Consultation, medical history and record taking

The ability to take an accurate medical history from a patient is one of the core clinical skills and an essential component of clinical competence. The medical interview or consultation influences the precision of diagnosis and treatment, and studies have indicated that over 80% of diagnoses in general medical clinics are based on the medical history. It is estimated that a doctor might perform 200,000 consultations in a professional lifetime. All of which supports the need to learn and develop effective interviewing technique.

The success of the medical consultation depends not only on the doctor’s clinical knowledge and interview skills but also on the nature of the relationship that exists between doctor and patient. For this reason, increasing emphasis is being placed on communication skills alongside history-taking in medical training in order to enhance the doctor–patient relationship and promote more effective consultations. How we communicate is just as important as what we say. The patient needs to feel sufficiently at ease to disclose any problems and express any concerns, and to know they have been understood by the doctor. The patient also needs to reach a shared understanding with the doctor about the nature of any illness and what is proposed to deal with it. As well as being more supportive for patients, good communication skills make history-taking more accurate and effective.

In any consultation, the doctor has a number of tasks to perform. Ideally, these should be undertaken in a structured way so as to maximise the efficiency and effectiveness of the process. A number of consultation models exist but an increasingly influential model is the Calgary–Cambridge approach. This identifies five main stages in a consultation within a framework that provides structure and emphasises the importance of building a good doctor–patient relationship.

This chapter primarily addresses the first two stages: initiating the session and gathering information. It outlines the basics of taking a medical history within a framework that is patient-centred and emphasises effective communication. In addition, it describes an approach to recording information from the consultation in the clinical record.

The consultation

The medical consultation is the main opportunity for the doctor to explore the patient’s problems and concerns and to start to identify the reasons for their ill health. Traditionally, medical history-taking has been based on a conventional medical model and assumed that disease can be fully accounted for by deviations from normal biological function. It gave little consideration for the social, psychological and behavioural dimensions of illness. Consequently, if a patient presented with a history of headaches, for example, the doctor’s questions would be focused mainly on trying to identify the abnormalities of pathophysiology that were causing the symptoms, such as ‘Where does it hurt?’, ‘When did the headaches start?’, ‘What helps relieve the headaches?’.

Whilst abnormalities of pathophysiology are largely common to everyone with the same disease, not everyone with the same disease experiences it in the same way. The experiences of each person are unique because their social, psychological and behavioural perspectives are unique, and interact with abnormal pathophysiology to cause each patient to experience illness in a very individual way. Thus, more recent approaches to medical consultation stress not just assessment of biomedical abnormality but also assessment of psychosocial issues. Questions to identify psychosocial perspectives could include: ‘What most concerns you about your headaches?’, ‘What do
Consultation, medical history and record taking

your headaches stop you from doing?’, and ‘What do you think would help these headaches?’.

Unless a doctor can reflect on a patient’s psychosocial concerns, they risk failing to accurately diagnose the problem and may ultimately fail to effectively manage the patient’s illness. The amount of distress an individual experiences refers not only to the amount of pathophysiological damage but also to what the illness means to them and how it relates to their circumstances. Individuals who have suffered personal upset or are worried may feel ill even when no demonstrable disease is present. Good doctors have always known this, but there is now increasing emphasis in medical history-taking that it should be geared to exploring not just the symptoms of the body’s dysfunction but also the individual’s perspective of the symptoms. Models of history-taking are becoming increasingly patient-centred and seek to assess both the main components of ill health – the biomedical component and the psychosocial component.

STARTING THE CONSULTATION

There are three main aspects to initiating the session: preparation, establishing initial rapport, and identifying the patient’s problems and concerns.

Preparation

In preparing for a consultation, you should plan for an optimal setting in which to conduct the interview. In general practice or in the outpatient department, the consulting room should be quiet and free from interruptions. Patients often find that the clinical setting stokes up anxiety and thought should be given to making the environment welcoming and relaxing. For example, arrange the patient’s seat close to yours (Fig. 1.1), rather than confronting them across a desk (Fig. 1.2).

Hospital wards can be busy and noisy, and it may be difficult to prevent your consultation being overheard and maintain confidentiality. If possible, therefore, try and find a quiet room in which to talk to the patient. If you consult with a patient at the bedside, sit in a chair alongside the bed, not on the bed, and ensure the patient is comfortable and able to engage with you without straining (Fig. 1.3).

Time management is important when preparing for the consultation. Ideally you should aim to avoid appearing rushed, and ensure that you set aside adequate time. Time constraints are often outside a clinician’s immediate control and one has to be pragmatic and comply with clinic appointment times. On the ward, rest periods and mealtimes are generally regarded as sacrosanct by the nursing staff, and it is usual courtesy to ask permission from them before encroaching on a patient’s time.

The patient’s first judgement of any healthcare professional is influenced by dress, which plays a role in establishing the early impression in the relationship. Whilst fashions change, most patients have clear expectations of what constitutes appropriate dress and it is advisable to adopt a dress code that projects a professional image. This may vary according to setting and patient group. For example, children may feel more at ease with a doctor who adopts a slightly more informal appearance. In addition to dress, you need to pay attention
to personal hygiene; make sure, for example, that your hands and nails are clean.

**Initial rapport**

On first meeting a patient it is important to establish rapport and put the patient at ease. It’s a chance for you to demonstrate from the outset your respect, interest and concern for them. You should greet the patient, introduce yourself and clarify your role, giving the patient an outline of what your intentions are. It may sometimes be appropriate to give an idea of how long the interview might take.

‘Hello, my name is Jean Smith. I’m a medical student here at St Elsewhere and I wonder if I could speak to you about your condition? Your doctor, Dr Brown, has asked me to speak to you.’

Communication consists not only of verbal discourse but also includes body language, especially facial expression and eye contact. The first contact should also be used to obtain or confirm the patient’s name and to check how they prefer to be called. Some people like to be addressed by their first name, whilst others may prefer the use of their surname.

**Identifying the problems and concerns**

Begin by asking the patient to outline their problems and concerns by using an open-ended question (e.g. ‘Tell me, what has brought you to the doctor today?’). Open-ended questions are designed to introduce an area of enquiry but allow the patient opportunity to answer in their own way and shape the content of their response. Closed questions require a specific ‘yes’ or ‘no’ response.

Remember that patients often have more than one concern they wish to raise and discuss. The order of their problems may not relate to their importance from either the patient’s or doctor’s perspective. It is therefore particularly important in this opening phase not to interrupt the patient as this might inhibit the disclosure of important information. Research has shown that doctors often fail to allow patients to complete their opening statements uninterrupted and yet, when allowed to proceed without interruption, most people do so in less than 60 seconds.

Once the problems have been identified, it is worth reflecting on whether you have understood the patient correctly; this can be achieved by repeating a summary back to them. It is also good practice to check for additional concerns: ‘Is there anything else you would like to discuss?’ You may write down a summary of the patient’s comments, but constantly maintain eye contact and avoid becoming too immersed in writing (or using a computer keyboard). An example of what you may have written at this stage is shown in the ‘symptoms and signs’ box below.
Consultation, medical history and record taking

Questions to ask
Examples of open and closed questions

Open questions
• Tell me about your headaches.
• What concerns you most about your headaches?

Closed questions
• Is the headache present when you wake up?
• Does the headache affect your eyesight?

It is also useful to summarise a reflection of the information you have gathered at various times in the consultation: ‘So Mrs Smith, if I have understood you correctly, your headaches started two months ago and were initially once a week but now occur almost every day. You feel them worse over the back of the head.’ This is helpful not just because it allows you an opportunity to check whether you have understood the patient correctly, but can also provide a stimulus for them to give further information and clarification.

BIOMEDICAL PERSPECTIVE

Questions on the biomedical perspective should seek to clarify the sequence of events and help inform an analysis of the cause of the symptoms.

Symptoms from an organ system have a typical location and character: chest pain may arise from the heart, lungs, oesophagus or chest wall but the localisation and character differs. Establish the location of the symptom, its mode of onset, its progression or regression, its character, aggravating or relieving factors and associated symptoms.

Symptoms helping distinguish different sources of chest pain
• Myocardial ischaemia – pressure, crushing, pressing retrosternal pain
• Pleuritic and chest wall pain – localised, sharp, distinct exacerbation with deep inspiration
• Gastro-oesophageal reflux pain – burning retrosternal discomfort (heart burn) arising from behind the sternum

For the assessment of pain, use the framework shown in the pain assessment box. The quality of the pain is important in determining the organ of origin. Patients often find it difficult to describe the quality of their symptom, so, if necessary, assist them by offering a list of possible adjectives (e.g. cramping, gripping, dull, throbbing, stabbing or vice-like). Ask whether medication has been necessary to alleviate the pain, whether the pain interferes with work or other activities and whether the pain wakes the patient from sleep. It is difficult to assess pain severity. Offering a patient a numerical score for pain, from ‘0’ for no pain to ‘10’ for excruciating pain, may provide a quantitative assessment of the symptom.

PSYCHOSOCIAL PERSPECTIVE

Information on psychosocial implications of a problem requires questions to be asked about a person’s ideas, concerns, expectations and the effect of the problem on their quality of life. For example, if you wanted to explore a patient’s psychosocial perspectives of their headaches, potential questions include those listed in the ‘questions to ask’ box.

Symptoms and signs

Symptoms and signs
• Type
• Site
• Spread
• Periodicity or constancy
• Relieving factors
• Exacerbating factors
• Associated symptoms

Questions to ask
To explore a patient’s psychosocial perspectives of their headaches
• What concerns you most about the headaches?
• What do you think is causing the headache?
• Is there some specific treatment you had in mind?
• How do the headaches affect your daily life?

Some people find it difficult to talk about their feelings and concerns and you need to be alert to verbal and nonverbal cues which might add insight to their thoughts and ideas. Following up on such cues can help facilitate further enquiry and might feel less threatening than more direct questions: ‘You mentioned that you were frightened that your headaches could be serious. Did you have specific cause you were worried about?’.

It is, of course, important to assess the impact of a problem on daily living by grading severity. For example, if the patient has intermittent claudication, ask how far the patient can walk before pain forces a rest. If breathlessness is a problem, ascertain whether the symptom occurs on the flat, climbing stairs, doing chores in the home or at rest. Gathering such information will allow a clearer understanding of the impact and meaning
of an illness for each individual. Combining information on psychosocial perspectives with biomedical information adds to the diagnosis and provides a foundation to plan management.

BACKGROUND INFORMATION

The information gathered about patient’s problems needs to be set in context and individualised. The doctor must understand and recognise the patient’s background, how this impacts on the problem(s), and why the patient has sought help at this particular time. Such contextual information requires enquiry into a person’s family history, their personal and social history, past medical history as well as their drug and allergy history.

Family history

The family history may reveal evidence of an inherited disorder. Information about the immediate family may also have considerable bearing on the patient’s symptoms. Social partnerships, marriage, sexual orientation and close emotional attachments are complex systems which exert profound influences on health and illness. A useful starting point might be to ask if the patient has a regular partner or is married. If so, ask about their health status or any recent change in health status. If the patient has children, determine their ages and state of health. Enquire whether any near relatives died in childhood and if so, from what cause. When there is suspicion of a familial disorder, it is helpful to construct a family tree (Fig. 1.4). If the pattern of inheritance suggests a recessive trait, ask whether the parents were related – in particular whether they were first cousins.

Differential diagnosis

**Common disorders expressed in families**

- Hyperlipidaemia (ischaemic heart disease)
- Diabetes mellitus
- Hypertension
- Myopia
- Alcoholism
- Depression
- Osteoporosis
- Cancer (bowel, ovarian, breast)

**Personal and social history**

Just as with families, interactions with wider society can exert powerful influences on health and well being. We know, for example, that major health inequalities relate closely to social class and income, with socially and financially deprived individuals experiencing poorer health than people on higher incomes. A detailed social history includes enquiries about schooling, past and present employment, social support networks, and leisure. At this point, it is also convenient to ask about the use of tobacco and alcohol – the quantity smoked and the number of units drunk each week.

Differential diagnosis

**Occupational disease**

- Asbestos workers, builders: asbestosis, mesothelioma
- Coal miners: coal worker’s pneumoconiosis
- Gold, copper and tin miners: silicosis
- Farmers, vets, abattoir workers: brucellosis
- Aniline dye workers: bladder cancer
- Healthcare professionals: hepatitis B
Consultation, medical history and record taking

readily. Frequent job changes or chronic unemployment may reflect both socioeconomic circumstances and the patient’s personality. It is useful to enquire about specific stress in the workplace, such as bullying or the fear of unemployment.

**Tobacco consumption** Patients usually give a fairly accurate account of their smoking. Ask what form of tobacco they consume and for how long they have been smoking. If they previously smoked, when did they stop and for how long did they abstain?

**Alcohol consumption** Unlike smoking, alcohol history is often inaccurate with a tendency to underestimate intake. Many patients consider beer and wine to be less alcoholic than spirits. Establish the type of alcohol the patient consumes and assess their intake in units.

<table>
<thead>
<tr>
<th>Symptoms and signs</th>
<th>Units of alcohol equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit is equal to</td>
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<tr>
<td>• 1/2 a pint of beer</td>
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<tr>
<td>• 1 glass of sherry</td>
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<tr>
<td>• 1 glass of wine</td>
<td></td>
</tr>
<tr>
<td>• 1 standard measure of spirits</td>
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If the patient is vague, ask how long a bottle of wine or spirits might last or the amount they drank over a specific recent time period (e.g. yesterday or over the last week). Alcohol-dependent patients often deny when questioned about alcohol consumption and a third party history from friends and family is often revealing and helpful. Certain questions may reveal dependency without asking the patient to specify consumption. Ask about early morning nausea, vomiting and tremulousness, which are typical features of dependency. Ask whether they ever drink alone, when they first wake up in the morning, or during the course of the day as well as in the evenings. Do they have alcohol-free days?

**Foreign travel**

Ask the patient about recent foreign travel. If so, determine the countries visited and, if the patient has returned from an area where malaria is endemic, ask about adequate prophylaxis for the appropriate period.

**Home circumstances**

At this stage in the interview, it is useful to ascertain how the patient was coping until the onset of the illness. The issue is particularly relevant for elderly patients and individuals with poor domestic and social support networks. Do they live alone? Do they have any support systems provided by either the community or family? If the patient’s condition has been present for some time, determine the effect on daily living. For example, in a patient with chronic obstructive pulmonary disease: Is work still possible? Can the patient climb stairs? If not, what provisions are required for maintaining independence? Can the patient attend to personal needs such as bathing, shaving and cooking? What assistance may be on hand during the day or at night? What effects does the illness have on the financial status of the family?

**PAST MEDICAL HISTORY**

Patients recall their medical history with varying degrees of detail and accuracy. Some provide a meticulous history, whilst others need reminding. You can jog a patient’s memory by asking if they have ever been admitted to hospital or undergone a surgical procedure, including caesarean sections in women. If the patient mentions specific illnesses or diagnoses, explore them in more detail. For example, if a patient mentions migraine, ask for a full description of the attacks so that you can decide whether or not the label is correct.

**Drug history**

Many patients do not know the names of their medication and it is useful to ask for the labelled bottles or a written medicines list. Remember to ask about nonprescription medicines: NSAIDs commonly cause dyspepsia and codeine-containing analgesics cause constipation. Ask about the duration of medication. Remember that iatrogenic disease is very common and always consider drug-related side effects in the differential diagnosis. Ask women of reproductive age about their choice of contraceptive and postmenopausal women about hormone replacement therapy. Ask about, and record, drug allergies.
At this point, it is useful to enquire sensitively about the use of illicit drugs. This will be influenced by the patient’s age and background; few 80-year-olds smoke pot or eat magic mushrooms! Broach the subject by first asking about marijuana, LSD and amphetamine derivatives. If the response suggests exposure, enquire about the use of the harder drugs such as cocaine and heroin.

**Systems review**

The other major element of background information gathering is to undertake a review of the body’s main systems. A systems review can provide an opportunity to identify symptoms or concerns that the patient may have failed to mention in the history. Before focusing on individual systems ask some general questions about the patient’s health. Is the patient sleeping well? If not, is there a problem getting to sleep or a tendency to wake in the middle of the night or in the early hours of the morning? Has there been weight loss, fevers, rashes or night sweats? The questions surrounding the presenting complaint will often have completed the systematic enquiry for that organ and there is no need to repeat questions already asked; simply indicate ‘see above’ in the notes. Develop a routine to avoid missing out a particular system.

**CARDIOVASCULAR SYSTEM**

**Chest pain**

Determine the location of any chest pain, its quality and its periodicity. Find out if there are specific triggering factors. Does the pain radiate? If the patient describes an exercise-induced pain, remember that angina can be confined to the throat, jaw or medial aspect of the left arm rather than centring on the chest.

**Dyspnoea**

Ask about breathlessness. Does this occur after climbing one or more flight of stairs, after walking on the flat and after what distance? Does the patient become short of breath on lying flat (orthopnoea) or does the patient wake up breathless in the middle of the night (paroxysmal nocturnal dyspnoea)?

**Ankle swelling**

Has the patient noticed any ankle swelling? Is it confined to one leg, or does it affect both? Is the swelling persistent or only noticeable towards the end of the day?

**Palpitations**

Patients may recognise abnormal heart rhythm, particularly one that is rapid or irregular. Try to establish whether the abnormal rhythm is regular or irregular and for how long it lasts. Can the patient give you an idea of the frequency by beating out the rhythm with a hand? Do any other symptoms appear such as dizziness, fainting or loss of consciousness at or around the time of the palpitation?

**RESPIRATORY SYSTEM**

**Cough**

Cough is difficult to quantify, particularly if dry. Does the cough wake the patient from sleep? If productive, assess the volume of sputum produced, using a standard measure like an egg cupful as a reference point. Is the sputum mucoid (white or grey) or purulent (yellow or green)?

**Haemoptysis**

If the patient has coughed up blood, ask whether this is blood staining of the sputum or more conspicuous frank bleeding. Is it a recent event, or has it happened periodically over a more prolonged period? Did it follow a particularly violent bout of coughing? Was it a definite cough or was it vomited (haematemesis)? Was it associated with pleuritic chest pain or breathlessness?

**Wheezeing**

Is the wheezing constant or intermittent, and are there trigger factors such as exercise? If the patient is using bronchodilators, determine the dosage and the frequency of use.

**Pain**

If the patient complains of localised chest pain, ask whether the painful area is tender to touch as might be expected with chest wall pain. Is the pain worse on inspiration? This is a characteristic symptom of pleural, or pleuritic, pain.

**GASTROINTESTINAL SYSTEM**

**Change in weight**

Ask the patient if there has been any recent weight loss or gain. If there is uncertainty about weight change, ask the patient whether they have noticed any alteration in the fit of clothes or belts.

**Flatulence and heart burn**

Does the patient complain of fl atulence or burping? Is there heart burn, and, if so, is it aggravated by postural change such as bending? Does the mouth suddenly fill with saliva (waterbrash)?

**Dysphagia**

Has there been difficulty in swallowing? Does this affect solids more than liquids or both equally? Is the difficulty swallowing progressive or fluctuant and unpredictable? Can the patient identify a site where they believe the obstruction occurs (this correlates poorly with the site of the relevant pathology).
Abdominal pain
Ask about abdominal pain. Determine its site, quality and relationship to food. Does it appear soon after a meal, or 3 to 4 hours later? Is there any relationship to posture? Can the pain disappear for weeks or months or is it more persistent? Does the pain cause night waking?

Vomiting
Ask the patient about nausea and vomiting. Is the vomiting violent (projectile) or does it represent effortless passive regurgitation of stomach contents? Is the vomiting lightly bloodstained or does it look like coffee-grounds, suggesting partly altered blood? Are items of food eaten some hours before still recognisable? Is there recognisable (green) bile in the vomit?

Bowel habit
Many patients believe they are constipated simply because they do not have a daily bowel action. If the patient has always experienced a bowel movement three times a week, and there has been no recent change, there is little likelihood of pathology. A change in bowel habit can refer to frequency, consistency of stool or both. Has the appearance of the stool altered? Are they black (suggestive of melaena) or pale and difficult to flush (suggestive of steatorrhoea)? If there has been a change in bowel habit, ask the patient what drugs they are taking. A common cause of constipation is the use of codeine-containing analgesics. Has there been rectal bleeding or mucous discharge? Finally, ask about incontinence or soiling of underwear. Although this is not uncommon, particularly in parous women, few patients volunteer this symptom.

GENITOURINARY SYSTEM
Frequency
Determine the daytime (D) and night-time (N) frequency of micturition. The findings can be recorded as: D 6–8, N 0–1.
Has there been an increase in the actual volume passed (polyuria) or, alternatively, a sense of urgency with small volumes passed on each occasion? Does the patient wake at night to void urine and is this associated with increased thirst (polydipsia) and fluid intake?

Pain
Ask whether there is pain either during or immediately after micturition. Has the patient noticed a urethral discharge? Is the urine offensive, cloudy or bloodstained?

Altered bladder control
Determine if there has been urgency of micturition, with or without incontinence. Does the patient have urinary incontinence without warning? Does coughing or sneezing cause incontinence? Has the urinary stream become slower, perhaps associated with difficulty in starting or stopping (terminal dribbling)? Does the patient have the desire to empty the bladder soon after completing micturition?

Menstruation
Ask about menstrual rhythm. Are they regular and predictable? Use a fraction notation to summarise the duration of menstruation and the number of days between each period (e.g. 7/28). Are the periods heavy (menorrhagia) or painful (dysmenorrhoea)? Have they changed in quality or quantity?

Sexual activity
Although sexual dysfunction is common, few patients volunteer this information and questions about sexual activity need to be asked sensitively. Ask whether they have a sexual partner and whether they are able to achieve a satisfactory physical relationship. Ask whether the partner is male or female. Does the patient practise ‘safe sex’? Has the patient ever had a sexually transmitted disease? In addition, ask whether intercourse is painful or whether the patient is concerned about a lack of sexual activity, whether due to loss of libido or to actual impotence. Prompting in this manner might prompt the patient to volunteer information on libido, potency and pain.

NERVOUS SYSTEM
Headache
Most people experience headache. A useful distinguishing feature is whether the headaches are unusual in either frequency or character. Follow the enquiry you use for other forms of pain but, in addition, ask if the pain is affected by head movement, coughing or sneezing. This might suggest pain arising from the sinuses. If the patient mentions migraine, ask the patient to describe the headaches in detail.

Loss of consciousness
Has the patient lost consciousness? Avoid terms like blackouts even if the patient tries to use them. Enquire about prodromal warning symptoms, whether they have been witnessed and whether they have led to incontinence, injury or a bitten tongue. Do the episodes occur only in certain environments or can they be triggered by certain activities (e.g. rising rapidly from a lying or sitting position)? How does the patient feel after the attack? Patients recover rapidly from a simple faint but after an epileptic seizure, patients often complain of headache and may sleep deeply for several hours. If the patient mentions epilepsy, ask about the exact nature of the attacks. There may be specific symptoms accompanying the attack that assist in making an accurate diagnosis.
Dizziness and vertigo

Dizziness (or giddiness) is a common complaint, describing an ill-defined sense of disequilibrium most often without any objective evidence of imbalance. This symptom is usually episodic, although some patients describe a more continuous feeling of dizziness. If the symptom is paroxysmal, does it occur in particular environments or with particular actions? For instance, dizziness associated with hyperventilation attacks can occur with anxiety in crowded places, whereas patients with postural hypotension will notice dizziness triggered by sudden change of posture from lying or sitting to standing. Only use the term ‘vertigo’ if the patient describes a sense of rotation, either of the body or the room or environment. Again, detail any triggering factors.

In benign positional vertigo, the symptom is induced by lying down in bed at night on one particular side or movement of the head from side to side.

Speech and related functions

The history will already have provided information about the patient’s speech. If there is a speech impediment, is this a problem of articulation, or does the patient use wrong words, with or without a reduction in total speech output? Note the patient’s handedness, which should include questions about the limb used for a variety of skilled tasks, rather than just writing. Enquire from either the patient or a third party whether there has been difficulty understanding speech. Has there been any change in reading or writing skill?

Memory

The patient may not complain of memory disturbance and, if this becomes evident, determine whether this applies to recent events, to events further back in the patient’s youth, or to both. Is the memory problem persistent or does the patient have fluctuating memory loss? Impaired memory is a common symptom, although further enquiry may suggest that it is not interfering with quality of life or social functioning.

CRANIAL NERVE SYMPTOMS

Vision

Ask about any visual disturbances. Do these take the form of visual loss or positive symptoms such as scintillations or shimmerings? Most patients assume that the right eye is concerned with vision to the right and the left eye with vision to the left. Consequently, few will cover-test during attacks of visual disturbance to determine whether the problem is monocular or binocular. Ask whether the patient has cover-tested before labelling the account of the visual symptoms. Is the visual disturbance transient and reversible, or continuous? Is it accompanied or followed by headache?

Diplopia

If the patient has experienced double vision (diplopia), determine whether the images were separated horizontally or in an oblique orientation. Can the patient describe in which direction of gaze the diplopia is most evident? Is it relieved by covering one eye or the other?

Facial numbness

Can the patient outline the distribution of any facial sensory loss? Does the involvement include the tongue, gums and the buccal mucosa.

Deafness

Has the patient become aware of deafness? A useful reference point is to ask about difficulties using the telephone or listening to the radio/television. Is the hearing loss bilateral or unilateral? Is there a history of chronic exposure to environmental noise or a family history of deafness? Is the hearing particularly troublesome when there is an increased level of background noise? Is the hearing problem accompanied by any ringing sound in the ear (tinnitus)?

Oropharyngeal dysphagia

Has the patient problems with swallowing? Does this principally affect fluids, solids or both? Is there spluttering and coughing associated with swallowing?

Limb motor or sensory symptoms

Is the problem confined to one limb, the limbs on one side of the body, the lower limbs alone or all four limbs? Does the patient describe loss of sensation or some distortion of sensation (e.g. a feeling of tightness round the limb)? If the patient complains of weakness, enquire whether it is intermittent or continuous and, if the latter, whether it is progressing. Does the weakness mainly affect the proximal or the distal part of the limb? Has the patient noticed muscle wasting or any twitching of limb muscles?

Loss of coordination

Few patients with a cerebellar syndrome will describe their problem as loss of coordination. Some will complain of clumsiness, others will simply refer to the problem as weakness. When assessing the loss of limb coordination, it is useful to ask the patient about everyday activities such as writing, fastening buttons and using eating utensils. Ask the patient about the sense of balance. Does the patient tend to deviate to a particular side or in either direction? Has the patient had falls as a consequence of any imbalance?

ENDOCRINE HISTORY

The history may provide clues to endocrine disease. Diabetes mellitus is characterised by weight loss,
polydipsia and polyuria. An overactive thyroid is suggested by recent onset heat intolerance, weight loss with increased appetite, irritability and palpitations. An underactive thyroid is suggested by constipation, weight gain, altered skin texture, recent-onset cold tolerance and depression.

MUSCULOSKELETAL SYSTEM

Has the patient experienced bone or joint pain? Has joint pain been accompanied by swelling, tenderness or redness? Is the pain confined to a single joint or is it more diffuse? Does the pain predominate on waking or does it appear as the relevant joint is used (e.g. in walking)? Is there a history of trauma to the affected joint and is there a family history of joint disease?

SKIN

Has the patient noticed any rashes? What is the truncal and appendicular distribution? Was the rash accompanied by itching? Is there a potential occupational risk of a chemical contact dermatitis? Enquire about recent change in cosmetics which might have provoked a skin reaction. Have metal bracelets or necklaces caused the rash (nickel allergy)? Does the patient wear protective gloves when using washing up liquid?

DOCUMENTING THE FINDINGS

It is essential that all the relevant information from the patient interview is accurately recorded in the notes. Deciding what is relevant can be difficult, but, if in any doubt, err on the side of inclusion. A specimen case history is illustrated in Figure 1.5.

PARTICULAR PROBLEMS

The patient with depression or dementia

It is useful to couple these clinical problems as both can cause the patient to appear withdrawn and uncommunicative. Patients with depression may dwell on symptoms such as insomnia and appetite loss and there may be a reluctance to discuss mood or mood change. Determine whether there has been any suicidal intent. Patients with dementia initially retain some insight and in particular may have reasonable memory of distant events. However, recent recall, orientation for ‘person, place and time’ and logical thought patterns may be obviously dysfunctional. A characteristic feature of Alzheimer’s dementia is loss of insight and failure of the patient to recognise their memory loss. This contrasts with senile dementias in which the patient is often concerned at their memory loss. When depression or dementia interferes with history-taking, family, friends and carers become crucially important in the assessment.

In addition, the history may only be complete with a visit to the patient’s home.

The hostile patient

If a patient is hostile to your attempts to take a history, back off with dignity and use the experience to try and analyse the reasons for the reaction. The reaction may reflect anger at being ill, separated from family and work, and the doctor or student provides an easy target for the emotion. You may wish to conclude the interview, although you may feel it reasonable to question the patient gently about their anger and use the encounter to restore trust and confidence, allowing you to explore the history more formally. If the hostility persists, terminate the interview and discuss the problem with the family. Involve another member of the medical or nursing staff to act as witness.

History-taking in the presence of students

Occasionally, patients find the presence of a group of students intimidating or an infringement of confidentiality. Although most often an explanation of their presence will satisfy the patient, it may be appropriate to leave the consultation and allow the patient to continue the consultation privately (Fig. 1.6).

Time considerations

The limited time allocated to a consultation might preclude a full history-taking, and part of the expertise of a skilled consulter is the ability to adapt and manage the interview in the face of time or other constraints. The interview should be efficiently choreographed to maximise the patient’s communication of important and relevant information. Judgement about which information is relevant can be difficult, and sometimes seemingly insignificant details can subsequently prove important to patient management. It is important to be competent and familiar with the approaches outlined in this and following chapters even if time constraints make it difficult to apply. It is also important to recognise which symptoms and signs necessitate prompt or urgent action. To help with this, Emergency boxes and Red flag boxes can be found throughout the book. Emergency boxes identify those clinical situations in which immediate action is necessary, whereas Red flag boxes identify symptoms and signs that necessitate urgent referral for assessment and investigation.

Recording the medical interview

Almost every encounter between doctor (or student) and patient involves recording information. The initial record will include a detailed history and examination, the problem list and plans for investigation and treatment. Whenever the results of investigations become available, this new information is added to the record and, at each
Patient history

Mrs G. W. 76-year-old female  
Date of birth: 11/1/36 Retired shop assistant  
Date: 1/6/07

**Patient's problems:**  
(1) Constipation  
(2) Stomach pain

**History of patient's problems:**  
(1) Constipation: Started on 7/4/07. Normally bowels open once a day, but didn't go for 6 days. Subsequently has been going once every 2–4 days.  
(2) Stomach pain: Pain started at the same time. Site of pain is in the left iliac fossa. Patient thought it was due to ‘straining’. Episodes of pain are of sudden onset and are a ‘sagging dull ache’. They last 1 hour and occur anything between 2–3 times a day to once every 3 days. There are no alleviating or exacerbating factors. Pain unrelated to eating or defecation and there are no preceding events. Pain appears not to fluctuate.  
Patient went to visit GP after 6 days constipation. GP felt a mass on abdominal palpation which on bimanual examination was thought to be of ovarian origin. Patient referred to the gynaecological outpatient department.  
Patient does not understand why GP has referred her to hospital. Hopes the hospital can just prescribe a laxative and discharge her. Her children have arranged a holiday for her and her husband in one month’s time and she does not want to miss it.

**Social history:**  

**Smoking:**  
Ex-smoker, 4–5 a day for 5 years as a teenager.

**Alcohol:**  
Only on Christmas Day and birthdays.

**Past obstetric history:**  
Menarche – 12  
Menopause – 50  
Gravidity 3  
Parity 3  
(1) Female 41  
Spontaneous vaginal delivery full term  
(7 lb)  
(2) Female 38  
Spontaneous vaginal delivery full term  
(8 lb 4 oz)  
(3) Female 35  
Spontaneous vaginal delivery  
39 weeks (6 lb 8 oz)

**Past medical history:**  
Hypertension for last 6 years treated by GP with atenolol. No previous operations.

**Drug history:**  
Atenolol

**Allergies:** None known

**Travel abroad:** Never

**Family history**

<table>
<thead>
<tr>
<th>M. l. 76</th>
<th>66 diabetic complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>80 alive and well</td>
</tr>
<tr>
<td>41</td>
<td>38</td>
</tr>
<tr>
<td>35</td>
<td>alive and well</td>
</tr>
</tbody>
</table>

No family history of TB.

**Systems review**

**General:**  
No weight change, appetite normal, no fevers, night sweats, fatigue or itch.

**Cardiovascular system:**  
No chest pain, palpitations, exertional dyspnoea, paroxysmal nocturnal dyspnoea, orthopnoea or ankle oedema.

**Respiratory system:**  
No cough, wheeze, sputum or haemoptysis.

**Gastrointestinal system:**  
No abdominal swelling noticed by patient, no nausea or vomiting, no haematemesis. Bowels open once every 2–3 days. Stool normally formed. No blood or slime. No melena.

**Genitourinary system:**  

**Nervous system:**  
No fits, faints or funny turns. No headache, paraesthesiae, weakness or poor balance.

**Musculoskeletal system:**  
No pain or swelling of joints. Slight stiffness in morning.

**Summary:**  
A 76-year-old hypertensive woman, referred to gynaecological outpatients with a short history of constipation and stomach pain. She has no other previous medical history.

---

**Fig. 1.5** A specimen case history taken from a student’s notes. Note the brief summary at the end, the writing of which gives useful practice in the art of condensing a substantial volume of information.
follow-up visit, progress and change in management are recorded. The medical record chronicles the patient’s medical history from the first illness through to death. Over a lifetime, patients present with distinct episodes of acute disease and chronic, intractable or progressive conditions. A number of doctors and healthcare professionals may contribute to the medical record. In addition, this multi-authored document may follow the patient whenever he or she moves home.

There is an onus on the author of each medical entry to recognise the historical importance of each record and to ensure that the entry conveys a clear and accurate account which can be easily understood by others.

The medical record has other uses: it is the prime resource used in medical audit, a practice widely adopted for quality control in medical practice, and it provides much of the evidence used in medicolegal situations; under judicial examination, your professional credibility relies solely on the medical record if your memory fails. Medical records are also a valuable source of data for research.

As medical care becomes more specialised and complex and increasingly dependent on teamwork, it has become necessary to standardise the approach to clinical record-keeping. The problem-orientated medical record (POMR) is a widely accepted framework for both standardising and improving the quality of medical records. The system encourages a logical approach to diagnosis and management and addresses the problem of maintaining order in the multidisciplinary, highly specialised practice of modern medical care. The problem-orientated approach to medical records was first advocated in 1969 by Lawrence Weed and remains relevant today. However, it is probably more widely used in hospital practice than general practice. There is also increasing use of computers to record medical interviews with software packages that provide a rigid template for recording consultation notes. Nevertheless many of the principles underlying the POMR provide useful insights and guidance to those learning about how to maintain good medical records.

**PROBLEM-ORIENTATED MEDICAL RECORD**

The accuracy of information gathered from a patient during the course of an illness influences the precision of the diagnosis and treatment. The POMR stresses the need to gather all the information, biomedicals, psychosocial, demographic, symptoms and signs and special tests, and uses this ‘database’ to construct a list of problems. This problem list not only provides a summary of the ‘whole’ patient but also offers a resource for planning management and encourages you to look for relationships between problems, allowing an integrated overview of the patient to emerge. Moreover, it distinguishes problems needing active management from problems that may be of only historical significance. The problem list does not provide a perspective of the relative importance of each problem: this must rely on discussion with the patient and the skill of clinical judgement. The database and problem list evolve through the course of an illness and changes with each subsequent presentation.

In addition to the problem list, the POMR provides a framework for standardising the structure of follow-up notes (Fig. 1.7); this stresses changes in the patient’s symptoms and signs and the evolution of clinical assessment and management plans. The POMR also provides a flow sheet that records sequential changes in clinical and biochemical measurements.

**THE HISTORY**

For generations, there has been little change in the method of recording information from the history. The interview is the focal point of the doctor–patient relationship and establishes the bonding necessary for the patient’s care. The history guides the patient through a series of questions designed to build a profile of the individual and his or her problems. By the end of the first interview you should have a good understanding of the patient’s personality, social habits and clinical problems. Additionally, you will have considered a differential diagnosis that may explain the patient’s symptoms.

A new history and examination are recorded in the notes whenever a patient presents with a fresh problem. Some information may remain unchanged over long periods (previous illness, family history, education and occupation). If these were accurately recorded at the time of the first presentation, there is no need to re-enter them unless there has been change.

Remember, at some time in the future the medical history may provide an important source of information, particularly if a patient is admitted to hospital with, for example, intense pain, altered consciousness or severe breathlessness and is therefore unable to provide a history. In these circumstances, a detailed systematic record may provide crucial information. A routine systems enquiry also prompts your patient to remember
events or illnesses that may otherwise have been overlooked.

THE EXAMINATION
The examination may confirm or refute a diagnosis suspected from the history and by adding this information to the database you will be able to construct a more accurate problem list. Like the history, the examination is structured to record both positive and negative findings in detail.

THE PROBLEM LIST
The problem list is fundamental to the POMR. The entries provide a record of all the patient’s important health-related problems, both biomedical and psychosocial. The master problem list is placed at the front of the medical record and each entry is dated (Fig. 1.8). This date refers to the time of the entry, not the date when the patient first noted the problem (this can be indicated in brackets alongside the problem). The dates entered into the problem list not only provide a chronology of the patient’s health-related problems but also a ‘table of contents’ which serves the medical record. Using the entry date as a reference, there should be no difficulty finding the original entry in the notes. In addition to providing a summary and index, the problem list also assists the development of management plans.

Setting up the problem list
Divide the problems into those that are active (i.e. those requiring active management) and those that are inactive (problems that have resolved or require no action but may be important at some stage in the patient’s present or future management). An entry of ‘Peptic ulcer (2006)’ in the ‘inactive’ column will provide a reminder to someone considering the use of a nonsteroidal anti-inflammatory (NSAID) drug in a patient presenting at a later date with arthritis. The problem list is dynamic and the page is designed to allow you to shift problems between the active and inactive columns (Fig. 1.9).

Your entries into the problem list may include established diagnoses (e.g. ulcerative colitis), symptoms (e.g. dyspnoea), psychosocial concerns (e.g. concern that they will die of stomach cancer like their brother), physical signs (e.g. ejection systolic murmur), laboratory tests (e.g. anaemia), family and social history (e.g. carer for partner, unemployment) or special risk factors (e.g. smoking, alcohol or narcotic abuse). The diagnostic level at which you make the entry depends on the information available at a particular moment. Express the problem at the highest possible level but update the list if new findings alter or refine your understanding of the problem. The problem list is designed to accommodate change; consequently, it is not necessary to delete an entry once a higher level of diagnosis (or understanding) is reached. For example, a patient may present with the problems of jaundice, anorexia and weight loss. This information will be entered into the problem list (Fig. 1.8). If, a few days later, serological investigation confirms that the patient was suffering from type A viral hepatitis, this new level of diagnosis can be entered on a new line in the block reserved for active problem 1 (Fig. 1.9). Other problems explained by the diagnosis (anorexia and weight loss)
**Consultation, medical history and record taking**

### Initial problem list

<table>
<thead>
<tr>
<th>No.</th>
<th>Active problems</th>
<th>Date</th>
<th>Inactive problems</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>jaundice (Jan '07)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>anorexia (Dec '06)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>weight loss</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>recurrent rectal bleeding</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>smoking (since 1980)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>unemployed (Nov '06)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>stutter</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>brother died of colon cancer – patient concerned he may have similar condition (Dec '06)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>duodenal ulcer (1996)</td>
<td></td>
<td></td>
<td>9/1/07</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 1.8** Problem list entered on 9 January 2007.

The problem list should be under constant review to ensure that the entries are accurate and up-to-date.

**INITIAL PROBLEM-RELATED PLANS**

The POMR offers a structured approach to the management of a patient’s problems. By constructing the problem list you will have clearly defined problems requiring active management (i.e. investigation and treatment), so it should be reasonably easy to develop a management plan (Fig. 1.10) by considering four headings (see below); all or only some of these headings may be applicable to a particular problem.

**Diagnostic tests (Dx)**

Enter the differential next to each problem. Adjacent to each of the possible diagnoses, enter the investigation that may aid the diagnosis. There are a large number of special tests that may be applicable to a particular problem; therefore, it is useful to evolve a general framework for investigation and to adapt this to each problem. You can construct a logical flow of investigations by considering bedside tests, side-ward tests, plain radiographs, ultrasound, blood tests and specialised imaging examinations (Fig. 1.11).

**Monitoring tests (Mx)**

Monitoring information charts the patient’s progress. Consider whether a particular problem can be monitored and, if so, document the appropriate tests and the frequency with which they should be performed to provide a meaningful flow of information.

**Treatment (Rx)**

Consider each problem in turn with a view to deciding on a treatment strategy. If drug treatment is indicated, note the drug and dosage. Include a plan for monitoring both side effects and the effectiveness of treatment.

**Education (Ed)**

An important component of your patient’s management is education and sharing information and decisions. Patients are able to cope better with their illness if they...
**Updated problem list**

<table>
<thead>
<tr>
<th>No.</th>
<th>Active problems</th>
<th>Date</th>
<th>Inactive problems</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>jaundice (Jan '07) → type A hepatitis*</td>
<td>9/1/07</td>
<td>resolved</td>
<td>14/2/07</td>
</tr>
<tr>
<td>2</td>
<td>anorexia (Dec '06) →*1</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>weight loss →*1</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>recurrent rectal bleeding → haemorrhoids</td>
<td>9/1/07</td>
<td>haemorrhoid banding</td>
<td>1/2/07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>smoking (since 1980)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>unemployed (Nov '06)</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>stutter</td>
<td>9/1/07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>brother died of colon cancer – patient concerned he may have similar condition (Dec '06)</td>
<td>9/1/07</td>
<td>resolved</td>
<td>Jan 2007</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>duodenal ulcer (1996)</td>
<td>9/1/07</td>
</tr>
<tr>
<td>10</td>
<td>hypercholesterolaemia</td>
<td>13/1/07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 1.9 Problem list updated to 14 February 2007, indicating the diagnosis of hepatitis A on 13 January and return of liver tests to normal by 14 February. The anorexia and weight loss are readily explained by the hepatitis; these problems are arrowed to indicate the relationship to problem 1 (hepatitis*). Note that the haemorrhoids were diagnosed on 11 January and this problem became ‘inactive’ when banding was performed on 1 February. The patient’s fears re colon cancer resolved when the diagnosis and causes of symptoms were explained. When the biochemical tests were returned on 13 January, hypercholesterolaemia was diagnosed for the first time and this was entered into the problem list on the same day. On 14 February, four unresolved problems remained.

understand its nature, its likely course and the effect of treatment, and management is most effective when patients are involved in decisions about their care. By including this heading in your plans, you will be reminded of the need to talk to your patient about the illness and involve them in decisions, and encouraged to develop an educational plan for your overall management strategy.

**PROGRESS NOTES**

The POMR provides a disciplined and standardised structure to follow-up notes. These should be succinct and brief, focusing mainly on change. There are four headings to guide you through the progress note (Fig. 1.12).

**Subjective (S)**

Record any change in the patient’s symptoms and, when necessary, comment on compliance with a particular regimen (e.g. stopping smoking) or tolerance of drug treatment.

**Objective (O)**

Record any change in physical signs and investigations that may influence diagnosis, monitoring or treatment.

**Assessment (A)**

Comment on whether the subjective and objective information has confirmed or altered your assessment and plans.

**Plan (P)**

After making the assessment, and in discussion with the patient, consider whether any modification of the original plan is needed. Structure this section according to the headings listed earlier (Dx, Mx, Rx and Ed).

If there is no subjective or objective change from one visit to the next, simply record ‘No change in assessment or plans’.

**FLOW CHARTS**

Clinical investigations and measurements are often repeated to monitor the course of acute or chronic illness.
## Problem-related plans

<table>
<thead>
<tr>
<th>Problem</th>
<th>Differential diagnosis</th>
<th>Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>jaundice</td>
<td>acute hepatitis</td>
<td>liver tests, prothrombin time</td>
</tr>
<tr>
<td>anorexia</td>
<td>alcohol</td>
<td>hepatitis screen (A, B and C) auto-antibodies</td>
</tr>
<tr>
<td>weight loss</td>
<td>drugs</td>
<td>(SMA, ANA, AMA) mean cell volume, gamma-GT</td>
</tr>
<tr>
<td>recurrent rectal bleeding</td>
<td>see jaundice</td>
<td>check with family doctor</td>
</tr>
<tr>
<td>smoking</td>
<td>haemorrhoids</td>
<td>ultrasound liver urea and electrolytes</td>
</tr>
<tr>
<td></td>
<td>polyp or colon cancer</td>
<td>basal weight full blood count</td>
</tr>
<tr>
<td></td>
<td></td>
<td>proctoscopy colonoscopy or barium enema</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chest radiograph</td>
</tr>
<tr>
<td>jaundice</td>
<td>Monitor</td>
<td>twice weekly liver tests</td>
</tr>
<tr>
<td>anorexia</td>
<td>twice weekly caloric intake</td>
<td>monitor diet and caloric intake</td>
</tr>
<tr>
<td>weight loss</td>
<td>twice weekly weight</td>
<td>haemoglobin weekly</td>
</tr>
<tr>
<td>recurrent rectal bleeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>bed-rest</td>
</tr>
<tr>
<td>jaundice</td>
<td>encourage calorific intake (favourite foods)</td>
<td>special high calorific drink supplements</td>
</tr>
<tr>
<td>anorexia</td>
<td>treat cause</td>
<td>(haemorrhoids or tumour) seek surgical opinion</td>
</tr>
<tr>
<td>weight loss</td>
<td>encourage relaxation and stress management</td>
<td>arrange meeting with social worker</td>
</tr>
<tr>
<td>recurrent rectal bleeding</td>
<td></td>
<td>discuss concerns, advise refindings of tests and reassure</td>
</tr>
<tr>
<td>smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unemployed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>concern recancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jaundice</td>
<td>Education</td>
<td>discuss differential diagnosis</td>
</tr>
<tr>
<td>anorexia</td>
<td>explain association with jaundice</td>
<td>explain need for colonic investigation</td>
</tr>
<tr>
<td>smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rectal bleeding</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 1.10** Example of a problem-related plan after the creation of a problem list (Dx, diagnostic tests; Mx, monitoring tests; Rx, treatments; Ed, education.)

Foreexample, patients presenting with diabetic ketoacidosis require frequent checks of blood sugar, urea, electrolytes, blood pH, urine output and central venous pressure. In chronic renal failure, the course of the disease and its treatment is monitored by repeated measurements of blood urea and electrolytes, creatinine, creatinine clearance, haemoglobin and body weight. A flow sheet is convenient for recording these data in a format that, at a glance, provides a summary of trends and progress (Fig. 1.13). Graphs may be equally revealing (Fig. 1.14) and are now often prepared automatically in computerised notes.

**ADVANTAGES OF THE POMR**

Whilst the POMR may not be followed in all health care settings, its underlying principles represent qualities that are relevant to medical record systems in general. The POMR encourages all the members of the healthcare team to standardise their approach to record-keeping. This, in turn, enhances communication and guarantees that everybody involved in the patient’s care can contribute to the medical biography. Furthermore, careful structuring of the problem list, care plans and follow-up notes encourages logical, disciplined thinking and ensures that the record is comprehensive and accurate. The POMR approach to record-keeping counters the tendency for the ‘weight’ of a single problem to overwhelm and to distract from other subsidiary but potentially important problems.

Peer review and medical audit have become an integral part of quality assurance and continuing medical education. The structure of the POMR exposes the clinician’s and patient’s thoughts and their decision-
Diagnostic test flow chart

- electrocardiogram
- peak flow measurements
- fluid aspiration
- liver/pleural biopsy
- lumbar puncture
- sigmoidoscopy
- bedside tests
- side-ward tests
- ultrasound: abdomen
- laboratory tests
- ‘special’ investigations
- radiographs: skeleton
- skull/sinuses
- chest
- abdomen
- radiographs and ultrasound
- haematology
- biochemistry
- endocrine tests
- immunology
- microbiology
- histopathology
- endoscopy
- CT scanning
- magnetic resonance imaging
- isotope scanning
- contrast radiology
- lung function tests
- exercise electrocardiography
- blood glucose
- urine: pH
- blood protein
- bilirubin
- urobilin
- glucose
- ketones
- specific gravity
- faecal occult blood

Fig. 1.11 Flow diagram to help plan diagnostic tests.

Progress notes

<table>
<thead>
<tr>
<th>date</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/07</td>
<td>S – nauseated, fatigued</td>
</tr>
<tr>
<td></td>
<td>O – less jaundiced</td>
</tr>
<tr>
<td></td>
<td>liver less tender</td>
</tr>
<tr>
<td></td>
<td>taking adequate calories and fluid</td>
</tr>
<tr>
<td></td>
<td>ultrasound liver/biliary tract: normal</td>
</tr>
<tr>
<td></td>
<td>A – seems to be improving</td>
</tr>
<tr>
<td></td>
<td>no obstruction</td>
</tr>
<tr>
<td></td>
<td>P – check liver tests tomorrow</td>
</tr>
<tr>
<td></td>
<td>phone laboratory for hepatitis markers</td>
</tr>
<tr>
<td>13/1/07</td>
<td>S – feels considerably better, appetite improving</td>
</tr>
<tr>
<td></td>
<td>O – transaminase levels and bilirubin falling</td>
</tr>
<tr>
<td></td>
<td>IgM antibody to hepatitis A positive</td>
</tr>
<tr>
<td></td>
<td>sigmoidoscopy: bleeding haemorrhoids</td>
</tr>
<tr>
<td></td>
<td>hypercholesterolaemia</td>
</tr>
<tr>
<td></td>
<td>A – resolving hepatitis A</td>
</tr>
<tr>
<td></td>
<td>rectal bleeding in young patient likely to be haemorrhoids</td>
</tr>
<tr>
<td></td>
<td>P – reassess patient, explain hepatitis A</td>
</tr>
<tr>
<td></td>
<td>consider discharge if next set of liver tests show sustained improvement; ask surgeon to consider treating haemorrhoids; red check cholesterol in 3 months; reassure re no evidence of cancer found</td>
</tr>
</tbody>
</table>

Fig. 1.12 Example of follow-up notes.

Making processes. This, in itself, is educational for both the clinician and others reading the notes, and makes the system particularly suited to the process of audit. The pressure to record meticulous and detailed information is also of intrinsic value to research workers embarking on retrospective or prospective clinical studies. Perhaps most importantly, the POMR helps to maintain a perspective of the ‘whole’ patient, thereby providing an overview of physical, psychological and social problems and their interaction in health and disease.

CONFIDENTIALITY

Clinical notes contain confidential information and it is important that you protect this confidentiality. Ensure that there is control over access to the medical record and that only individuals directly involved in the patient’s care should read or write in the notes. Computerised notes should be password protected. In certain circumstances special security may be necessary. Patients with HIV infection and AIDS and individuals attending sexually transmitted or psychiatric clinics may have a separate set of clinical notes that are maintained distinct from the general medical records. Access to these classified records is usually restricted to doctors working in that department and the notes never leave the area of the specialist unit.
# Consultation, medical history and record taking

## Chapter 1

### Examination of elderly people

#### History-taking

There are special problems when recording a history from elderly patients. Consider the following:

**Hearing loss**
- Common in the elderly
- May be helped by hearing aid
- Important to speak clearly and slowly
- Face the patient and avoid extraneous sound
- If necessary, write questions in bold letters

**Visual handicap**
- Cataracts, glaucoma and macular degeneration are common in the elderly
- Ensure the room is well lit
- Engage an assistant or carer to help patients move in and out of the consulting room and examination area

**Dementia**
- Often occurs in patients who appear physically fit
- Forgetfulness, repetition and inappropriate answers characterise responses
- Family members, friends and carers often note the development of dementia

**Important aspects of a history from elderly patients include:**
- State of the domestic environment and general living conditions
- Provision of community and social services
- Family support structures
- Economic status and pension provision
- Mobility (at home and in the local environment)
- Detailed drug history and compliance
- Provision of laundry services
- Legal will

## Flow sheet

<table>
<thead>
<tr>
<th>Tests</th>
<th>9/1/07</th>
<th>11/1/07</th>
<th>13/1/07</th>
<th>14/1/07</th>
<th>7/2/07</th>
<th>14/2/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilirubin (&lt;17)</td>
<td>233</td>
<td>190</td>
<td>130</td>
<td>28</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>AST (&lt;40)</td>
<td>1140</td>
<td>830</td>
<td>500</td>
<td>52</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>ALT (&lt;45)</td>
<td>1600</td>
<td>650</td>
<td>491</td>
<td>61</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Albumin (35–45)</td>
<td>41</td>
<td>40</td>
<td>41</td>
<td>42</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Pro-time (s)</td>
<td>14/12</td>
<td>14/12</td>
<td>13/12</td>
<td>13/12</td>
<td>12/12</td>
<td></td>
</tr>
<tr>
<td>Haemoglobin (11.5–16.2)</td>
<td>12.1</td>
<td>12.3</td>
<td>12.1</td>
<td>12.2</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Blood urea (3.5–6.5)</td>
<td>3.1</td>
<td>4.2</td>
<td>4.8</td>
<td>6.0</td>
<td>6.2</td>
<td></td>
</tr>
<tr>
<td>Blood glucose (3.5–6.5)</td>
<td>5.5</td>
<td>6.8</td>
<td>5.0</td>
<td>5.6</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>Hepatitis screen</td>
<td>IgM</td>
<td>Hep A +ve</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholesterol (3.5–6.8)</td>
<td>8.1</td>
<td>8.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 1.13** Example of a flow sheet.

**Fig. 1.14** Example of the use of a graph to illustrate changes in serum bilirubin levels following acute type A hepatitis.

### Decreasing bilirubin level

<table>
<thead>
<tr>
<th>serum bilirubin (μmol/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>240</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>160</td>
</tr>
<tr>
<td>120</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>days</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>60</td>
</tr>
</tbody>
</table>
Recording the medical interview

Review

The history

- Welcome
- Note the patient’s body language
- Begin with an open-ended question
- Take a history of the presenting complaints(s) – both biomedical and psychosocial perspectives; use closed questions to answer the following:
  - which organ system?
  - likely cause?
  - predisposing factors?
  - complications
- Social history
- Medical history
- Education
- Employment
- Medicines, drugs and tobacco
- Alcohol consumption
- Foreign travel
- Home circumstances
- Family history
- Systems review
  - cardiovascular
  - respiratory
  - gastrointestinal
  - genitourinary
  - nervous
  - endocrine
  - musculoskeletal
  - skin and hair