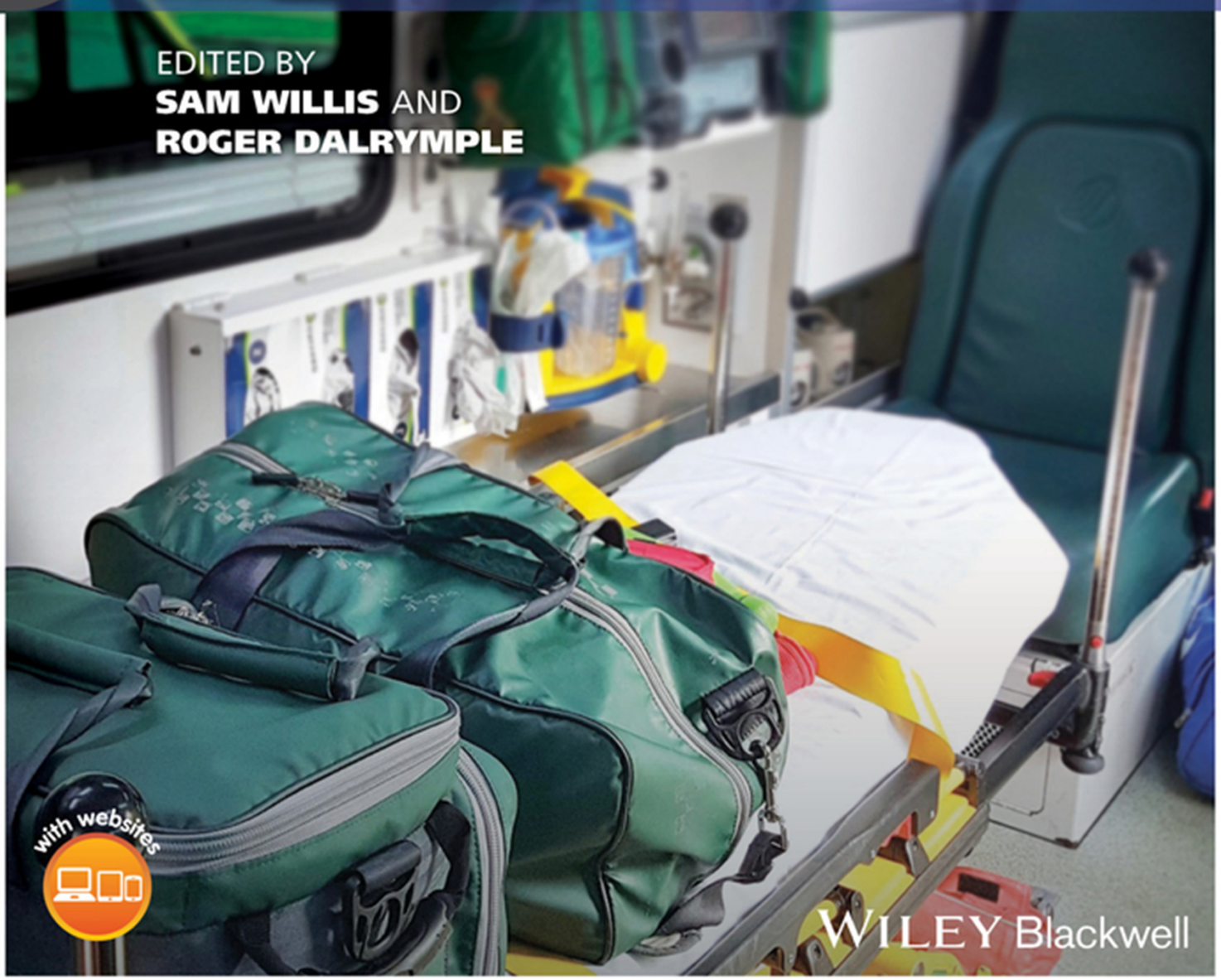
FUNDAMENTALS

SECOND EDITION

# Fundamentals of Paramedic Practice

## A Systems Approach

EDITED BY
**SAM WILLIS** AND
**ROGER DALRYMPLE**

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Fundamentals of

# Paramedic Practice

*Through my many years of teaching and working with students I have witnessed at first hand the personal sacrifices students make to complete their pre-university and undergraduate studies in paramedicine. This book is dedicated to those students who have a deep desire to help people in crisis through working as a paramedic, and are willing to move mountains to succeed in doing so.*

*Whether you think you can or can't, you're right.*
*Henry Ford*

Fundamentals of

# Paramedic Practice

## A Systems Approach

**Second Edition**


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# Contents

*List of contributors* xiv
*Preface* xvi
*Acknowledgements* xvii
*About the companion website* xviii

**Chapter 1** Professionalism in paramedic practice 1
*Netta Lloyd-Jones*

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 12
*Ramon Z. Shaban, Ruth Townsend*

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
*Sam Willis, Helen Pocock*

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
*Sue Putman*

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
*Sue Putman*

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
*Sam Willis, Gary Mellor*

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
*Rozz McDonald*

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
*Jack Matulich*

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
*Steve Whitfield, Michael Porter*

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
*Jan Davison-Fischer, Catherine J. Davison-Fischer, Roger Dalrymple*

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
*Charlie McGurk, Sam Willis, Alice Acutt*

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
*Nathan Puckeridge*

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
*Mark Ives, Sam Willis, Sonja Maria, Clare Sutton*

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
*Clair Merriman*

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
*Matthew Faulkner, Clare Sutton, Georgina Pickering*

Introduction 244
Abdominal anatomy and physiology 244
Patient assessment 254
Conclusion 261
Activities 261
Glossary 262
References 263

**Chapter 19** Respiratory assessment 264
*Dan Staines, Samantha Sheridan, Georgina Pickering*

Introduction 265
Respiratory anatomy and physiology 266
Pathophysiology of respiratory conditions 268
Patient assessment 268

Conclusion 278
Activities 278
Glossary 279
References 279

**Chapter 20** Paramedic assessment skills 280
*Duncan McConnell*

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
*Robb Kightley*

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
*Sam Whitby, Steve Whitfield, Kerryn Wratt*

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
*Tianna Camilleri*

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
*Helen Pocock*

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
*Craig Barlow*

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
*Kallai Sugden, Bede Wilson*

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
*Duncan McConnell*

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

*Answers to activities* 412
*Index* *428*

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# Preface

This fully revised second edition is a cause for celebration. It not only builds on the strengths of the first edition, which continues to sell globally, but serves as an acknowledgement of the rapidly changing face of paramedicine. The first edition influenced the paramedic profession in many ways: for instance, it has been adopted as a key text at universities around the world, and it is also used as a go-to guide by many clinicians and educators when they require a brief refresher on a given topic.

The face of paramedicine is rapidly changing. For example in the UK, paramedics are now able to prescribe certain medications, which reduces the burden of patients unnecessarily attending the emergency department. As mental health remains one of the key health priority areas in Australia and the UK, some regions can see specialist paramedics working with registered nurses to provide high-quality care to meet the needs of mental health patients in the community. These examples allow us to see the confidence the medical profession, politicians, and the public have in paramedics. Paramedic education must also continue to evolve to take into account new evidence, as well as changes to clinical practices that are based upon expert opinion, written in the absence of high-quality evidence.

So what is new about this second edition? It has been completely revised to ensure that it not only draws upon the most up-to-date research and evidence, but also reflects global economic and political changes that have impacts on the safe delivery of care by paramedics. Content revisions have occurred in every chapter, bringing them up to date with the most recent evidence.

This second edition also sees several brand new chapters which reflect the emerging developments in prehospital care. These include exciting new chapters on toxicology, medical terminology, and a chapter which acknowledges that ambulance service caseloads have a high incidence of low-acuity situations.

Many of the existing chapters have been almost completely rewritten, some of those by new contributors, giving them a fresh new look. These include chapters on human factors, paramedic skills, trauma, and major incident management, two chapters now covering mental health due to the huge demand for such information, and the leadership chapter incorporates new content on mentorship and professional learning. This time around a number of the chapters feature discussions on the ever-important topic of end-of-life care, something that remains central to paramedic practice.

Many of the chapter case studies have also been completely rewritten, and many of the end-of-chapter learning activities are new. We are also proud that this edition has maintained its strong connections with industry, drawing upon the many years' experience of practising clinicians, mainly paramedics, and we must not forget the enormous contribution made by clinical academics, who teach the next generation of paramedics and undertake research, and who have shared their wisdom and expertise in this edition.

Australian and UK standards of education and clinical practice share huge similarities, with many Australian graduates travelling to the UK to work as paramedics at a number of ambulance services over the past decade. This edition places a wider emphasis on such similarities and will be attractive to those who are studying in the UK and Australia, by including a wider contribution from Australian academics and clinicians. However, the second edition will still be suitable for any student preparing to work in a healthcare system that is similar to those of the UK and Australia.

Overall, the revisions in this second edition provide a contribution to the paramedic literature and will be appealing to student paramedics starting out at university, and may be a gentle refresher to those clinicians who need to get their heads back in the book. It will be particularly useful to mentor paramedics who are tasked with the rewarding but challenging role of developing student paramedics, but cannot find a text that provides simplifications of complex themes in paramedic practice.

Sam Willis

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This second edition received significant support from Abigail Milner, who assisted with collating images, chapter glossary construction, and learning materials.

# About the companion website

This book is accompanied by a companion website:

**www.wileyfundamentalseries.com/paramedic**

The website includes:

- Interactive multiple choice questions
- Case studies to test your knowledge
- 'Label the diagram' flashcards
- Glossary of terms used in each chapter
- Answers to activities

Scan this QR code to visit the companion website:

# 1

# Professionalism in paramedic practice

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## Contents

| | | | |
|---|---|---|---|
| Introduction | 2 | Assessment and standards of professionalism | 7 |
| Professionalism in paramedic practice | 2 | Regulatory areas, fitness to practise | |
| Defining professionalism | 3 | processes, and outcomes | 8 |
| Professionalism as ethical practice | 3 | Conclusion | 9 |
| Professional identity, socialisation, | | Activities | 9 |
| and culture | 4 | Glossary | 10 |
| How do students learn professionalism? | 6 | References | 10 |

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# Learning outcomes

On completion of this chapter the reader will be able to:

- Discuss the importance of professionalism in relation to paramedic practice.
- Identify three key themes of professionalism.
- Describe three concepts which influence professionalism.
- Describe how you may learn professionalism.
- Describe the potential outcomes of behaving unprofessionally.

# Case study

A paramedic student is on a hospital placement and has been allocated to work in the operating theatre suite. This is her second of four days in this placement and she is anxious about learning airway management. She enters an operating department anaesthetic room where an anaesthetist and an operating department practitioner (ODP) are with a conscious patient, preparing him for imminent anaesthetic for surgery. The paramedic student does not introduce herself to anyone and asks loudly: 'Can I practise intubation on this patient?'

## Introduction

Today's paramedic must not only demonstrate extensive clinical knowledge and skills for paramedic practice, but must also demonstrate **professionalism** throughout their daily lives, both on and off duty. This chapter identifies and discusses key aspects of professionalism required by paramedic practice.

## Professionalism in paramedic practice

For the paramedic to demonstrate professionalism, they must know what is required of them by their professional statutory regulatory body. In the UK this is the **Health and Care Professions Council (**HCPC**)**. The HCPC provides a professional code of conduct that applies to all registered paramedics. Part of this code relates directly to professional knowledge, skills, behaviour, and attitude, as well as professional clinical performance by being the 'knowledgeable doer' (the term adopted by the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (1986) as a rationale for the Project 2000 curricula) and practising safely within the scope of training and practice. The HCPC (2008) Standard 13 states:

> You must behave with honesty and integrity and make sure that your behaviour does not damage the public's confidence in you or your profession.

Behaving professionally is a standard expected not only by the HCPC and new regulatory bodies of other countries such as Australia, where recent legislation allows paramedics to be a regulated profession (Townsend 2017), but also by patients, co-workers, other healthcare professionals, and the general public. Healthcare professionalism is currently under a great deal of scrutiny, with increasing numbers of **fitness to practise** cases

being heard by all healthcare professional statutory regulatory bodies, where issues of inappropriate or unprofessional behaviour are cited. In the UK, paramedic fitness to practise cases heard by the HCPC comprise 33% of the total of 16 professions governed (HCPC 2017). This appears to be a higher rate than for other, more established professions, which may be due to the highly challenging practice environments in which paramedic practice is provided. It is therefore important that all paramedics consider professionalism as a lifelong competence that will require continual demonstration (and development) throughout their careers. To support this, the role that professional associations (such as the British College of Paramedics) provide in supporting and promoting professionalism and ethics is developing (van der Gaag et al. 2017).

In 2011, research was commissioned by the HCPC which explored healthcare professionals' understanding of professionalism. It concluded that the key to professional behaviour is 'the interaction of person and context, and the importance of situational judgement' (HCPC 2014, p. 3). This is particularly relevant to paramedics, where responses to crisis, trauma, and emergency situations involving family and significant others, and the heightened emotion at such times, can result in misperceptions and miscommunication (van der Gaag et al. 2017).

# Defining professionalism

So what is professionalism? Defining professionalism is not easy, as it is diverse, multifaceted, and open to individual interpretation. In recent years, there has been an increasing focus in the literature on what constitutes professionalism in healthcare, and the concept is evolving according to societal changes. Sociologists may define 'a profession' in terms of being a vocation with a specific body of knowledge, a defined range of skills, which is inherently trustworthy and ethical, and which provides a service to society (e.g. as usefully summarised in Hugman 1991, pp. 2–9; Johnston and Acker 2016). Other healthcare literature focuses upon values of care and compassion held by the profession itself, and roles undertaken by its registered practitioners, for example developing honest relationships with patients (e.g. Burges Watson et al. 2012), patient advocacy (e.g. Batt et al. 2017), and clinical excellence.

There is an increasing body of knowledge that provides more helpful detail. For example, Bossers et al. (1999) devised useful schemata of professionalism, dividing the concept into three main themes:

- Professional parameters (e.g. legal and ethical aspects)
- Professional behaviours (e.g. discipline-related knowledge and skills)
- Professional responsibilities (e.g. responsibility to patients, oneself, employers, and the public)

Professionalism is now more regarded as a meta-skill, comprising situational awareness and contextual judgement, which allows individuals to draw on the communication, technical, and practical skills appropriate for a given professional scenario (HCPC 2014), rather than it comprising a set of discrete skills. Such professional judgement will be dependent upon the knowledge developed through logic; sensed intuitively; gained through experience, particularly prior experience of similar events; and influenced by education, socialisation, and the human resources of employing organisations (Johns 1992; Gallagher et al. 2016; Brown et al. 2005). In addition to this, the current focus is upon consistently demonstrating of a set of identifiable, positive professional attributes, values, and behaviours. It is this challenge of embedding a discrete body of knowledge into the philosophy and values of a profession which the paramedic profession is still exploring (Donaghy 2013; Johnston and Acker 2016; Givati et al. 2017).

# Professionalism as ethical practice

Whatever aspect of healthcare we are in, regardless of the specific engagements within the paramedic role, the nature and practice of healthcare demand that paramedics are concerned with morals and ethics (see Chapter 8, Legal and Ethical Aspects of Paramedic Practice). As this chapter details, what paramedics view ethics to be is

important within a professional context. Meta-ethics (what is meant by 'right' and 'wrong'), normative ethics (placing the concepts of 'right' and 'wrong' into professional practice situations), and applying ethics in specialised areas, such as healthcare or public health ethics, are all part of demonstrating professionalism. In a scoping review to outline scales for measuring professional behaviour amongst paramedics, Bowen et al. (2017) identified the key characteristics of professionalism. These include practising within a professional code of ethics. Key principles which underpin professionalism as ethical practice include integrity, honesty, trustworthiness, probity, objectivity, and fairness. These key professional characteristics are also applied as legal principles when determining cases of professional misconduct. Professionalism can thus be regarded as ethical competence in all aspects of professional activity.

# Professional identity, socialisation, and culture

Professional identity, professional socialisation, and professional culture will all influence understanding of what professionalism is within particular professions.

## Identity

Identification encompasses basic cognitive and social processes through which we make sense of and organise our human world (Monrouxe 2010). Our thoughts, experiences, and reflections create a complex catalogue of who we are as individuals and members of groups (Ashmore et al. 2004). Professional identity is assimilated with other aspects of a personal sense of identity, such as being a student, friend, mother, brother, carer, ambulance technician, or paramedic. **Paramedic professional identity** involves being able to practise with knowledge and skill, demonstrating a commitment to the paramedic profession, and being accountable and responsible for one's own actions (and omissions) through exercising professional judgement. Whilst there are some widely perceived stereotypical 'identities' of paramedics (such as being a hero or a lifesaver), developing honest relationships with patients, patient benefit, and timely treatment/duty to respond are key components of paramedic identity (Burges Watson et al. 2012; Johnston and Acker 2016). The newly emerging professional identity in which there is adaptation to increasing medical roles within the paramedic service is also being adopted as a key component of identity (Burges Watson et al. 2012).

## Socialisation

Students learn to think critically within university and practice contexts, and so professional socialisation is a combination of an individual's professional development and a social, acculturation process occurring within a professional group and practice context (Ajjawi and Higgs 2008). Socialisation in a healthcare profession is likely to depend on the individual's past experiences, the reflective nature of the process, and the beliefs and values promoted in their educational programme (Howkins and Ewens 1999), as well as the opportunities for interdisciplinary learning (Brehm et al. 2006) and learning beyond registration. Socialisation is therefore negotiated in both university and practice settings, which shapes individual and collective professional identity and work culture through shared challenges and the values of both educational and vocational experiences (Givati et al. 2017).

# Practice insight

Make an effort to communicate with and share aspects of your life with those around you, such as other students, university lecturers, and ambulance service staff. This will increase your opportunities and enhance your working relationships, and is known as 'social capital'.

Another aspect of becoming socialised in the paramedic community is the introduction to the knowledge and expertise of the range of practitioners working within the practice setting. For paramedics, this includes working with ambulance technicians, patient transport services and operational managers, education teams within ambulance services, and a range of professionals in hospital and other community healthcare settings. The relevant hierarchical structure of the organisation of service delivery is also influential in determining the professional behaviour (and attitudes) expected. For example, the power and authority in an organisation (and/or profession) are embedded within job descriptions, forms of address, policies and procedures, and practice standards. As the professionalisation of this profession becomes more widely implemented through education and regulation, there will be challenges of cultural differences of professionalism between degree-educated paramedics and those who qualified through vocational training (van der Gaag et al. 2017; Townsend 2017). The strength of professionalism development will be dependent upon how all registrants can facilitate the change in culture and share best practice in all professional domains.

## Professional culture

Historically, the paramedic professional culture has been one of training rather than education, and it has been regarded as 'the trainer's role' to 'instil' professionalism into their learners, rather than to rely on students learning from registered paramedics and qualified mentors. This may now be transferred onto the role of 'the university', as paramedic education moves further into a higher educational structure as part of the development of the profession. It may seem easier to criticise another party, rather than look to your own skills in supporting professional development in students and less experienced colleagues. It is therefore important for the profession to develop confidence in its own ability to develop and assess its own students and registrants, rather than to rely on other professions, such as medicine, to provide this role modelling for them (Figure 1.1). Professional culture can influence and be influenced by the challenges of change and its management. New students and employees are keen to 'fit in' to the work culture, and are aware of being scrutinised by registrants when on placement (Givati et al. 2017). It may often be easy, due to the busy working lives of healthcare professionals,

**Figure 1.1** A paramedic lecturer teaching students. Source: N. Raja, Melbourne, Australia, 2014. Reproduced with permission of N. Raja.

to be unwilling to embrace change, especially when time is so limited for reflecting on and thinking of the benefits of implementing the development of professionalism for regulated professions (HCPC 2014; Gallagher et al. 2016). The university may be seen as the 'intruder' who has caused the 'loss of the communal occupational nature of paramedic practice' (Givati et al. 2017, p. 367), but also as a key influencer in the development of professionalism (Givati et al. 2017). The influence of the professional culture may also have an impact upon the contribution to research in practice (Burges Watson et al. 2012).

## How do students learn professionalism?

Learning about the concept of professionalism and how to demonstrate competence is achieved throughout the paramedic educational curricula, both campus and practice based. In addition to taught components (such as discussing cases of academic misconduct, developing clinical decision-making, or critical thinking), much of what paramedics learn is through working with clinical mentors and registered paramedics, through role modelling in practice, and within the university setting. Positive and negative **role models** in practice can provide a great influence on the understanding of the concept. Positive role models are widely reported as having excellent interpersonal skills, enthusiasm, commitment to excellence and evidence-based practice, integrity, effective teaching skills, building rapport with students, and being committed to professional development and exceptional clinical skills. Where there are clear policy obligations for practice staff (e.g. mentors) to 'teach', connections between theoretical and practical knowledge are more likely to be made (Peiser et al. 2018). However, there are significant challenges for paramedic staff who support students in practice. In particular, there may be conflict between supporting and assessor roles alongside heavy service delivery workloads (e.g. Johnston and Acker 2016; HCPC 2017) and, where there are only informal requirements for supporting students in practice, staff are 'inclined to attend to the development of contextual knowledge with a consequent disconnect between theory and practice' (Peiser et al. 2018, p. 16). In addition, campus-based teaching may only have a limited effect on learning compared to work-based learning, and role modelling professional attributes appears crucial to developing professionalism in nursing students (Eraut 2007; Felstead and Springett 2016; Nevalainen et al. 2018). Humans unconsciously learn from their environment, but because of extensive information assimilation they may not be aware that they are learning (Scott and Spouse 2013), so paramedic students may find it hard to appreciate their learning from working alongside registered paramedics in busy environments, or may not assimilate learning until further on in their career. In addition, the wealth of knowledge, skill, and behaviours of an experienced role model is often difficult to verbalise until formal recording occurs in writing (Scott and Spouse 2013). Most people know more than they can ever put into words. This tacit knowledge (after Polyani 1958) is also conveyed to learners by positive role models offering solutions in complex and challenging encounters, which can be integrated into the existing knowledge of the paramedic.

## Practice insight

Recognise the many different elements of paramedic practice. Be aware that elements of expertise exist due to, in part, experience within the profession. Therefore listen to and embrace aspects of practice that have been shared with you by more experienced clinicians. If you are unsure whether what you are being taught is correct, then investigate the matter further.

There is a need for a contemporary evidence base to learning professionalism. A recent US consensus statement entitled 'Perspective: the education community must develop best practices informed by evidence-based research to remediate lapses of professionalism' (Papadakis et al. 2012) called for the development of an evidence base for teaching and learning healthcare professionalism through socialisation. There is a range of research

currently being undertaken to develop this evidence base (e.g. Lloyd-Jones 2013), building upon Roff et al. (2012). Papdakis et al. purport that preregistration professional educational programmes must ensure that learning environments promote 'the development of explicit and appropriate professional attributes'. They refer to 'potent forces' that 'erode' the 'professionalisation that has occurred during training despite countervailing curricula in professionalism and inspiring role models'. When socialisation is described as actively weakening professionalism in this way, it provides a rationale for increasing the focus upon professional parameters, behaviours, responsibilities, and values, so that public confidence in registered professionals is not compromised. Professionalism is a competence that extends beyond registration, and all paramedic professionals must continue to demonstrate it throughout their career.

New technologies are being used to engage students in the activity of learning professionalism and to research the stages of learning professionalism, so that teaching and learning may be informed by a contemporary evidence base. One example is implementing the Dundee Polyprofessionalism e-learning tools for Academic Integrity and Early Clinical Learning (Roff and Dherwani 2011a, 2011b), for completion by groups of pre-qualifying undergraduate health and social care students. These tools are being used to investigate the learning curve from understanding **academic integrity** issues to the 'proto-clinical' (Hilton and Slotnick 2005) stages of learning. Hilton and Slotnick indicate that students move from learning and understanding academic integrity issues (such as plagiarism and other academic misconduct) to the proto-clinical stages of early patient/client exposure in professional practice. They suggest that 'practical wisdom' is only acquired after a prolonged period of experience (and reflection on experience), which occurs alongside the professional's evolving knowledge and skills base.

The Dundee Polyprofessionalism e-learning tools facilitate reflective learning utilising the four principles of feedback recommended by Sargeant et al. (2009). The cycle of response and feedback engages students in reshaping assessment and feedback in classroom seminars by being presented with anonymised results of the seminar group's responses to rating a range of different statements.

## Assessment and standards of professionalism

How you need to demonstrate your professionalism is determined by the assessment for your programme or, once qualified and registered, the standards expected by your employer, peers, the HCPC, and professional associations (e.g. professional bodies such as the UK College of Paramedics). Students are assessed by clinical mentors and other colleagues with whom they work in practice. Self and peer assessment, objective structured clinical examinations (OSCEs), direct observation by academic tutors, critical incident reports, and learner-maintained portfolios are some of the ways in which triangulations of assessment can be achieved. Such triangulation is important to reduce the subjectivity of a particular assessor. Any single measure alone is not sufficient (van Mook et al. 2009). Addressing issues of lack of professionalism when employed as a registered paramedic will usually be undertaken by following relevant local policies (e.g. bullying and harassment policies, or grievance procedures). All such policies and processes will require notification to the regulatory body or professional association, as appropriate.

## Practice insight

Visit your university website and take a look at the student charter/code of conduct. Also visit the HCPC website and take a look at the student code of conduct, performance, and ethics, to recognise the standards that affect you as a student. You may also be aware of such standards laid out by the ambulance service you practise with. Make sure you are aware of all of these standards from the start of your paramedic programme.

# Regulatory areas, fitness to practise processes, and outcomes

There are four main areas of regulation that will apply in paramedic programmes:

- Academic misconduct
- Unprofessional behaviour within university-based settings (including social media)
- Unprofessional behaviour in practice settings (including social media)
- Health-related issues

To ensure public protection as a requirement of health and social care professional regulators, and as a process for maintaining the ethical practice of students, universities are required to have established fitness to practise procedures in place that include standards of conduct and processes for determining the fitness to practise of students. Such procedures tend to mirror professional statutory regulatory bodies' processes for hearing cases of professional misconduct (Figure 1.2). However, as a student, there will also be processes to help in learning what it means to behave professionally.

Whether a student or a registered paramedic, all cases will need to follow an approved process that allows each to be addressed on an individual basis. There is no definitive outcome, as each case will be different; however, panel decisions in hearing cases of alleged misconduct can be broadly classified as:

- No case to answer.
- Minor breaches of conduct.
- Significant breaches of conduct.

**Figure 1.2** A student paramedic facing a disciplinary panel. Source: N. Raja, Melbourne, Australia, 2014. Reproduced with permission of N. Raja.

- Serious breaches of conduct, which may result in temporary suspension/withdrawal from the professional register/practice and/or programme. This usually does not exceed 12 months. The individual will need to provide evidence of developments and remediation before being able to return to the programme.
- Major breaches of conduct, which may result in the individual being permanently removed from the professional register or withdrawn from their preregistration programme.

# Conclusion

Paramedics must demonstrate professionalism in all aspects of their practice. Guidelines exist that can help the paramedic to achieve this, and this chapter provides an overview of the key issues and principles to help the paramedic understand and demonstrate professionalism in all aspects of their lives, but most importantly in their role in providing emergency patient care.

# Activities

Now review your learning by completing the learning activities in this chapter. The answers to these appear at the end of the book. Further self-test activities can be found at **www.wileyfundamentalseries.com/paramedic.**

## Test your knowledge

1. What are the three main themes that constitute professionalism?
2. What may influence understanding of professionalism for paramedics?
3. Does behaving professionally apply when you are on duty or when you are off duty?
4. What are the five levels of outcome against which fitness to practise panels judge individual student or registered paramedic cases proven to have behaved unprofessionally?

# Activity 1.1

John, a registered paramedic, has just finished a shift and is completing his time sheet. He turns to you and tells you to make sure that you claim an extra hour of overtime even though you do not feel you are entitled to do so. He reassures you by saying: 'It's OK, everybody does, it happens all the time and nobody ever says anything.'

What would you say or do if you were in the coffee room listening to this conversation? What do you think about this?

# Activity 1.2

For each of the following questions, state whether it is true or false:

1. The paramedic clinical mentor is the only person who can truly assess a student paramedic's overall development – true or false?
2. Negative role models in paramedic practice do not help the student to learn about professionalism – true or false?
3. As a student paramedic you are not always aware that you are learning – true or false?

# Glossary

| | |
|---|---|
| **Academic integrity:** | Honesty, responsibility, and rigour in scholarship and research, including avoidance of cheating or plagiarism. |
| **Fitness to practise:** | Fitness to practise means to practise in a safe, competent, knowledgeable way, demonstrating a professional attitude through behaviour, so that the public are protected. |
| **Health and Care Professions Council (HCPC):** | The professional statutory regulatory body for paramedics in the UK. |
| **Paramedic professional identity:** | Paramedic professional identity involves being able to practise with honesty, integrity, and trustworthiness, and with knowledge and skill. It includes demonstrating a commitment to the paramedic profession, and being accountable and responsible for one's own actions (and omissions) through exercising evidence-based practice and professional judgement. |
| **Professionalism:** | Knowledge, skills, and attitudes expected from a person on a professional register. |
| **Role model:** | A role model is a person who demonstrates good practice and whose behaviour is replicated by others. |

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