

Contents

<i>List of contributors</i>		xiv
<i>Preface</i>		xvi
<i>Acknowledgements</i>		xvii
<i>About the companion website</i>		xviii
Chapter 1 Professionalism in paramedic practice <i>Netta Lloyd-Jones</i>		1
Introduction		2
Professionalism in paramedic practice		2
Defining professionalism		3
Professionalism as ethical practice		3
Professional identity, socialisation, and culture		4
How do students learn professionalism?		6
Assessment and standards of professionalism		7
Regulatory areas, fitness to practise processes, and outcomes		8
Conclusion		9
Activities		9
Glossary		10
References		10
Chapter 2 Professional health regulation for paramedicine and ambulance prehospital emergency care <i>Ramon Z. Shaban, Ruth Townsend</i>		12
Introduction		13
Principles for paramedic professional health regulation		13
Health professional regulation for paramedic professionalism		14
The UK experience		15
Paramedics behaving badly		18
The Australian experience		19
Conclusion		20
Activities		21
Glossary		21
References		22

Chapter 3	Human factors in paramedicine	23
	<i>Sam Willis, Helen Pocock</i>	
	Introduction	24
	What are human factors?	24
	Human error in paramedicine	25
	Tasks	26
	Organisation	27
	Tools and technology	28
	Environment	28
	Interactions	29
	Human factors in paramedic practice	29
	Conclusion	32
	Activities	32
	Glossary	33
	References	33
Chapter 4	Mental capacity and prehospital care	35
	<i>Sue Putman</i>	
	Introduction	36
	What is mental capacity?	36
	How do we make decisions?	37
	Assessing mental capacity	38
	The five principles	39
	Additional mental capacity safeguards	43
	Conclusion	45
	Activities	46
	Glossary	46
	References	47
Chapter 5	Mental health and prehospital care	48
	<i>Sue Putman</i>	
	Introduction	49
	What is 'mental health'?	49
	What are 'mental disorder' and 'mental illness'?	50
	Emotions (mood) and behaviour	52
	ABC model of emotion	52
	Brief outline of common mental illnesses	52
	General strategies to help with all mental health conditions in the prehospital environment	56
	Mental health act	57
	Conclusion	57
	Activities	58
	Glossary	58
	References	58
Chapter 6	Communication skills for the prehospital professional	60
	<i>Sam Willis, Gary Mellor</i>	
	Introduction	61
	Background	61
	The importance of effective communication	62

A model of communication	62
Nonverbal communication	63
Verbal communication	68
Effective listening	69
Empathy	70
Barriers to effective communication in the prehospital setting	70
Conclusion	71
Activities	71
Glossary	72
References	73

Chapter 7 Sociological aspects of paramedic practice 74

Kellie Tune

Introduction	75
The sociological imagination	75
Three sociological paradigms	76
The sociocultural context of health	78
Medicalisation and demedicalisation	80
Conclusion	80
Activities	80
Glossary	82
References	82

Chapter 8 Legal and ethical aspects of paramedic practice 84

Ruth Townsend, Sam Willis, Nevin Mehmet

Introduction	85
Legal aspects of paramedic practice	85
Ethical aspects of paramedic practice	90
Ethical principles: An ethical framework	92
Conclusion	93
Activities	93
Glossary	94
References	94

Chapter 9 Leadership and mentorship in paramedic practice 95

Roger Dalrymple

Introduction	96
Theories of leadership: a brief overview	97
Definitions of leadership	98
From leaders to leadership behaviours	98
Leadership styles and approaches	99
Leadership at the individual level	100
Leadership and the mentoring or supervisory role	101
Leadership and team work	103
Ongoing leadership development	104
Conclusion	104
Activities	104
Glossary	105
References	106

Chapter 10	Safeguarding adults at risk of abuse and neglect	107
	<i>Rozz McDonald</i>	
	Introduction	108
	Legislation and policy	108
	Types of abuse and neglect	110
	Recognising abuse and neglect	110
	Radicalisation and extremism	115
	Practice principles of safeguarding	116
	Paramedic responsibilities	116
	Conclusion	119
	Activities	119
	Glossary	119
	References	120
Chapter 11	Essential toxicology for prehospital clinicians	122
	<i>Jack Matulich</i>	
	Introduction	123
	Pharmacokinetics in toxicology	124
	The importance of clinical context and vulnerability	125
	The initial resuscitative approach in toxicology	126
	Toxidromes	130
	Activities	139
	Glossary	140
	References	141
Chapter 12	Medical terminology	142
	<i>Steve Whitfield, Michael Porter</i>	
	Introduction	143
	A brief history (Hx) of medical terminology	144
	Medical terminology and word structure	145
	Prefixes and suffixes	145
	The building blocks of medical terms	148
	Pronunciation of medical terms	149
	Forming plurals	150
	Eponyms	150
	Anatomical positions	151
	Movement terminology	154
	Medical abbreviations and acronyms	154
	Common similarities in terminology	160
	Spelling – British versus American English	161
	Conclusion	161
	Activities	162
	Glossary	162
	References	163

Chapter 13	Research methods and paramedic practice	164	ix
	<i>Jan Davison-Fischer, Catherine J. Davison-Fischer, Roger Dalrymple</i>		
	Introduction	165	
	Qualitative and quantitative research	165	
	Ethics	167	
	Case reports	167	
	Case control studies	167	
	Questionnaire studies	168	
	Interview studies	170	
	Focus group studies	170	
	Observational and participatory studies	170	
	Before-and-after studies and routinely collected data	171	
	Randomised controlled trials	171	
	Longitudinal cohort and panel studies	172	
	Critical literature reviews	172	
	Conclusion	175	
	Activities	175	
	Glossary	176	
	References	176	
Chapter 14	Trauma	178	
	<i>Charlie McGurk, Sam Willis, Alice Acutt</i>		
	Introduction	179	
	Head injuries	179	
	Facial injuries	182	
	Neck and back injuries	183	
	Chest injuries	185	
	Abdominal injuries	188	
	Pelvic injuries	189	
	Limb injuries	190	
	Upper limb injuries	191	
	Shock	192	
	Conclusion	192	
	Activities	192	
	Glossary	193	
	References	194	
Chapter 15	Prehospital electrocardiography	195	
	<i>Nathan Puckeridge</i>		
	Introduction	196	
	What is an ECG?	196	
	P, Q, R, S, and T waves	197	
	Evaluating the ECG	198	
	Atrioventricular heart blocks	201	

	Performing and reviewing a 12-lead ECG	202
	Acute coronary syndromes and the ECG	203
	Idioventricular rhythm	204
	Bundle branch blocks	205
	Conclusion	205
	Activities	206
	Glossary	206
	References	207
Chapter 16	Assessing the cardiac system	208
	<i>Mark Ives, Sam Willis, Sonja Maria, Clare Sutton</i>	
	Introduction	209
	Cardiac anatomy and physiology	209
	Common cardiac conditions	211
	Patient assessment	215
	Conclusion	224
	Activities	224
	Glossary	225
	References	225
Chapter 17	Assessing the nervous system	227
	<i>Clair Merriman</i>	
	Introduction	228
	Nervous system: structure and function	228
	Central nervous system	229
	Peripheral nervous system	232
	Upper and lower motor neurones	233
	History and physical examination	233
	Conclusion	241
	Activities	241
	Glossary	242
	References	242
Chapter 18	Assessing the abdomen	243
	<i>Matthew Faulkner, Clare Sutton, Georgina Pickering</i>	
	Introduction	244
	Abdominal anatomy and physiology	244
	Patient assessment	254
	Conclusion	261
	Activities	261
	Glossary	262
	References	263
Chapter 19	Respiratory assessment	264
	<i>Dan Staines, Samantha Sheridan, Georgina Pickering</i>	
	Introduction	265
	Respiratory anatomy and physiology	266
	Pathophysiology of respiratory conditions	268
	Patient assessment	268

Conclusion	278	xi
Activities	278	
Glossary	279	
References	279	
Chapter 20 Paramedic assessment skills	280	
<i>Duncan McConnell</i>		
Introduction	281	
Part 1: The conscious patient	281	
Case study 1: Using the primary survey	283	
Case study 2: Implementing the secondary survey	287	
Case study 3: Completing the systematic approach	290	
Part 2: The unconscious patient	292	
Case study 4: The unconscious patient systematic approach	296	
Conclusion	299	
Activities	304	
Glossary	304	
References	305	
Chapter 21 Birth and the paramedic	307	
<i>Robb Kightley</i>		
Introduction	308	
Physiological birth	308	
Birth phases	309	
Preparing for the birth	311	
Paramedic intervention following normal childbirth	312	
Birth complications	313	
Conclusion	317	
Activities	317	
Glossary	318	
References	318	
Chapter 22 Paediatrics	319	
<i>Sam Whitby, Steve Whitfield, Kerry Wratt</i>		
Introduction	320	
Paediatric anatomy and physiology	320	
Paediatric examination	322	
Patient assessment triangle	322	
Paediatric emergencies	324	
Conclusion	334	
Activities	334	
Glossary	335	
References	335	
Chapter 23 Medical emergencies	337	
<i>Tianna Camilleri</i>		
Introduction	338	
Neurological emergencies	338	
Metabolic emergencies	341	

	End-of-life care	344
	Infection	345
	Immunological emergencies	349
	Conclusion	350
	Activities	350
	Glossary	351
	References	351
Chapter 24	Caring for older adults	353
	<i>Helen Pocock</i>	
	Introduction	354
	The elderly population	354
	Assessing older adults	355
	Physiology of ageing	355
	Frailty	358
	Trauma	360
	Falls	360
	Additional assessments in the elderly	362
	Pain assessment	362
	End-of-life care	363
	Conclusion	364
	Activities	364
	Glossary	365
	References	365
Chapter 25	Managing minor injuries in the prehospital setting	367
	<i>Craig Barlow</i>	
	Introduction	368
	Background	369
	The importance of history taking	369
	Consent to treatment	370
	Clinical examination	371
	Minor head injuries	373
	Nasal injuries	374
	Wound assessment and care	374
	Ankle injuries	376
	Minor burns	377
	Transporting minor injury patients	378
	Conclusion	379
	Activities	379
	Glossary	380
	References	382
Chapter 26	Major incident management	383
	<i>Kallai Sugden, Bede Wilson</i>	
	Introduction	384
	Managing the incident site: first ambulance on scene	385
	Declaring a major incident: METHANE and SAM	385

Casualty management	387
Incident management system	390
Emergency management	393
Conclusion	393
Activities	394
Glossary	394
References	395
Chapter 27 Low acuity	396
<i>Duncan McConnell</i>	
Introduction	397
What is low acuity care?	398
How to approach low acuity care patient assessment	400
Performing a systems review	402
Other physical assessment clues to assist the diagnosis	405
Gathering further clinical information from patients	407
Conclusion	409
Activities	409
Glossary	410
References	411
<i>Answers to activities</i>	412
<i>Index</i>	428