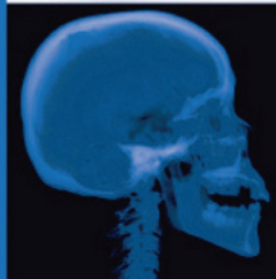
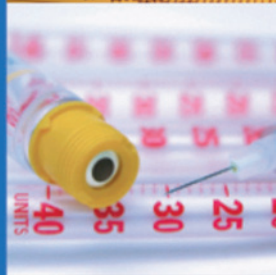
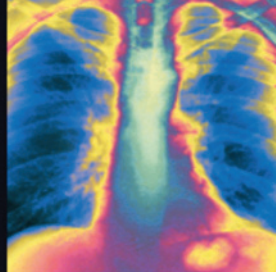


Fourth Edition

The Hands-on Guide for Junior Doctors

Anna Donald
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Ciaran Scott Hill

 WILEY-BLACKWELL



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Fourth Edition

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Introduction

Your junior doctor years are guaranteed to be one of the big experiences of your life. Free at last from rote learning and endless exams, your first job is intensely practical. The trouble is that the theoretical training in medical school does not usually prepare you for the physical and emotional rigours of hundreds of tasks being thrust upon you around the clock. Similarly, medical textbooks rarely deal with the practical know-how which makes all the difference between clumsy and elegant doctoring.

This book is based on the collective experience of junior doctors who remember only too well the highs and lows of their first year. It contains

information not readily available in standard texts that will help you to feel competent and confident despite sleepless nights and low blood sugars. It assumes minimal practical know-how. Subjects are listed in alphabetical order within each chapter. A detailed index is also provided for rapid reference.

Whatever you do, keep your head up and keep smiling. Hospitals are funny places. Lots of people love their first job; we hope you are one of them. Take care and good luck!

A.K.D.
C.S.H.
M.L.S.
J.T.H.T.

How to use this book

This book is designed as a user-friendly manual. We recommend skimming through it when you first buy it, and then referring to relevant sections for particular problems that you come across.

This book provides standard algorithms for diagnosis and management of clinical problems that worked for us and our colleagues, in different settings throughout Britain. Please don't follow our instructions slavishly. We realize that every firm has its own way of doing things and that there may be more appropriate algorithms for specialist wards or unusual situations. Like a recipe book, feel free to scrawl in the margins to make it more usable for you. We have included some blank pages at the back for extra notes.

We want to emphasize that this book is not the *Oxford Textbook of Medicine*, so please don't expect to find the 337 causes of tropical swollen legs here!

To keep the book compact and maximally relevant to what you need, we have not attempted to replicate the *British National Formulary*. While we do suggest drugs where relevant, we realized from our own experience that the safest and most efficient way to prescribe drugs is to use the *BNF* in conjunction with your hospital's drug formulary.

Finally, if you discover a better way of doing something, please let us know. If we can use your suggestion, you will be acknowledged in the next edition of the book.

Acknowledgements

This book is dedicated to Uncle Ivan Harris and to Bruce, Janet and Tom Donald, for the support and love that made writing this book possible.

Fifty per cent of the authors' royalties for this book are donated to the University of Cape Town Medical School.

Dedication

The wonderful Anna Donald died during the preparation of this fourth edition of *Hands-on Guide for Junior Doctors*. For those who never had the privilege of meeting Anna, here is a little bit about an extraordinary friend and colleague (also see her obituary in the BMJ – 4 February 2009 – by Richard Smith and Sir Muir Gray):

Anna had a brilliant and inquisitive mind, receiving degrees from not one but three top-flight universities:

- University of Sydney: Bachelor of Arts, majoring in history and preclinical medicine

- University of Oxford: Bachelor of Medicine and Surgery degree (Rhodes Scholar)

- Harvard University: Master's degree in Public Policy

Anna worked as a doctor and lecturer in epidemiology and public policy at University College London, and was founding editor of the British Medical Journal's *Clinical Evidence*, the journal of evidence-based health care and

evidence-based health policy. Anna's professional passion was the delivery of high-quality health care for everyone. Indeed, in 1998, as a pioneer in evidence-based health care, Anna founded Bazian, one of the first companies in the world to provide specialist evidence-based consulting and analysis to support the delivery of health care.

In 2007, Anna learned that her breast cancer, first diagnosed in 2003, had metastasized. Anna remained incredibly positive and said this: 'When you discover you have metastatic cancer you think you've picked a black ball in the lottery. But I've discovered it's a luminescent ball. I'm becoming the person I want to be. I'm not putting it off until I retire'.

Anna died two years later on 1 February 2009 having become the person she wanted to be. And she was always a person that everyone who met her, loved.

For more about Anna Donald, see her entry in Wikipedia.

Abbreviations

We include a long list of abbreviations to aid reading medical notes and for reference throughout this book.

μg	micrograms	AVCs	additional voluntary contributions
–ve	negative	AXR	abdominal X-ray (plain)
+ve	positive	Ba	barium
A&E	accident and emergency	BBB	bundle branch block
ABC	airway, breathing, circulation	bd	<i>bis die</i> (twice per day)
ABG	arterial blood gases	bHCG	beta-human chorionic gonadotrophin
ac	<i>ante cibum</i> (before food)	BMA	British Medical Association
ACE	angiotensin-converting enzyme	<i>BMJ</i>	<i>British Medical Journal</i>
ACTH	adrenocorticotrophic hormone	<i>BNF</i>	<i>British National Formulary</i>
ADH	antidiuretic hormone	BP	blood pressure
AF	atrial fibrillation	bpm	beats/minute
AFB	acid-fast bacillus	Ca	carcinoma
AIDS	acquired immunodeficiency syndrome	Ca	calcium
ALP		CABG	coronary artery bypass graft
(alkphos)	alkaline phosphatase	CBD	common bile duct
ALS	Advanced Life Support	CCF	congestive cardiac failure
ALT	alanine aminotransferase	CCU	coronary care unit
ANA	antinuclear antigen	CEA	carcino-embryonic antigen
ANCA	antineutrophil cytoplasmic antigen	CFC	complement fixation test
ANF	antinuclear factor	CI	contraindications
APTT	activated partial thromboplastin time	CK	creatinine kinase
ARC	AIDS-related complex	CK-MB	creatinine kinase cardiac isoenzyme
ARDS	adult respiratory distress syndrome	CLL	chronic lymphocytic leukaemia
ARF	acute renal failure	CML	chronic myeloid leukaemia
ASAP	as soon as possible	CMV	cytomegalovirus
ASD	atrial septal defect	CNS	central nervous system
ASOT	antistreptolysin O titre	COAD	chronic obstructive airways disease
AST	aspartate transaminase	COPD	Chronic Obstructive Pulmonary Disease
ATN	acute tubular necrosis	CPR	cardiopulmonary resuscitation
AV	atrioventricular	CRF	chronic renal failure
		CRP	C-reactive protein
		CSF	cerebrospinal fluid
		CT	computed tomography

CTG	cardiotocography	FVC	forced vital capacity
CV	curriculum vitae	Fx	family
CVA	cerebrovascular accident	FY1	Foundation Year 1
CVP	central venous pressure	FY2	Foundation Year 2
CVS	cardiovascular system	g	gram(s)
CXR	chest X-ray	G&S	group and save
D&V	diarrhoea and vomiting	G6PD	glucose-6-phosphate dehydrogenase
DDAVP	desmopressin	GBM	glomerular basement membrane
DIC	disseminated intravascular coagulation	GCS	Glasgow Coma Scale
DIP	distal interphalangeal	GFR	glomerular filtration rate
DKA	diabetic ketoacidosis	GGT	gamma-glutamyl transferase
dl	decilitre(s)	GH	growth hormone
DM	diabetes mellitus	GI (GIT)	gastrointestinal
DNR	do not resuscitate	GKI	glucose, potassium and insulin
DOA	date of admission	GMC	General Medical Council
DOB	date of birth	GN	glomerulonephritis
DOD	date of death	GP	general practitioner
DoH	Department of Health	GT	glutamyl transferase
DVLC	Driver and Vehicle Licensing Centre	GTN	glyceryl trinitrate
DVT	deep venous thrombosis	GTT	glucose tolerance test
DXT	radiotherapy	GU	genito-urinary
EBV	Epstein-Barr virus	HB	heart block
ECG	electrocardiogram	Hb	haemoglobin
ECHO	echocardiography	HBsAg	hepatitis B surface antigen
EDTA	ethylene diamine tetra-acetic acid	Hct	haematocrit
EEG	electroencephalogram	HDL	high density lipoprotein
ELISA	enzyme-linked immunosorbent assay	HDU	high dependency unit
EM	electron microscope	Hep	hepatitis
ENT	ear, nose and throat	HiB	<i>Haemophilus influenzae</i> B vaccine
EPC	early pregnancy clinic	HIV	human immunodeficiency virus
ERCP	endoscopic retrograde cholangiopancreatography	HLA	human leukocyte antigen
ESR	erythrocyte sedimentation rate	HO	House Officer
FBC	full blood count	HOCM	hypertrophic obstructive cardiomyopathy
FDP	fibrin degradation product	HPC	history of presenting complaint
FEV ₁	forced expiratory volume in first second	HS	heart sounds
FFP	fresh frozen plasma	HT	hypertension
FOB	faecal occult blood	IBD	inflammatory bowel disease
FSH	follicle stimulating hormone	IBS	irritable bowel syndrome

ICP	intracranial pressure	<i>mane</i>	in the morning
ID	identification	MC&S	microscopy, culture and sensitivity
IDDM	insulin-dependent diabetes mellitus	MCV	mean cell volume
Ig	immunoglobulin	MDU	Medical Defence Union
IHD	ischaemic heart disease	Mg	magnesium
IM	intramuscular	mg	milligrams
INR	international normalized ratio (prothrombin ratio)	MI	myocardial infarction
IPPV	intermittent positive pressure ventilation	ml	millilitres
ISDN	isosorbide di-nitrate	mmHg	millimetres of mercury
ITP	idiopathic thrombocytopenic purpura	MND	motor neurone disease
ITU	intensive therapy unit	MPS	Medical Protection Society
iu (IU)	international unit	MRI	magnetic resonance imaging
IUCD	intrauterine contraceptive device	MRSA	methicillin resistant <i>Staphylococcus aureus</i>
IV	intravenous	MS	multiple sclerosis
IVC	inferior vena cava	MSK	musculoskeletal
IVI	intravenous infusion	MST	morphine sulphate tablets
IU	intravenous urography	MSU	midstream urine
JAMA	<i>Journal of the American Medical Association</i>	N&V	nausea and vomiting
JVP	jugular venous pressure	Na	sodium
K ⁺	potassium	NB	<i>nota bene</i> (note well)
KCCT	kaolin-cephalin clotting time	NB	nil by mouth
KCl	potassium chloride	NBM	<i>New England Journal of Medicine</i>
kg	kilograms	NEJM	
kPa	kilopascals	NGT	nasogastric tube
L	left	NIDDM	non-insulin dependent diabetes mellitus
l	litres	<i>nocte</i>	in the evening
LBBS	left bundle branch block	NR	normal range
LDH	lactate dehydrogenase	NSAIDs	non-steroidal anti-inflammatory drugs
LDL	low density lipoprotein	O&G	obstetrics and gynaecology
LFT	liver function test	obs	observations
LH	luteinizing hormone	OCP	oral contraceptive pill
LIF	left iliac fossa	OD	overdose
LMN	lower motor neurone	od	once a day
LMP	last menstrual period	$PaCO_2$	partial pressure of CO ₂ in arterial blood
LOC	loss of consciousness	PAN	polyarteritis nodosa
LP	lumbar puncture	Pap	Papanicolaou
LUQ	left upper quadrant	PaO_2	partial pressure of O ₂ in arterial blood
LV	left ventricle	PAYE	pay as you earn
LVF	left ventricular failure	PBC	primary biliary cirrhosis
LVH	left ventricular hypertrophy	pc	<i>post cibum</i> (after food)

PCA	patient controlled analgesia	RUQ	right upper quadrant
PCP	<i>Pneumocystis carinii</i> pneumonia	RV	right ventricle
PCR	polymerase chain reaction	RVF	right ventricular failure
PCV	packed cell volume	RVH	right ventricular hypertrophy
PDA	personal digital assistant	Rx	treat with
PE	pulmonary embolism	SAH	subarachnoid haemorrhage
PEFR	peak expiratory flow rate	SBE	subacute bacterial endocarditis
PID	pelvic inflammatory disease	SC	(sub cut) subcutaneous
PIP	proximal interphalangeal	SD	standard deviation
PM	<i>post mortem</i>	SE	side effects
PMH	past medical history	SHO	Senior House Officer
PMT	premenstrual tension	SIADH	syndrome of inappropriate ADH secretion
PN	percussion note	SL	sublingual
PND	paroxysmal nocturnal dyspnoea	SLE	systemic lupus erythematosus
PO	<i>per orum</i> (by mouth)	SOA	swelling of ankles
PPD	purified protein derivative	SOB	shortness of breath
PPF	purified plasma fraction	SpR	specialist registrar
PR	<i>per rectum</i>	SR	slow release
PRN	<i>pro re nata</i> (as required)	SRN	state registered nurse
<i>pro tem</i>	as required, on an ongoing basis	SSRV	structured small round virus
PRV	polycythaemia rubra vera	stat	<i>statim</i> (immediately)
PSA	prostate specific antigen	STD/STI	sexually transmitted disease/infection
PTC	percutaneous transhepatic cholangiography	SVC	superior vena cava
PTH	parathyroid hormone	SVT	supraventricular tachycardia
PTT	prothrombin time	SXR	skull X-ray
PU	peptic ulcer(ation)	T	temperature
PV	<i>per vaginum</i>	T _{1/2}	biological half life
qds	<i>quarte in die somemum</i> (to be taken four times a day)	T3	triiodothyronine
qid	<i>quarte in die</i> (four times a day)	T4	thyroxine (tetraiodothyronine)
R	right	TB	tuberculosis
RA	rheumatoid arthritis	tds	<i>ter die somemum</i> (to be taken three times a day)
RBBB	right bundle branch block	TENS	transcutaneous electrical nerve stimulation
RBC	red blood cell	TG	triglyceride
RCC	red cell count	TIA	transient ischaemic attack
RF	rheumatic fever	TIBC	total iron binding capacity
Rh	rhesus		
RIF	right iliac fossa		
RS	respiratory system		
RTA	renal tubular acidosis/road traffic accident		

tid	<i>ter in die</i> (three times a day)	UMN	upper motor neurone
TLC	tender loving care	URT	upper respiratory tract
TOP	termination of pregnancy	US	ultrasound
tPA	tissue plasminogen activator	UTI	urinary tract infection
TPN	total parenteral nutrition	VDRL	venereal diseases research
TPR	temperature, pulse and respiratory rate	VF	ventricular fibrillation
TRH	thyrotrophin releasing hormone	VLDL	very low density lipoprotein
TSH	thyroid stimulating hormone	VMA (also HMMA)	vanillyl-mandelic acid
TTA	to take away	VQ scan	ventilation perfusion scan
TTO	to take out	VSD	ventriculo-septal defect
TU	tuberculin units	VT	ventricular tachycardia
TURP	transurethral retrograde prostatectomy	WBC	white blood cell
TURT	transurethral retrograde tumourectomy	WCC	white cell count
u (U)	units	WPW	Wolff–Parkinson–White syndrome
U&E	urea and electrolytes	ZN	Ziehl–Nielsen stain
UC	ulcerative colitis	Zn	zinc

Chapter 1

STARTING UP

Day one of your first job is rarely the nightmare you think it will be. Half of it is taken up by firm meetings and introductions to the hospital. During the other half you will be introduced to the wards. It's all over before you know what's happening. You are finally a real doctor. And then it's day two and you have to get on with the job...

Panic?

Never panic. The thing that strikes terror into the hearts of day-one junior doctors is the thought that they, alone, are expected to battle with disease and death when they have never given an IV drug in their life and don't know how to plug in the paddles of the cardiac arrest trolley. That's if they know where to find it. The ward and hospital are often unfamiliar. The whole thing is enough to give you a nasty rash, which many junior doctors do get.

The one thing to remember is: **YOU ARE NOT ALONE.** You are a modest, essential cog in a vast machine which churns away quite happily whether you know exactly what you're doing or not. You soon will. Nobody expects you to know much on the first day – or even in the first month. And everyone will show you what to do.

People to help you

You are surrounded by people who can help you. All you need to do is to ask them. They include:

1 Nurses who often know more about what you are doing than you do, as they have watched and done it for years.

2 Patients who want to be treated kindly, properly and with as little pain as possible.

3 Other doctors who love to demonstrate their skill at just about everything and are always open to requests for help.

- Problems arise when junior doctors do NOT ask for help. If you feel panic rising in your throat, just ask for help. This is counter-intuitive for self-reliant medics, but it saves lives (yours and the patient's).

- Attend orientation day for junior doctors if the hospital has one. It is useful for finding out what the hospital can do for you. They can be painful and bureaucratic at times but there are often sources of important information.

- If possible contact your predecessors before their last day on the job. They can give you invaluable information about what to expect from your new job (the idea for this book originally came from a request for help from a new junior doctor). In particular, ask them about what your new consultants do and do not like and how to access the computer systems.

- Most people find that they are physically exhausted during their first week of work. Such fatigue passes as you get used to the hospital and new routines.

Three basic tips

1 Always take the initiative in hospitals. If things are not working, do something about it. Big institutions can become bad places to work in just because no one bothers to address things that are clearly going wrong. Figure out a solution and contact whoever is in charge of the problem, whether it be a doctor, nurse, manager or the porter.

2 Similarly, take initiative in managing patients. Present seniors with a plan for your patients rather than just asking them what to do. Don't be afraid to look beyond what is asked of you. If you feel that a patient has a problem that your team is not interested in then don't just ignore it, take the initiative. Thinking strategically actually makes work more fun and prepares you for more responsibility.

3 Order your work. When tasks are being fired at you from all directions, priority-setting is really important. Try to learn early on which things are super-urgent and which can wait for more peaceful moments. Despite the hype, there is quite a lot of down time in your junior doctor year (unless you are very unlucky or disorganized!).

Other useful start-up information

Dress

It is worth bearing in mind that patients often dress up to the nines to 'visit the doctor'. I once watched an elderly woman with deteriorating eyesight, high-heeled shoes and lopsided make-up hobble over the hospital lawn to visit the diabetes clinic. Having always dressed casually, I dressed my best from then on.

■ Changing from student to doctor mode can put grave dents into your early pay cheques. If nothing else, buy good-quality shoes which will look good and will stay comfortable on your 36th hour.

■ You may get stained with all sorts of unmentionable substances as a junior doctor. *Stain Devils* from supermarkets and household stores can remove most things. Soaking garments in cold water and lots of soap, followed by a normal machine wash removes blood stains.

■ A few hospitals will reimburse you for dry cleaning bills associated with work-related accidents, such as major blood stains on suits. Phone hospital personnel through the switchboard.

■ While wearing theatre scrubs ('blues') on the wards can be all the rage, doing so is an infection risk and frowned on by some hospitals. If you have to wear them outside theatre, remember to change regularly and return them to the hospital laundry to be washed! Wearing them outside hospital grounds is definitely not acceptable.

Equipment

Always carry:

1 Pen (more than one). Black is the only acceptable colour unless you are a pharmacist.

2 Notebook/PDA/piece of paper.

3 Stethoscope.

4 Tourniquet (if you are happy with the hospital's disposable ones this may not be necessary).

5 Torch.

6 Pager/bleep.

7 Cash for food/drink/newspaper.

8 Ophthalmoscope (if not readily accessible on wards) or at least a torch for papillary reactions and looking in mouths.

9 You should also have access to a neurology kit (tendon hammer, orange sticks, neuropins, tuning fork and Snellen's eye chart).

- You may wish to carry everything in a traveller's pouch or a small shoulder bag.
- Things often get misplaced so you should label anything you cannot afford to lose with your name, either by engraving or hospital wrist bands.
- Junior doctors definitely need access to ophthalmoscopes. Ward ophthalmoscopes have an amazing tendency to walk and to run out of batteries. Therefore, buy your own portable ophthalmoscope, and examine people's eyes at every opportunity. It is a great skill to have but takes time to acquire. Pocket veterinary ophthalmoscopes are sometimes the most portable, cheap and reliable, and little known to medics – as they are advertised for vets.
- Ask your ward pharmacist for a couple of aliquots of tropicamide (0.5%) to carry in your top pocket. One to two drops greatly facilitates ophthalmic examination. It takes a few minutes to work. Warn the patient they may have blurred vision and sensitivity to light for a few hours, record the procedure in the notes and tell the nurse. Having failed to do the latter, you are liable to be fast bleeped by a nurse who thinks the patient is coning. It is sensible to dilate both eyes, not only to avoid mistaken neurology but also to allow you to view and compare the fundi. Never use tropicamide in patients with a history of glaucoma or eye surgery. You should also avoid alternatives like cyclopentolate as these can take weeks for the eye to return to normal.
- Consider carrying a ring binder (see Chapter 2) containing important team info, a handful of blood forms; radiology requests; blank drug charts; and history,

discharge summary and TTO sheets. Such a binder allows you to do a lot of the paperwork on ward rounds, before it gets forgotten. It also saves having to dash off to the stationery drawers in the middle, which tends to go down badly with seniors.

First-day paperwork

The first day is mainly paperwork. Here is a checklist of documents to bring:

- GMC registration certificate
- Medical indemnity certificate (e.g. Medical Defense Union or Medical Protection Society)
- Bank details
- Induction pack and contract from the Trust
- Occupational health report (and data card if you have one)

Geography

- Get a map of the hospital from reception to help you learn where everything is.
- Specifically, find out the location of: blood gas machines, canteen, casualty, wards, radiology department, doctors' mess, drink machines, endoscopy, labs for crucial bloods, nuclear medicine and on-call rooms.

Ward rounds

Think of yourself as the ward round producer (much of it is performance). Give yourself at least 15 minutes' preparation time to have everything ready. For each patient, be prepared to supply at the drop of a hat:

- 1 Patient ID (name, age, date of admission, occupation, presenting complaint).
- 2 Changes in condition and management since last round (with dates of change).

3 Results (any investigations carried out recently).

4 Assessment (physical, social, psychological).

5 Plan for in-patient management (future investigations, ops, drugs).

6 Plan for discharge (see Discharging patients, below).

It is helpful to print off a list of patients to give to consultants and the senior registrar, which includes 1, 2, 3 and 5 of the above.

■ Unless the patient asks for relatives to remain present, it is a generally a good idea to ask them to leave the room while the team examines the patient. Curtains are not sound proof. People will often give more information if their relatives are absent.

■ Ask your registrar which investigations to have available. If your hospital uses an electronic reporting system such as PACS (patient archiving and communications system) then you may wish to access the important scans before the ward round so that your seniors can look at them without too much disruption.

■ Each consultant has up to five pet details that he or she wants to know about each patient. Find out what these are from your predecessor and supply them tirelessly at ward rounds (these could range from occupation to ESR to whether or not the patient has ever travelled to the tropics).

■ Never say that you have done something you haven't, and never make up a result to please seniors. It is bound to backfire. If you realize you have given a piece of information that is wrong, admit it sooner rather than later.

■ Do not argue with colleagues (or anyone else) in front of patients.

■ Get a clear idea of the management plan for each patient. Sometimes instruc-

tions may be dealt out in a half-hearted way, only for you to learn later (to your cost) that they were meant in earnest. Do not allow seniors to get away with this. Make definite 'action points' and if your consultant cannot be pressed into being clear, then ask your registrar.

■ If you work with a partner, such as a fellow junior doctor, make sure that jobs arising from the round are clearly allocated. Meet up later for a 'paper round' to check important results, prioritize jobs and make sure that everyone is clear about what remain outstanding.

Social rounds

You need to let the social team know how your patient is going to cope (or not) on discharge.

1 Ask yourself: how is this patient going to manage physically, socially and mentally? Specifically, draw up a list of 'disabilities'. These are things that the patient *cannot do*, for whatever reason. From the Barthel Activities Index (Appendix, Barthel score), consider bathing, bladder, bowels, dressing, feeding, grooming, mobility, stairs, toilet, transfer.

2 Have relevant patient details ready (see below). Most are available from the medical notes and the front-page admissions sheet. Otherwise try the nurses, nursing notes, the patient, relatives and the GP.

3 If you are required to give a history, try to include the following points:

- Patient ID.
- Prognosis: short and long term.
- GP and admitting rights to local hospitals (usually in the admission sheet at the front of the notes and dependent on home address).
- Type of residence and limitations (e.g. stairs).

- Home support and previous reliance on social services.
- Financial status.
- Special problems which need to be addressed (physical, social, mental, legal).
- Questions you want to ask members of the multidisciplinary team to help you plan for discharge of the patient.

4 Go to the meeting with specific questions you want answered. Make sure you come away with 'action points' – not just vague gestures from various team members about your patient's care (this goes for all ward rounds).

5 Translate medical jargon into normal English for social rounds, as some members of the social team may not be fully fluent in medical acronyms.

6 Familiarize yourself with key people from local rehabilitation services, residential homes, nursing homes and alcohol support services. Effective liaison can prevent or at least curtail hospital admission.

Night rounds

As a junior doctor your experience of night shifts may be limited. However, it is important to do a quick night round before you leave for home. If you are covering overnight this can mean the difference between a relatively happy night and a sleepless nightmare. Even if you are not on overnight you still have a responsibility to leave your patients well tended to for the night shift. This will take the stress of the night cover (which will one day be you) and protect your patients from being neglected while you are away. If you do nothing else, make sure you have checked off the following before going to bed:

- 1** Analgesia.
- 2** Fluids.

3 Infusions (on the few occasions where you are required to make them up, leave them in the fridge and tell the nurses where they are).

4 Sedation.

5 Sign for drugs you have verbalised during the evening (Chapter 9, Verbals).

6 Ask each team nurse on the night shift if he or she has problems that need sorting out before the morning.

- If possible start your night round *after* the night nurses' start of shift and drug rounds have been completed. This is when they identify problems that you need to deal with before going to bed.

- If you are the covering doctor then tell night staff to bleep you if they are concerned about a patient. Paradoxically, this combined with reassurance and information about worrisome patients cuts down bleeps.

- Inform every team nurse of what to do if a sick patient's condition changes. Sometimes you can set limits for relevant signs (e.g. pulse, CVP, T, BP) beyond which you want a doctor to be called. Write these in the notes. Many hospitals have 'early warning systems' that do this job for you and tell nurses when they should contact a doctor or nurse specialist.

- If bleeped for an apparently trivial matter overnight, try your best not to sound irritated. Be ready to go to the ward, even if only to provide reassurance. Again, paradoxically, this reduces bleeps. If nurses are confident that you will turn up if requested, they will not bleep you ahead of time.

- If the on-call room is a long way from the wards, there may be somewhere that you can sleep on the ward. Ask the sister or charge nurse. Be very careful though as some trust have taken disciplinary action against doctors sleeping in side rooms at night.

Discharging patients

Clearing hospital beds is an invaluable skill that will earn you lots of brownie points from virtually everyone. To clear beds effectively:

1 Make plans for people's discharge on the day they arrive. Ask yourself:

- When will they be likely to leave?
- What will get in the way of this person going home or being transferred?
- What can be followed up in clinic?

2 If possible, write discharge summaries (Chapter 3, Discharge summaries (TTO/TTA)), sending the TTO (drug prescriptions) to the pharmacists early in the day to avoid delays. Beware of last minute changes to medications if you do this, errors can and do occur.

Work environment

Evidence suggests that upgrading your environment upgrades your work – and you. Old, decrepit NHS hospitals can be depressing. There are ways you can make your particular corner of it a great place to work, even if the rest of the hospital has miles of yellow peeling paint, dripping pipes and corridors of empty wards.

■ There is no crime in asking hospital supplies for better furniture and accessories, like shelving, desk, chairs or bulletin boards. They can always say no.

■ You could take a plant to work.

■ If you have a tiny desk (or no desk), order a better one. Ring hospital supplies and ask if there is a spare one somewhere. Or request a new one. There's nothing like drawers that slide open easily for making paperwork easy. As a doctor with tons of notes to write, you are entitled to a desk of some kind.

■ Consider buying a personal music player. Label it clearly and lock it away. It

can do wonders for long winter weekends and nights on call.

■ Put postcards/pictures/photos up in your work area. If you don't have a bulletin board, order one from hospital supplies. Again, some managers frown on this but if it's in an area to which patients do not have access, like the doctor's room, then you should be fine.

■ Most hospitals provide a computer in the doctor's room. Make sure you get as much internet access as local policy allows. Carry a portable USB hard drive. It will allow you to carry your work with you.

■ Bring decent coffee or cocoa supplies to work. A single-cup cafetière, some packs of coffee at the back of the ward fridge and a jar of your favourite spread can upgrade your existence no end.

■ Be nice to your team, bring them biscuits and buy them coffee and they'll do the same for you. Work must be enjoyable and if the people around you are happy then you will be too.

Bibliography

Most junior doctors read little other than fiction during their job. You probably don't need to buy anything you don't already have. A few recommended texts and online resources are:

■ *Pocket Prescriber*: Nicholson T., Gunaratne A., Singer D. (2009) Hodder Arnold, London. A brilliant and truly portable little text, useful for checking those common drugs on a ward round.

■ *Acute Medicine*: Spriggs D., Chambers J. (2007) Wiley Blackwell, Oxford. A comprehensive guide to emergencies.

■ *Pocket Examiner*: Hill C.S. (2009) Wiley Blackwell, London. A pocket-text of clinical examinations.

■ *Oxford Handbook of Clinical Medicine*: Hope R.A. (Editor), Longmore J.M., Wilkinson I., Turmezei T., Cheung C.K. (2007) Oxford University Press, Oxford. A great pocket reference text for medical conditions.

■ *Surgical Talk*: Goldberg A., Stansby G. (2005) Imperial College Press, London. Commonly asked topics for those awkward theatre moments.

■ *The ECG Made Easy* (and sequel, *The ECG in Practice*): Hampton J. (2008) Churchill Livingstone, Edinburgh. An approachable guide to the mysteries of the ECG.

■ *Clinical Medicine*: Kumar P., Clark M. (2009) Saunders, London. Love it or hate it, it probably answers most of the medical questions you could ever ask.

■ *Rapid Medicine*, Sam A.H. et al. (2010) and *Rapid Surgery*, Baker C. et al. (2010) Wiley Blackwell, Oxford. Both are memory joggers for core facts.

■ *Junior Doctors' Handbook*: Published annually by the BMA, free to members. An excellent summary of your rights and useful information for your early years as a doctor.

■ *Map of Medicine*: A set of 300 flow-charts covering the community and specialist aspects of the 300 'top' conditions. An excellent and interactive quick reference. It is free to NHS professionals in

England and Wales; you need an Athens password for the professional version (www.mapofmedicine.com). The read-only version is available through NHS Choices.

Recommended texts for the medical specialties (SHO level texts) include:

■ *Lecture Notes: Respiratory Medicine*: Bourke S. (2007) Wiley Blackwell, Oxford. Beautiful explanations of the pathophysiology and principles of management of respiratory disease. A very good primer for a Chest Unit job.

■ *The Little Black Book of Neurology*: Zaidat O., Lerner A. (2008) Saunders, New York. A concise but very detailed guide to clinical neurology.

■ *Essential Haematology*: Hoffbrand A., Pettit J., Moss P. (updated every reprint; the most recent edition, 2011) Wiley Blackwell, Oxford. A superb book!

■ *Essential Endocrinology and Diabetes*: Holt R., Hanley N. (2006) Wiley Blackwell, Oxford. Another very useful primer for an Endocrine job.

We haven't found any particularly good small books for rheumatology or nephrology so we recommend using the appropriate chapter in any medical textbook such as Kumar and Clark.

For fun and rapid insight into the world you are entering, try the classic: *House of God*, Sham S. (1978).

Chapter 2

GETTING ORGANIZED OR 'THE FOLDER'

Keeping track of patients and their details can be the bane of your life as a junior doctor. Filling in forms after work is a waste of precious evenings. Fortunately, you can greatly reduce the time you spend chasing paper, patients and results with the core weapon in a junior doctor's arsenal: a folder.

Personal folder and the lists

A well-organized ring-binder folder can save days of time. Unlike a Filofax or PDA, a folder provides a decent writing surface at the bedside and an immediate supply of forms during ward rounds, so that you can do all the paperwork during rounds and don't have to return to the ward later. As well as saving time, a folder means you are less likely to forget things, because you can do many tasks as soon as they are requested. Although they look great and are very powerful, iPads and the like still weigh a lot more than a paper folder and don't synchronize (yet) with hospital electronic medical record systems.

How to make a personal folder

You need one A4 ring-binder folder and brightly coloured dividers. Also consider getting sheets of pre-punched transparent plastic pockets. Fill the folder with all the different forms you use during the day, stacking each type of form behind

different dividers. Label the dividers. Stuff blank forms (e.g. blood forms) into the plastic pockets. Useful forms include: blood cards (biochemistry, haematology, bacteriology and cross match), radiology and nuclear medicine request cards, drug charts and fluid charts, spare continuation/history sheets, discharge forms (if these are still paper in your hospital), commonly used telephone numbers, a firm timetable and any foundation assessment forms.

1 You can almost always find a hole-puncher at the ward clerk's desk.

2 Consider sticking common drug regimens to the front of the folder for easy reference. These might include heparin dosing, insulin sliding scales, GTN and morphine infusions, gentamycin dosing and other frequently used antibiotic regimens. Common antibiotic regimens and doses.

3 Hospitals have their own days for doing specialty procedures (such as isotope scans and endoscopy). Colleagues and relevant departments will know what these are. Get a copy of your team's timetable. Find out from your colleagues

Name	Extension	Name	Extension
Accident & Emergency		Microbiology	
Anaesthetist on-call bleep		Occupational therapy	
Bed manager		Outpatient clinics	
Biochemistry		Pain team	
Blood transfusion		Pharmacy – general	
Cardiology on-call bleep		Pharmacy – drug info	
Coronary care unit		Physiotherapy	
Discharge coordinator		Porters	
Doctors' mess		Psychiatry team	
ECG		Radiology – CT scanning	
Echocardiogram		Radiology – general	
Endoscopy		Radiology – portable films	
Eye clinic		Radiology – secretaries	
Food – local takeaway		Registrar bleeps (your dept.)	
Haematology		Secretaries (your dept.)	
Histology		SHO bleeps (your dept.)	
Intensive therapy unit		Surrounding hosp. quickdial	
IT department		Theatre list coordinator	
Matron		Thrombolysis nurse bleep	
Medical records		Ward extensions	
Medical staffing			

Fig. 2.1 Essential telephone numbers.

what you need to bring for team activities such as radiology conferences, academic events and mortality/morbidity meetings.

4 Phone numbers are essential. Making a list early saves a lot of time. You can shrink the list and stick it on the front of your ward folder for easy reference. Another option is to include it in a small font on the bottom of your patient list so it is reprinted each day. Get out-of-hours contact numbers as well. From experience, it is easier to find names if the list is strictly alphabetical. Copy or modify Fig. 2.1 if you like.

In addition to the sundry paperwork above, you will also need to generate

three lists daily. These need not be in physical paper form; it can be a digital copy in a PDA or USB memory stick, but a physical one is always handy. Spreadsheets are actually better than word-processors for organizing lists, as they have all kinds of sorting functions. The necessary lists are:

1 The patient list (i.e. the master list)

2 The job list

3 Results sheet

Some doctors combine the three but it is often useful to have a paper copy of each.