Chapter

1 Paramedic Practice: The Changing Patient Profile in Urgent, Emergency and Critical Care

Chapter Objectives 

This chapter will cover:

- The development of the paramedic;
- The evolving role of paramedics and changing practice settings;
- Patient **demography** and **epidemiology**;
- Professional conduct and standards;
- The paramedic's role as an Allied Health Professional.

Introduction: The Development of the Paramedic

The term 'paramedic' emerged in the UK from the well-established title used in North America. It was adopted for early schemes in Brighton and Bristol which, prior to the formal adoption of the term, went on to drive the 'extended care' ambulance service roles developed in the mid-1980s. A standard paramedic curriculum became established in the early 1990s. By 2000, paramedics were able to register with the Council for Professions Supplementary to Medicine (CPSM), which went on to become the Healthcare Professions Council (HPC) and more recently the Health and Care Professions Council (**HCPC**). This registration, initially voluntary, became compulsory in 2003, which is the year the HPC published its first edition of the *Standards of Proficiency for Paramedics*.

In the context of decision making, the paramedic needed to develop into a profession whose members were truly professional and were responsible for their actions through regulation. This change occurred in the early 2000s, saw paramedics considered 'broadly autonomous', and implied significant responsibility to intervene in highly complex clinical scenarios, albeit with little or no supervision or support. The professionalising of what was previously a largely vocational role, created by **rote learning** and training rather than higher education, was extremely rapid. In many ways the profession is still in transition. The dawning of the era of paramedic regulation, and the events of the following decade, coincided with changes to many aspects of paramedic practice – not least the increasing diversity of paramedic practice settings. The details of the changing and emerging patient

profiles are covered later in this chapter, but the main changes affecting paramedics and the services they work for are due to the requirement to provide care for an increasingly ageing population. Many of these older people, who often have one or more long-term health conditions, are living alone and independently in the community, and this inevitably impacts on demand for care. Linked to this, the illnesses and injuries traditionally associated with paramedic practice, such as vehicle trauma, are declining due to changes to car design and improved driver and passenger safety measures (such as crumple zones and airbags). This era has also seen more focus on prevention, and a shift in public attitude towards a reduction in drink driving, and greater use of seatbelts. In 1980 there were 5,953 deaths on the roads in the UK; this fell to 1,713 in 2013 (DoT, 2014). While trauma can still be complex, the decision to admit patients to hospital with long bone fractures, head and internal injuries, rarely needed much deliberation as patients' ongoing care for these conditions is largely pre-determined and could only be provided in secondary care. While that is still true now, the changing proportions of patients not needing secondary care has grown exponentially.

The combined effect of these changes meant that paramedics began to be required to make more complex decisions for a larger number of patients with a growing range of needs. While the critical care role has always existed, and will continue to develop, fewer cases can now be described as high **acuity**/low complexity and more as low acuity/high complexity (see Figure 1.1).

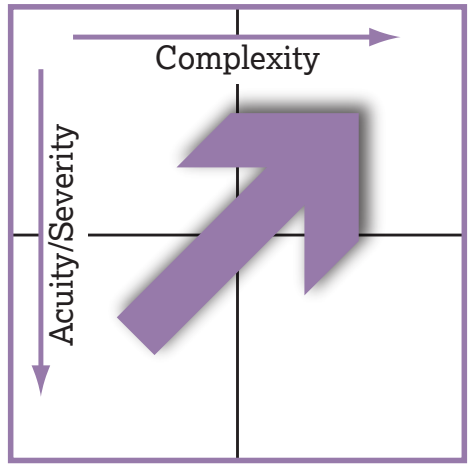

Figure 1.1: *The shift of patient presentations seen by paramedics*

One the most important developments for the paramedic profession was the establishment of the professional body (College of Paramedics, 2017). Professional bodies are common to all registered healthcare professions and are vital in representing the interests of their membership. The College of Paramedics is responsible for the development of curricula documents, career guidance and competency frameworks. It also provides membership services such as medical indemnity insurance and malpractice cover, as well as organising annual national conferences and regional events. The College of Paramedics also works closely with

Health Education England and the higher education institutes to ensure that the paramedic profession remains fit for purpose, and undergraduate and postgraduate courses are of sufficient quality.

It is only through the development of the profession that the rapid pace of change has been possible. While this has had significant benefit for patients, the healthcare system, and the paramedics themselves, it must be remembered that with these developments comes more responsibility. Increasingly, paramedics are required to make more and more complex decisions.

HCPC Standards

The Health and Care Professions Council standards are central to professional practice and the following points are taken from their standards of conduct, performance and ethics. These points underpin much of what is discussed in the rest of this chapter. They remind the paramedic of aspects to practice which are vitally important such as communication skills, personal conduct and acting in the patient's best interests. Decision making requires the paramedic to ensure they are fully informed, and to actively seek the amount of information required to make a decision. While most information is easily accessible (it can be seen, read, heard, smelled etc.), other factors are either inaccessible (and require further enquiry or examination) or hidden in plain sight (but you may not know what to look for). Make sure you are aware of the standards required in practice, and use them to help you with your developing decision-making skills.

Registrants must:

- promote and protect the interests of service users and carers;
- communicate appropriately and effectively;
- work within the limits of their knowledge and skills;
- delegate appropriately;
- respect confidentiality;
- manage risk;
- report concerns about safety;
- be open when things go wrong;
- be honest and trustworthy; and
- keep records of their work.

(HCPC, 2016)

The Evolving Role of Paramedics and Changing Practice Settings

The paramedic role is evolving rapidly with greater opportunity to practise across a range of settings, spanning the career framework, and with far more mobility than previously experienced by paramedics. Traditional roles for paramedics rarely extended beyond employment in an ambulance trust, either in clinical roles or as managers or trainers. This confinement restricted the potential for paramedics to be seen in the wider health economies for many years. Arguably, the most significant change to paramedic practice came with the publication of *Taking Healthcare to the Patient* (DH, 2005); this document describes a broadening of roles for paramedics, focusing on providing healthcare rather than simply transport as well as laying the foundations for a diversification of practice settings. At the same time, early pilots of what we now recognise as specialist and advanced practice roles were being developed, allowing paramedics to return to, or undertake for the first time, higher education study in more depth on many essential practical and theoretical concepts. Paramedics emerged initially from a role which looked only at signs and symptoms ahead of taking the patient to the hospital, and decision making may have extended only as far as which hospital was closest.

This leap forward, which has now developed into a more consistent professional career framework, needed to be underpinned by better education and training for those joining the profession. This has become essential and is supported by a range of evidence including most importantly the *Paramedic Evidence Based Education Project* (Lovegrove and Davis, 2013). This advocates strongly for the change to undergraduate education, moving to all paramedics registering for the first time needing a Bachelor's Degree. These changes have all contributed to paramedics' potential being recognised more widely. In 2011, the second edition of *Taking Healthcare to the Patient* (AACE, 2011) made suggestions including a proposal to introduce independent prescribing, supporting a consultation published in 2010. The basis for the proposal for independent prescribing is that the paramedic in an advanced practice role is suitably equipped to make excellent decisions, and can diagnose and treat patients in a range of settings. At the time of writing, in 2017, independent prescribing is still to become a reality. However, the proposal was discussed by the Commission on Human Medicines in late 2015, and again in 2016, bringing it a step closer. If passed eventually, it will provide safer and more timely access to medicines for those patients who are being treated by paramedics.

Paramedics are no longer synonymous with ambulances or ambulance services, which is good news for patients and the profession. The support given to the paramedic professional in recent years, such as in the *Urgent and Emergency Care Review* produced by Professor Sir Bruce Keogh, Medical Director for NHS England, has given paramedics roles in a much wider range of practice settings (NHS England, 2013). Paramedics now work in GP practices, emergency departments, out of hours services, community services, aeromedical services, motorsport medicine, military healthcare, and expedition medicine, as well as the more traditional roles in ambulance services and helicopter emergency medical services (**HEMS**). The career opportunities for those entering the profession are rich and

diverse, and the breadth of settings often include much more inter-professional and multi-professional working, seeing teams formed from other **Allied Health Professionals** (AHPs), nurses and doctors, as well as mental health professionals, social care professions and staff from other agencies. Paramedics do not just work alongside the police and fire brigade anymore, and are positioned firmly as Allied Health Professionals.

To be trusted as a healthcare professional, it is vital for the paramedic to be seen as a decision maker in order to represent him- or herself consistently according to their core professional identity. The opportunities which exist must be approached as an opportunity to focus on ensuring patients have the best access to high-quality care from a range of skilled healthcare professionals, each with their own unique skills and abilities, coming together to define the nature of multi-professionalism. The risk of making healthcare professions generic may dilute the unique core skills of paramedics, as well as those of the other AHPs and nurses. All these professions run the risk of being viewed as interchangeable because of the apparent similarity of intent when providing care. In reality though, this may damage the patient/carer relationship. Paramedics who move up the Career Framework (College of Paramedics, 2015) and into diverse practice settings remain paramedics and must uphold the standards published by their professional regulator, the Health and Care Professions Council. Registrants cannot abdicate their professional title – most importantly they cannot adopt another role title that creates a misrepresentation during the care encounter. We should be proud of our profession and ensure that we promote it – celebrating the time when we approach a patient and introduce ourselves as a paramedic.

The ever-growing range of practice settings is raising the profile of paramedics and placing them within care teams which previously were occupied by one profession alone. The College of Paramedics Career Framework (2015), and its accompanying curriculum guidance, demonstrates the diversity of paramedic practice (see Figure 1.2). Whether you are a graduate starting your first job with an ambulance trust, or an advanced paramedic working in a multi-professional environment, the two axes which describe the professional demonstrate the advances paramedics have made since their inception in the early 1980s – as clinicians, practitioners, critical thinkers, educators, researchers and, most importantly, decision makers.

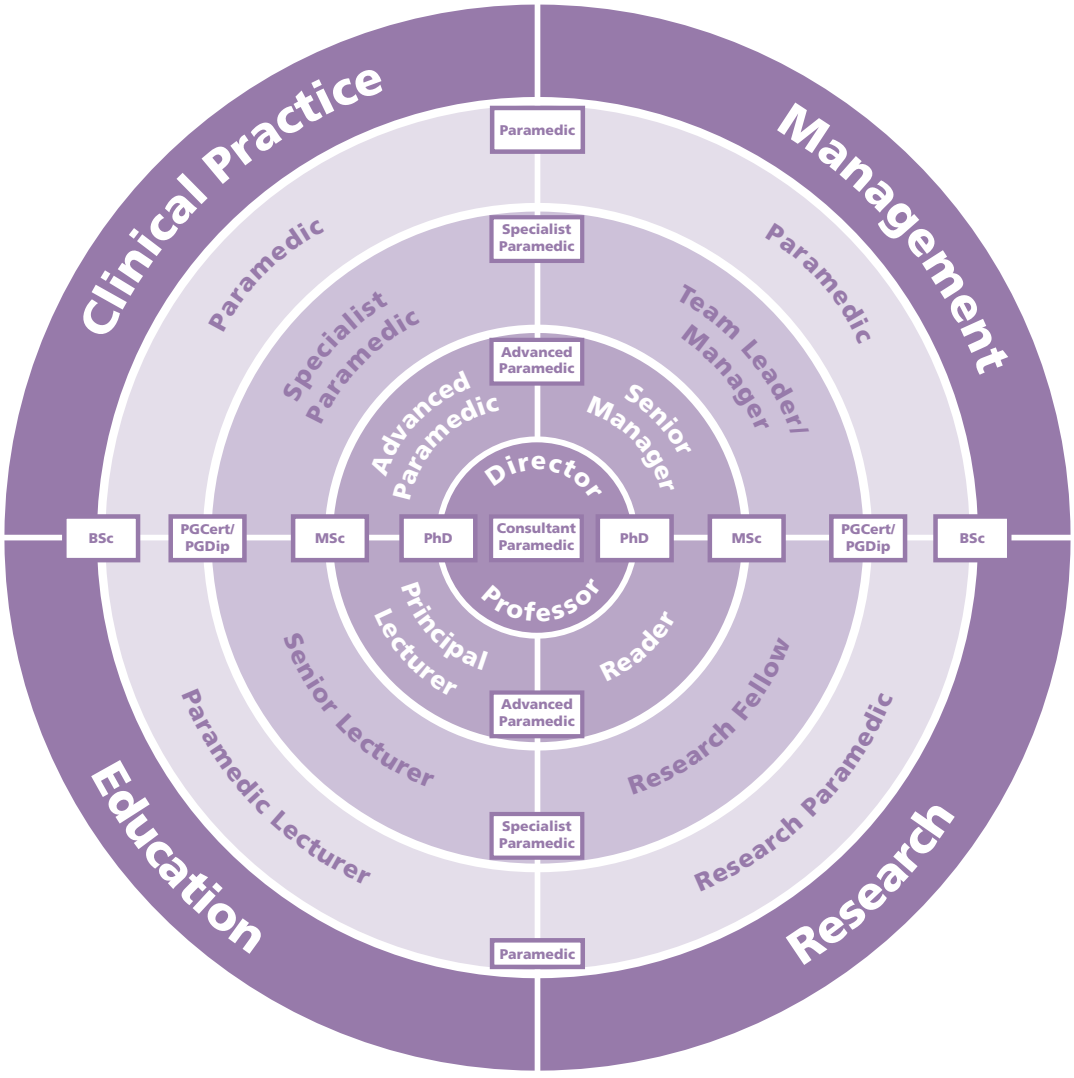

Figure 1.2: *College of Paramedics' Career Framework (2015)*

Patient Demography and Epidemiology

In real terms, there are twice the number of 999 calls to ambulance services each year compared to a decade ago (NHS Digital, 2014). Paramedics are seeing more and more patients in other practice settings outside the traditional ambulance service environment, such as GP practices, urgent care centres and emergency departments. Patients with long-term health conditions, such as COPD (chronic obstructive pulmonary disease), diabetes, Parkinson's disease etc., make up around 50% of all appointments in primary care each year and account for 70% of all inpatient bed days (Kings Fund, 2016). This underpins the importance of good decision making when providing care for these patients, not only in relation to the

direct care for the individual patient, but in the context of the economic impact of long-term healthcare on society. Patients with long-term health problems pose a greater challenge for the decision maker as their condition may present more complex information and considerations. For example, patients with COPD may have lower oxygen saturation, and this must be taken into account when dealing with an acute problem.

> *'In England, more than 15 million people have a long-term condition – a health problem that can't be cured but can be controlled by medication or other therapies. This figure is set to increase over the next 10 years, particularly those people with 3 or more conditions at once. Examples of long-term conditions include high blood pressure, depression, dementia and arthritis.'*
>
> (DH, 2015)

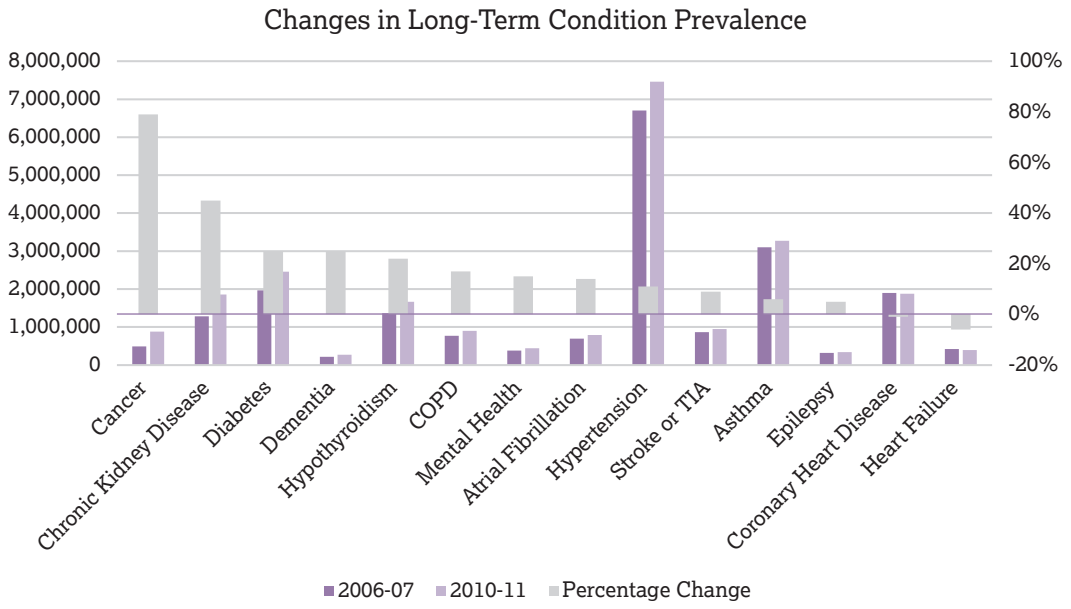

Figure 1.3: *Changes in Long-Term Condition Prevalence*

Across the whole of health and social care, £7 out of every £10 is spent on care for patients with long-term healthcare needs. The problem is compounded as care becomes more complex from the perspective of **multi-morbidity** with around 30% of the population having one or more long-term health conditions (DH, 2012). The population is getting older, adding further challenges associated with the normal changes seen in ageing and how these can impact on the prevalence and management of long-term healthcare (see Figure 1.3) – particularly when considered in the context of promoting independent living in the community.

Patients with long-term health conditions are increasing in numbers and account for significant resource use across health and social care. For paramedics, contact with these patients often occurs at times of crisis and therefore these encounters

are complex. Decision making in relation to the **comorbid** patient suffering an acute-on-chronic presentation, which may also potentially involve considerations relating to advanced decisions and end of life care, can lead to the risk of avoidable hospital admission and failure to meet care goals. Health policy is moving towards care closer to home (NHS England, 2013) and therefore paramedics must consider how to make the best decision for patients across the spectrum of age and disease. Later chapters look at the dilemmas and conundrums faced in practice, and discuss scenarios relating to patients with long-term healthcare needs.

By way of summary, people with long-term conditions account for:

- 50% of all GP appointments;
- 64% of outpatient appointments;
- 70% of all inpatient bed days;
- In total around 70% of the total health and care spend in England (£7 out of every £10);

This means that 30% of the population account for 70% of the spend.

(DH, 2012, p.3)

People with long-term conditions consistently say:

- They want to be involved in decisions about their care – they want to be listened to;
- They want access to information to help them make those decisions;
- They want support to understand their condition and confidence to manage – support to self-care;
- They want joined up, seamless services;
- They want proactive care;
- They do not want to be in hospital unless it is absolutely necessary and then only as part of a planned approach;
- They want to be treated as a whole person and for the NHS to act as one team.

(DH, 2012, p.3)

Patients with long-term healthcare problems are a growing cohort and are usually complex. Improving the approach to decision making for this group of patients is vital for paramedics if they are to contribute effectively to the health of the nation and to support healthcare policy in action – most importantly ensuring that patients' voices are heard and their wishes met. Long-term disease prevalence and multi-morbidity cannot however be seen in isolation; there are two more important aspects to care – ageing and deprivation – which impact on decision making and often exist alongside long-term healthcare problems as a triad.

The UK population is getting older (see Figure 1.4) and the prevalence of multi-morbidity increases with age, and in the presence of deprivation. The population of the UK is expected to increase by around 3% between 2015 and 2020 and, within this general rise, the number of people aged 65 and over will increase by 1.1 million, an equivalent of 12%. Within this period the number of people aged over 85 will increase by 300,000, and there will be 7,000 more people reaching their century. In the early 1990s it was truly rare for a paramedic to attend a patient aged 100 or over, whereas now it is far less unusual and only noteworthy where 100 has been exceeded by several years.

Ageing in itself is not a disease, but the anatomical, physiological and psychological changes experienced in ageing are important to underlying health. Older patients are more prone to illness, often associated with age and frailty. This results in patients living independently or in supported living in the community, doing so with increased risks to their health, secondary to their age. For instance, an older patient with diminished bone density and **polypharmacy** is at far higher risk of falling and suffering a fracture. Patients who have already suffered a fracture over the age of 65 are far more likely to suffer another 'fragility fracture' as a result of subsequent falls. The decision making for this group of patients, therefore, is increasingly complex – considering carefully the risk/benefit balance of promoting independent living versus admission to hospital in the face of increased risk of an injurious fall. This can only be done in the presence of good decision making which ensures the patient is paramount, and their wishes are considered in the context of the information they need to make an informed decision about their own healthcare.

While epidemiology and demography are the main areas of analysis most commonly seen in health data, at a practical level clinicians need to consider the concept of deprivation in the context of the wider background information available. Deprivation is in essence the lack of basic means to live at a level associated with good health and wellbeing:

> *'… a situation in which you do not have things or conditions that are usually considered necessary for a pleasant life.'*
>
> (Cambridge Dictionary, 2017)

Deprivation impacts on individual patients' health and wellbeing, and life expectancy. Also, the instances of long-term ill health increase where deprivation is seen. Many paramedics will be familiar with its symptoms. It is often seen in clusters, and when these are linked by geography this can give the impression that everyone in that area is deprived, but the following statement demonstrates that this is not true:

> *'It is important to note that these statistics are a measure of relative deprivation, not affluence, and to recognise that not every person in a highly-deprived area will themselves be deprived. Likewise, there will be some deprived people living in the least deprived areas.'*
>
> (DCLG, 2015)

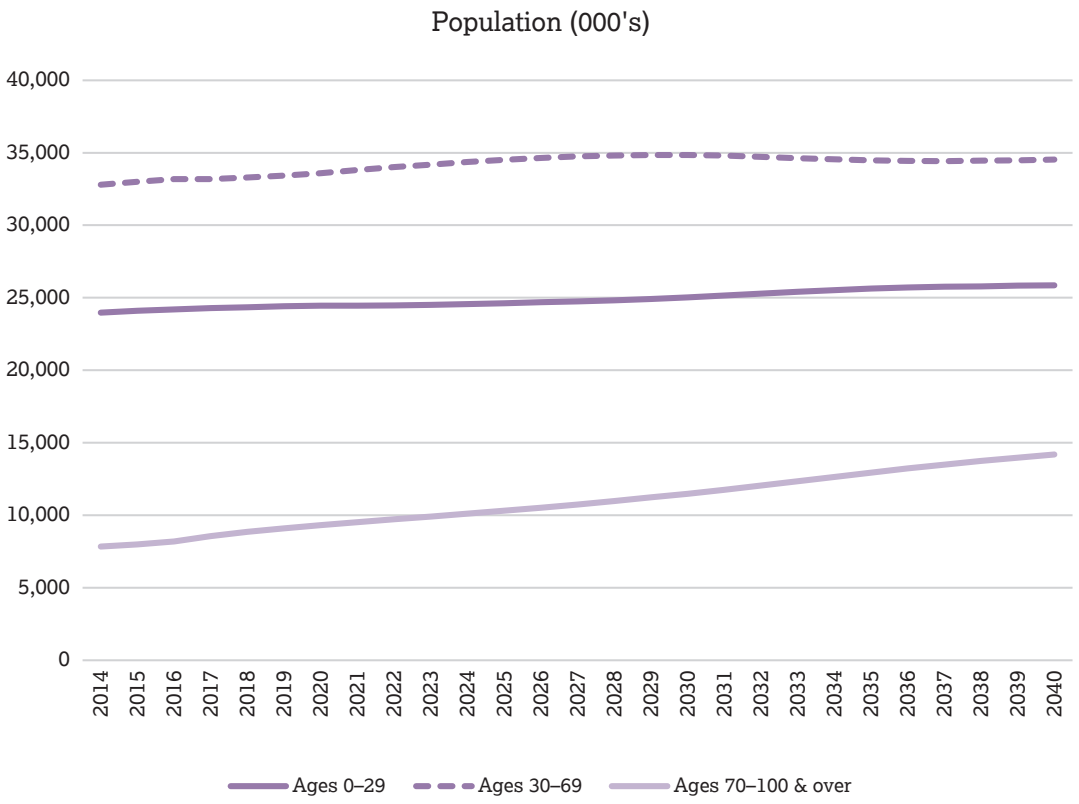

Figure 1.4: *The changing shape of the UK population (information taken from the ONS, 2015)*

For the decision maker, deprivation must be considered in the context of the diagnostic and treatment process. For instance, the instances of undiagnosed long-term disease are more prevalent in areas of deprivation which means that it is in these areas that you are more likely to see patients with COPD that has not been formally diagnosed or managed. This is also reflected in life expectancy, with significant differences in average lifespans in Wokingham and Manchester, or Richmond and Tower Hamlets (DCLG, 2015).

Decision making has many cues and places from which better formed ideas can be tested. Consideration must be given to all the factors that assist with making a better decision. Working in certain areas, or working with certain defined groups (such as by age or deprivation), consideration can be given to increasing the context of care in these settings, and while this is not the main influence in making a decision, it helps with the richness of the analysis and therefore the quality of the result for the patient.

Professional Conduct and Standards

'Professionalism' can sometimes be a vague and somewhat nebulous term, often implied rather than bestowed, and with a sense that one can unconditionally adopt professionalism by dint of a qualification. While this may not be consistent with the emerging evidence, one could be forgiven for not fully appreciating what professionalism is. *The Oxford English Dictionary* (2013) has a comprehensive entry relating to the words 'professional' and 'professionalism' and these include:

- *'Senses relating to or derived from (the conduct of) a profession or occupation.'*
- *'Of a person or persons: that engages in a specified occupation or activity for money or as a means of earning a living, rather than as a pastime. Contrasted with amateur.'*
- *'Relating to, connected with, or befitting a (particular) profession or calling; preliminary or necessary to the practice of a profession.'*
- *'Engaged in a profession, esp. one requiring special skill or training; belonging to the professional classes.'*
- *'That has or displays the skill, knowledge, experience, standards, or expertise of a professional; competent, efficient.'*
- *'That has knowledge of the theoretical or scientific parts of a trade or occupation, as distinct from its practical or mechanical aspects; that raises a trade to a learned profession.'*

(OED, 2013)

Being a member of a profession may not link to professionalism in all cases, but in healthcare, the values and behaviours which ensure that patients are treated effectively, safely and with dignity are vital to the point where professionalism exists as a feature alongside competent technical skill. Paramedics are, by definition, healthcare professionals and are registered and regulated accordingly. However, professionalism is achieved with a far more objective range of values, in many ways distinct from competency. For example, and in the context of decision making, unprofessional behaviour may be seen where a patient for whom admission to the emergency department is not indicated is taken there by a paramedic who wants a cup of tea (which they know they can get there). In **biomedical ethics**, the patient must never be the *means to an end* – they must only ever be *the end* in itself – to paraphrase Immanuel Kant (1724–1804). This means that the good of the patient must be considered above other considerations; the patient should never be used as a means of achieving another goal – such as by leveraging the system to visit the place the paramedic wants to be (to get a cup of tea) rather than where the patient needs to be. Using the patient as a lever to visit the local hospital is unprofessional, and the decision making which leads to this is flawed.

We will explore throughout this book how the process of decision making is linked to other considerations, and professionalism is assumed throughout rather than being added as a constant reminder. It is important therefore to reflect on

professionalism as a concept. This will promote optimal 'purity' in decision making, free from the extrinsic factors and stressors which may result in deviation from the focus essential to patient/carer relationship. Basing practice on high professional standards in many ways makes decision making easier. It is an exercise that can be used to enhance professional fitness and therefore confidence and competence in practice.

So, how is professionalism defined and understood? Using the findings from the Consensus towards Understanding and Sustaining Professionalism in Paramedic Practice study (Gallagher et al., 2016), we can see how the profession defines professionalism for itself, both from among practising clinicians and those invited to contribute to the Delphi Study which formed part of the research study. The key findings suggest that paramedic professionalism has four components:

- The conduct and character of paramedics;
- The role of regulation;
- Professional education;
- The values that paramedics profess.

The professionalism enablers identified by this project revealed a good deal of consensus regarding participants' views of broader factors that impact on professionalism. These are the role of regulation, regulators' codes and standards, professional education and the responses of the general public. There were suggestions also that other professions, such as GPs, do not always give paramedics the respect they deserve. The data also highlights the view that responsibility for paramedic professionalism goes beyond individuals, with organisations having a key role in providing support. The role of employers in promoting and enacting professional values was also highlighted as an important professionalism enabler.

There is further discussion in Chapter 6 on professional issues, including the responsibilities associated with being a registered healthcare professional.

The Paramedic's Role as an Allied Health Professional

Paramedics are Allied Health Professionals (AHPs) alongside other professions such as physiotherapists, dietitians, radiographers, speech and language therapists, orthoptists, podiatrists, occupational therapists, prosthetists/orthotists, drama therapists, art therapists, and music therapists. The term Allied Health Professional (AHP) is an extremely important aspect of practice for paramedics. There are 130,000 AHPs registered in the UK, of which only around 20,000 are paramedics. The 12 AHPs are represented by the Allied Health Professions Federation which acts on behalf the individual professions to provide collective leadership on issues common to all AHPs (AHPF, 2016).

Paramedics are recognised as central to the delivery of high-quality healthcare in the community, and this increasing recognition and responsibility means that each paramedic must be able to do the very best for their patients. This means making decisions every day of their working lives. Being part of the wider family of Allied Health Professionals is important for paramedics. It also promotes multi-professional and inter-professional working, which has clear benefits for patients.

Paramedics are unique in comparison to other AHPs as their area of practice is generalised and occupying a wide breadth of practice. In reality, paramedics are focused on patients with a well-defined range of conditions, which are linked by their onset or severity. Most other AHPs, in contrast, provide care in a more planned way. Paramedics should understand their role as an AHP and be aware of the roles of the other AHPs as there are always opportunities to refer to other professions. While it is less likely a paramedic will refer patients to art therapists or drama therapists, they will interact with physiotherapists, occupational therapists, dietitians and radiographers far more often. It is important, therefore, to understand what all these professions can offer your patients. Developing this understanding will also enhance your professional knowledge.

Just as regulation with the HCPC is important for paramedics as professionals, so too is membership of the professional body, the College of Paramedics. Paramedics should also have an awareness of themselves as members of an Allied Health Profession, as this is equally important for sharing best practice. Embracing the common values of AHPs can only enhance their knowledge and effectiveness in practice. In addition, the Allied Health Professions Federation exists to represent the interests of AHPs in areas common to their members. You can find out more about the AHPF at www.ahpf.org.uk.

Conclusion

Paramedic practice is no longer as simple as putting someone on a stretcher and driving them to hospital. Moreover, paramedics are not just working in the ambulance setting and are working across a range of multi-professional practice settings, such as primary care, emergency departments, military, offshore, remote medicine, and private practice. Ambulance services provide very basic professional leadership, and often promote a top-down approach to professional responsibility. In reality, and in response to our evolving profession, paramedics need to look across other professions and sectors in order to understand fully the requirements of professional practice. Decision making must be one of the cornerstones of professional practice as it underpins and promotes safety during clinical encounters – regardless of the practice setting. Without objective decision making, any imbalance between confidence and competence can be dangerous; therefore, professional responsibility and **autonomy** should be considered carefully in the context of self-awareness and the risks associated with biased thinking.

Patients are changing too. They are more informed about their health and have greater expectations about the healthcare they receive. Patient-centred care means that all healthcare professionals must make the correct decisions about each individual patient's care, and these decisions must be reached on the basis that the patient is paramount. As professional practice has developed and become more complex, healthcare professionals must become better at decision making in order to create the best outcome for patients.

The next chapter introduces some of the issues and considerations which run alongside clinical practice. While these may not be directly associated with decision making, they do provide an important context for professional practice, and therefore influence everything we do for our patients.

Reflective Exercises 

- Consider your own role in clinical practice and reflect on your own professional development, taking into account the ageing population and the increasingly complex patients for whom paramedics provide care.
- What do professional and regulatory standards mean to you? Consider the key documents published by the HCPC at this stage of your development in relation to making decisions. (You may want to repeat this reflective exercise after reading Chapter 6.)
- What does it mean to be an Allied Health Professional? In relation to decision making, what similarities and differences are there between professions?