Fourth Edition

The Hands-on Guide for Junior Doctors

Anna Donald
Michael Stein
Ciaran Scott Hill

WILEY-BLACKWELL

The Hands-on Guide for Junior Doctors

The Hands-on Guide for Junior Doctors

Fourth Edition

ANNA DONALD
BA (Sydney), BM, BCh (Oxon), MPP (Harvard)
Late of Bazian Ltd, London

MICHAEL STEIN
MB ChB, BSc (Hons) (UCT), DPhil (Oxon)
Chief Medical Officer, Map of Medicine, London
and Medical Advisor, Hearst Business Media,
Hearst Corporation, New York

CIARAN SCOTT HILL
BSc (Hons) MSc (Clin. Neuro.) MBBS MCSP MRCS MRCP
Speciality Trainee in Neurosurgery, London

WILEY-BLACKWELL
A John Wiley & Sons, Ltd., Publication

This edition first published 2011 © by A Donald, M Stein and C S Hill
Previous editions published 1996, 2002, 2006

Blackwell Publishing was acquired by John Wiley & Sons in February 2007. Blackwell's publishing program has been merged with Wiley's global Scientific, Technical and Medical business to form Wiley-Blackwell.

Registered Office
John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

Editorial Offices
9600 Garsington Road, Oxford, OX4 2DQ, UK
The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK
111 River Street, Hoboken, NJ 07030-5774, USA

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com/wiley-blackwell

Library of Congress Cataloging-in-Publication Data

Donald, Anna.
The hands-on guide for junior doctors / Anna Donald, Michael Stein, Ciaran Scott Hill. – 4th ed.
p. ; cm.
Includes bibliographical references and index.
ISBN 978-1-4443-3466-1 (hardcover : alk. paper)
I. Residents (Medicine)–Handbooks, manuals, etc. 2. Medicine–Handbooks, manuals, etc.
I. Stein, Michael. II. Hill, Ciaran. III. Title.
[DNLM: 1. Medical Staff, Hospital–organization & administration–Great Britain–Handbooks.
2. Clinical Competence–Great Britain–Handbooks. 3. Internship and Residency–organization & administration–Great Britain–Handbooks. 4. Medicine–Great Britain–Handbooks. WX 203]
RA972.D66 2006
610.92–dc22

20100039148

A catalogue record for this book is available from the British Library.

Set in 8/10pt Humanist by SPi Publisher Services, Pondicherry, India

Contents

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

CTG	cardiotocography
CV	curriculum vitae
CVA	cerebrovascular accident
CVP	central venous pressure
CVS	cardiovascular system
CXR	chest X-ray
D&V	diarrhoea and vomiting
DDAVP	desmopressin
DIC	disseminated intravascular coagulation
DIP	distal interphalangeal
DKA	diabetic ketoacidosis
dl	decilitre(s)
DM	diabetes mellitus
DNR	do not resuscitate
DOA	date of admission
DOB	date of birth
DOD	date of death
DoH	Department of Health
DVLC	Driver and Vehicle Licensing Centre
DVT	deep venous thrombosis
DXT	radiotherapy
EBV	Epstein–Barr virus
ECG	electrocardiogram
ECHO	echocardiography
EDTA	ethylene diamine tetra-acetic acid
EEG	electroencephalogram
ELISA	enzyme-linked immuno-sorbent assay
EM	electron microscope
ENT	ear, nose and throat
EPC	early pregnancy clinic
ERCP	endoscopic retrograde cholangiopancreatography
ESR	erythrocyte sedimentation rate
FBC	full blood count
FDP	fibrin degradation product
FEV_1	forced expiratory volume in first second
FFP	fresh frozen plasma
FOB	faecal occult blood
FSH	follicle stimulating hormone
FVC	forced vital capacity
Fx	family
FY1	Foundation Year 1
FY2	Foundation Year 2
g	gram(s)
G&S	group and save
G6PD	glucose-6-phosphate dehydrogenase
GBM	glomerular basement membrane
GCS	Glasgow Coma Scale
GFR	glomerular filtration rate
GGT	gamma-glutamyl transferase
GH	growth hormone
GI (GIT)	gastrointestinal
GKI	glucose, potassium and insulin
GMC	General Medical Council
GN	glomerulonephritis
GP	general practitioner
GT	glutamyl transferase
GTN	glyceryl trinitrate
GTT	glucose tolerance test
GU	genito-urinary
HB	heart block
Hb	haemoglobin
HBsAg	hepatitis B surface antigen
Hct	haematocrit
HDL	high density lipoprotein
HDU	high dependency unit
Hep	hepatitis
HiB	*Haemophilus influenzae* B vaccine
HIV	human immunodeficiency virus
HLA	human leukocyte antigen
HO	House Officer
HOCM	hypertrophic obstructive cardiomyopathy
HPC	history of presenting complaint
HS	heart sounds
HT	hypertension
IBD	inflammatory bowel disease
IBS	irritable bowel syndrome

ICP	intracranial pressure
ID	identification
IDDM	insulin-dependent diabetes mellitus
Ig	immunoglobulin
IHD	ischaemic heart disease
IM	intramuscular
INR	international normalized ratio (prothrombin ratio)
IPPV	intermittent positive pressure ventilation
ISDN	isosorbide di-nitrate
ITP	idiopathic thrombocytopenic purpura
ITU	intensive therapy unit
iu (IU)	international unit
IUCD	intrauterine contraceptive device
IV	intravenous
IVC	inferior vena cava
IVI	intravenous infusion
IVU	intravenous urography
JAMA	*Journal of the American Medical Association*
JVP	jugular venous pressure
K^+	potassium
KCCT	kaolin-cephalin clotting time
KCl	potassium chloride
kg	kilograms
kPa	kilopascals
L	left
l	litres
LBBB	left bundle branch block
LDH	lactate dehydrogenase
LDL	low density lipoprotein
LFT	liver function test
LH	luteinizing hormone
LIF	left iliac fossa
LMN	lower motor neurone
LMP	last menstrual period
LOC	loss of consciousness
LP	lumbar puncture
LUQ	left upper quadrant
LV	left ventricle
LVF	left ventricular failure
LVH	left ventricular hypertrophy
mane	in the morning
MC&S	microscopy, culture and sensitivity
MCV	mean cell volume
MDU	Medical Defence Union
Mg	magnesium
mg	milligrams
MI	myocardial infarction
ml	millilitres
mmHg	millimetres of mercury
MND	motor neurone disease
MPS	Medical Protection Society
MRI	magnetic resonance imaging
MRSA	methicillin resistant *Staphylococcus aureus*
MS	multiple sclerosis
MSK	musculoskeletal
MST	morphine sulphate tablets
MSU	midstream urine
N&V	nausea and vomiting
Na	sodium
NB	*nota bene* (note well)
NBM	nil by mouth
NEJM	*New England Journal of Medicine*
NGT	nasogastric tube
NIDDM	non-insulin dependent diabetes mellitus
nocte	in the evening
NR	normal range
NSAIDs	non-steroidal anti-inflammatory drugs
O&G	obstetrics and gynaecology
obs	observations
OCP	oral contraceptive pill
OD	overdose
od	once a day
PaCO_2	partial pressure of CO_2 in arterial blood
PAN	polyarteritis nodosa
Pap	Papanicolaou
PaO_2	partial pressure of O_2 in arterial blood
PAYE	pay as you earn
PBC	primary biliary cirrhosis
pc	*post cibum* (after food)

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

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

The Hands-on Guide for Junior Doctors, Fourth Edition. Anna Donald, Michael Stein and Ciaran Scott Hill.

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 loose 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 instructions 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 verballed 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., Gunarathne 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*: Sprigings 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 flowcharts 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

The Hands-on Guide for Junior Doctors, Fourth Edition. Anna Donald, Michael Stein and Ciaran Scott Hill.

Name	Extension
Accident & Emergency	
Anaesthetist on-call bleep	
Bed manager	
Biochemistry	
Blood transfusion	
Cardiology on-call bleep	
Coronary care unit	
Discharge coordinator	
Doctors' mess	
ECG	
Echocardiogram	
Endoscopy	
Eye clinic	
Food – local takeaway	
Haematology	
Histology	
Intensive therapy unit	
IT department	
Matron	
Medical records	
Medical staffing	

Name	Extension
Microbiology	
Occupational therapy	
Outpatient clinics	
Pain team	
Pharmacy – general	
Pharmacy – drug info	
Physiotherapy	
Porters	
Psychiatry team	
Radiology – CT scanning	
Radiology – general	
Radiology – portable films	
Radiology – secretaries	
Registrar bleeps (your dept.)	
Secretaries (your dept.)	
SHO bleeps (your dept.)	
Surrounding hosp. quickdial	
Theatre list coordinator	
Thrombolysis nurse bleep	
Ward extensions	

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.