and research projects

Many undergraduate curricula require students to undertake research projects, and all of them stipulate that students need to understand the principles underpinning good research and audit. General practice and community attachments expose you to a wide range of topics and the necessary support for you to engage in both audit and research projects across the curriculum. There are ample opportunities for you to take part in simple audits in your early years and sometimes these audits form part of your assessments. Audit helps us understand how data about patients, stored in general practice, can be analysed to show how care can be improved and facilitate the review of typical daily activities such as variance in referral rates. Many practices will expect you to present your findings and consider how best to disseminate any significant outcomes. The development of practice leaflets, posters and patient information sheets by students are common.

Conducting research while on community attachments will facilitate your overall understanding of the field, help you think about career choices, improve your academic skills and contribute to your CV. While not all of you will have the time to take on a research project, it is expected that you will read around the main areas of controversy in practising in general practice and critically appraise some of the relevant leading research articles to ensure your knowledge is up to date.

The costs of healthcare are escalating globally. In many countries the cost of treatments and new medical procedures is spiralling out of

control. Common clinical pathways have been introduced into general practice to facilitate efficiencies and cost-effectiveness in many countries within Europe such as, the United Kingdom, Belgium and Holland (www.e-p-a.org). Understanding the underlying research and scientific principles that help design some of these pathways may be an area for your own study and research.

TASK

For example, how valid is some of the clinical pathway guidance? Why not have a look at some of the empirical evidence that helped produce a clinical pathway that is relevant to your community attachment and consider how it lead to its design and how you might explore its implementation within the practice.

Summary

This chapter has covered a wide range of content that you may learn about in general practice and community settings. Emphasis has been placed on how early attachments lay the foundations for later clinical placements, how community placements complement both your science and hospital teaching, and highlights specific elements of the syllabus that you can only learn about when in the community.

While this first chapter has concentrated on what you should and will learn, it has also introduced ideas about how best to learn, which approaches you may find helpful, and how the book as a whole can support and encourage you to make the most of your community learning opportunities.

The following chapters therefore explore these areas in more depth, with Chapter 3 describing about the necessary preparations to make before beginning a community attachment, and then providing plenty of practical advice.

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Further resources

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