Professionalism in medicine.
What is it and how can it be taught?

By

Hudson Birden

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Abstract

This study examines the conceptual framework and teaching of medical professionalism from the perspectives of the literature on the subject, clinicians engaged in clinical teaching regarding professionalism, and medical students.

I begin with a brief history and overview of the concepts of professionalism in medicine. I follow that with a Best Evidence in Medical Education (BEME) systematic review of the literature to identify the best evidence for how professionalism should be defined and taught. This review found that there is as yet no overarching conceptual context that is universally agreed upon. The development of ways to teach and assess professionalism has been encumbered, and failed to progress, in large part because of this amorphous nature of the various definitions promoted.

The review also found no unifying accepted theory or set of accepted practice criteria for teaching professionalism. Evident themes in the literature are that role modelling and personal reflections, ideally guided by faculty, are the important elements in current teaching programs, and are widely believed to be the most effective techniques for developing professionalism. While it is generally agreed that professionalism should be part of the whole of a medical curriculum, the specifics of sequence, depth, detail, and the nature of how to integrate
professionalism with other curriculum elements remain matters of evolving theory. No teaching methodology has been demonstrated in the literature to be effective or accepted for use across a wide range of medical schools.

I next developed and carried out qualitative studies to discover what conceptual understanding (mental models) of professionalism medical students and clinical educators held, how these two groups view current professionalism training as a component of medical education, and how they think it should be taught.

I found that medical students achieve professionalism through the influence of their exposure to seasoned professionals and through informal peer reflection. The doctors in my study group achieved professionalism not through any formal training they received, but as a result of the actions and attitudes they witnessed during their training, which created a path to reflective practice that they have sustained.

I conclude by proposing a conceptual model for instilling professionalism through medical education. This model captures the formative influences on professionalism and provides a framework for understanding professional performance. The teaching of professionalism should be integrated into all years of the medical curriculum, and across all disciplines included in the curriculum. Some attributes of
professionalism, such as ethics and communication skills, can be introduced in early years. Mentoring and exposure to positive role models hold the most promise as effective teaching methods. Guided reflection turns transient incidents and experiences into true learning moments, solidifying and honing professionalism. Ultimately professionalism should be viewed as an ethos.

I hope that my findings will improve our ability to instil professionalism in our students.
Dedication

I dedicate this work to my mentors:

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Chapter 1: Introduction

Respondent number 10 speaks:
I tend to think in terms of energy. If you can think of an energetic field, that each of us has an energetic field, and within that energetic field we project out. Now if we are allowing things to come into our energetic field which are harmful to us, and you could say that in terms of, say, a patient coming in who's very emotional and very distressed, or very angry, or very depressed, and if you allow that energy to come in to you and affect your energy, your energy becomes – I suppose in a way could call it energetic collusion. And equally, if you are in a very angry frame of mind and you are looking after somebody, even writing prescription for them or doing a procedure on them, your anger is projected on to them. And so I guess looking at it this way you can teach students to be aware of energy and to be aware of emotions, to be aware of the effect of others’ emotions can have on them, and the effect their emotions can have on others, and if we see it in this very kind of – I don't know how to put it. In very practical terms, rather than airy-fairy terms, I think students can actually relate to energy if you teach about energy, and although I'm not saying it is a simplistic as that, it's a starting block for learning how to protect yourself and how to look after others.

Respondent 10 is a General Practitioner (GP) who has embraced with enthusiasm the role of medical educator. He loves the work and takes pride in seeing students excel. When you read what he has to say, you are missing the impish grim with which these lines are delivered. He is being quite sincere, but is also quite aware that the imagery he employs is taking off from the new age mindset of the counter-culturalists, Sannyasens, new agers, and hippies, who populate the coastal regions of Australia. An alternative lifestyle and manner of speaking are convention there, and so insinuate into the public discourse. He is responding to my introduction to our interview, in which I explained the purpose of my research (to explore attitudes of current clinical preceptors regarding personal and professional development of doctors), what my initial working definition of professionalism was (it encompasses an approach to medical practice that incorporates such things as ethical approaches to practice, receptiveness to change, sensitivity to patients, resilience, time management, and professional and personal life balance) and ending with my query do you have any initial thoughts on this set of concepts?

He is talking about professionalism. Let’s give him a pseudonym; Dr. Klotho.
**Purpose Statement**

My purposes in carrying out this research were:

1. to examine the literature to determine whether there is a consensus definition of professionalism
2. to determine the best definition to use to frame matters of teaching and assessment in a curriculum
3. to determine how current medical students conceptualise professionalism and how appropriate and effective they judge the teaching of professionalism to be, as they have experienced it
4. to determine how current clinical educators conceptualise professionalism, how they were taught to be professional
5. to determine how current clinical educators teach professionalism, and how well prepared they think their students are for professional practice in the later stages of their formal medical training
6. To conclude how teaching professionalism might be improved

Professionalism, in medicine as elsewhere, is difficult to define measure, teach, and assess. As light can be described as a wave or a particle, so can professionalism be described as either an ethos or as a set of attributes to be mastered (van Mook et al., 2009b). Hafferty refers to these as “abstractedness versus specificity” (Hafferty, 2004)(p. 29). DeWitt Baldwin considers professionalism as a “value-oriented ideologically based construct” (Baldwin, 2006) (p. 103).

As an ethos, professionalism can be attributed to personality (Verkerk et al., 2007) or character; to a large extent coming from personal integrity rather than being learned. To some professionalism means defending the profession against external threats, particularly corporatized health care in the US. To others, it is the art that complements the science in an effective, well rounded physician.
While there have been ample publications on professionalism, and considerable attention devoted to it within medical professional organisations and medical schools, there is still an ambiguity in the scholarly debate that is the focus for much of my exploration. In light of this, I run in a hermeneutic circle (Rennie, 1998, Ginev, 1988) throughout this work, examining parts, then wholes, then back around again, seeking comprehension— a more detailed understanding of Dr. Klotho’s ‘energy’.

**Methodology**

My methodologic approach in carrying out this research has been, aside from calculation of a K statistic in Chapter 4 and some simple arithmetic in chapters 4 and 5, purely qualitative. I used a combination of focus groups and one on one interviews to gather data from students and clinicians, respectively.

Since my purpose was to identify attitudes, beliefs, and points of view, in an area where the appropriate questions are not at all obvious, a qualitative study was the rational choice (Creswell, 2009)(p. 4).

The most difficult part of developing this or any other qualitative study is defining that which is to be explored. The next decision is how best to explore it. In 2006, Baldwin and Daugherty felt confident in stating that “no completely satisfactory single scale or survey for assessing a comprehensive concept of professionalism in the medical setting currently exists” (Baldwin and Daugherty, 2006).

I pursued a descriptive phenomenological approach (Lopez and Willis, 2004) in this research. I was interested in finding out the meaning of professionalism held by students and by those who supervise their practice learning. “Meanings are constructed by people as they engage in the world they are interpreting” (Flood, 2010).
My approach in sampling was to capture the views of a broad cross section of clinical educators and medical students within the medical education framework of New South Wales, so that the resultant data set would yield broadly consensual meaning of professionalism and how it should be taught. Considering the small group of people, particularly clinical educators, to choose from, recruitment of participants needed to be opportunistic. My potential pool of participants was not broad enough or heterogeneous enough for true purposeful (maximum variation) sampling. While the theoretical approaches to sampling, and terminology used to describe sampling processes, are still evolving (Koerber and McMichael, 2008), I followed a path best described as analysis-governed purposeful sampling (Coyne, 1997). I carried out sampling, data collection and analysis concurrently.

The key question in sampling in any qualitative study is: where to begin? In this case, the beginning was identification of a pool of suitable people. In my case, that consisted of clinical academics teaching medical students in the context of their practice and medical students at the stage of their education where they are learning in such practices. Why these particular people? The professionalism literature is not in agreement on many things, but it is in agreement that role models are the key actors in nurturing (but not necessarily teaching) the development of professionalism in medical students. While these students get formal classroom training in professionalism, or personal and professional development (PPD), in their early, pre-clinical years) many programs are doing away with the concept of pre-clinical training, giving students access to patients, in very controlled circumstances, right from the start, this training does not embed this ethos. It takes reflection, and framing the ‘textbook’ knowledge in the experience (really, cumulative experience) of clinical practice for true professionalism to be achieved (Hilton and Slotnick, 2005).
I think, and the literature suggests (Cornwall, 2001, Kenny et al., 2003, Rose et al., 2005, van Mook et al., 2009a), that the phase of training in which the mental model of professionalism will crystallise will be that in which the student is spending time in practice, not in classroom. This is where other researchers have looked for clues to the formation of professionalism through role modelling. I looked for that in the attitudes of these teachers, especially in answer on the questions; what do you think professionalism is? How did you learn it? How do you think it should be taught? And, most importantly, how will your students learn it?

The next step question is: where do I find suitable subjects? The answer to this was easy, if opportunistic. There exists a cadre of just such clinical educators who have been ever more frequently called upon to teach. These teachers are in hospitals and in general practices. I focused purposely, although not exclusively, on general practice because

1. The general practice environment differs from the hospital environment; it has a less bureaucratic structure (hence less formal rule bound constraints on actions that would role model professionalism or its antithesis)
2. General practice placements are generally longer term, providing more exposure
3. Teaching in General Practice fits in with the general mission of the universities for which I work
4. It was convenient to do so

The next set of questions concerned the challenge of assembling a body of information that covered the ground, allowed for variation in beliefs, and captured a meaningful set of themes. In order to do that, I incorporated some elements of snowballing (Flick, 2006) (p. 257-258) (Seale, 2007) (p. 177). Dr. Alecto, for example (Chapter 8), was a possible respondent whom I learned of through other
respondents and from colleagues who recommended potential respondents. In fact, colleagues suggested that I not include this individual because of Dr. Alecto’s extreme views. As outliers add interest and perspective to a collection of data, I determined (with my supervisor’s endorsement) that an interview with this person would be an important inclusion to my research.

I describe my sampling protocol as analysis governed purposeful sampling (Coyne, 1997). As Coyne points out, there is an overlapping Venn diagram (at least a semantic one) between theoretical and purposive sampling. I had a fixed purpose in selecting the respondents I did, and in stopping recruitment when I did (saturation achieved). I also sought to derive a theoretical understanding from the research, perhaps nothing so grand as a grounded theory, but certainly some meaning that will be relevant to the continuing efforts to decide whether professionalism needs to be formally taught, and if so, how.

Since I decided who to interview (or invite to a focus group) next after reviewing each transcript, according to themes arising from each encounter (constant comparative analysis), I meet Coyne’s litmus test of theoretical sampling by keeping the design “sufficiently open and flexible to permit exploration of whatever the phenomenon under study offers for inquiry” (Coyne, 1997)(p. 630).

A few respondents were added purposely to broaden the respondent pool. For example, I purposely chose students from two medical schools to increase the number of schools represented in my sample to five. I wanted to see if there was any peculiar unidentified synergy between the three major schools I sampled from, and I also wanted to expand the pool to de-identify the work, so that no reader could generalise as to what school(s) certain assertions were coming from.
The last question to ask in sampling is; where to stop? I decided to end my data gathering phase when I felt that I had reached data saturation- when no new insights appeared to be forthcoming from further interviews or focus groups. Glaser and Strauss defined saturation thus; ‘no additional data are being found whereby the [researcher] can develop the properties of the category’ (Glaser and Strauss, 1967) (p. 61). Dey puts it more clearly; stop when the ideas run out (Dey, 2007). This point turned out to be both relatively easy and relatively difficult to identify in this study. Easy, because the narratives of respondents became thematically repetitive and I had the thought “now I get it” when reflecting on answers I was getting to most of the questions I was asking. Difficult, because each nuance of experience, each new story, provided the temptation to go off in a new direction; chasing small disparities, divergence of experience, or subtle differences in respondents’ conceptualisation of the issues. As Glaser and Strauss point out, the next respondent might ‘explode’ the theory (Glaser and Strauss, 1967) (p. 73).

**Participants**

On the teaching side of my research, participants were primarily clinical medical educators (clinicians full time who take on teaching roles for a medical school in the context of their practice), primarily in general practice (GP). In order to capture differences in perspective, I did incorporate some hospitalists, to see whether their views differed from those of GPs.

On the learning side, participants were medical students in the final year (4 or 5) of their training. All were affiliated with medical schools in New South Wales. Some came from other countries to work or study here, but their experience of medicine is shaped by the way it is taught and practiced here.
Setting

My research questions would seem quite simple at face value: ‘What is professionalism in the context of medical practice?’ and ‘How can we teach professionalism’? But the answers to these questions remain elusive. While many people have endeavoured to define professionalism, a consensus definition, or even a working definition suitable for framing curriculum teaching modules, remains elusive. I’ll dwell on this topic in Chapter 4, and revisit it in Chapter 9.

As I will show in chapter 5, there is no identified teaching methodology, or set of methodologies, that have demonstrated success in developing doctors with a higher degree of professionalism than that of doctors of a generation ago, when such teaching (and such debate) was absent.

If professionalism in medical practice can’t be adequately defined, then how can it be taught? If Professionalism is approached as a set of attributes, as many writers and professional bodies have approached it, these can be taught as such. But focusing on component aspects runs the risk of losing sight of the ‘comprehensive concept’ that Baldwin & Daugherty find both elusive and impossible to measure. As I will show, the way doctors become excellent at being ‘professional’, of developing the capability to generate and harness Dr. Klotho’s energy, comes about not through formal, didactic learning as set by a curriculum, but through experience and reflection on that experience.

My research is based in the context of, the work I do, which is teaching in a medical education collaboration of three universities that believe that the best way to train doctors is to give medical students intensive clinical experience in long term (1 year) placements in rural medical practice settings in the ultimate year of their medical education. Some of these students are postgraduate, some undergraduate. A quote
from clinical educator Respondent Number 12 indicates the merit of this teaching model:

…the idea of attachments is so that they [medical students] get attached to teams and they get to follow things through and to watch how people manage things, provided they’ve got the basic knowledge and provided they’re sensitive, they’ll pick up those practical details that they’ll be able to say, “Well, this is what I see and this is what I know.” And I think that’s very valuable. And I think perhaps we didn’t get that in our undergraduate teaching programs. We had to pick it up afterward. I will say that what’s good now too is the fact that it’s accepted that the educational process isn’t – doesn’t just halt when you do your final year exam, but in fact there are now structured approaches to education into the intern and resident years. And I think that’s very valuable, because again, we didn’t have that. We kind of had to make it up as we went. And I guess because of our exposure we picked up a lot as a result of that.

Fred Hafferty has identified three major new foci of activity (movements or paradigms) in medicine today: patient safety, Evidence based medicine (EBM), and professionalism (Hafferty, 2006). The first two of these are now well established.

EBM has a body of theory (La Caze, 2009, Satterfield et al., 2009), methods (Greenhalgh, 2006) and skills (Fisher, 2007), and a track record of evidence of effectiveness in enhancing medical practice (for example (Hooper, 2010)). A similar body of evidence supporting theory and practice exists for patient safety (Sammer et al., 2010, Pronovost et al., 2011). Most importantly, effective curricula have been developed for both (Wong et al., 2010, Hoffmann et al., 2010).

My study looks at the current debate regarding professionalism in medicine through the lens of those challenged to teach it- clinical educators, and those challenged to acquire it- Australian medical students. What is professionalism? What are the views of teachers and students- where do they coincide and where do their expectations differ?

However, a universal consensus definition of professionalism, and proven methods of teaching it, have yet to be achieved. Most academics writing in the field agree that it is a set of attributes, including empathy, resilience, life work balance, and, perhaps,
punctuality and communication skill. This thesis is not an examination of any of these attributes in isolation. It does attempt to identify a working definition and model for teaching.

It is focused on an Australian perspective, as perspectives on professionalism differ by country.

**Summary of Chapters**

Chapter 2 places my research in a historical context. While the idea that healers have a higher calling and greater need for personal integrity in carrying out their work extends back to Hippocrates (Jotterand, 2005), increasing attention has been given to the notion 'professionalism' in medicine over the past two decades. I trace some of the evolution of this renewed focus. Understanding how the issues have been framed and what has been going on in the broader social contexts in which modern medicine resides helps understand the struggle for, particularly, definition.

Chapter 3 and the publications contained in the appendices set the scene by defining the milieu in which education of senior year medical students takes place, establishing the parameters and some of the other agendas that are going on in parallel to professionalism (patient simulation, virtual patients) but deliberately excluding the technical aspects of clinical medicine and evidence based practice taught virtually separately, and through different methodologies.

In this chapter, I set out theoretical and pragmatic perspectives of medical education, placing professionalism teaching in a context of current beliefs, learning theories, and teaching methods that frame what professionalism entails and how it should be taught.
Chapter 4 is a systematic review of the literature on defining professionalism over the decade 1999-2009. I sought to capture the direction that the professionalism literature is taking. As will be explained, professionalism is an evolving area in medical education. As a teachable, assessable construct, it has not yet reached maturity, where a consensus is reached and where there is little more that needs to be researched.

Chapter 5 is the second analysis from the same systematic review, this time looking at teaching professionalism.

Chapter 6 is a study that examines the view of professionalism held by current medical students (graduate and postgraduate) in Australia. Again using qualitative methodology, themes have been developed that identify how these students conceptualise professionalism, how they view the teaching methods they have been exposed to, and how they think the concepts should be taught. These people are midway through the development effort that will result in their careers as doctors. They are people with a great deal of intelligence, and significant formative life experience behind them. They are intellectual as alive as they will ever be, and able to indentify strengths and weaknesses in their curricula. They should be partners in the development of training programs, but their opinions seldom register in the literature.

Chapter 7 is a study of concepts of professionalism held by current medical educators. I chose for my participants clinical educators (persons teaching within a professional practice rather than an exclusively academic setting), both general practitioners and hospitalists. The people who are teaching from a practice perspective are those who serve as role models and mentors, as well as formal teachers, to the current generation of medical students. Therefore, their concepts of
professionalism; what they learned about it in medical school and what their professional personas have come to be through the influence of their experiences and reflections, are instrumental in capturing what is really happening in medical education.

This study focuses on medical students learning through long term placements, where they are embedded in a medical practice in a semi-apprenticeship learning model. There are several reasons for focusing on this group of students, these clinicians, and this teaching model. First, this model is becoming a favoured mode of teaching, hearkening back to the trade or guild systems in the infancy of medicine as an exclusive endeavour (i.e. a profession). Second, the ‘informal curriculum’, that body of knowledge imparted by osmosis that lies outside the realm of formal education, has been identified as the route by which most doctors acquire their approach to practice- their professionalism (Jerant et al., 2010, Hundert et al., 1996, Rabow et al., 2007). Third, I teach in a graduate medical education program focused on this teaching mode.

This study has been carried out using qualitative methodology. The aim was to find out what study participants think about professionalism, how they act, what motivates them in their current practice, and, more importantly, their teaching. The themes identified in this study reveal the teaching framework for professionalism in these placements and provides clues as to how the best of this may be formally captured and encouraged. They also show where such teaching can be improved, by enhancement or elimination of current mental models.

Chapter 8 is devoted to one outlier who emerged from my interviews with clinicians. His views were so singular that the more I read the transcript of our
conversation, especially seeing what my other respondents had said, the more I determined that I would have to examine his views as a separate case.

Chapter 9 presents a concluding discussion of themes emerging from the research project as a whole and concludes with a framework for approaching curriculum development in professionalism. Despite the intense activity in analysing professionalism from many perspectives, there is yet room for development of a model curriculum that can contribute to the enhancement of this aspect of medical education. In this chapter I have attempted to provide a beginning for that.

Ultimately this work seeks to establish a theoretical perspective placing professionalism teaching in a context of current beliefs on what professionalism entails and how it should be taught. This perspective includes how it is learned. In fact, the most unique contribution of this study is the capturing of the attitudes, beliefs, value systems and perspectives held by senior medical students, deeply in the midst of their efforts to become professionals.

Teaching is closely linked to assessment. I briefly address assessment in Chapter 2, but to delve into the art and science of assessment would be beyond the parameters I set out for this study. To do justice to assessment would take an entire thesis itself. I have then concentrated my work on the theoretical constructs of professionalism and how these are imparted in the context of, particularly, clinical placements in the senior years of medical education, both undergraduate and graduate-entry, in Australia.
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Chapter 2: History of the ‘new professionalism’ movement

“Stuck sums up medicine’s current professional crisis” Brain Castellani and Delese Wear (2000) (p. 499)

“Professionalism is an old idea but a new core competency” Gregory Larkin (2003) (p. 175)

“Whereas eighteenth and nineteenth century physicians experienced patients who put faith in doctors, physicians today may expect to encounter patients who challenge their expertise” Nancy Jecker (2005) (p. 286)

Introduction

The focus on professionalism in medical education has emerged in a specific context. That context includes significant drivers of the professionalism ‘movement’ from societal and professional dynamics, from responses to the evolution of medical practice, and its place in an overarching flow of progress.

The purpose of this chapter is to survey those drivers and to set the context in terms of extrinsic factors. The questions that I address are;

• How has the present focus on professionalism in medicine evolved?
• What have been the extrinsic societal, political, administrative, and economic factors that have shaped the current concepts of medical professionalism?

Of necessity, as a comprehensive history of medical professionalism is beyond the scope of my work, I have constructed an overview, identifying main trends, summarising key points, and setting my project in a historical context.

A thorough analysis of the history of medical professionalism would be a dissertation in itself. It would take into account a vast body of literature, ranging across sociology (Tousijn, 2006, Freidson, 2001a), history of medicine (Dolan, 2010), history of western civilization (Lewis, 1988), and cultural studies (Cooter, 2007). It
would also concentrate on primary sources. These would include: background documents and minutes of meetings of the professional organizations that created Doctors in Society in the U.K. (Royal College of Physicians, 2005), Good Medical Practice (Australian Medical Council, 2009) in Australia, and the multi-national Physicians’ Charter (Sox et al., 2002). Interviews with key payers would also be a part of the construction of such a history.

**The historical context of medical professionalism**

**Medicine as a ‘profession’**

The discourse on professionalism in medicine today is stuck somewhere between the Scylla of Friedson (1970, 2001b, 2001a, 2004) and the Charybdis of Haug (1976, 1988, 1993). Friedson writes from a largely U.S. perspective. In his view, professionalism is a defensive reaction to an erosion of the autonomy (or power) of medicine by the state and the private sector corporate world. Haug, conversely, sees loss of autonomy as being driven by loss of control of sources of knowledge (writing before the internet magnified this problem); “knowledge is losing its role as a power base as it becomes demonopolized” (Haug, 1976) (p. 86/87). His respondents, doctors from the UK and USSR, were emphatic that patients should not have access to their medical records!

Traditionally, four professions were recognised; high ranking public officials (including corporate and government leaders at ministerial or CEO level) medicine, law, and the clergy (Krause, 1996, Reader, 1966). From the Middle Ages up through the 20th Century, more occupational groups, learned, skilled ‘trades’, such as engineers, accountants, and even bankers, aspired to the status of a ‘profession’. Elliott named these the ‘occupational professions’ to differentiate them from the earlier “status professions” (Elliott, 1972).
Stichweh considers “professions… a mechanism of transition from the society of estates of early modern Europe to the functionally differentiated society of modernity” (Stichweh, 1997) (p. 95). In ‘pre-modern’ Europe, social hierarchy was most usually conferred by birth into the right family. Such families had an economic vested interest in protecting their skills and lore to their economic advantage. In rare cases, (the clergy primarily), admission to the right group could be gained by outsiders. Medicine evolved as one of these professions, having about it also an attribute of a guild- a collective of people sharing (and defending from society as a whole) their special knowledge. From ancient times, healers set themselves apart as persons with a life calling that embraced a moral dimension, with a high value placed on integrity, through taking oaths, pledging to hold themselves to high standards of ethical practice (Sandlow, 2011, Miles, 2004).

The ‘functional differentiation’ (Stichweh’s term) of modern society obviated the need for such exclusiveness, which should have ensured its eventual irrelevance and obsolescence. But medicine has retained this ‘exclusive’ aspect, possibly due to the continued esoteric nature of the knowledge necessary to practice the profession. While medicine evolved as a scientific endeavour through the late 19th and most of the 20th centuries, the protected status of this knowledge, and the profession, remained exclusive. Doctors went from being “regarded as gentlem(e)n) with impeccable characters” to “professional(s) with special skills and abilities” (Jecker, 2005) (p. 293).

However, by the turn of the 21st century, patients and the lay public were gaining access to the previously privileged mine of medical lore through new information technologies- (Christmas and Millward, 2011) (p. 6) bringing about “The transformation of medical knowledge from something possessed by the doctor to something which (sic) can be accessed by anyone.” (Adler et al., 2008b) (p. 145). They were then able to challenge the doctor, whose exclusive privilege to that information became diminished
(Barondess, 2003), stimulating a “decline in deference” (Tallis et al., 2005) (p. 7), with “the compliant patient...increasingly being replaced by the expert health consumer” (Brown, 2008) (p. 355). Doctors were compelled to acknowledge their own uncertainty (Tallis et al., 2005).

Krause (1996) argues that medicine, law, and to some extent occupations such as engineering, formed modern day professional bodies closely resembling the trade/craft guilds of early modern Europe. The defining aspects of these guilds are (or rather were, as he emphasizes their demise and the reasons thereof) power and control over the profession itself, and the members thereof, the workplace (via monopoly or ‘market shelters’ (Freidson, 2001a)), the market, and the relation between the profession and the state (Krause, 1996) (p. 3).

**Drivers of professionalism in medicine in recent times**

As a broad generalization, it has been be argued that a key set of drivers of the recent interest in (and debate about) professionalism stems from the confluence of two sets of factors, both originating in the US in the latter decades of the 20th century (Hafferty, 2006a, Krause, 1996, Englehart Jr., 2002, Starr, 1982, Holsinger Jr and Beaton, 2006, Hafferty and Levinson, 2008).

The first of these factors is the reaction to the perception that the practice of medicine has become primarily a scientific endeavour, with the concomitant rise in high technology treatments as a key feature of health care systems and the ensuing focus on the economics of controlling resultant high costs incurred by such systems for providing them.
The second factor is the several failed attempts in the U.S. of securing comprehensive health care for all citizens. These efforts were vigorously opposed by the American Medical Association, the peak professional body for doctors in the U.S. (Sox, 2007, Quadagno, 2004). The AMA traditionally has been a conservative organisation, perceived as bent on preserving the status quo of doctors as very privileged (and affluent) members of society. While the rest of the developed west has not experienced this dilemma, the reactive, defensive focus that the U.S. brought to the professionalism discourse has catalysed and characterised the professionalism discourse as it has developed elsewhere (Hafferty and Levinson, 2008). The financial aspect of health care has dominated the dialogue on the profession of medicine, and, hence, medical education and professionalism (Collier, 2012a). Quantity of procedures and reimbursement mechanisms have become the focus, such that U.S. doctors, especially GPs (known as family practice or internal medicine in the U.S.) have increasingly gone from independent or small practice business people to being employees of managed care organisations (Isaacs et al., 2009, Adler et al., 2008a), with non-medical insurance company employees overseeing and in many cases dictating what diagnostics and treatments a doctor can order in any situation. As Jordan Cohen, President Emeritus of the Association of American Medical Colleges puts it; “The progressive intrusion of commercialism into the realm of medicine is threatening to replace the ethics of professionalism with the irreconcilable ethics of the marketplace” (Cohen, 2006) (p. 607).

Beverley Rowley argues that this focus on commercialism and regulation has constrained the decision making capacity of doctors and driven medicine to cling to a cloak of ‘professionalism’ in a reactionary response. The current climate, in her words, has “goaded medicine into asserting the claims of professionalism as a defense against these constraints, and as a way of reclaiming its traditional autonomy and freedom” (Rowley et al., 2000) (p. 90). Similarly, Adler et al observe
that in response to pressures of commercialism, doctors, under increasing external performance requirements, have collectively made decisions on professional policies that have been construed as protective of doctors self-interest rather than community at large (Adler et al., 2008a) (p. 362).

Together, these factors resulted in an increasingly negative public perception of medicine and an erosion of the public trust that had been formerly placed in it (Collier, 2012b, Mechanic, 1996, Cohen, 2006). While the majority of people still trusted their own doctor implicitly, they also held a view of the profession as being cold, distant, uncaring (Krause, 1996) (p. 43). This changed the dynamic of the doctor/patient relationship by including other actors (Jotterand, 2005), who wrested control in the relationship from doctors.

Thanks to modern mass communication and institutional requirements of evaluation and audit of practice performance, doctors also lost not only the attribute of privileged knowledge, but autonomy of action as well (Stichweh, 1997). This was a financial as well as an existential threat. Latham, writing in 2002, noted that “for the last two decades, the profession’s response to the dangerous assaults on its status, its autonomy and its authority has been mixed up with its response to assaults upon its income” (Latham, 2002) (p. 368).

As a result of these converging trends, doctors lost much of their autonomy (Holsinger Jr and Beaton, 2006). There is a paradox at work here. Knowledge based occupations, as a percentage of all occupational groups, are expanding in the developed west (Evetts, 2003), but this appears to be increasing rather than decreasing the threat to professions.
Also originating in the U.S., but rapidly spreading, at least in the West, the reality of doctors in practice has been at odds with the portrayal of doctors in the newly emerged medium of television, where until recently (the television show *House*) they have been portrayed as being all knowing and saint-like (Ben Casey, Dr. Kildare, Marcus Welby, MD).

At the same time, rising costs of health care served a catalyst for governments, spurred on by insurance companies who pay for most care and all high-tech care, to rein in costs (Ludmerer, 1999). This resulted in the current situation where virtually all US doctors are wage earners, not individual business people-employees answerable to bureaucrats, not independent decision makers. As McKinlay and Stoekle (1988) put it, doctors had declined to the ranks of middle managers in the new corporate world of health systems. The change from individual to systems view of quality of care marked the end of what some have mourned as the ‘golden age of medicine’ (Katz et al., 2007, McKinlay and Marceau, 2002, Collier, 2012c).

In response, medicine felt a need to regain its respect and credibility, and to preserve its integrity, and so a focus on professionalism as a set of virtuous attributes by which doctors deserved a lofty status in societal hierarchy, emerged as an attempt to “keep commercialism’s values from encroaching on the doctor-patient relationship” (Cohen, 2006) (p. 610). Hafferty sees this as a very insular viewpoint: “organized medicine’s concerns about its own professionalism prospects...[arose] in the mid-to-late 1980s with medicine’s self-declared fall from professional grace and its launching of a formal professionalism counter-initiative” (Hafferty and Castellani, 2009) (p. 827).

As Americans struggled with newly gained independence in the late 18th/early 19th Centuries, American doctors began to build an infrastructure to rival the high status of the one they left behind, and started seeing themselves (and placing themselves) in an elite position in society (Jecker, 2005) (p. 280). The doctor became a “gentleman
whom the patient could trust” (Jecker, 2005) (p. 286), then lost that vaunted standing after the perception changed, nearing the end of the last century. Perhaps the doctor had become a disengaged technology purveyor, placing a sign in the waiting room urging payment at time of service.

Coulehan and Williams see a deterioration in professional virtues of doctoring during the same time period as the rise in corporate medicine, but for different reasons; the parallel deterioration in the socialisation process inherent in education to the medical community (Coulehan and Williams, 2003) (p. 15).

Stevens (2002) attempted to chart the history of the modern professionalism movement in 2002. She saw the emerging focus on professionalism (in the U.S.) as a defensive reaction of medicine to changes in public attitudes towards medicine that took place in the 1960s-1970s. As she argues, medicine was under challenge from a public and government ever more outraged by a perception of arrogance in the medical fraternity, and a lack of accountability for its actions and particularly its privileges.

Stevens also identifies the threats to medicine as the encroachment of third party payers for health care into the decision making of medicine and the “political choice” in the U.S. to accept a low standard of care. She claims that as a backlash to their hubris, doctors had been removed from the pedestal society had previously put them on, as tension developed between “a selfish market on one side and an idealistic profession on the other” (Stevens, 2002) (p. 360). An unanticipated consequence of medicine’s resistance to government attempts to exert control over cost (and therefore quality and delivery of service) was an erosion of doctors’ historic autonomy.
It could be argued that this was not a choice, but a default position resulting from an inability or failure to tackle the difficult, complex mess that US health care had become after the move during World War II to employer-funded personal health care (Thomasson, 2002), an “accident of history” (Blumenthal, 2006) (p. 82) that has had profound consequences and resulted in a U.S. health care system that seems to be continually on the brink of disaster.

Likewise Latham (Latham, 2002) argues that as professionals, doctors have historically sought status, reputation, and a privileged place in society’s esteem, not political power or money per se. Changes to the means by which the U.S. federal government provided and/or paid for medical care for some segments of society (Medicare for the elderly, Medicaid for the indigent), created opportunities for doctors to attain wealth by becoming investors in health care delivery systems without compromising their ethical, professional stance within society. Eventually, however, this migration from missionary to mercenary drove a conflation of professional autonomy with very high wealth potential. This became painful when the U.S. government made attempts to rein in the more egregious excesses of medical profit making, and resulted in an erosion of trust; the investiture of doctors by society with authority was undermined medicine is now trying to redress through the ‘new professionalism’ movement. This has been primarily a U.S. set of circumstances.

Arnold Relman, former editor of the New England Journal of Medicine, had issued a warning against the rise of a “new medical-industrial complex” (Relman, 1980). This appellation was geared to resonate with a public that had become wary of Eisenhower’s ‘military-industrial complex’, and so include medicine in the U.S. public’s fear of losing personal liberty to corporate control.
Come forward another decade, and another NEJM editor sounded a call warning against the ‘double agency’ required of doctors, responsibility not only to their patients but to the bureaucratic systems that they increasingly worked in (Angell, 1993). Marcia Angell saw “economics driving ethics” (p. 280), and argued that it stemmed from the ‘historical accident’ of employers assuming payment of health insurance premiums in order to be competitive in a dwindling (male) workforce and at the same time to avoid payment of payroll taxes during World War II.

Forward yet another decade to 2000 and this situation had become worse. Brian Castellani and Delese Wear interviewed 50 doctors (their description of their methodology is concise and witty) to construct a grounded theory of professionalism based on doctors’ own struggles and their views of the knowledge and skills they needed. They wrote; “When physicians consider themselves beholden to those for whom they work, they find themselves, grudgingly, adopting an ethics of economics because they feel a loss in power. Therefore, they become employees working in a system under contractual obligation to management and its bureaucratic and capitalistic amorality.” (Castellani and Wear, 2000) (p. 497). They concluded that doctors in the US are going through a radical period of cultural transformation accompanied by narrative dysfunction- the stories that used to underpin their mental models of their place in the scheme of things no longer worked. Feeling beleaguered by the changes engulfing them, changes which they perceived to be totally external, doctors tried with ever less success to make the old stories fit again. Hafferty refers to this as nostalgia.

The threat of corporatisation and/or bureaucratisation to medical autonomy is not limited to the U.S. In Australia (White, 2000), Canada (Coburn, 1993), Norway (Carlsen, 2010), and the UK (Allsop, 2006, Aldred, 2009, Dent, 2006, Nettleton et al.,
Evolutionary change towards greater state control and user/consumer/patient empowerment have been perceived as threats to the traditional autonomy of medicine. Perhaps the nature of the threat of corporatised medicine and popular perception (including the perceptions of doctors) has been overestimated/overstated, however. Numerato, Salvatore, and Fattore (2011) carried out an extensive review and analysis of the literature on the impact of managerial oversight on doctors, looking at professionalism both as a sociological construct and as a necessary adjunct to the ability to exercise high level skills using specialized knowledge. It is no surprise that they found that the majority of this literature is predicated on the tensions between management and the medical profession that I have highlighted above, the hegemonic influence (they use the analogy of colonisation) of medicine by management, or what they term the “hermeneutics of suspicion” (p. 12). But they also found ample evidence of the reverse case; of medical professionals being able to work within an encroaching managerial regime or co-opt it, through use of “soft autonomy” (Numerato et al., 2011) (p. 10)- doctors playing on their in-depth and particular expertise in clinical care to overtly or subtly drive managerial systems and organisational requirements- neutralising or re-balancing the top-down bureaucracy. They found “no evidence of deprofessionalisation among doctors” but that “the interplay between professionalism and management results more often in co-existence, co-optation, mediation, negotiating, merging, and (strategic) adaptation rather than in clashes, hegemony, and resistance.” (p. 12). They also noted that this literature lacks analyses of the impacts on system performance resulting from the dynamic, evolving nature of relationships between managers and doctors.

A collaboration convened in 2002 between the American Board of Internal Medicine Foundation, the American College of Physicians Foundation, and the European
Federation of Internal Medicine, named the Professionalism Charter Project (Sox et al., 2002, Smith et al., 2007, Brennan et al., 2002a, Brennan et al., 2002b, Brennan et al., 2002c, Brennan et al., 2002d, Blank et al., 2003, Blank, 2002, ABIM Foundation and ACP-ASIM Foundation European Federat Internal Med, 2002), developed a working definition of professionalism, an “operational definition of medical professionalism rooted in prevailing circumstances” (Cohen, 2006) (p. 609), and a set of guidelines for its teaching and evaluation. Their physician charter, which has been dubbed a “modern-day Hippocratic oath” (Rabow et al., 2009) identified three fundamental principles of professionalism; primacy of patient welfare, respect for patient autonomy, and commitment to social justice (Sox et al., 2002). Professionalism was defined as “aspiring toward altruism, accountability, excellence, duty, service, honour, integrity, and respect for others” (American Board of Internal Medicine, 1995). The Charter follows a long tradition of the medical profession establishing professional codes of conduct for its members (Sox, 2007). This work is heavily cited, and so may be considered a turning point in the emergence of professionalism as a field of focus in medical education, if not the beginning of the formal debate.

However it is not without its critics, who see it as disingenuous or vague (Jotterand, 2005, Van Rooyen and Treadwell, 2007). It is also difficult to find a difference made by the charter in either the practice or teaching of medicine. Wear and Nixon (2002) point out a fundamental, and revealing, poor choice of wording used in the ABIM Project Professionalism manifesto. The word that ABIM used to describe the process of introducing professionalism to medical students is *inculcate*, which, as Wear and Nixon point out, denotes a forceful, top down method. They prefer *foster*, with its more enlightened and egalitarian connotations.

The assessment of the clinical competencies set out in the Physicians’ Charter is problematic (Huddle and Heudebert, 2007), as is the very notion of competency
when applied to integrative and subjective constructs like professionalism (Brooks, 2009). Van Rooyen and Treadwell (Van Rooyen and Treadwell, 2007) report on a qualitative study in which South African medical students found that the Physicians’ Charter definition was not particularly relevant there due to the mix of cultures and language, and the sharp divides in social class and religion in that country.

**Europe and the United Kingdom**

The notion of professionalism as being conferred by educational achievements and membership in a league of gentlemen had parallels in the European conception of medical professionalism (Broman, 1995, Rieder and Louis-Courvoisier, 2010). Broman, describing medical professionalism in 18th century Germany, writes; “the university’s function centered on the formation of the future physician’s identity as a professional man. Preparation for medical practice as an occupation fell outside the university’s purview.” (p. 847). It was learnedness (having an MD degree) that set the physician apart from (and enabled sustainable economic competitive advantage over) the other healers at work in society; barbers, surgeons, midwives, apothecaries, as well as snake oil purveyors. As members of these occupational groups sought the elevated status of professional through establishment of university programs for their skill sets, they were challenged by physicians not on the basis of ability, but of character (p. 864) There, as today, professionalism was a response to existential and economic threats to the group as much as a desire for integrity.

In Britain, the ‘new professionalism’ was set in train in the late 1990s, with a compliance date of 2004, by which time all doctors were to be regularly assessed for professionalism (Irvine, 2001). This ‘movement’ was driven by changes in the public expectations of doctors, the incorporation of a multidisciplinary approach to health care, and the need for doctors to take a more pro-active role in quality assurance,
particularly as driven by system needs for economic efficiency and productivity (Stanton et al., 2011, Irvine and Hafferty, 2011). It is in essence a response to the ever increasing bureaucratisation of health care in Britain, with an emphasis of risk management and system accountability, rather than individual patient care and trust (Brown, 2008).

Stacey (1992) is credited by Irvine (2004) as having coined the term ‘new professionalism’. This term is more current in the UK, but encompasses the same conceptual re-focusing (introspection) of medicine on the higher, aspirational, elements of medical practice.

In the UK, the loss of stature in medicine also occurred through the blurring of previously inviolable class distinctions. Doctors came from and belonged to the upper classes, went to university, and thus were treated with utmost deference by those of lower social status. As Haug put is; “The claim that medicine has scientifically based curative power is a relatively new basis for physician authority, and is grafted onto the earlier and more internalized public belief that the doctor’s social position merits faith and compliance” despite “the absorption of lower-class apothecaries and barbers into the occupation of physician and surgeon”(Haug, 1976) (p. 96).

**History according to Hafferty**

Fred Hafferty, as well as being the consummate theorist on professionalism, has also been the most diligent and perceptive historian of the professionalism movement (Hafferty and Castellani, 2009, Hafferty and Castellani, 2010b, Hafferty and Levinson, 2008). He marks the “modern day” professionalism movement as
occupying the 25 years to 2010 (Hafferty and Castellani, 2010a), and sees it as divided in to several distinct periods.

The initial, ‘nostalgic’ period (as identified also by Krause) saw doctors becoming aware of the erosion of their once-vaunted place in the eyes of the public. The scientific approach to medicine (and life in general) had taken the shine off their curative abilities, long perceived as super-human if not god-like. Erde, though, makes a compelling argument that doctors have been ruing the loss of the golden age of medicine, with all aspects entailed in this supposedly modern nostalgic phase, for a considerably longer time (Erde, 2008). He finds examples from the medical literature to support it.

Hafferty considers that the interface between commercial interests and medicine, particularly pharmaceutical companies and joint-venture diagnostic, treatment businesses, to be the factor most responsible for the erosion of professionalism, or at least the professional image of doctors, in the USA today (Hafferty, 2006b) (p. 51). Sex and drugs are probably numbers two and three. He sees professionalism as “something that resides in the interface between the possession of specialised knowledge and a commitment to use that knowledge for the betterment of others” (Hafferty, 2008) (p. 21).

Erde argues that the dismay present day doctors hold over loss of the treasured aspects of their profession, like autonomy and respect of the populace, are not due to real erosion of these- they have been present and been perceived as being eroded for at least a century. Rather, in his estimation, the issue is a simple response to the threat of losing power, a threat made justifiable by doctors’ abuse of the power that they assumed for their own group. For him, the “nostalgia for professionalism is based on a past that never was” (Erde, 2008) (p. 20-21).
Hafferty also remarks on the rise of a ‘new professionalism’ movement midway through this modern evolution, characterized by a split between European and American approaches to the issue (Hafferty and Castellani, 2009). He identifies the American stream as being more individually oriented, focusing on individual physician attribute such as Altruism. The European movement, by contrast, is more publicly oriented, focused around the ethos of professionalism as it impacts public policy (Irvine and Irvine, 2004).

**Medical professionalism in Australia**

The discourse on professionalism hasn’t evolved to the same extent in Australia as it has in the U.S. and U.K. (Jorm, 2012) (p. 43). A recent study on Australian doctors’ views on what professionalism entails found two sets of attributes considered important- technical skill, including firm decision making and maintaining a steady nerve in a crisis, and effective communication skills (Jorm, 2012) (p. 42-65).

**Conclusion**

The last word in the history of medical professionalism (at present ) must go to Walsh and Abelson (2008), who not only capture the approaches to professionalism in practice in the recent past and today, but extrapolate out to 2050, envisioning the logical extensions of today’s electronic technology allowing remote diagnosis and treatment and speculating on what the frame of professionalism will be then. Optimistically, they see a world where the ‘laying on of hands’ will still be essential, although just for expressing empathy, not for actual treatment.

This historical record suggests that while the emphasis on professionalism in medicine is being engaged in for all the right reasons by clinical medicine
professional organizations and medical educators, some of the drivers and motivators are more reactionary than progressive. This doesn’t mean the professionalism is merely a knee-jerk reaction to loss of status in the field- the tenets of professionalism, focusing on desirable attributes to instill in practitioners, have been purposely devised strategies to re-invigorate medicine and increase public credibility. If the true drivers, including the defensive ones, are understood and acknowledged it is more likely, as Hafferty and others have taken great pains to point out, that they will be effective.

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Chapter 3: Context - the place of professionalism in medical education

“Professionalism has no meaningful existence independent of the interactions that give it form and meaning”

Fred Hafferty, Dana Levinson (2008) (p. 611)

“Identity is constructed at the intersection of the social and the individual” Kaija Collin (2009) (p. 24)

Introduction

Chapter 2 provided the historical framework on which the modern debate on professionalism is built. In this chapter I examine, through literature review, the key issues in medical education that directly related to the current debate on professionalism in medicine. I will establish the context for my research, building the following chapters, through examining these elements in detail.

These issues include those of definition (examined in detail in Chapter 4), and aspects of medical training that influence the development of professionalism. These include the hidden curriculum, the cynicism, or ‘hardening of the heart’, that has been observed as an undesirable consequence of the medical education process, discrete attributes of professionalism which have served as the focus of much of the professionalism debate, and how professionalism is assessed.

I also review the educational theories that I think best serve as a foundation for teaching professionalism, including reflection in practice, situated learning theory, and social learning theory.
The place of professionalism in modern medical education

Medicine is one of the most difficult fields of endeavour to master, consisting of requirements for technical skill (performing procedures), ability to make judgments, and ability to elicit information from patients. Doctors must also accommodate differences in patient culture, gender, age, and their innate ability to convey information that is useful to the doctor.

The traditional adage has been that medicine is an art as much as a science (Anderson, 2006; Brawer, 2006). Pickering put it this way: “the difference between the science and art of medical practice is that science is infinitely replicable and impersonal, whereas art is not necessarily replicable and is essentially personal” (Pickering, 1978).

Halpern points out that the historical practice of medicine was a mix of science and superstition. As superstition was culled and a scientific base strengthened, the notion of professional, dispassionate detachment was the correct tone for doctors to adopt with patients. In the process, the persona of the healer was diminished. “[E]motions are inherently subjective influences that interfere with objectivity” (Halpern, 2001) (p. 17).

It is, therefore, important that modern teaching programs strike a balance between imparting clinical skills based on scientific evidence and the development and nurturing of empathetic caring healers. Past practices that relied largely on the student’s innate abilities (or lack thereof) to bring these empathetic elements of practice to full development have been largely discarded.

Recent experience in Australia has found (Maley et al., 2006), and a systematic review has confirmed (Dornan et al., 2006), that students embedded in community practice situations develop a sense of themselves as practitioners earlier than their
counterparts trained in traditional hospital ward settings only. Long term integrated community placements are effective training methods for clinical skills and professionalism (Couper et al., 2011, Couper and Worley, 2010), for socializing students to the profession, giving them a useful experience of working within complex systems (Howe, 2001, Norris et al., 2009, Berwick and Finkelstein, 2010), and adding value to patient care (Scheffer et al., 2010).

The University of Queensland has developed a model for professionalism development which references governmental regulatory environment for professionalism and integrates with other curriculum aspects. They have constructed a ‘pyramid of professionalism’ that formalises a process of identification, notification, and correction of professionalism concerns (Parker et al., 2008).

Professionalism, sometimes referred to as Personal and Professional development (PPD) (Gordon, 2003b), Professional Behaviour (PB) (van Mook et al., 2010), or has come into renewed prominence in the past two decades to describe the humanist side of medicine, as opposed to technical proficiency in performing tasks (diagnosis, treatment, history taking). The connotation has been construed variously to refer to communication skills, an ethical approach to practice, defense of the profession of medicine against external threats, or a set of attributes that compel or enable a doctor to act in patient-focused manner. Individual traits included in this set are subject to debate, but generally include honesty, integrity, altruism, personal/professional balance, and honesty. The concept is heavily oriented towards medical education in western countries (Ho et al., 2011).

It has been argued that the main purpose of medical education, aside from the vocational technical aspect of skilling up students in basic clinical skills, is a socialisation to the profession (Bloom, 1988, Bloom, 1989). Professionalism includes
the ways in which a practitioner thinks about her/his approach to practice, how the practitioner engages with their patients, the ethical framework within which a practitioner operates, and the life/work balance within which the practitioner operates.

Evetts, in a paper examining the conceptual evolution of the term professionalism, and its impact on various occupational groups, argues that “a shift of focus is required from a preoccupation with defining ‘profession’ to analysis of the appeal to ‘professionalism’ as a motivator for and facilitator of occupational change” (Evetts, 2003) (p. 395). She sees the concept of professionalism as tied in with matters of control of occupational groups, both from within and by organisational hierarchies- a continual tension between “normative values and ideological control” (p. 411). Considering the expansion of specialisation and collaborative effort though health care teams that characterise modern medicine, it may be necessary to reconsider whether there can be a single, universal definition of professionalism relevant to any doctor in any practice situation (Christmas and Millward, 2011) (p. 7, 45).

There is a sense of privilege, of being special in some way, that comes with any profession, perhaps particularly that of medicine. This can conflict with the view of the profession held by the community at large. “The claim to uniqueness in professions is based, in part, on the fact that the professional is loyal to the profession rather than any particular employer” (Gibson, 2003) (p. 25-26). The medical student is trained, or more appropriately socialized, to don a “cloak of competence” (Haas and Shaffir, 1987), displaying to the world by their comportment that they have become a doctor.

The ways in which clinical preceptors/supervisors understand, value and implement professionalism in their own practice will directly impact their approach in modeling appropriate professional behaviour to these students, and thus influence
the assessment of students’ professional behaviour and development. But Cruess maintains that “most physicians do not fully understand professionalism and the obligations required to sustain it” (Cruess, 2006). Hafferty found a similar lack in medical students (Hafferty, 2002). This leaves us with a very hard task ahead.

Huddle, in his exposition of the aptness of analogy between professionalism and expertise (he also argues the counter point) maintains that “acquisition of expertise is marked by a transition from detachment to involvement” (Huddle, 2005) (p. 886). It is not only an intellectual appreciation, but also a set of feelings, emotion. He doesn’t credit Jodi Halpern’s book (2001), published four years before his own work, but the two thinkers are clearly on parallel tracks. One of Halpern’s central theses is an exploration of how emotional communication and an emotional presence (in an empathetic sense) are required skills for a doctor to achieve the highest levels of competence.

Huddle also nuances his argument—highlighting where the expertise analogy breaks down. Technical medical skills are presented to people (medical students) who have not encountered these skills before, in a context that’s highly structured and highly removed from the normal world of social interactions. When it comes to morality, however, the student will already have a functional framework in place, and will test new material presented against that framework. So instead of providing something new, the educational goal is to build from what is already there, shaping and correcting as needed.

Like Halpern, Huddle doesn’t deem a strict divide between reason and emotion as being particularly important or useful in constructing a professionalism framework or a way to teach it. Just as Halpern bestows on physicians permission to be both emotional and rational (Halpern, 2001) (p. 32), Huddle also sees a combination of
seeing and feeling as being necessary. He revives the ancient Greek concept of *akrasia* (Huddle, 2005) (p. 887) - knowing intellectually what the right thing to do is, but failing to do it anyway.

Coralie Wilson (Wilson and Bushnell, 2008) has constructed professionalism (she refers to it as PPD) as encompassing a reasoning and problem-solving approach to medical practice that incorporates;

- receptiveness and responsiveness to change
- ethical and legal approaches to professional life
- teaching and learning practices
- sensitivity and responsiveness to, and respect for, patients; self-awareness and professional resilience
- effective time management and professional responsibilities
- professional and personal boundaries
- team-based (multidisciplinary) practice.

Arnold and Stern (2006) conceptualise professionalism as resting on the pillars of excellence, humanism, accountability, and altruism, the whole construct resting on a bed of ethical and legal understanding supported by the foundations of communication skills and clinical competence.

DeWitt Baldwin has developed a model that identifies four archetypes of doctor encompassing the range of possible professional behaviours. Against a vertical axis with doing good at the top and avoiding good at the bottom, he crosses a horizontal axis of avoiding bad at left and doing bad at right. The four quadrants so demarcated then become; use of proper methods leading to a positive outcome on the upper left, using improper methods but still achieving a positive outcome on the upper right, using proper methods but achieving negative outcomes on the lower
left, and using improper methods thus achieving a negative outcome on the lower right.

Baldwin uses the character of Hawkeye Pierce from the M*A*S*H* movie and TV series as an exemplar of the upper right quadrant of his model, with Gregory House continuing the trend more currently (Bryden et al., 2010). I have extended this thought to identify archetypes for the other three quadrants. These may be conceived of as:

- Those who use proper methods to achieve proper results: Dr. James Kildare, handsome, serious, always proper TV doctor of the 1960s as played by Richard Chamberlain (Brand, 1961).
- Those who employ improper methods to achieve proper results: Hawkeye Pierce
- Those who employ proper methods, but nevertheless achieve improper results: The famous Dr. Henry Jekyll (Stevenson, 1886)
- Those who use improper methods and achieve improper results: Dr. Josef Mengele (Seidelman, 1988).

Adoption of a Hawkeye persona is tempting. When the need arises, a Hawkeye will subvert or at least rail against the “incongruence of values” (Gabel, 2011) (p. 422) between a health care system focused on financial and procedural considerations and a medical strategy that may flaunts rules but is likely to obtain best results for a patient. The leadership literature, particularly of the 1980s and 1990s, has been replete with exhortations to ‘first break all the rules’ (Buckingham and Coffman, 1999), turn someone’s sacred cow into hamburger (Kriegel and Brandt, 1997), and most of all to be entrepreneurial (Gupta et al., 2004, McGrath and MacMillan, 2000, Oliver and Paul-Shaheen, 1997).
But most leadership literature is aimed at the business world, not the practice of medicine. What then, should we expect the behaviour of a young doctor to be as he navigates the myriad rules and regulations that envelop medical practice? Does the doctor work for the patient only, or for the organisation that is paying for the doctor’s services (Bourne and Lewis, 1978, Mateen and Rubenstein, 2011)? Is a rule bending or breaking trait an admirable display of independent thinking or an anarchistic threat to safety and well being? Whether or not political advocacy should be part of professionalism is a contentious topic (Huddle, 2011, Banack and Byrne, 2011, Sud et al., 2011, Halliday, 2011, Palfrey and Chamberlain, 2011, Schickedanz et al., 2011, Kuo et al., 2011).

A truly comprehensive examination of professionalism in medicine would have to cover a much wider range of perspectives than this thesis could effectively cover. For example, there is a vast amount of psychological (Elman et al., 2005) and behavioural science (Howell and Dorfman, 1986) literature underpinning conceptions of professionalism. There is also a robust professionalism literature in nursing (Grant et al., 1996, Jackson et al., 2007, Hojat et al., 2003) and allied health (Stupans et al., 2011, Bruhn, 1987) which has relevance to professionalism in medicine.

**Literature reviews on medical professionalism**

Surdyk, Lynch, et al (2003) reviewed the literature on medical professionalism in 2003. They identified a set of five relationships the doctor must engage with in professional life: the doctor with patient, with society, with the health care system, with peer clinicians, and with his own self. These relationships must be nurtured through varying professionalism attributes. A doctor’s relationship with a patient requires technical competence, compassion, and integrity above all, while the
relationship to society involves attributes of accountability, trustworthiness, civic responsibility, and cultural sensitivity. The relationship to self relies on reflection, resilience, and self-care. Taken together, these relationships and corresponding attributes could form a systems analysis view of professionalism.

Teams led by Lynch (2004), Veloski (2005), and Jha (2007) have performed systematic reviews of the literature for evidence of effectiveness of measures used to assess attitudes essential for professionalism and their psychometric rigor. Their reviews concentrated on the internal and external validity of professionalism measurement methods. I will examine them in detail under Assessing Professionalism.

Satterfield and colleagues performed a systematic review of medical school curricula studies to identify emotional skills training methods and outcomes (Satterfield and Hughes, 2007), finding that the literature was broad in scope but limited (only 26 studies met their inclusion criteria. Findings of published studies were positive (although this may due to publication bias), but no conclusions could be drawn by the authors on what is best to do.

**The Hidden Curriculum**

“One can no more get rid of the hidden curriculum than one can get rid of protons”

Fred Hafferty, Dana Levinson (2008)

and Merenstein, 2007, Reisman, 2006, Gaufberg et al., 2010), that get in the way of efforts to impart caring attitudes and communication skills (Rees et al., 2002) to students.

This hidden curriculum is a set of unwritten ‘rules’, really attitudes, beliefs, and customs that evolves around the formal learning plans developed by a faculty, and influences, if not governs, the day to day interactions between and among faculty, administrators, and students (Haidet and Stein, 2006). Another interpretation holds that it is the set of learning outcomes stemming from, but not intended by, the formal curriculum. Coulehan puts it well: “Students enter medical school with an idealistic but inchoate commitment to professional virtue. However, in medical training they experience a disconnect between the virtue-based narrative medicine commonly avowed by their teachers and the detached, reductionistic medicine actually practiced by their teachers.” (Coulehan, 2004) In his view, the result of the hidden curriculum is that students take from their training a mindset that the medical establishment and the health care system, rather than the patient, is of prime importance in. This comes about especially through their experiences with unsanctioned aberrant or unprofessional behavior (Coulehan, 2005). Stephenson identified proof of the corrosive effect of the hidden curriculum on learning in the UK (Stephenson et al., 2006).

Gofton (2006) credits the first use of the term ‘hidden curriculum’ to Philip Jackson, writing in the educational literature (Jackson, 1968). Lempp and Seale (2004), reviewing the literature on this phenomenon ten years on from Hafferty’s seminal work on the hidden curriculum in medical education (Hafferty and Franks, 1994), identified six “learning processes” that had been described stemming from it; loss of idealism and, adoption of a ritualized professional identity (Toulis and Sinclair, 1997), emotional neutralization (Helman, 1991), change of ethical integrity (Coldicott
et al., 2003), acceptance of hierarchy (Hafferty, 2010), and the learning of the less formal aspects of being a ‘good’ doctor (Wright et al., 1998). It is likely that they meant to refer to Cribb and Bignold (1999), who identified the first four of these, and who saw “the key tensions inherent in the professional socialisation of doctors-between ‘objectifying’ and ‘humanising’ currents’” (p. 195) as being the major barriers to ridding medical schools of the hidden curriculum’s pervasive negative influence.

Gofton and Regehr (2006), contemplating the hidden curriculum from the particular perspective of orthopaedic surgery training, ponder the cumulative negative influence from students’ exposure to house staff’s “recreational complaining” and the relative scarcity of females in positions of authority (p. 23). They speculate that the result is a negative stereotype of orthopaedic surgery as a profession unfriendly to a healthy life/work balance, thus deterring good candidates, particularly female, from the subspecialty.

A validated instrument, trialled across nine US Medical schools, exists to measure the major components of the hidden curriculum (Haidet et al., 2005). Called the Communication, Curriculum, and Culture (C³) Instrument, it measures the experience of medical students to determine the extent to which the health care environment they are learning in is patient centred. Results are framed on three axes of Role Modelling (appropriate or not), Support for Student Behaviours, and Student Experiences (good or bad). This would seem to be a reasonable set of attribute measures for hidden curriculum effects. The early trials revealed significant differences across these institutions. What to do to correct imbalances found remains unanswered.
An untested, informal approach to the development of professionalism has a high potential to lead to confusion over accepted norms and values, and an inability to engage in continual educational quality improvement. Worse, it can lead to aberrant organizational culture that becomes an established norm passed down from teacher to student.

An example: It has been argued that sexually transmitted illness investigators (they were called venereologists in the time) working for the US Centers for Disease Control and Prevention (CDC) through the first half of the 20th century, largely graduates of the Medical School of the University of Virginia, were trained in a curriculum that held Eugenics as a legitimate approach to practice (Lombardo and Dorr, 2006). Eugenics was a belief system in fashion then in academia and popular culture, but largely discredited since the Second World War, that held that there are genetic differences between human racial groups that account for bad or good attributes, and that breeding humans to strengthen desirable traits and eliminate bad ones was a legitimate focus of medicine. Blacks were considered intellectually and physically inferior to whites and sexually degenerate (Brandt, 1978). This set of social and medical beliefs, and the resultant framing of appropriate professional behaviour, led directly to the infamous Tuskegee Syphilis Study, in which poor African American sharecroppers infected with syphilis were denied treatment and followed as a cohort to determine the natural history of the disease (Reverby, 2001, Jones, 1981).

Fins et al. (2003) report success in counteracting the hidden curriculum, although in terms of near-term student evaluation and not long term performance as doctors, of an intervention focused on guided reflection.
Recently Wear and Skillcorn found the hidden curriculum still alive and causing mayhem, with students in psychiatric clerkships seeing it as a negative in their educational experience and doctors believing they were using it for the good (Wear and Skillcorn, 2009).

**The Null curriculum**

Of equal importance to the hidden curriculum is the ‘null curriculum’ (Hafferty, 2006); that set of knowledge, beliefs, and traits that aren’t taught or even addressed—the bits that are left out of instruction formal or informal. Compassion, respect (Burack et al., 1999), and, in fact, the range of emotions that come to play in medicine, and the ways and means to deal with them, often fall into this category.

Jodi Halpern was taught in her medical training that “detachment was needed not only for doctors to avoid burning out, but more importantly, to provide objective medical care” (Halpern, 2001) (p.xiii). Her counter is that doctors who so program themselves miss important emotional cues that can aid diagnosis and treatment.

Professional competence, reflecting the “situational relationships among doctors, their patients, and the systems in which they perform” (Klass, 2007), is as much a function of settings and systems as it is of individual personality traits and past experiences (Gude et al., 2005a, Horsburgh et al., 2006), and so an understanding of the system in which students will be placed is essential to success in professionalism training. Caring for critically ill patients and facing personal problems in an actual work setting can be triggers for personal growth, while lack of personal; time and overwork can be barriers (Levine et al., 2006, Lown et al., 2007).
Extensive, long term, immersion type placements in clinical setting appear to be beneficial in cancelling or avoiding this hardening of attitude (Bell et al., 2008, Krupat et al., 2009).

Professionalism is not an abstraction, although it may be an amorphous set of traits at present compared with the well documented and increasingly evidence-based skill sets that make up the mechanics of medicine. As a situational set of traits, professionalism must also be considered a cultural construct, relative to the people and nation in which practitioners are working. Students at US medical schools are generally required to take an oath to “swear allegiance to a set of beliefs or action guidelines” (Hafferty, 2002).

**Hardening of the Heart**

A problem cited frequently in the current literature is that through the course of their medical education, students either do not progress in measures of some attributes of their personal and professional development (DiLalla et al., 2004, Bebeau, 2002, Branch, 2000, Patenaude et al., 2003, Jha et al., 2007), such as moral reasoning ability and empathy (Hojat et al., 2004, Newton et al., 2000, Neumann et al., 2011), or actually regress-scoring lower later in their medical education than in earlier years (Remen, 2000, Spencer, 2004, Woloschuk et al., 2004, Newton et al., 2008, Pololi et al., 2009, Huddle, 2005, Stebbins, 2005, Pololi and Price, 2000, Coulehan and Williams, 2001, Fehser, 2002, Nunes et al., 2011, Humphrey et al., 2007, Neumann et al., 2011). Becker and Geer delineated medical education into the “pre-cynical and cynical years” (Becker and Geer, 1958) (p. 50), although finding that idealism returned as his students left school for practice.

One of the few longitudinal studies of personality, stress, and coping in medical students found an overall decrease in life satisfaction among these students
These observations are not new (Rezler, 1974, Eron, 1958, Kopelman, 1983, Wolf et al., 1989).

The evidence supporting this ‘hardening of the heart’ has, however, been challenged by Colliver and associates (2010b), who re-analysed data from the original studies and assert that the differences reported are not that significant and that the methods used in most of this research are suspect. Several of the authors so accused have responded (Hojat et al., 2010, Newton, 2010, Sherman and Cramer, 2010), insisting that their methods are appropriate. Colliver has stuck to his position (Colliver et al., 2010a).

Egan noted that, as opposed to law students, who spend their training period in academia and not the real world of legal practice, medical students are exposed from an early phase of their career as students to clinical settings (Egan et al., 2004). He argues that as a result, medical students lose some of the altruism, enthusiasm for practice, while law students emerge from training with as much or more idealism as they had when they enrolled.

Training programs focusing on clinical skills may be developing technical competency at the expense of humanistic competency (West et al., 2007). Shapiro may have captured at least part of the reason: “if the physician does not erect self-protective barriers, the suffering of the patient will engulf and neutralize the physician’s competence” (Shapiro and Rucker, 2004).

**Attributes of professionalism**

In 2004, Wear and Kuczewski, in a seminal paper (2004), argued that the discussion to that point had been focused on abstractions, not tangible (important, measurable)
attributes of professionalism. But there is a lack of consensus on what attributes (Boudreau et al., 2008) and what behaviours (Ginsburg et al., 2004) constitute a ‘gold standard’ of professionalism. Is professionalism a virtue? Morality? Larkin (2003) has come up with a four tiered schema of professional behaviours and misbehaviours (aspirational/ideal behaviours, desired/expected behaviours, unacceptable behaviours, and egregious behaviours), ranking each on a scale from +2 to -2. This is one of the few reports in the literature to suggest stratification and quantification of professionalism based on attributes.

Price et al. (1971), in a report that predates the current professionalism debate by several decades, sought to identify a set of criteria for defining professionalism. They asked 371 doctors what characteristics were important for providing exemplary patient care, then asked 100 people from the community who weren’t doctors to rate the attributes mentioned. They came up with a list of 86 attributes, many of which (“is conscientious, strives for perfection”, “works effectively with patient’s family in giving competent medical care” “strict about honoring confidences”) (p. 232) would fit in well in a contemporary list, although some (“consults regularly with drug representatives in order to stay abreast of new drugs and medications”) (p. 233) may now be anachronistic.

They may be excused for using the outmoded (even then) descriptor of ‘negroes’ for African Americans. A greater mystery, although we have to credit the breadth of their opinion sampling, is their inclusion of ‘hippies’ (a by then almost extinct breed) in their sampling frame. Regrettably, criteria used to identify hippies were not presented.

But professionalism in medicine is surely more than a set of behaviours. Any program that attempts to enhance professionalism through medical education must
also examine the reasoning and motivations that underlie professional conduct (Ginsburg et al., 2004). Yet since a medical education program must proceed in stages, integrating and building on content as the student moves through the process, it is practical to approach professionalism as a set of interlocking components (Kuczewski, 2001), some of which can be taught in discrete curriculum modules.

Hilton and Slotnick (2005) consider professionalism to be “an acquired state, rather than a trait” (p. 59). They identify six domains of professionalism (p. 60). One set of these consists of personal (intrinsic) attributes, including ethical practice, reflection and self-awareness, and responsibility/accountability for actions (including commitment to excellence/lifelong learning/critical reasoning. The other set constitutes co-operative attributes such as respect for patients, working with others (teamwork), and social responsibility. While many of these domains are life skills useful in any social interactive occupation, Hilton and Slotnick suggest that they encompass the scope of medical practice and propose a simple follow-on definition of professionalism as “a doctor who is reflective and who acts ethically” (p. 61), assuming consensus definitions of ‘reflective’ and ‘ethics’.

But one problem with the ‘attribute’ approach to professionalism is that there is no consensus on the nuance of meaning, the connotations, of such frequently used terms in the context of the professionalism debate. Nor is the consensus on what attributes make up a ‘professional’ doctor. Hilton and Slotnick provide a pragmatic set, and go on to frame this set of attributes in the context of a model of how professionalism is learned. At this point, an examination of some of the other attributes often mentioned, and the utility of their consensus definitions in demarcating what constitutes measurably professional behaviour, might be useful. One of the most frequently mentioned is altruism.
Altruism

Altruism is dead. Its definition often can’t be decided upon (Ginsburg et al., 2004). The UK Working Party on Medical Professionalism, in submissions received by them in their efforts to define medical professionalism, heard much scepticism regarding this, based on concerns that “its implicit claim to moral superiority might lead to complacency or worse” (Tallis et al., 2005) (p. 8).

Altruism is considered by some as exploitation of the ‘altruistic’ for the gain of others (patients, senior medical faculty) who seek to abuse a power differential by preying on a student’s feeling of obligation or guilt or selfishness if they refuse (Hafferty, 2006). It has also been defined as a fiduciary responsibility of a doctor to a patient, the obligation to act in the patient’s best interest above all else (Glannon and Ross, 2002), especially the needs or desires of the doctor. The meaning of the concept - the context and manifestations of what constitute an altruistic act - change over time and setting (Shirley and Padgett, 2006) (p. 27).

In a viewpoint paper, Johnston argues that the difference in professionalism between contemporary students and their clinical teachers is greatest in the area of altruism, reflecting both the structure of medical training curricula and the socialisation process that students undergo while participating in it. (Johnston, 2006) He notes that the particular viewpoints brought into the profession by each new generation of students drive change in the shared professionalism paradigm. This occurs particularly in the areas of life work balance and the increasingly holistic concept of appropriate medical practice; “Medicine’s professional values must be constantly renegotiated with a changing society and with a changing cohort of members.” (p. 188).
May has described a gratuitous, rather than heat-felt altruism, as the “conceit of philanthropy” (May, 1975). Wilkinson’s team conceptualise it as “Balance availability to others with care for oneself” (Wilkinson et al., 2009) (p. 553). Altruism is featured heavily in many of the published calls to renew professionalism (American Board of Internal Medicine, 1995, Gordon, 2003c, Kearney, 2005).

**Empathy**

Empathy is dead, or so says Levy (1997). Her argument is that the term, in its modern common English usage, has been divorced from both the meanings of the original Greek and the more recent (early 20th century) German concept of Einfühlung in the fine arts world, is too close in syntax to sympathy, thus generating confusion, and that it is subject to three ambiguities in meaning:

1. Is empathy voluntary or involuntary, active or passive
2. Is empathy a matter of imagination or understanding? What is the necessary linkage (or is there any) between what the empathizer is feeling and what the object of his/her empathy is feeling?
3. Is empathy and emotion or an attribute- momentary or continual.

She suggest the rather tortuous substitute Involuntary Emotional Identification as a substitute, defined as “An involuntary; suffusion of feeling which is manifested in a physical way, no matter how slight, and triggered by a perceived or imagined sign of feeling, or a perceived or imagined condition which implies feeling, in a living creature or creatures”, with the proviso that it does not necessarily imply congruence between the feelings of the person expressing such identification and those of the subject of that person’s interest.

Her definition for the term is: “the faculty or capacity for imagining the unarticulated, even unobserved, feeling and/or motives of another living creature, or of attributing feelings and/or motives to an inanimate objects in nature or art”, which she calls ‘Sympathetic Projection’,
and “the faculty or capacity, for being attuned, at an emotional level, to the unarticulated feelings and/or motives of another living creature and, in particular, being attuned to signals of disturbance or distress” which she terms ‘Sympathetic Understanding’ (p. 182).

Others define Empathy as “the human capacity to understand the views, experiences, and feelings of another being without intensive emotional involvement” (Veloski and Hojat, 2006). A comprehensive review of empirical research on empathy in medicine published in 2009 found much complexity related to context, and much variation in definitions used throughout the literature surveyed (Pedersen, 2009).

Empathy is given high importance in much of the literature related to professionalism (Brownell and Côté, 2001, Marshall and Bleakley, 2009, Benbassat and Baumal, 2004). Shapiro emphasizes the importance of teaching empathy from both a behavioural and an attitudinal perspective (Shapiro, 2002). Her respondents (clinical educators) reported no difficulty conceptualising the concept, rather more so with how it could best be taught. She found it easy to fit her respondents on a continuum from those who saw empathy as an ‘attitudinal’ attribute to those who saw it as a ‘behavioural’ one.

Far from considering empathy dead, Jodi Halpern considers it fundamental to a doctor’s professional being. She addresses several themes in her book;

- A doctor’s emotions help them to “attune to and empathetically understand” a patient’s emotions (Halpern, 2001) (p. 10)
- Empathy effective for therapy stems from the doctor’s understanding of the patient’s emotional perspective, not the intensity of the doctor’s own feelings for/about the patient (p. 17).
Halpern’s conceptualisation is akin to that of Branch and colleagues, who examine humanism in medicine, defining it as “the physician’s attitudes and actions that demonstrate interest in, and respect for, the patient and that address the patient’s concerns and values” (Branch et al., 2001), published in the same year as her book.

Seaberg and colleagues (2000) report good results teaching empathy by having emergency department (ED) residents “walk in their patients’ slippers” (Brunton and Radecki, 1992, Brunton and Radecki, 1994)– giving them a clinical scenario with which to register as a patient, with ED nurses blinded to the study. Being cluey, these nurses soon guessed the real deal, but considering the trial important continued to play along. The authors report that the exercise increased empathy in participants, and left them with an improved attitude towards the experience of their patients.

Empathy has featured heavily in the literature on professionalism (Aring, 1958, Black, 2004, Nightingale et al., 1991, Jahoda, 2005, Mathiasen, 2006, Hojat et al., 2002, Blumgart, 1964, Rousseau, 2008, Kearney et al., 2009). It is well that it does. A doctor’s ability to engage with each patient, understanding their emotional as well as physiological responses to their state of health, without doing so from either extreme of complete, aloof dispassionate observation or over-identification and emotional involvement that clouds judgment and impedes ability to exercise good clinical judgment, is essential to a productive, fulfilling practice (Liang, 2011).

Resilience

“I use the analogy of being a rechargeable torch - you might start out being a shining light in the darkness, but if you never plug yourself in to recharge you will end up being no use to anyone!”

Sue Page (personal communication)
Resilience (synonyms; fortitude, endurance) is the ability to survive and recover from the hard knocks of life. Not only does a doctor have to deal effectively with personal crises, keeping them in check so as not to impede clinical decision-making, s/he also has to assist patients in dealing with theirs. In some instances, e.g. conveying to a patient the information that the patient has a terminal illness, the doctor may be the source of news that provides great personal distress and also the first and primary person that patient will depend on to help them (the patient) deal with the condition and the stress caused by it. Thus burnout, or compassion fatigue, reaching the end of one’s ability to further cope with adversity, is a concern in the rapidly changing, complex, high stress environment that is the modern world of medicine (Lawrence, 1996, DiGiacomo and Adamson, 2001, Herzberg, 2000, Mechaber et al., 2008, Meier et al., 2001, Muszalska and Buczkowski, 2006, Rovik et al., 2007, Tyssen et al., 2004, Tyssen and Vaglum, 2002, Tyssen et al., 2001, Tyssen et al., 2005, Woodside et al., 2008, Dwyer et al., 2011, Riley, 2004, Jorm, 2012, Howe et al., 2012) (Jorm p. 33).

While the doctor’s professional world is ever more the domain of intrusion by corporate (financial, administrative) actors, the doctor, especially if that doctor is a general practitioner, is also frequently the sole source of solace for patients in a world where families have lost the place of prominence as central to many people’s lives. Not only does the doctor diagnose and treat, the visit to the doctor is itself therapeutic, what Balint referred to as “the drug, doctor” (Balint, 2000) (p. 4, 229). The expectations patients have of their doctors are high, adding to emotional stress. Doctors, in turn, feel a strong obligation to live up to these expectations (p. 230).

Burnout is characterised by feelings of emotional exhaustion, depersonalization, and a sense of low personal accomplishment (Bruce et al., 2005, Gabel, 2011). Burnout can happen at any stage in a medical career, although it is more likely early on.
Medical students are also at risk (Dyrbye et al., 2009). On a physician survey in the Midwest U.S. and New York City, doctors working part time reported less burnout and higher job satisfaction (Mechaber et al., 2008). A cohort study in Norway found that one third of medical students and young doctors experienced mental health problems related to burnout (Tyssen et al., 2004). In Australia, psychiatric morbidity rates of 26% by the end of medical school, increasing to 70% during postgraduate training, have been reported (Willcock et al., 2004).

The effects of burnout can be reversed through interventions such as mindfulness meditation, reflective writing (Koppe, 2008), and other self-care routines (Kearney et al., 2009). The objectives are to prevent burnout during the training phase itself (Denz-Penhey et al., 2004), and to impart/encourage coping skills and bolster resilience such that the doctor recognises and is able to effectively ward off burn out. Goehring et al. (2005) identified predictors of burnout in Swiss doctors as;

- Male gender (also found in East Tennessee (Woodside et al., 2008))
- Age 45-55
- Excessive perceived stress due to workload
- Pressure imparted by health care systems (including differential between authority and responsibility Rutter et al., 2002))
- Medical uncertainty
- Practice in a rural area.

Dr. Michael Balint, a Hungarian-born psychotherapist and GP practicing in the UK in the 1950s, developed the concept of a small group of GPs and psychotherapists meeting on a regular basis to discuss case studies from their practices on patients with difficult psychological aspects (Balint, 2000, Samuel, 1989). The purpose was to examine (research) and improve (practice) the doctor/patient relationship as a therapeutic tool in itself (Lustig and Lustig, 2006, Benson and Magraith, 2005, Clarke
et al., 2002). Peer support as a benefit of participating in such a group acts as a mechanism to cope with stresses and avoid burnout (Kjeldmand et al., 2008) and enhance the reflective aspect of professionalism (Adams et al., 2006). Other researchers (Bruce et al., 2005) have found that a one to one debrief is preferred. The ability of doctors to examine their emotional response to patients, particularly seriously ill patients, and control these responses may help (Meier et al., 2001). Being a parent may help (Woodside et al., 2008).

Halpern explicitly rejects the argument that emotional detachment is necessary to prevent burnout (Halpern, 2001) (p 17). Rather, she encourages just the opposite. She suggest that “by accepting rather than resisting his (sic) own emotional range” (p. 21), the doctor can not only avoid burnout but also be more effective through better understanding of patients’ emotional states.

Dunn and colleagues (2008), reviewing the literature on medical student stress, devised a useful metaphoric model- the ‘coping reservoir’, incorporating positive and negative drivers of student well being. They conceptualise negative inputs (stress, time pressure) as filling the reservoir, depleting the energy of the student and leading to burnout. Conversely positive inputs (psychological support, a good mentor) lead to resilience, emptying the reservoir.

Few studies have looked at differentials in burnout, or burnout potential between different specialties or practice locations. One that has, carried out in Poland, (Muszalska and Buczkowski, 2006) found an apparent greater resilience in surgeons (attributed to an “Excessively-ambitious” personality pattern) as compared to GPs (who the study found manifested a “resigned/burnout pattern”. Cathebras et al., studying French GPs, found emotional exhaustion to be correlated with female sex, heavy
workload, wish to retrain, drinking, psychotropics, and suicidal ideation (Cathebras et al., 2004).

Resilience can be no more than an abstract concept to medical students in their early twenties, still in an age of self-perceived invulnerability where risk taking is seen as a mark of distinction (Gordon, 2003c).

Stress levels are high enough in modern life in general. In medicine, with ever changing rules, ever evolving technology, and an ageing population base, resilience is an essential trait, but one difficult to teach.

**Reflection in Practice**

Reflection in action, both in teaching and in practice, provides an integrated perspective based on hard knowledge (drug effectiveness proven by randomized controlled trial) with the more intuitive skill set required of a successful doctor (knowledge of patient need gathered through a process of probing conversation, reflection and analysis, and shared negotiation of action) (Epstein, 1999). This focus on reflection has proven to be valid in professional education in general (Redmond, 2006) and in medicine in particular (Grant et al., 2006, Roberts and Stark, 2008, Muir, 2010). For our purposes, students’ reflection on their self-perceived learning experiences and outcomes builds their own abilities and also allows their feedback to be used to the benefit of the program. A focus on reflection in action and reflection in learning throughout a medical education program should contribute greatly the development of professionalism. Writing in, and referring back to, a reflective journal can aid in attaining growth in insight (Johnson and Bird, 2006).

The educational theorist Donald Schön, in conceptualising his idea of the reflective practitioner, used contrasting metaphors of the “high hard ground” of research based
practice and the “swampy lowland” of practice situations that can not be solved solely through technical fixes (Schön, 1983). I was privileged to have the opportunity to work with Dr. Schön and his colleague Peter Senge in the early 1990s, developing learning content for the Public Health Leadership Institute, a joint venture between the US Centers for Disease Control and the University of California system. A cordial and affable man, as well as a deep thinker, at the time he had just completed work with Chris Argyris that resulted in a consolidation of the theoretical and practical bases of reflective practice (Argyris and Schön, 1992).

Schön had identified, in 1987, the dichotomous situation that commercial dominance places on professional schools, with the academic world of theory being in constant tension with the pragmatic world of practice (Schön, 1987). This dichotomy exists still (Maudsley and Strivens, 2000). Faculties in such schools tend to polarize along the discipline/practice divide.

However Schön worried less about this theory/practice divide than he did about the potential loss of reflection in practice in professional schools dominated by technical rationality. If rigor in such a school depends on the extent to which practice concepts are taught based on the application of scientific, replicable (and easily assessed!) science, then the artistry of the profession (Schön generalizes, but the application to medicine of his thought is quite apt) the reflective component- gets lost as tangential, trivial, or just overlooked in the focus on measurable outcomes. In his words: “know-how, when it does make its appearance, takes the form of science-based technique” (Schön, 1987) (p. 309).

To Schön, a practicum introduced earlier rather than later in a professional curriculum provides the necessary grounding for reflective practice. To the extent that it is lengthy and intensive, it provides the grounding necessary to build a
reflective component into practice. The practicum should provide “time to live through the initial shocks of confusion and mystery, unlearn initial expectations, and begin to master the practice of the practicum” (Schön, 1987) (p. 311).

Students in such practica “do not so much attend these events as live in them” (Schön, 1987) (p. 311). The school, in such a curriculum does not provide teaching, it provides coaching. Schön envisioned a critical inability for an institution to provide support and encouragement for such a coaching function, being counter to the main academic game as it is, but he did not, in his 1987 thoughts, encompass the prospect of the coach being to a large degree external to the institution while still being connected to the learning stream, as modern clinical educators are.

But Coulehan (Coulehan, 2005) argues that the majority of medical school graduates emerge from their experience as ‘non-reflective professionals’. They think that they manifest the virtues of a good doctor (empathy, altruism, and the rest) because they have played a role in their clinical training that led them to believe that, but in actuality, as a result of the effect of the ‘hidden curriculum’, they have deluded themselves, for example by conforming to hospital culture instead of critically reflecting on whether the conduct they have observed in clinical settings, and the rules set up by the bureaucracy of institution, mainly hospitals. For example, Coulehan argues that a medical student may come away from the experience having learned (subliminally more than anything else) that personal interaction is suspect because it lacks objectivity.

Mann, Gordon, and MacLeod conducted a systematic review of the literature to evaluate the evidence on reflective practice in health professions education (Mann et al., 2009). They found a wide variety of approaches to reflection and depth of reflective thinking amongst both health professions educators (they focused on
doctors and nurses) and their students. A central theme that emerged in their examination of the literature that addresses reflection in practice was that reflection is most likely in challenging situations, “where the professional’s knowledge in action is not adequate to the situation” (p. 602).

They conclude that reflective capacity can be developed (taught). In fact, their inference from the sparse literature they found is that reflective capacity, rather than occurring naturally, is stimulated by directed learning activity. Mentoring appears more effective than portfolio writing in developing effective reflection capability. Other factors that contribute to effective development include a supportive organisational or teaching environment, real world experience (as opposed to hypothetical exercises) as context, and group learning.

From nine studies addressing the topic, they conclude that it is possible to assess reflection in a valid and reliable fashion, more so in practitioners than in students. Other factors that they caution that element of culture and the context in which reflection occurs must be taken into account in any assessment protocol. The early stage of reflection research in health professional education, and the concomitant lack of standardized conceptual frameworks, prevent a conclusive understanding of the effectiveness of reflection or of methods for teaching it. While none of the studies they reviewed looked at outcomes of reflective practice, they are confident that reflection is integral to deriving meaning from complex situations. The literature they reviewed lends support to Schön’s models of reflection- on-action and reflection-in-action.

Other attributes
Other key attribute commonly considered as essential to medical professionalism include; compassion (Browning et al., 2007), including avoidance of compassion
fatigue (Kearney et al., 2009), trust (Browning et al., 2007), teamwork (Hill-Sakurai et al., 2008), respect (Brownell and Côté, 2001) (Browning et al., 2007) competence (Brownell and Côté, 2001, Matveevskii et al., 2012), lifelong learning (Gordon, 2003c) and honesty (honour, integrity, ethics) (American Board of Internal Medicine, 1995, Gordon, 2003c, Shorr et al., 1994, Singer, 2003). Ginsburg and Regehr found that lying could be viewed as either professional or unprofessional conduct (Ginsburg et al., 2004).

Ginsburg and Regehr (Ginsburg et al., 2002) found that the critical issues that students deemed important in their professional development did not fit easily into the standard list of professional attributes.

**Unprofessional behaviour**

This review is not concerned with technical medical expertise- the skill with which a doctor accurately diagnoses illness and effectively administers treatment, is not included in the conceptualisation of professionalism, and is not addressed by this review.

Neither is a focus on learning a code of professional conduct, as opposed to an ability to engage in critical thinking (Bebeau, 2002). While these are important aspects of medical practice, they are generally well defined and assessed in current medical curricula.

But it is necessary to examine what is meant by unprofessional conduct in order to fully understand professionalism. Further, we must decide whether such conduct should be evaluated as an underlying individual flaw or something that may occur in otherwise virtuous people due to some lapse (Howe et al., 2010). If the latter, can
there be extenuating circumstances that can trigger a lapse in professionalism that are best dealt with as the circumstance themselves, not the actor?

Ginsburgh and Regehr (2002) examined students experiences of witnessing behaviour they considered unprofessional during their training, and mapped these to six critical issues; communication violations, role resistance, objectification of patients, accountability, physical harm, and crossfire; being put in the middle of a internecine conflict. Most of these were contextual: a conduct or behaviour that in different circumstances would not be notable was seen by these students as wrong. They describe students “torn between the learner’s contract with the teacher and the caregiver’s contract with the patient...”(Ginsburg et al., 2002) (p. 521). They emphasise that these students’ perceptions of unprofessionalism do not fit neatly into the general set of definitions of what professionalism is.

They suggest that faculty, being inured to their long held behavioural patterns, run the risk of not critically examine their own performance and being unaware of the extremely comfortable position that such behaviours, along with the power differential in the training situation place on students. This is again a dilemma posed by (inherent in?) the ‘hidden curriculum’.

Murden and colleagues identified deficiencies in early year students that were predictive of poor performance in clinical rotations. These included lack of interviewing skills, overall shyness, and a paternalistic attitude towards patients (Murden et al., 2004).

Vanderbilt University has developed protocols for identifying and dealing with unprofessional behaviour. Their approach, modelled after a progressive disciplinary mode, includes four progressively more involved interventions, the earlier ones
aimed at assisting the doctor with identifying and rectifying minor lapses, the fourth constituting formal disciplinary sanctions (Hickson et al., 2007).

Assessing professionalism

“Professionalism is about what someone does, rather than what he or she knows” Tim Wilkinson, Winnie Wade, L. Doug Knock (2009) (p. 553)

Professionalism is the aspect of medicine least amenable to objective, quantitative scrutiny (CMAJ anonymous, 2012). As a result, medical education thinkers have determined that there is a need to be more formal about approaches to professionalism, leaving less to the hidden curriculum and chance and instead determining what works to educate doctors who have skills of empathy, patient respect, and personal time management and life work balance that are as well evolved, and as formally imparted, as are their technical skills.

A valid assessment tool for professionalism would be one that is capable of accurately measuring change over time (hopefully improvement) in some one or all agreed-upon important attributes of professionalism (Hamilton, 2008). It should also be able to rule out alternative hypotheses other than the educational program being assessed as causes of change measured, and should be capable of providing this measurement without bias due to gender, culture, etc. (Hamilton, 2008) (p. 500). Efforts in the US to assess professionalism in reference to the AGME Guidelines (ACGME and ABMS, 2000, Larkin et al., 2002) are problematic (Huddle and Heudebert, 2007, Reeves et al., 2009), and appear to have been unsuccessful so far (Lurie et al., 2009), while efforts in Europe, combining formative and summative processes, show more promising results, in that reports of unprofessional student
conduct have risen, indicating greater awareness of them and greater procedural capacity to address them (van Mook et al., 2010).

There is much room for improvement in the assessment of professionalism skills (Dannefer et al., 2005, Jha et al., 2007, Mazor et al., 2007b, van Zanten et al., 2005, Cruess, 2006, Crisp, 2011, Schwartz et al., 2009), either in students or in practitioners. Most assessment in medical education had traditionally focused on categorizing students in terms of mastery, a reflection of the clinical skill domination of most curricula. The standard assessment tool of the objective structured clinical examination (OSCE) has been adapted to the purpose, with results that emphasise the difficulty in applying this tool to professionalism (Mazor et al., 2007b). But notions of objective measurement of competence, reducing assessment to guidelines and checklists, adapt poorly to the assessment of professionalism (Brooks, 2009).

Assessment as a method for improving learning has been adopted (Lynch et al., 2004) (p. 369). For example, Dannefer and colleagues, studying a peer assessment process in students, suggest an approach based on a two factor conceptualization of professionalism: work habits and interpersonal habits (Dannefer et al., 2005) as a formative assessment.

There is a strong view in the literature that narrative assessments, as opposed to objective assessments, are most appropriate for assessing professionalism. The appropriate attitude can easily be assumed by a student in an objective structured assessment. Assessing behaviours, without assessing underlying attitudes, has a likelihood of failure to identify true poor performers (Rees and Knight, 2007). The actual manifestation of appropriate professionalism traits is best observed in a real clinical setting. In this regard, assessment by other members of the health care team; nurses, other doctors, and patients, can be of value. (Huddle, 2005). The subjectivity
and complexity of professionalism lend themselves to an assessment regime that includes more than one assessment tool or method (Lynch et al., 2004).

A formative assessment tool, the assessment of professional behaviours, has been developed by the US National Board of Medical Examiners. This instrument is a multi-source feedback tool involving input from several raters (Mazor et al., 2007a).

Filmed vignettes of clinical encounters have been used as a teaching technique. These present (usually) ethically sensitive issues or inappropriate conduct. They serve as triggers (Ber and Alroy, 2002) for discussion and reflection. Ginsburg’s team has used this technique to test the assumptions that there are commonly held views shared by faculty regarding what constitutes professional and non-professional behaviour that students should aspire to, and that the behaviour exhibited by students in key situations is an accurate predictor of their ability to attain professional competence. They found that there are few “shared standards” (Ginsburg et al., 2004) (p. S4) held by faculty for students.

In fact, for some scenarios faculty held polar opposite views about appropriate student conduct. Honesty, particularly engaging in deception that causes no harm to a patient, was one area of mixed results. In fact, one of their respondents thought lying to be ethical in one instance and not in another, even though expressing an opinion that truthfulness was an absolutely necessary component of professionalism!

Identification of exemplary students who can lead their fellow students to a higher degree of professionalism through peer evaluation has also been trialled (McCormack et al., 2007), and methods for best use of this approach have been suggested (Finn and Garner, 2011).
A professional development portfolio has been used both as a learning tool and a formative self-assessment by several research and evaluation teams (Gordon, 2003a, Kalet et al., 2007, Rees and Sheard, 2004, Azer, 2008). Such tools have been found to enable students to gain better focus on learning goals and to serve as a structure to mentoring, with best outcomes achieved when the mentor/supervisor works together with the student/trainee (Pryor, 2010).

Assessment tools for varying aspects of professionalism have been developed recently and are finding their way into the assessment process. One such is the Defining Issue Test which measures moral reasoning skills and clinical performance, designed by Donnie Self and Associates (2000). Another is the Miller – Rest Model for professional assessment (Stern, 2006) (p. 29).

Lynch and colleagues distil a number of recommendations for assessing professionalism as a result of their review of the literature. These include (Lynch et al., 2004);

- Use several assessors
- Use more than 1 instrument (e.g. a moral reasoning assessment along with a behavioural assessment)
- Assess in varied settings

Maria Savoia, of the U&CSD School of medicine, suggests a novel approach to assessing professionalism whereby a Likert scale is used, but with ‘best’ in the centre position, instead of at an extreme end (Savoia, 2007). This is being used as an evaluation instrument by the advisory committee of the AAMC. It is based on the premise that it is possible to have too much or too little of a virtue. For example, honesty can run a spectrum from being totally dishonest, deceitful, lying, up to
being brutally honest and therefore tactless to the point of causing injury (what is the best answer to “does my butt look big in this”?). Similarly, altruism can run the gamut from aloofness, with concern for self exceeding any concern for others to a complete disregard for one’s own well being when considering others, thus placing the self in danger.

If most medical students have integrity and go on to manifest true professional personas, what Hafferty describes as a “low probability of unprofessionalism” (Hafferty, 2006)(p. 289), then specificity and sensitivity of measurements of professionalism should be a concern (Hafferty, 2006). Students take a dim view of attempts at assessing professionalism (Levenson et al., 2010). An assessment tool for professionalism in general practice has been trialled (Van De Camp et al., 2006).

A series of systematic reviews have collated assessment methods in use or trialled over the past several decades. Jha and colleagues (2007) attempted to answer the following research questions:

- What measures have been used to assess attitudes to medical professionalism
- ‘what is the psychometric rigor of measures employed to assess attitudes of medical professionalism
- What interventions have been found to be effective in changing attitudes towards professionalism (Jha et al., 2007) (p. 823)

Their inclusion criteria were papers in English that reported primary empirical research on measurements used to gauge students’ attitudes about professionalism. They found 97 relevant papers. The lack of qualitative studies is a reflection of their heavily quantitative focused inclusion/exclusion criteria. They noted that few studies reported on the method of development of the instrument(s) used. Fifteen studies were longitudinal, with only 3 reporting a change in attitude towards professionalism over time.
Their conclusion is discouraging in that they found that only a small portion (44 of the 97) of studies reported validity and reliability measures for the instruments used. Further, there was very little longitudinal study, necessary to examine the dynamics and bring about change in the erosion of professionalism attitudes in the course of medical training that is already documented.

The systematic review performed by Veloski et al (Veloski et al., 2005) published in 2006, covered studies published between 1982 and 2002. They concluded that there was still much room for assessment of professionalism to evolve. Reflecting the recent increase in attention on professionalism, they found that only one fifth (23) of studies they uncovered were published before 1990, whereas one third (46) had been published in 2000 or later. Most assessment methods (84 of 134) measured specific attributes of professionalism, with only eleven assessing professionalism in whole. Most assessment measures were developed for purposes of program evaluation, not individual student performance. Few studies had the requisite validity, reliability, and practicality to be used to accurately measure that.

More recently, Wilkinson’s team picked up where Veloski’s left off, reviewing studies published from 1996 to 2007 (Wilkinson et al., 2009). They created a ‘blueprint’ covering published assessment tools and the individual attributes of professionalism they were used to measure, identifying gaps where no suitable tool existed for a given attribute. They found no single tool adequate to the task. Rather, individual measurement techniques must be incorporated for individual attributes.

Of the assessment measures they reviewed, direct observation/assessment of the student, by supervisors and even patients (with cautions on potential biases) are useful across a range of professionalism attributes. They view portfolios as useful in
collating evidence of professionalism, but more suited to self-reflection than formal assessment. As with Veloski’s work, they conclude that there are still gaps in what is measurable, with “reflectiveness, advocacy, life-long learning, and dealing with uncertainty” (Wilkinson et al., 2009) (p. 557) among the professionalism attributes without suitable existing measurement systems. They also reiterate a need to develop better tools and for integration of existing tools to build a comprehensive assessment methodology.

A wide variety of assessment tools have been used to measure various attributes of professionalism, including fundamental psychological profiles predictive of ability to develop appropriate professionalism traits. Table 3.1 lists some assessment tools that have featured prominently in the professionalism literature. My main purpose in this research is to explore how professionalism is taught now and how this teaching can be improved. Teaching and assessment are integral to each other, and so I explore assessment in the context of teaching in Chapter 6 and again in Chapter 9.

### Table 3.1: Professionalism assessment instruments

A compendium of specific instruments designed to measure professionalism or one of its key traits in medical students or practitioners.

<table>
<thead>
<tr>
<th>Instrument/Test</th>
<th>Measures</th>
<th>ref</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kohlberg Moral Judgement Interview</td>
<td>Moral reasoning/judgment</td>
<td>(Patenaude et al., 2003a, Patenaude et al., 2003b, Baldwin and Self, 2006)</td>
<td></td>
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<tr>
<td>Libertarian dual communitarian</td>
<td>Moral orientation</td>
<td>(Bore et al., 2005)</td>
<td>One-off design from</td>
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<tr>
<td>Instrument/Test</td>
<td>Measures</td>
<td>ref</td>
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<tr>
<td>questionnaire</td>
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<tr>
<td>Health Care Professional Attitude Inventory</td>
<td>professionalism</td>
<td>(Brooks and Shepherd, 1992)</td>
<td>Used extensively in Nursing</td>
</tr>
<tr>
<td>Watson-Glaser Critical Thinking Appraisal</td>
<td>Critical thinking ability</td>
<td>(Brooks and Shepherd, 1992)</td>
<td></td>
</tr>
<tr>
<td>Maslach Burnout Inventory (MBI)</td>
<td>Emotional exhaustion, depersonalisation, low personal accomplishment</td>
<td>(Calkins et al., 1994, Goehring et al., 2005, Woodside et al., 2008)</td>
<td></td>
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<tr>
<td>Professionalism Mini Evaluation Exercise (P-MEX)</td>
<td>Professional behaviours</td>
<td>(Cruess et al., 2006)</td>
<td>Mini-CEX format Developed by Cruess, a leading researcher in this area</td>
</tr>
<tr>
<td>Job Satisfaction scale</td>
<td>Job Satisfaction</td>
<td>(Finset et al., 2005)</td>
<td>Used in context of measuring personality and “medical school variables” in resultant professional job satisfaction</td>
</tr>
<tr>
<td>Ethics and Health Care Survey Instrument</td>
<td>Responses to ethical dilemmas</td>
<td>(Goldie et al., 2002)</td>
<td></td>
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<tr>
<td>Instrument to assess ‘ethical sensitivity’</td>
<td>ethical sensitivity</td>
<td>(Hébert et al., 1992)</td>
<td>Based on 4 clinical vignettes Uni Toronto</td>
</tr>
<tr>
<td>questionnaire</td>
<td>Medical students’ ethics as shaped by clinical dilemmas</td>
<td>(Hicks et al., 2001)</td>
<td></td>
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<tr>
<td>Machiavellianism and Paulhus socially desirable responding (SDR) scales</td>
<td>Moral reasoning</td>
<td>(Hren et al., 2006)</td>
<td></td>
</tr>
<tr>
<td>survey</td>
<td>Caring attitudes</td>
<td>(Lown et al., 2007)</td>
<td>Distributed to curriculum leaders by Association of American Medical Colleges in 2005</td>
</tr>
<tr>
<td>Assessment of</td>
<td>Professional</td>
<td>(Mazor et al., 2007a)</td>
<td>The (US) National</td>
</tr>
<tr>
<td>Instrument/Test</td>
<td>Measures</td>
<td>ref</td>
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<tr>
<td>Professional Behaviors</td>
<td>behaviours</td>
<td></td>
<td>Board of Medical Examiners developing, multisource feedback (MSF) tool intended for formative use with medical students and residents.</td>
</tr>
<tr>
<td>OSCE</td>
<td>Professional behaviours</td>
<td>Mazor et al., 2007b</td>
<td>Based on 20 videotaped encounters</td>
</tr>
<tr>
<td>Balanced emotional empathy scale (BEES)</td>
<td>Empathy, vicarious empathy</td>
<td>Newton et al., 2008, Chlopan et al., 1985, Mehrabian, 1996, Veloski and Hojat, 2006, Mehrabian and Epstein, 1972</td>
<td>30 positively or negatively worded items that measure responses to scenarios</td>
</tr>
<tr>
<td>Observation-based assessments</td>
<td>Highly professional behaviours</td>
<td>Reed et al., 2008</td>
<td>One off Mayo Clinic study by Reed</td>
</tr>
<tr>
<td>Self-Reflection and Insight Scale (SRIS) measures</td>
<td>three factors in the self-regulation of behaviour cycle: need for reflection; engagement in reflection, insight</td>
<td>Grant et al., 2002, Roberts and Stark, 2008</td>
<td>Developed by Anthony Grant (USyD), refined by Chris Roberts and Patsy Stark</td>
</tr>
<tr>
<td>Lind’s Moral Judgment test</td>
<td>moral judgment competence and moral attitudes</td>
<td>Slovackova and Slovacek, 2007</td>
<td>Used in Czech study</td>
</tr>
<tr>
<td>moral judgment competence and moral attitudes/ Myers-Briggs Type Indicator</td>
<td>Empathy as determined by Personality traits</td>
<td>Stebbins, 2005</td>
<td>New in 2005</td>
</tr>
<tr>
<td>evaluation of professional behaviour in general practice (EPRO-GP) instrument</td>
<td>Professional behaviour</td>
<td>Van De Camp et al., 2006</td>
<td>New in 2006. Optimised for GP</td>
</tr>
<tr>
<td>Educational Commission for Foreign Medical Graduates (ECFMG) clinical skills assessment (CSA)</td>
<td>Interpersonal skills, including rapport</td>
<td>van Zanten et al., 2005</td>
<td>Uses standardised patients</td>
</tr>
<tr>
<td>Interpersonal Reactivity Index (IRI)</td>
<td>empathy</td>
<td>West et al., 2007, Davis, 1983, Veloski and Hojat,</td>
<td>Used to correlate</td>
</tr>
<tr>
<td>Instrument/Test</td>
<td>Measures</td>
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<tr>
<td>Observed clinical encounters (with or without standardized patients)</td>
<td>Communication skills</td>
<td>(Klaman and Williams, 2006)</td>
<td>Empirically measures development of empathy and its variations and correlates throughout the stages of medical education in med students and doctors</td>
</tr>
<tr>
<td>Empathy Scale</td>
<td>empathy</td>
<td>(Hogan, 1969, Veloski and Hojat, 2006)</td>
<td>Developed by Hogan</td>
</tr>
<tr>
<td>Jefferson Scale of Physician Lifelong Learning</td>
<td>lifelong learning</td>
<td>(Hojat et al., 2003)</td>
<td></td>
</tr>
<tr>
<td>Groningen Reflection Ability Scale (GRAS)</td>
<td>Personal reflection ability</td>
<td>(Aukes et al., 2007)</td>
<td>Self reflection, empathic reflection, reflective communication</td>
</tr>
<tr>
<td>Patient-Practitioner Orientation Scale (PPOS).</td>
<td>PPOS differentiates between patient-centred versus doctor-centred or disease-centred orientation,</td>
<td>(Tsimtsiou et al., 2007)</td>
<td>measuring attitudes along 2 dimensions: ‘sharing’ and ‘caring’</td>
</tr>
<tr>
<td>Semi-structured questionnaire survey</td>
<td>Self reflection</td>
<td>(Boenink et al., 2004)</td>
<td>Based on case vignettes</td>
</tr>
<tr>
<td>Self-Directed Learning readiness scale (SDIR)</td>
<td>professionalism in clinical environment</td>
<td>(Quaintance et al., 2008)</td>
<td></td>
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<tr>
<td></td>
<td>Adults’ readiness to engage in self-directed learning</td>
<td>(Hoban et al., 2005, Guglielmo, 1977)</td>
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</table>
Longitudinal studies

The optimal study design for determining the promoters and barriers of professionalism in medical students would be a longitudinal design—measuring important attributes like moral reasoning skill, maturity, personality profile at baseline and then re-testing at appropriate intervals, following students into their mature years of practice. Few of these have been done.

One longitudinal study of Norwegian students looked at the outcome variable: ‘identification with the role of doctor’ (Gude et al., 2005b). This study found that the variables that correlated significantly with identification with the role of doctor were male gender. This was identified by the authors as likely due to a traditionalist, male dominated medical community (the study was initiated in 1993). Other factors were self-confidence in knowledge, prior motivation to study medicine, and fear of work demands. This study did not examine the attributes of professionalism identified in this review as important, and it was done in a culturally homogeneous environment long enough ago such that it’s relevant to the situation today, and in countries other than Norway, must be questioned.

While Patenaude et al. call their study of evolution in students’ moral development a cohort study (Patenaude et al., 2003), it really is a before-and-after study, as there is no comparison/control group. Using Kohlberg’s Moral Judgment Interview, their results support those of others studies – that moral reasoning did not change over the course of 3 years in medical school.
Situated learning theory

“Authentic activity...is important for learners, because it is the only way they gain access to the standpoint that enables practitioners to act meaningfully and purposefully” John Seely Brown, Allan Collins, Paul Duguid (1989) (p. 36).

Understanding the personal and professional culture of the learning environment in which students will be placed is critical to establishing appropriate professionalism learning goals and teaching methodologies, both for clinical educators and for students (Coulehan and Williams, 2001).

Professional development is based on attitudinal learning (Howe, 2002). As medical students learn the skills of clinical practice from their preceptors through their training, they also develop (evolve) attitudes regarding the norms of professional behaviour acquired from these same preceptors. It is a useful construct to consider students engaged in the process of acquiring these identity traits as “proto-professionals” (Hilton and Slotnick, 2005).

Through this evolution from student to doctor, learner to caregiver, assimilating and assuming identification as a professional, the student overcomes the ‘role resistance’ (Ginsburg et al., 2002) of the initiate through their learning experience as guided by the preceptor.

Holmboe and Ginsburg are concerned that most medical training programs are based on learning theories focused on the individual learner in isolation, rather than the learner in a dynamic social situation (Holmboe et al., 2011). Traditionally, medical students first learned the basic sciences, in the absence of clinical care experience, then progressed to clinical care experiences though truncated rotations
that left them with little appreciation for the complex systems in which care is delivered (Berwick and Finkelstein, 2010).

Lave and Wenger's situated learning theory (Lave and Wenger, 1991) aptly frames the context in which medical students learn professionalism in their later years of training when they are involved in clinical placements (Maudsley and Strivens, 2000). During this time they are witness to and participants in the social structures, institutions, (hospitals, medical practices), and protocols of medical practice. This is the realm where inexperience meets and learns from experience (Goldie, 2008), where theoretical knowledge is transformed into practical knowledge (Cruess and Cruess, 2006, Cruess, 2006, Brown et al., 1989), and where different professions (nursing, allied health medicine) interact.

Systems, methods of approaching and solving problems, and historical factors all come to play within this aspect of their learning. Through their situated experience within these structures, through their interactions with the players in the healthcare system, and, perhaps as importantly, the observations of these players in action, students begin to adopt the role of practitioner, both experientially and psychologically.

As well as a social structure, there are social systems and theories of social practice to which they are then exposed (Lave and Wenger, 1991) (p. 13). While medical students at this stage, being 24 to 27, are adults, they have not yet left the stage of being students, and therefore are very dependent and therefore very used to having structure and formality imposed on them rather than devise it for themselves. Gender, ethnicity, social orientation, and class all come into play, as an individual’s identity in these regards governs both their interpretation of what they are being
taught and what their teachers assume, based on these attributes, that their orientation to learning might be.

Students’ identity is being moulded as a person as well as a professional. Through legitimate peripheral participation, situated in a practice environments, and, ideally, under the guidance of a capable role model, students evolve into professionals by talking to their role models and each other (Kenny et al., 2003).

Learning is so fundamental to the social order we live by that theorising about one is tantamount to theorising about the other (Lave and Wenger, 1991) (p. 15). In the practice environment students are being transformed into professionals in contexts that carry a great weight of baggage which we would prefer to lose. This baggage includes power differentials, bad working practices, and unprofessional performance- all are realities of the clinical placement.

Change within these structures is coming slowly, with time, fuelled by changes in the rest of society. There is concerted effort in medical education to eliminate racism, advance women in the workplace, eliminate bullying, and develop laws to protect employees against these and other excesses of the past.

There is a danger inherent in attempting to formalise professionalism training to too great an extent in classroom situations, in a curriculum, or in any overly-structured format. In such settings, knowledge is deconceptualised, proceduralised (Wenger, 1998) (p. 265), and can lead to a dependence on such types of rote learning theory. This produces narrow understanding and narrow applicability with little opportunity for the learner to negotiate, and little need for the learner to reflect.
Evaluation procedures that are linked to or tailored to such a formalised structured curriculum can tend to reinforce these narrow, inappropriate aspects of such a learning process. This could further negate the opportunities for individuals to learn professionalism in ways that make sense to them in the context in which they will be actually practising.

In professionalism, a very context-driven construct, the primary focus of education must be on negotiation of meaning and aiding the learner to develop reflective techniques and cognitive intellectual ways of processing information and reacting to situations.

Theories of learning medicine over the past 100 years since Flexner (Flexner, 1910) were based on a positivist perspective; science-based, value neutral, and largely disassociated from context (Mann, 2011). Now, a constructionist perspective seems both more appropriate as a way of understanding and more effective as a paradigm for teaching. In this approach, the learner is put in a place of actively constructing a very personal body of knowledge framed by past experiences and his or her unique individual view of the world. Meaning has multiple meanings. Pathways to acquiring knowledge are also individualised, with the ultimate goal in the case of professionalism being the achievement of phronesis (Aristotle, 350 BC), practical wisdom (Ross, 1980), “the set of capabilities that allow us to deliberate about things with ends or goals in mind, and to discern and enact right action, thus acknowledging the complexities involved in practical realities” (Radden and Sadler, 2008) (p. 377). The medical student is challenged by “illstructured problems” (Hilton and Slotnick, 2005) that clutter the path to enlightenment.

Wenger (1998) (p. 266) uses an analogy of learning a new language, which is relevant to learning professionalism. A new language is best learned by immersing oneself in
a culture where the language is spoken. Not only is there continual reinforcement and rehearsal of grammar, speech structure, and even the sound of speech, but also learning the language is done in the context of where and how the language is used to convey meaning. So learning is carried out in a far deeper level than learning by rote in a classroom.

So, too, is professionalism really learned in clinical settings. Not aided by a structured curriculum guide, so much as by the character, common sense, and prior learning of the learner – in this case, the medical student – and as importantly, perhaps more importantly, in the context of acceptable practice where the learner is situated. What goes for professionalism in the clinic, in the hospital, in the practice, where the student is placed is going to mould professionalism for the student. This can be a positive or negative effect. Students can learn much from negative displays of professionalism if they are able to contextualise these, identify them as inappropriate, or wrong, and avail themselves of the ability to resist temptations towards such activity and rather seek out pathways towards conduct that is the opposite of that which they witnessed during training.

Conversely, it might be possible for students to learn professionalism in situations where professionalism is never called into question, where actions are appropriate, camaraderie is high, and the people engaged in the practice are engaged at it at a very high level of professionalism. The literature is replete with examples of unprofessional behaviour witnessed, experienced, and digested by students as part of the hidden curriculum. However, there is no body of evidence to suggest that doctors in practice today are not practicing at a generally high level of professionalism.
Wenger points out that learning in an apprentice model is different (he says better) than didactic formal classroom learning because participatory learning processes like apprenticeship are so “epistemologically correct” (Wenger, 1998) (P. 101).

By learning in context, practice points are continually reinforced, driven home, assimilated, corrected, and guided by actual practitioners. Competence that is achieved is achieved through a real-world process in a real-world setting, not through an abstract presentation in a classroom.

The parallel consultative practice model (Walters et al., 2008) developed at Flinders University (Worley et al., 2000) is a competent means for doing this. In this model, a medical practice must have sufficient rooms that a student can see a patient in one while a doctor sees a patient in another. Two patients enter at the same time, the doctor sees one, and the student sees another for a certain period of time, generally 15 minutes. At the end of this time, the doctor will be finished with her/his patient, having made the diagnosis, referral, or consultation that is necessary, and will then enter the room with the student and the patient that the student has been seeing. The student will have taken a history, gained some details from the patient, and ideally made a preliminary assessment. The student presents these to the doctor in the presence of the patient. The doctor makes further enquiries, perhaps takes further data, and then makes the formal diagnosis and prescribes the treatment or other outcome. The doctor may then review the student’s assessment, either still in the presence of the patient or later in private.

The difficulty in learning medicine through clinical placements is that the medical student needs the identity of a doctor in order to participate in practice in order to learn practice. Yet the student is still a student, perhaps a “proto-professional” (Hilton and Slotnick, 2005), but not yet confident in the role, not yet ready to don the
identity of practice. How do we provide students with partial identities as doctors in order that they may participate in clinical practice or apprenticeship while at the same time acknowledging that they are not full participants, not fully fledged, and not fully qualified? How do we allow them to make certain limited decisions, which enhance their learning and their assimilation of identity without running the risk of endangering patient welfare?

A perceived benefit for the patient, seeing both student and doctor, is that they get double the time spent face-to-face with someone in the medical practice and the meeting. A reflective dialogue between the student and doctor may provide an enhanced diagnosis or consultative experience. For the system to work, there needs to be sufficient space available (individual rooms) such that the medical practice is not disrupted or the flow of patients slowed down over-much by the student presence.

**Social Learning Theory**

Social learning theory (Harrison and McIntosh, 1992, Thyer and Myers, 1998, Cruess, 2006, Rosenstock et al., 1988, Bandura, 1977) is a construct similar to Situated Learning Theory (one would be careful not to use the acronym) in explaining the learning process as it relates to medicine, especially in practice placements. Simply put, Social Learning Theory holds that we model what we see, but are not consciously aware of it unless we engage in the necessary reflection to do so. It can be used as one construct to define and explain how attributes of professionalism evolve in specific settings, in this case rural medical practice.

Education, in this view, is cyclical, with continual rounds of having an experience in a learning situation, reflecting on it, abstracting a generalization from it (a theory or
tenet), and then testing that tenet by adopting it in a similar practice situation.
Reflection (remember Schön) is the key element that drives this process of learning from experience (Fryer-Edwards et al., 2006) (p. 217).

Conclusion

Professionalism is but one component, and not always the most featured one, in a medical education experience. Medical students learn first from formal structured, traditional didactic sessions (lecture), then move into real clinical environments, where their learning is both formal and informal. In this latter stage, their professional persona becomes more fully formed, although this persona will go on forming and changing throughout a person’s entire medical career. Through examining this process, and several key components of it, this chapter has laid a foundation on which subsequent chapters will be built.

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NEWTON, B. W., BARBER, L., CLARDY, J., CLEVELAND, E. & O’SULLIVAN, P. 2008. Is There Hardening of the Heart During Medical School? Academic Medicine, 83, 244-249.


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Chapter 4: Defining Professionalism in medical education: A Best Evidence in Medical Education (BEME) Systematic Review.

“Explicit definitions are explicit heuristics: they guide or impel us in certain directions. By doing so they tend to divert our attention from information beyond the channels they cleave, and so choke off possibilities” Benson Saler (1993) (p. 74)

“Today, the term ‘professionalism’ springs like kudzu from every nook and cranny of medical education” Jack Coulehan (2005) (p. 892)

"I shall not today attempt further to define [pornography]... But I know it when I see it” U.S. Justice Potter Stewart (1964)

“a doctor who is reflective and who acts ethically” Hilton and Slotnick (2005) (p. 61).

“l do not strive for a clear and unambiguous definition of “professionalism” because l do not believe one is possible” Edmund Erde (2008) (p. 7)

Introduction

Over the past decade, ‘professionalism’ has spread as an intellectual epidemic (Goffman and Newill, 1964) of ideas through medical education circles. To some professionalism means defending the profession against external threats, particularly corporatized health care in the US. To others, it is the art that complements the science in an effective, well rounded physician, and so equates with humanism (Swick, 2007). DeWitt Baldwin considers professionalism as a “value-oriented ideologically based construct” (Baldwin, 2006) (p. 103). Freidson saw professionalism as “independence of judgement and freedom of action” (Freidson, 2001) (p. 122). There is now a vast literature on the subject, but still no clearly resolved definition, let alone teaching or assessment methods.

The review team that I led undertook a systematic review and qualitative meta-synthesis of the literature to examine the state of knowledge of professionalism and identify the best evidence for how professionalism should be defined, taught, and
assessed. Our aim was to identify a complete and unbiased body of evidence including a broad range of studies. This includes not only experimental designs but also descriptive papers to capture information about current practices and to provide context. Both qualitative and quantitative studies were reviewed.

While there have been many attempts at definition, none is standardised or has universal agreement. A definition is necessary to convey meaning - both to those within the profession, conferring a shared identity, and to those outside the field, particularly the lay public, to identify what the profession is dedicated to and what it values. A definition is also a fundamental basis for assessment of medical students, and for performance appraisal/evaluation in practitioners.

I treated the issue of the definition of professionalism as an emerging issue in medical education that would benefit from holistic conceptualisation and synthesis of the literature to date (Torraco, 2005). I have therefore employed an integrative literature review (Whittemore and Knafl, 2005) methodology.

The research questions were:

- How is professionalism understood by medical practitioners, medical teachers, and their students, and how has this developed through the literature over the past 10 years? (this chapter)
- What teaching processes, systems, and approaches have been found to work to ensure optimum personal and professional development in medical students? (review paper number 2/ Chapter 5)
- What methods have been shown to be effective in assessing professionalism in medical students and doctors in vocational training? (review paper number 3/Postdoctoral).
Methods

Conceptual framework of review

The purpose of the review is to capture the meaning and significance of the literature (Greenhalgh et al., 2009) and the genesis of the modern professionalism thread in medical education. Therefore, I opted for a descriptive analysis of the existing literature, and the results are more interpretive than integrative (Oliver et al., 2005, Tricco et al., 2011, Greenhalgh et al., 2005). I referred to the Centre for Reviews and Dissemination (2009) and the Best Evidence in Medial Education (BEME) Guidance publications (Hammick et al., 2010, Harden et al., 1999, Hammick, 2005) for guidance in developing the review.

I sought to capture the entire body of literature on professionalism through our initial search, identify key papers that have contributed substantially to the conceptual and theoretical development of professionalism, and tell the story of professionalism in medical education as it has evolved and as it is currently understood from the perspective of the literature.

My attempt is to identify a construct of professionalism about which, hopefully, a consensus has emerged; a comprehensive definition of medical professionalism that is more than a list of attributes (Cruess et al., 2004), and which can be measured directly, without the need to rely on proxy measures (Jha et al., 2007). Figure 4.1 presents the logic framework that I developed to conceptualise the review.
Team effort

This section describes the contributions that other team members made to demonstrate how an integrated effort resulted in this review.

A systematic review can’t be carried out effectively as a solo project. One of the strengths of systematic review methodology comes from involving multiple people in the process, especially in evaluating abstracts and papers against inclusion/exclusion criteria (White and Schmidt, 2005) (p. 56) (Higgins and Green, 2011). Bringing multiple professional perspectives to the effort, as well as just the fact that two heads are better than one, adds rigour to the process. I designed the protocol for the review (contained in Appendix E) and drafted the initial search strings. As all abstracts, and, subsequently, papers required review by...
at least 2 reviewers, I reviewed all abstracts identified in initial searches, and all papers identified for possible inclusion in the abstract review stage, partnering with other team members in this work as described below. I hand-searched relevant journals, and performed ancestry and progeny searches (references in and article citing studies retrieved through the search process). I obtained and compiled all numerical data contained in the tables and figures in this chapter, including citation counts and sub-group analyses of studies included (study type, country of origin of study teams, etc.) I also wrote this chapter, modifying it with editorial suggestions from other team members.

Ian Wilson, Professor of Medical Education at the University of Western Sydney, reviewed one third of abstracts retrieved in the initial search, reviewed half of all papers identified for possible inclusion by the review of abstracts, and provided editorial suggestions on this chapter.

Professor Nel Glass, Chair of Nursing Research and Director, Nursing Research Institute, School of Nursing & Midwifery, Australian Catholic University, also reviewed one third of abstracts retrieved in the initial search and half of all papers identified for possible inclusion by the review of abstracts, and provided editorial suggestions on this chapter. Dr. Glass has also taken on the role of final drafting of this chapter as a manuscript for submission to the journal Medical Teacher in fulfilment of the terms of BEME’s acceptance of this proposal. This later work is not contained in the chapter you are now reading.

Michelle Harrison, Faculty Liaison Librarian at the Medical Library of the University of Sydney, assisted in refining the search strings, provided editorial suggestions on this chapter, and provided technical assistance with retrieving and managing abstracts and papers.
Professor Liz Farmer critically reviewed this chapter (as she did all chapters in this work) and provided editorial advice.

Duncan Nass, then a medical student at the University of Wollongong Graduate School of Medicine, reviewed one third of abstracts retrieved in the initial search and also wrote a brief review of issues around definitions of professionalism (not included here) as fulfilment of the requirements of his Phase III student placement research project.

Last but most important, Professor Marilyn Hammick, Visiting Professor, Birmingham City University UK, Consultant to Best Evidence Medical Education, reviewed and accepted the review proposal and provided much advice on theory, methodology, and conceptual framing of the review, even travelling to the University of Western Sydney campus for a face to face meeting with the review team.

**Search strategies**

Several members of the review group had personal bibliographies of professionalism, including over 700 citations. These were used to estimate sensitivity and specificity of search strings in preliminary scoping searches, and were added to the bibliographic database before the first search results. The initial search string was developed by me, and was modified from that of Jha et al. (2007). As Jha et al. were looking at a narrower range of professionalism studies, search strings developed for this study were broadened through three iterations of pilot testing, observing the results of different filtering strategies until apparent sensitivity and specificity appeared to be optimised. Formal sensitivity/specificity calculations were not performed. The search string was deliberately set to err on the side of
maximising sensitivity without producing an unreasonable number of abstracts to review. **Table 4.1** lists search strings used for each database.

**Table 4.1: Search strings used**

<table>
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<tr>
<th><strong>Medline</strong> 7/09/2010</th>
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</table>
| Topic: medical professionalism not restricted to medical education (and including humanism) Date limits: 1999-2009 1. (humanist or humanism).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 2. exp Ethics, Medical/ 3. exp Ethics/ 4. Social Values/ 5. exp Professional Impairment/ 6. professionalism.mp. 7. ((behav* or act or acts or action* or values) adj3 (ethic* or professional or professionally)).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 8. professional role.mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 9. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 10. (doctor* or gp or "general practitioner*" or "medical professional*" or surgeon* or specialist* or registrar*).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 11. exp Physicians/ 12. students, medical/ or students, premedical/ 13. (medic* adj2 graduate*).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 14. 10 or 11 or 12 or 13 15. 9 and 14 16. limit 15 to yr="1999 - 2009"
|  |

<table>
<thead>
<tr>
<th><strong>Pre-Medline</strong> 25/8/10</th>
<th></th>
</tr>
</thead>
</table>
| 1. (medic* adj3 professionalism).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 2. (humanis* adj3 (medic* or doctor* or physician* or "health profession*" or surgeon or registrar or resident or GP or "general practitioner*"))].mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier] 3. 1 or 2 4. limit 3 to yr="1999 - 2009"
|  |

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<tr>
<th><strong>Embase</strong> 11/09/10</th>
<th></th>
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</thead>
<tbody>
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<td>'humanism'/de OR humanist:ti OR humanism:ti OR humanist:ab OR humanism:ab OR 'medical ethics'/exp OR 'ethics'/de OR 'bioethics'/de OR 'conflict of interest'/exp OR 'complicity'/exp OR</td>
<td></td>
</tr>
</tbody>
</table>
'casuistry'/exp OR 'social psychology'/exp OR 'morality'/exp OR 'malpractice'/exp OR 'professional misconduct'/de OR 'professionalism'/de OR professionalism:ti OR professionalism:ab OR 'professional standard'/de OR 'professional role' OR behav* NEAR/3 ethic* OR behav* NEAR/3 professional OR behav* NEAR/3 professionally OR act NEAR/3 ethic* OR act NEAR/3 professional OR act NEAR/3 professionally OR acts NEAR/3 ethic* OR acts NEAR/3 professional OR acts NEAR/3 professionally OR action* NEAR/3 ethic* OR action* NEAR/3 professional OR action* NEAR/3 professionally OR values NEAR/3 ethic* OR values NEAR/3 professional OR values NEAR/3 professionally AND
('physician'/exp OR 'medical specialist'/exp OR doctor* OR gp OR 'medical professional' OR 'medical professionals' OR surgeon* OR registrar* OR 'general practitioner':ti OR 'general practitioners':ti OR 'general practitioner':ab OR 'general practitioners':ab OR 'medical student'/exp OR medic*: NEAR/2 graduate*)
AND [embase]/lim AND [medline]/lim AND [1999-2009]/py

**Philosophers Index 25/8/10.**

1. (medic* adj3 professionalism).mp. [mp=abstract, title, heading word]
3. Professionalism.sh.
4. 2 and 3
5. 1 or 4

**Legaltrac 25/8/10.**

(tx (medic* w3 professionalism))

**Informit 25/8/10.**

(kw(medic* %3 professionalism))

**Capital Monitor** Results not included in library

12 refs found to various parliamentary docs
Databases searched included Medline, the Cochrane collaboration, Excerpta Medica (EmBase), PsycINFO, Proquest, Informit, legaltrac, Philosophers Index, PreMedline, Dissertation and Theses Full Text. Libraries Australia, the British Library, Library of Congress (US) and www.Amazon.com were searched for books. The search period was 1999-2009 inclusive (10 year period). Table 4.2 presents yield by database for these searches.

I used EndNote X2 (2010) as a reference manager to create the bibliographic database for this project. I migrated to X3 in April 2010.

**Inclusion criteria.**

Any articles presenting viewpoints, opinions, or empirical research into the conditions, processes, or outcomes of personal and professional development, especially in clinical workplace learning, identified through the search methodology, were considered subject to the following criteria:

- Any language
- Qualitative and quantitative
- Failed efforts are of special interest
- Undergraduate or postgraduate medical students.

I purposely kept selection criteria broad at each stage of the review, as I was seeking a consensus voice across a very heterogeneous literature. Editorials and opinion pieces had the potential to be very influential in the evolving debate about what constitutes professionalism, and the research question (how is professionalism defined) does not lend itself to traditional study design types except for quantitative surveys or qualitative designs, and so the effort was to cast a wide net across the ten years of literature searched.
Table 4.2: Yield of abstracts for review by database

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<tr>
<td>Embase</td>
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<td>1585</td>
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<td>Phil index</td>
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<td>3</td>
</tr>
<tr>
<td>Legaltrac</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Informit</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>Sociological abstracts</td>
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<td>7</td>
</tr>
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<td>Psychinfo</td>
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<td>Libraries Australia</td>
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<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>19263</td>
<td>3522</td>
</tr>
</tbody>
</table>

Excluded as obviously irrelevant = 15741

Exclusion criteria

Since this was an exploratory systematic review, no outcome measures were excluded, at least initially. Papers focusing on professionalism in professions other than medicine were excluded, as were papers focusing on a single component attribute of professionalism and papers focusing on professionalism in subspecialties of medical practice.

Review of Abstracts

Two team members independently assessed each abstract identified in the initial searches for eligibility. I was one of them in all cases. Differences of opinion on whether to keep/discard were resolved by discussion between the two reviewers after each had independently reviewed the abstract. In all cases these discussions resolved the dilemma. If agreement could not have been reached, a third team member would have reviewed the abstract.
Inter-rater agreement on whether to keep or reject individual abstracts was very good, ranging between 85-90%, Kappa between $K=0.69$ and $K=0.80$.

Abstracts were deleted at this stage if they were not relevant to the topic, and so were permanently removed from the database. An electronic copy (EndNote library) of the total bibliography of 3522 abstracts, indicating those kept and deleted, was retained for reference.

**Hand searching**

Hand searching was carried out in the following journals:

- Medical Teacher
- Medical Education
- Academic Medicine
- Education for Primary Care
- Clinical Teacher

This search contributed one new paper to the total.

**Reference list (ancestry)**

Reference lists from all papers meeting quality criteria were reviewed, with relevant papers identified and obtained.

**Citations (progeny)**

The most productive source of relevant papers for the review that were not obtained from the initial search or team members’ libraries consisted of ‘cited by’ searches carried out in selected seminal papers, some of which were published before the time period covered by this review. For example, Hafferty’s 1994 paper on the ‘hidden curriculum’ has been cited 277 times at date of this writing. Among its’
progeny were five relevant papers not captured in the initial searches or hand searches.

Grey literature
The most prominent authors in this area were contacted with a request for ‘grey literature’: conference proceedings, unpublished studies, internal reports, etc. This search did not contribute any new papers to the total.

Data synthesis
Full text papers were acquired for each abstract identified as a candidate for inclusion. These papers were then reviewed for inclusion in the final data synthesis. For accuracy and transparency, two people independently assessed each paper for eligibility for inclusion in synthesis, and, concurrently, for quality. Papers rejected were moved to a separate database and retained. Papers were excluded if they were not on the topic (definition, teaching or assessment of professionalism in medicine), focused on a narrow specialty/discipline within medicine or a single attribute of professionalism, or focus on a profession other than medicine. Papers excluded from the study after review of full text are listed in Appendix F.

In this review, I used a narrative synthesis technique using the Institutes for Health Research UK Economic & Social Research Council ESRC narrative synthesis guidance document (Popay et al., 2006). This method is more appropriate than thematic analysis (Thomas et al., 2004) when synthesising different types of evidence (qualitative, quantitative, viewpoint, and for purposes such as mine, where a rich description of a literature, rather than development of theory, is the objective (Lucas et al., 2007).
As there was considerable heterogeneity among the studies included in the review, and very little quantitative analysis, I did not undertake a meta-analysis. I also rejected the approach of a comparative and thematic synthesis, essentially a qualitative meta-synthesis (Sandelowski et al., 2007). I hoped to capture the development of a school of thought on Professionalism and identify the most valuable insights offered to date on professionalism, how it should be taught, and how it should be assessed.

In order not to reject key insights of this type out of hand by restricting the data synthesis to reviews of a particular design type (Edwards et al., 1998), I included viewpoint and opinion pieces as well as empirical research. In fact, the vast majority of this literature to date has been of this type. Therefore, a narrative synthesis emerged as the method best suited to synthesising this large and disparate body of knowledge.

There is a growing body of literature on techniques for combining different types of evidence in a systematic review (Oliver et al., 2005, Harden et al., 2004, Pawson et al., 2005, Dixon-Woods et al., 2005, Barnett-Page and Thomas, 2009), although this evolution is very much a work in progress, with no established consensus on how to establish quality (Dixon-Woods et al., 2007), (Ring et al., 2011, p. 13).

I modelled our methodology on techniques emerging from this literature. After experimenting with several critical appraisal tools, I opted for a semi-structured analysis with unprompted judgement (Dixon-Woods et al., 2007) for quality evaluation, inclusion in the final set of papers for review, and synthesis of evidence. In this method, the reviewers rely on their collective professional judgment to assess the worth of a given study, looking at studies in a holistic manner rather than focusing on methodologic and procedural aspects.
As a quality criterion for inclusion in data synthesis, I only included papers for which the review team could collectively agree on the answer ‘yes’ to all twelve of the ‘Questions to ask of evidence based on experience, opinion, or theory’ put forth in the first BEME Guide (Harden et al., 1999) (p. 557).

I developed an instrument to aid us in the determination of quality and addition to the synthesis, taking into account QUEST dimensions (Harden et al., 1999) as developed for BEME reviews such as this. Table 4.3 presents the data quality assessment tool I developed for this study (definitional papers). In doing so, I acknowledge the risk that such a checklist has the potential to be reductionist if not arbitrary (Barbour, 2001), and to skew results towards aspects of execution or reporting of qualitative data, rather than a holistic judgement (Dixon-Woods et al., 2007).

Citation counts were identified for each paper as at April 2010. Citation counts were obtained from the SCI Web of Science. Focusing on citation counts is problematic. On the one hand, it is a standard indication of the influence of a particular work in a body of literature. It is expected that highly cited publications will be more likely to be further cited (de Solla Price, 1976). However, this can be due to several factors, some of them negative. An important paper with seminal ideas will be cited extensively, and rightly so. But a controversial or flawed paper may also be highly cited by subsequent authors who challenge or refute the findings or assertions in it. An author is compelled to cite her/his own prior work, either because their recent work builds on older work or because in the academic world increasing your citation count is a necessary factor in promotion.
<table>
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<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td><strong>Relevance:</strong></td>
<td>Barely relevant</td>
<td>Derivative or not well developed</td>
<td>Relevant</td>
<td>Contains new, interesting concepts</td>
<td>Preeminent. Ground breaking paper</td>
</tr>
<tr>
<td><strong>Conceptual basis:</strong></td>
<td>Trivial or incidental (letter, introductory editorial) Redundant</td>
<td>Concepts covered in other publications</td>
<td>A viewpoint, well expressed</td>
<td>A closely reasoned intuitive approach without empirical data</td>
<td>A closely reasoned deductive approach to defining professionalism</td>
</tr>
<tr>
<td><strong>Journal:</strong></td>
<td>Obscure journal</td>
<td>Fairly unknown journal</td>
<td>Good journal, but with focus far removed from medical education</td>
<td>Good medical education journal</td>
<td>Prestigious journal</td>
</tr>
<tr>
<td><strong>Citation count:</strong></td>
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<td></td>
<td></td>
<td>Well cited (&gt;10)</td>
<td>Highly cited</td>
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<tr>
<td><strong>Inclusion?</strong></td>
<td>Best not to include</td>
<td>Will not be missed</td>
<td>maybe include</td>
<td>Definitely include</td>
<td>Seminal paper</td>
</tr>
</tbody>
</table>

Adapted from Mitton C, Adair CE, et al. The Milbank Quarterly. 2007;85(4):729-68

**Results**

Electronic searches identified 3522 references, of which 1077 were kept after abstract review. Of these, 753 came from team members personal reference lists, 43 were from progeny (citation) lists, and 25 were from ancestry (reference lists). This supports Greenhalgh’s findings that for complex areas, traditional search strings are not enough (Greenhalgh and Peacock, 7524)

Full text copies were obtained and reviews of all papers identified as being relevant trough abstract review. Of these, we identified 717 studies meeting inclusion
criteria, consisting of 195 on the topic of definitions of professionalism, 217 on how to teach it, and 265 on how to assess it. **Figure 4.2** presents, by year and topic, studies meeting inclusion criteria that were published over the time period covered by the review.

**Definitions papers**

Of 195 papers on the topic of professionalism, we rated 27 as best evidence for inclusion in data synthesis. **Figure 4.3** presents the flow diagram through the review process, indicating numbers of records reviewed and retained at each stage.

Outcome 1: comprehensive, universally accepted definition of medical professionalism: No such definitions were evident in the literature.

Outcome 2: closely argued view, widely accepted, concerning what such a definition should consist of. See below.

**Figure 4.2**: Papers by year and topic

<table>
<thead>
<tr>
<th>Year</th>
<th>def</th>
<th>teach</th>
<th>assess</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4</td>
</tr>
<tr>
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</tr>
<tr>
<td>2009</td>
<td>28</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

notes:
2002 Medical Professionalism in the New Millennium: A Physicians’ Charter released; multiple articles excluded
2004 includes theme issue of American Journal of Bioethics
2007 includes theme issue of Academic Medicine
2008 includes theme issue of Perspectives in Biology
As would be no surprise, most papers on the definition of professionalism were viewpoints or opinion pieces. The few qualitative and quantitative studies sought to identify consensus or meaning of professionalism, and how it is practiced, in various groups (students, medical faculty, practicing doctors). Table 4.4 presents a list of journals in which papers were published. Table 4.5 breaks down definitional papers by study type. Table 4.6 lists the most cited definitional papers. Table 4.7 presents countries from which the best evidence definitional papers came from. Table 4.8 summarises some of the major conceptual definitions for professionalism in medicine.

**Overview of literature on defining medical professionalism**

Despite over twenty years of intense scrutiny and rumination in the medical literature, there is still a lack of consensus as to what defines professionalism (Hafferty, 2006c, Hamilton, 2008, Jotterand, 2005, Van De Camp et al., 2004). Even the UK Working Party on Medical Professionalism, tasked to develop such a definition, given ample resources to do so, and including the leading thinkers in medicine and medical education in the UK, conceded that “an easy definition of ‘professionalism’ eludes us” (Tallis et al., 2005)(p. 8), and consider their work to be a framework document, not a manifesto. Swick argues that “The complexity of contemporary medical practice drives the complexity of medical professionalism and confounds a simple, universally accepted definition” (Swick, 2007) (p. 1022).
Figure 4.3: Flow Diagram
BEME Systematic review: definitions of professionalism

Records identified through database searching
(n = 19263)

Additional records identified through other sources
(n = 70)

Records after duplicate and irrelevant removed
(n = 3522)

Records screened
(n = 3522)

Records excluded
(n = 2513)

Full-text articles assessed for eligibility
(n = 1077)

Full-text articles excluded
(n = 417)

Studies meeting inclusion criteria
(n = 195)

Best evidence included in synthesis:
Definitional Issues
(n = 27)

Table 4.4. Journal in which paper published

<table>
<thead>
<tr>
<th>Journal</th>
<th>Number of papers</th>
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<tbody>
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<td>Academic Medicine</td>
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<tr>
<td>Medical Education</td>
<td>84</td>
</tr>
<tr>
<td>Medical Teacher</td>
<td>40</td>
</tr>
<tr>
<td>Journal of General Internal Medicine</td>
<td>27</td>
</tr>
<tr>
<td>The American Journal of Bioethics</td>
<td>28</td>
</tr>
<tr>
<td>Perspectives in Biology &amp; Medicine</td>
<td>16</td>
</tr>
<tr>
<td>Clinical Orthopaedics and Related Research</td>
<td>11</td>
</tr>
<tr>
<td>Teaching and Learning in Medicine</td>
<td>10</td>
</tr>
<tr>
<td>Journal of the American Medical Association (JAMA)</td>
<td>6</td>
</tr>
<tr>
<td>Journal of Medical Ethics</td>
<td>9</td>
</tr>
<tr>
<td>Clinical Anatomy</td>
<td>9</td>
</tr>
<tr>
<td>New England Journal of Medicine</td>
<td>8</td>
</tr>
<tr>
<td>Mount Sinai Journal of Medicine</td>
<td>8</td>
</tr>
<tr>
<td>European Journal of Internal Medicine</td>
<td>8</td>
</tr>
<tr>
<td>Cambridge Quarterly of Healthcare Ethics</td>
<td>8</td>
</tr>
<tr>
<td>Medical Journal of Australia</td>
<td>8</td>
</tr>
<tr>
<td>Annals of Internal Medicine</td>
<td>4</td>
</tr>
<tr>
<td>Patient Education and Counseling</td>
<td>6</td>
</tr>
<tr>
<td>Annals of the Academy of Medicine, Singapore</td>
<td>5</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>2</td>
</tr>
<tr>
<td>Education for Health: Change in Learning and Practice</td>
<td>4</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>7</td>
</tr>
<tr>
<td>American Journal of Obstetrics and Gynecology</td>
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</tr>
<tr>
<td>Other</td>
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### Table 4.5: Study design types. Definitional papers (n=195)

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<td>Qualitative methods</td>
<td>14</td>
</tr>
<tr>
<td>Systematic reviews</td>
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</tr>
<tr>
<td>Books/book chapters</td>
<td>19</td>
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</table>

### Table 4.6: Most highly cited BEME definition papers

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<th>citations</th>
<th>1st author</th>
<th>year</th>
<th>citations</th>
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<td>119</td>
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<td>Swick</td>
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<td>McCullough</td>
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<td>Pellegrino</td>
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<td>2006</td>
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<td>Jortand</td>
<td>2005</td>
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<td>Ginsburg</td>
<td>2002</td>
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<td>2005</td>
<td>49</td>
<td>Kearney</td>
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<td>2004</td>
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<td>Askham</td>
<td>2006</td>
<td>14</td>
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<tr>
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<td>Jha</td>
<td>2006</td>
<td>13</td>
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<td>Irvine</td>
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<td>Duff</td>
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<td>2002</td>
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<td>Rowley</td>
<td>2000</td>
<td>10</td>
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Table 4.7. Country/Region of study origin, Best Evidence Definitional papers (n = 27)

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<td>Canada</td>
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<td>The Netherlands</td>
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<td>South Africa</td>
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Table 4.8: Selected conceptual definitions of professionalism in medicine

<table>
<thead>
<tr>
<th>Source</th>
<th>definition</th>
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</thead>
<tbody>
<tr>
<td>Swick, 2000</td>
<td>medical professionalism consists of those behaviors by which we—as physicians—demonstrate that we are worthy of the trust bestowed upon us by our patients and the public, because we are working for the patients’ and the public’s good. Failure to demonstrate that we deserve that trust will result in its loss, and, hence, loss of medicine’s status as a profession. Medical professionalism, then, comprises the following set of behaviors: Physicians subordinate their own interests to the interests of others. Physicians adhere to high ethical and moral standards. Physicians respond to societal needs, and their behaviors reflect a social contract with the communities served. Physicians evince core humanistic values, including honesty and integrity, caring and compassion, altruism and empathy, respect for others, and trustworthiness. Physicians exercise accountability for themselves and for their colleagues. Physicians demonstrate a continuing commitment to excellence. Physicians exhibit a commitment to scholarship and to advancing Physicians deal with high levels of complexity and uncertainty. Physicians reflect upon their actions and decisions.</td>
</tr>
<tr>
<td>Ber and Alroy, 2002</td>
<td>Medical professionalism includes expert knowledge, self-regulation and fiduciary responsibility to place the needs of patients ahead of the self-interest of physicians (from Freidson (Freidson, 1970) )</td>
</tr>
<tr>
<td>Stephenson et al., 2006</td>
<td>professionalism mainly consists of adherence to a specific set of professional attributes constitutive of medical role morality and readily identifiable as virtues of medical professionalism (VMP)</td>
</tr>
<tr>
<td>Buyx et al., 2008</td>
<td>a state of mind that includes confidence, motivation and a sense of professional identity</td>
</tr>
<tr>
<td>Dornan et al., 2007a</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gordon, 2003b</td>
<td>altruism, accountability, duty, integrity, respect for others and lifelong learning in doctors</td>
</tr>
<tr>
<td>Cruess et al., 2004</td>
<td>Profession: An occupation whose core element is work based upon the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning or the practice of an art founded upon it is used in the service of others. Its members are governed by codes of ethics and profess a commitment to competence, integrity and morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession a monopoly over the use of its knowledge base, the right to considerable autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served and to society. (p. 74)</td>
</tr>
<tr>
<td>Huddle, 2005</td>
<td>Professionalism is medical morality</td>
</tr>
<tr>
<td>Lown et al., 2007</td>
<td>Caring attitudes: feelings and opinions that arise from values that affirm the importance of understanding others as individuals with unique needs, in the context of individual, community and cultural relationships. Behaviors that reflect these attitudes include: demonstrating empathy, communicating sensitively and responsively, engaging in mutual decision making, committing to ongoing self-reflection, and welcoming feedback (p. 1515)</td>
</tr>
<tr>
<td>Royal College of Physicians Working Party, 2005</td>
<td>Medical professionalism signifies set of values, behaviours, and relationships that underpins the trust the public has in doctors (p. 45)</td>
</tr>
</tbody>
</table>

Firstly, the question of whether there is a distinction between the concepts of ‘personal and professional development’ (PPD) and ‘professionalism’.

It could be argued that the former is primarily a means to an end and that professionalism is a set of acquired traits, not a set of innate personal attributes (Baldwin and Daugherty, 2006). However, the terms are used almost interchangeably (see for example, (Parker et al., 2008, Gordon, 2003a)). No fundamental distinction between these terms exists in the literature, hence the terms are essentially synonymous.

Rabow and colleagues, from the University of California San Francisco, where The Healer’s Art professionalism elective was established in 1992 (Remen and Rabow, 2005), prefer the term ‘professional formation. They argue that this term integrates students’ “individual maturation with [their] growth in clinical competency, and
their ability to stay true to values which are both personal and core values of the profession” (Rabow et al., 2010) (p. 311). In their view this “resonates with medicine’s current focus on the skills and commitments of the profession”, and is analogous to the parallel concept of ‘formation’ in the clergy- one of the other traditional ‘professions’.

The University of Washington deleted the word professionalism from its curriculum in 2005, replacing it with professional values, in response to complaints from students that the word was overused (Goldstein et al., 2006). Professionalism can be differentiated from ‘expertise’, which denotes technical prowess.

Levine, Haidet, and colleagues (Levine et al., 2006), in a prospective qualitative study clearly designed to measure what would be deemed ‘professionalism’ labelled their outcome measure ‘personal growth’. However Smith (Smith, 2005) thinks this term is so vague as to be meaningless.

Wear and Zarconi (2008) are broad minded. As well as accommodating either ‘professionalism’ or ‘humanism’, they accept ‘virtues’ and even ‘socially competent care giving’ as being synonymous.

There is also considerable overlap or at least a vagueness of definition leading to confusion of usage, between professionalism and the concept of humanism.

Humanism in medicine has been defined variously as “the application of science in recognition of human values and in service of human needs” (Kumagai, 2008, Markakis et al., 2000, Marcus, 1999, Misch, 2002) and “the physician’s attitudes and actions that demonstrate interest in and respect for the patient and that address the patient’s concern’s and values” (Branch et al., 2001, Gracey et al., 2005). Cottingham, Suchman, et al. (2008), for example, while focusing on humanism, also uses the two terms together, offering no differentiation. Swick (2007) offers a fine conceptualisation that emphasises that
each can enrich the other as complementary (but distinct) attributes of excellence in medical practice, each enriching the other. He suggests that they be integrated in medical education curricula. Gracey (2005) studied ways of teaching humanism without seeing a need to define the term, apparently taking it as a given that the meaning was clear.

Baldwin (2006) compiled a list of attributes associated with professionalism/humanity/morality/spirituality, then presented his list to colleagues, asking them to identify which of the four constructs they would place the attribute in. He found a high degree of overlap in these “value-oriented ideologically based constructs” (p. 103), with 35% being assigned to all four. He asks, not rhetorically, “How can a particular quality that is so important and highly regarded be learned and successfully attained if it cannot be defined and measured with the precision of the rest of science and education?” (p. 104).

Also focusing on a definition based on discrete attributes, Brownell and Côté (2001) asked senior residents (registrars) what they thought professionalism was, and got a list of 1,052 attributes, which condensed into 28 groups. These overlap, but do not exactly coincide with, attributes included in other lists. Since their respondents were at a stage of their career where they have attained the role of expert practitioner, and so are continually engaged with clinical decision making, ethical issues, and direct patient care, their concept of professionalism is drawn from that reality of practice.

Branch and colleagues, in an influential paper from 2001, define humanism as "the physician’s attitudes and actions that demonstrate interest in and respect for the patient and that address the patient’s concerns and values" (Branch et al., 2001) (p. 1067). Goldberg also sees a distinction, and worries that a careless conflation of humanism with professionalism devalues the former, as the latter in his view, is merely the culturally
determined practices of a privileged elite (Goldberg, 2008). For him: “humanism is too precious to be swallowed up by pretentious professionalism” (p. 721).

Cohen differentiates humanism from professionalism (Cohen, 2007). Humanism, he argues, is a set of beliefs, convictions, or virtues, including altruism, compassion, and respect for others. Professionalism, by contrast, is a set of actions and behaviours (that can be influenced by humanism). He accepts the Physician Charter (2002) set of professional behaviours. An important aspect of the distinction he makes is his argument that doctors could act as professionals because they know that they are supposed to, without actually believing in the intrinsic worth of doing so. To him; “Humanism provides the passion that animates authentic professionalism” (p. 1029).

Stern et al. (2008) also attempt to offer a differentiation between professionalism and humanism before proceeding to describe how best to teach ‘humanism’. Citing the Cohen quote mentioned above (Cohen is a co-author in this work), they review the distinction from the Hippocratic oath through recent American professional societies and regulatory bodies’ work. They see professionalism associated with actions and behaviours, humanism with a set of beliefs that influence those actions and behaviours. (p. 496).

Huddle equates professionalism with medical morality (Huddle, 2005). She argues that the truest test of moral fibre lies not in seeing the right moral stance in the difficult cases usually presented in ethics tutorials in the established curriculum. Rather, it lies in the choice of actions made by practicing doctors under system-imposed stresses (time pressure, paperwork) and internal stresses (time pressure, family issues, fatigue, hunger) in mundane, routine patient encounters. The proving ground is even tougher during training, as students have to answer to the faculty and supervisors as well as perform (albeit under supervision) within the system.
Medical trainees surveyed by a working party convened by The Royal College of Physicians defined medicine as “a profession which is learnt through apprenticeship and defined by responsibility towards patients, and which requires qualities such as altruism and humility” (Chard et al., 2006). The (U.K.) General Medical Council sought to operationalise this definition in their Good Medical Practice (Irvine, 2001). Rothman (2000) took a similar operational approach for the U.S. context, emphasising the particular structural barriers to best practice inherent in the U.S. health care system.

There is a commonly perceived notion within health care, but not well established yet in the literature, that the attributes of professionalism may differ by specialty and individual practitioner (Garfield et al., 2009, Rowley et al., 2000, Bryden et al., 2010, Pryor, 2010). Kinghorn and colleagues add the observation that most formal statements on professionalism, as ‘promulgated’ by various professional bodies, reflect consensus within those bodies but do not reflect the community cultural and moral traditions within which medicine must operate (Kinghorn et al., 2007). Woodruff et al. (2008) also present a compelling argument against definitions of professionalism that are tailored to different medical sub-specialties.

There is a question regarding whether professionalism in medicine should refer to a doctor’s obligation to her individual patient (the traditional interpretation) or whether the duty owed is to improvement in performance of a health system as a whole (Brennan, 2002, Kuczewski, 2001).

Wilkinson et al (2009) performed a thematic analysis of definitions of professionalism as part of a review the aim of which was to link assessment methods with attributes of professionalism. They identified five major these in the definitions they reviewed: “adherence to ethical practice principles, effective interactions with patients and with people who are important to those patients, effective interactions
with people working within the health system, reliability, and commitment to autonomous maintenance / improvement of competence in oneself, others, and systems” (from the abstract). They found self-reflection to be an attribute common to nearly all definitions.

Erde, agreeing that there is still no clear definition, adds that he does not think that one is possible (Erde, 2008). His premise is that a broad term such as ‘professionalism in medicine’, which must of necessity include within its meaning a range and depth of complexity, cannot do justice to that complexity in being truncated, cannot “include...all it should and exclude...all it should” (p. 8), and then ends up being used as a slogan, used by “insiders” “mindlessly and inappropriately”. He questions the prominent definitions on semantic and philosophical grounds.

Inui sees the focus on professionalism as reactionary; “our discourse about professionalism in medicine represents both a flight from commercialism, on the one hand, and a corresponding need to reaffirm our deeper values and reclaim our authenticity as trusted healers on the other.” (Inui, 2003)(p. 9). This is in accord with views on the evolution of professionalism across all fields, but especially medicine, held by the leading theorists in this field (Freidson, 2001, Krause, 1996). Writing for the Association of American Medical Colleges (AAMC)and commenting on the similarity between the lists of attributes incorporated into definitions of professionalism put forth by the AAMC, the ABIM Physician Charter, General Medical Council (UK), and by Swick (Swick, 2000), he concludes “If you are seriously interested in professionalism in medicine and need an accounting of the major domains of this concept, take a list- any list- and take it seriously” (Inui, 2003) (p. 14).

The definition created by Cruess and colleagues (2004) “Profession: An occupation whose core element is work based upon the mastery of a complex body of knowledge and skills. It is a
vocation in which knowledge of some department of science or learning or the practice of an art founded upon it is used in the service of others. Its members are governed by codes of ethics and profess a commitment to competence, integrity and morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession a monopoly over the use of its knowledge base, the right to considerable autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served and to society.” (p. 74) is a valiant attempt, but suffers from being over broad, as Cruess’ team tried to create a definition of professions and then fit medicine into that, rather than attempting to define professionalism as the term as it fits within the field. Several writers stress the context-dependent nature of professionalism (Verkerk et al., 2007, van Mook et al., 2009).

Books
By nature of the publication process, material compiled in book form is not at the cutting edge. However, a thorough review of best evidence in medical professionalism would not be complete without mention of the several books that provide valuable material on which to build a curriculum.

Table 4.9: Books on Medical Professionalism

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Year</th>
<th>Publisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halpern J.</td>
<td>From Detached Concern to Empathy: Humanizing Medical Practice.</td>
<td>2001</td>
<td>Oxford University Press.</td>
</tr>
<tr>
<td>Savett LA</td>
<td>The Human Side of Medicine: Learning What It’s Like to be a Patient and What It’s Like to be a Physician.</td>
<td>2002</td>
<td>Praeger.</td>
</tr>
<tr>
<td>Thistlethwaite, J. and J. Spencer</td>
<td>Professionalism in Medicine.</td>
<td>2008</td>
<td>Abingdon, Oxon, UK Radcliffe Medical PR.</td>
</tr>
<tr>
<td>Wear, D. and Bickel J, eds.</td>
<td>Educating for Professionalism: Creating a Culture of Humanism in Medical Education.</td>
<td>2008</td>
<td>Iowa City: University of Iowa Press.</td>
</tr>
</tbody>
</table>
Previous systematic reviews

Veloski and colleagues performed a review of the literature (Veloski et al., 2005) with the purpose of ascertaining the utility of measurement tools for professionalism in medical students and residents. They came to a number of conclusions that informed this review;

- Research in this field has grown in the current decade, indicating that much research is in progress and will be published
- The instruments used in measuring professionalism may be used in other health care professional development settings, and so those bodies of work also should be searched to find the best instruments and their best use
- The evidence base for content validity, reliability, and practicality as revealed through their review, was weak at that time (the review ended in 2002).

Van De Camp and colleagues observed that professionalism is “passively ‘caught’”: students are expected to emulate the values and behaviours modeled by their teachers” (Van De Camp et al., 2004) (p. 696). They attempted to arrive at a consensus definition of professionalism, first through a systematic review of the literature to identify quality papers addressing the meaning of professionalism or its constituent elements, and then by doing a qualitative analysis of thematic elements identified through it, with results vetted by an expert panel. (Van De Camp et al., 2004). They concluded that there was no consensus within the medical community on a definition of professionalism, and suggest that conceptualization of professionalism is dependent on context- primarily the context of medical practice/specialty from which the perspective of professionalism is seen. This appears to be a key element in any effort to identify and quantify professionalism. In subsequent work she refines her model into a model for professionalism in general practice (Van De Camp et al., 2006).
Martimianakis, Maniate, and Hodges (2009) reviewed the literature on the sociology of the professions, and from this literature reject the view that a definition consisting of a set of traits or behaviours is sufficient. They argue that professionalism is not a stable construct, but rather “socially constructed in interaction” (Martimianakis et al., 2009)(p. 835). They raise the provocative notion that professionalism, rather than an individual attribute, is a shared construct across a health care team or organisation, a “distributed attribute” (p. 835). An adoption of this perspective would require a wholesale rethinking of how professionalism is taught and assessed, and also how unprofessional behaviour is addressed in organisational contexts.

Several single issues of peer-reviewed journals have been devoted to the topic of medical professionalism. Foremost among these are; Academic Medicine, 2002;77(6) and 2007;82(11), Medical Education 2005;39(1), Perspectives in Biology and medicine 2008;51(4), and The American Journal of Bioethics 2004;4(2).

Of these, Wear and Kuczewski’s, paper (2004), along with the 26 invited response pieces that accompany it, provide a particularly fresh philosophical frame for the professionalism debate. Wear and Kuczewski argue that the ongoing dialogue on professionalism had by that time become too abstract, ignoring the realities of the modern medical education environment, especially social factors, most especially gender. They present a series of recommendations that challenge educators to engage more with students in the development of professionalism curricular components, such that the structures of curricula themselves become more compassionate and respectful. Theirs is a view of professionalism as an overarching construct, more than a set of attributes, and a concept that needs to be lived by educators, not merely presented to students as a package of lore dissociated from practice: “we need to think about what happens once the abstractions are uttered, because there is no movement to filter them through the cultural practices of
academic medicine—in particular the formal, informal, and hidden curriculum—as they are experienced by students, patients, and physicians” (p. 5).

**Discussion**

Viewed as a set of attributes or behaviours, it is easier to develop methods of teaching and assessing professionalism. The danger is that instead of a nuanced, practical tool, the result easily becomes “a set of ‘hooray’ words that no one would either disagree with or find informative” (Tallis et al., 2005) (p. 8).

Is professionalism a set of attributes, or a holistic approach, an ethos that is more than the sum of component attributes, and, thus, incapable of being examined when broken down into components? Professionalism in this sense is a certain approach to work that implies skill, attention to duty, and doing the right thing.

A common use of the label relates to membership in the profession- the Guild, and denotes an “us/them” dichotomy devoid of inherent moral connotation. “professional identity is more usually connected to a particular profession or vocation as such and its relation to identity.” (Collin, 2009).

There have been several proactive and reactive elements affecting the evolution of these definitions. From particularly the U.S. perspective, professionalism is the bulwark erected by doctors, beginning with the ABIM Foundation, to fend off the onslaught of invading hordes of commercial interests from the North and non-medical health care managers from the south, with plaintiffs’ attorneys tunnelling in from beneath.
This bulwark can’t hold, and so the best way forward is to conceptualise professionalism in an integrated systems analysis approach; the doctor as part of a social, societal, structural system (Sullivan, 2000, Sullivan, 2004).

Seven years on from its publication, we find that the conclusion of Van De Camp’s team, that “there is absolutely no consensus within the medical community about what constitutes professionalism” (Van De Camp et al., 2004) (p. 700) still remains true. Van De Camp’s team opt for the ‘attributes’ pathway to defining professionalism. They identified four such, altruism, accountability, respect, and integrity as being consensus favourites, noting that these attributes have been associated with the highest levels of excellent practice since Hippocrates.

In a field that is relatively small and tightly knit, if not in actual collaboration at least in awareness of newly produced work, systems and network influences have no doubt shaped the development and dissemination of the conceptual definition of professionalism. With the Physicians’ Charter, published widely and cited greatly, as a defining moment, the community of medical educators has stimulated creative recombination of ideas (Lambiotte and Panzarasa, 2009) on what constitutes professionalism since the Charter was first published.

As well, more recent papers have taken a more nuanced approach, focusing on a more complex, nuanced definition that is based on behaviours (Green et al., 2009) or on an ethos (Coulehan, 2005, Jha et al., 2006, Swick, 2007, Wagner et al., 2007), rather than a fixed set of attributes. These approaches more accurately portray the complex, contextual nature of desirable approaches to medicine, and behaviours are more readily measured, so aiding in assessment.

**Strength and limitations of the present study**

The potential always exists in reviewing such a broad ranging literature that important studies may have been missed. The literature also contains in-built biases of publication and reporting which skew the public discourse on newly emerging topic such as this in ways that cannot be adequately assessed.

The conceptual framework and research methodologies addressing professionalism are strongly informed by those of other disciplines, primarily education and sociology (Hafferty, 2006c) (p. 193). A truly comprehensive review of definitional issues in professionalism would need to systematically explore also the tangled paths between those literatures and the medical literature.

Similarly, professionalism should operate across health care disciplines (Christmas and Millward, 2011). Sadly, there is little interprofessional discourse across health care disciplines that should operate as teams (nursing, allied health). These disciplines have their own professionalism soul searching – parallel but disconnected. Surveying one discipline in isolation misses common content and underpinnings.

Other limitations include the new and evolving nature of the data synthesis techniques that we have incorporated. My very subjective approach to assessment
of quality, in particular, has the potential to be reductionist, if not arbitrary (Barbour, 2001). While the systematic advance planning or a systematic review ensures that the initial search strategy and inclusion criteria are objective, all synthesis strategies incorporate some element of subjectivity, and so are invariably interpretive in nature (Sandelowski, 2008). Review such as this, combining qualitative and quantitative (and even opinion) papers are prone to criticism from the appearance of driving one agenda over others.

This study will have relevance to those who are developing professionalism curricula and to those interested in the sociology and philosophy of medicine in the modern world.

**Conclusion**

After so much debate and publication, one could expect that the definition and important attributes of professionalism would be well codified by the end of the 1st decade of the 21st century, but there is ample evidence in the literature to suggest that the reverse is true (Bryden et al., 2010), and as yet no overarching conceptual context that is universally agreed upon (Archer et al., 2008, Walsh and Abelson, 2008, Chandratilake et al., 2012).

Taken together this literature reveals distinctions of subtlety and nuance, more than substance, surrounding definition of the key concepts of professionalism, humanism, and personal and professional development. There have been many attempts at definition, and some that have gained more traction than others, particularly the American Board of Internal Medicine (ABIM) ‘medical professionalism in the new millennium pronouncement (Sox et al., 2002, Brennan et al., 2002).
The struggle with developing ways to teach and assess professionalism in medicine has been encumbered, and so failed to progress, because of the amorphous nature of these definitions, and the competing, and often left unsaid, underlying argument driving the definers. Hafferty captures this with his observation that “professionalism is not a ‘thing’ that exists independent of social action and actors” (Hafferty, 2006b) (p. 9109). This is particularly apparent in the US discussion of professionalism, which is a direct response to the greater encroachment of bureaucracy and commerce into the realm of medical practice.

The semantics of professionalism obfuscate more than they clarify, and the continually shifting nature of the medical profession and the organisational and social milieu in which it operates create a dynamic situation where no definition has yet taken hold as the definitive one. This is the ‘open systems predicament’, referred to in the quote that opens this chapter, at work. Efforts to define (or teach or assess) professionalism serve as additional drivers of change.

**Late breakers**

Several additional papers have been published between the time the review closed in Dec 2009 and submission of this review for examination (Hafferty and Castellani, 2010b, Hafferty and Castellani, 2010a, Regis et al., 2011). A scoping report written for the Health Foundation (UK), released in October 2011, notes: “There has been no shortage of recent attempts to define medical professionalism, and no obvious increase in clarity as a result.” (Christmas and Millward, 2011) (p. 4).

**References**

2009. Systematic Reviews: CRD’s guidance for undertaking reviews in health care, Layerthorpe, York, Centre for Reviews and Dissemination, University of York.


BRYDEN, P., GINSBURG, S., KURABI, B. & AHMED, N. 2010. Professing Professionalism: Are We Our Own Worst Enemy? Faculty Members’ Experiences of Teaching and Evaluating Professionalism in Medical Education at One School. Academic Medicine, 85, 1025-1034.


RING, N., RITCHIE, K., MANDAVA, L. & JEPSON, R. 2011. A guide to synthesising qualitative research for researchers undertaking health technology assessments and systematic reviews, Glasgow, Healthcare Improvement Scotland


THISTLETHWAITE, J. & SPENCER, J. 2008. Professionalism in Medicine, Milton Keynes, UK, Radcliffe Medical PR.


Chapter 5: Teaching Professionalism: A best evidence in medical Education (BEME) systematic review

“Personal and professional development is more than an isolated curriculum theme or strand, it is a way of approaching the entire course”  
Jill Gordon (2003) (p. 341)

Introduction

There has not been a systematic review of the literature on teaching professionalism. The heterogeneity of learning theories and teaching approaches employed make such a review a difficult undertaking. This difficulty is compounded by the varying ways that professionalism has been defined and the lack of consensus on what criteria make up professionalism.

This review sought to systematically identify papers that address teaching medical professionalism over the time period 1999 to 2009 inclusive, and to assess these papers for quality, identifying methods that have proven effectiveness through validation over multiple years in a curriculum or (better yet) demonstrated success in several institutions, or evaluation showing effectiveness through some objective measure. We also looked for ideas that have received prominent attention from the medical education community, to capture a theoretical, methodological understanding of what works or what might work, absent any current assessment evidence to prove that it does.

I sought to discover:

- What works in teaching professionalism? (method)
- How does it work? (methodology)
- Why does it work? (theory)
• What does it teach? What changes in knowledge, attitude, behaviour have been demonstrated? Is the focus professionalism as a holistic construct, or an individual attribute?

Teaching professionalism is not akin to imparting a technical clinical skill. Rather, if successful, it brings about what Huddle terms a “personal transformation - the shaping of individual moral identity” in the learner (Huddle, 2005)(p. 890). Branch argues that “there are few known techniques for effective teaching of humanism” (Branch et al., 2001) (p. 1067), and Goldie et al, in 2007, noted that few studies examined methods of teaching it (Goldie et al., 2007). Indeed, it has been argued that professionalism cannot be taught (Finn et al., 2010).

Methods

Methods used in this review, including search strategies, selection criteria, and data abstraction methods, have been described in Part I of this review (Chapter 4).

Eligible studies included any articles published between 1999 and 2009 inclusive presenting viewpoints, opinions, or empirical research into the conditions, processes, or outcomes.

We rated these papers using a semi-structured analysis with unprompted appraisal (Dixon-Woods et al., 2007) for quality evaluation, inclusion in final set of papers for review, and synthesis of evidence. For this, I developed a ranking system for quality of evidence modified from the model of Mitton et al (Mitton et al., 2007). Our rating took into account relevance to the question ‘how can professionalism be taught’, the conceptual or theoretical basis for the teaching methodology described, quality and appropriateness (relevance to medical education) in which the study was published,
and citation count. My rating sheet is shown in Table 5.1. High quality evidence consists of papers that scored 4 or 5 (out of 5) by reviewers. Lower quality evidence papers scored 1-3 and are not included in the final analysis. Our results, then, are an integrated review of best evidence in the literature, both qualitative and quantitative, on how to teach medical professionalism.

Table 5.1: Quality rating sheet
Score each paper from 1-5 based on criteria below

<table>
<thead>
<tr>
<th>Score</th>
<th>Score: 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance:</td>
<td>Barely relevant</td>
<td>1 or 2 interesting ideas, not well developed</td>
<td>Relevant with a few interesting ideas</td>
<td>Contains new, interesting ideas</td>
<td>Preeminent. Ground breaking paper</td>
</tr>
<tr>
<td>Conceptual basis:</td>
<td>Trivial or incidental (letter, introductory editorial) Local experience Redundant</td>
<td>Ideas covered in more recent publications</td>
<td>A viewpoint, well expressed</td>
<td>A closely reasoned deductive approach without empirical data</td>
<td>A closely reasoned deductive approach to teaching professionalism with empirical data</td>
</tr>
<tr>
<td>Journal:</td>
<td>Obscure journal</td>
<td>Fairly unknown journal</td>
<td>Journal with focus far removed from medical education</td>
<td>Good journal</td>
<td>Prestigious journal</td>
</tr>
<tr>
<td>Citation count:</td>
<td>Not cited</td>
<td></td>
<td></td>
<td>Well cited (&gt;10)</td>
<td>Highly cited</td>
</tr>
<tr>
<td>Inclusion?</td>
<td>Best not to include</td>
<td>Will not be missed</td>
<td>maybe include</td>
<td>Definitely include</td>
<td>Seminal paper</td>
</tr>
</tbody>
</table>

Adapted from Mitton C, Adair CE, et al. The Milbank Quarterly. 2007;85(4):729-68

Citation counts were identified for each paper as at September 2010. Citation counts were obtained from the SCI Web of Science. We performed a comparative and
thematic synthesis, essentially a qualitative meta-synthesis, on these high quality papers in order to capture the development of a school of thought on defining professionalism. Mixed methods studies were counted as both qualitative and quantitative. Case reports, papers from individual institutions reporting on their experience with a particular curricular approach to teaching professionalism, were considered as viewpoint articles.

**Results**

We identified 217 papers on how to teach professionalism. We determined 49 of these to constitute best evidence for teaching professionalism by applying a quality rating criteria described below. *Figure 5.1* shows a flow diagram of search results and inclusion of studies

Our ‘gold standard’, the highest grade of evidence that we searched for, consisted of studies reporting on a teaching method or set of methods that produced a verified increase in some measure of professionalism, either qualitative or quantitative, over multiple years across a range of medical schools. We found none.

Our next highest grade of evidence was a curriculum that demonstrated success in at least one institution over time. Few studies provided comprehensive evaluation or assessment data demonstrating success. We also reviewed studies reporting short term positive results from a well-described and well designed curriculum approach and papers with well reasoned view points on how professionalism might be taught, grounded in validated pedagogy and learning theory, including case reports of curricula presented by several academic centres as being successful. The majority of papers fell into this group. *Table 5.2* summarises papers included in the review by type. *Table 5.3* lists the most cited papers from this data set.
**Figure 5.1. Teaching professionalism flow diagram**

<table>
<thead>
<tr>
<th>Identification</th>
<th>Records identified through database searching (n = 19263)</th>
<th>Additional records identified through other sources (n = 70)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Records after duplicate and irrelevant articles removed (n = 3522)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Records screened (n = 3522)</td>
<td>Records excluded (n = 2515)</td>
</tr>
<tr>
<td></td>
<td>Full-text articles assessed for eligibility (n = 1077)</td>
<td>Full-text articles excluded (n = 859)</td>
</tr>
<tr>
<td></td>
<td>Studies included in synthesis: Teaching professionalism review (n = 218)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of study</th>
<th>Best quality evidence</th>
<th>Second tier evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Quantitative</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Viewpoint</td>
<td>18</td>
<td>95</td>
</tr>
<tr>
<td>Case reports</td>
<td>14</td>
<td>42</td>
</tr>
<tr>
<td>Systematic review</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Books</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>62</strong></td>
<td><strong>156</strong></td>
</tr>
</tbody>
</table>
Table 5.2. Best Evidence on teaching professionalism by study type
n=49

<table>
<thead>
<tr>
<th>Type of study</th>
<th>count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative</td>
<td>17</td>
</tr>
<tr>
<td>Quantitative</td>
<td>9</td>
</tr>
<tr>
<td>Viewpoint</td>
<td>20</td>
</tr>
<tr>
<td>Case report</td>
<td>9</td>
</tr>
<tr>
<td>Book</td>
<td>6</td>
</tr>
</tbody>
</table>

Mixed methods result in multiple counts

Table 5.3: papers on teaching professionalism with more than 50 citations

<table>
<thead>
<tr>
<th>1st Author</th>
<th>Year</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novack</td>
<td>1999</td>
<td>137</td>
</tr>
<tr>
<td>Lempp</td>
<td>2004</td>
<td>133</td>
</tr>
<tr>
<td>Inui</td>
<td>2003</td>
<td>119</td>
</tr>
<tr>
<td>Swick</td>
<td>1999</td>
<td>109</td>
</tr>
<tr>
<td>Hicks</td>
<td>2001</td>
<td>106</td>
</tr>
<tr>
<td>Coulehan</td>
<td>2001</td>
<td>93</td>
</tr>
<tr>
<td>Branch</td>
<td>2000</td>
<td>92</td>
</tr>
<tr>
<td>Branch</td>
<td>2001</td>
<td>91</td>
</tr>
<tr>
<td>Haidet</td>
<td>2006</td>
<td>82</td>
</tr>
<tr>
<td>Suchman</td>
<td>2004</td>
<td>71</td>
</tr>
<tr>
<td>Steinert</td>
<td>2005</td>
<td>70</td>
</tr>
<tr>
<td>Wear</td>
<td>2000</td>
<td>67</td>
</tr>
<tr>
<td>Kenny</td>
<td>2003</td>
<td>59</td>
</tr>
<tr>
<td>Ginsburg</td>
<td>2002</td>
<td>58</td>
</tr>
<tr>
<td>Brownell</td>
<td>2001</td>
<td>58</td>
</tr>
<tr>
<td>Klein</td>
<td>2003</td>
<td>55</td>
</tr>
<tr>
<td>Wright</td>
<td>2002</td>
<td>51</td>
</tr>
<tr>
<td>Markakais</td>
<td>2000</td>
<td>51</td>
</tr>
</tbody>
</table>

Citations counts as by SCA Web of Science as at Sept 2010

We identified eleven books on teaching professionalism in medicine published during the study period. These are listed in Table 5.4.

The majority of papers were from US based researchers. Table 5.5 lists best evidence papers by nation of work group/institution. Table 5.6 lists paper graded as high quality by the review team.
Table 5.4: Books on teaching medical professionalism

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Year</th>
<th>Publisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kao A.</td>
<td>Professing Medicine: strengthening the ethics and professionalism of tomorrow’s physicians</td>
<td>2001</td>
<td>Chicago: American Medical Association</td>
</tr>
<tr>
<td>Mills, A., et al.</td>
<td>Professionalism in Tomorrow’s Healthcare System: Towards Fulfilling the ACGME Requirements for Systems-Based Practice and Professionalism</td>
<td>2005</td>
<td>Hagerstown, MD, USA: University Publishing Group</td>
</tr>
<tr>
<td>Thistlethwaite J, Spencer J.</td>
<td>Professionalism in Medicine</td>
<td>2008</td>
<td>Milton Keynes, UK: Radcliffe Medical PR</td>
</tr>
<tr>
<td>Wear, D. and J. Bickel</td>
<td>Educating for Professionalism: Creating a Culture of Humanism in Medical Education</td>
<td>2008</td>
<td>Iowa City: University of Iowa Press</td>
</tr>
</tbody>
</table>

Table 5.5. Best evidence teaching papers by Country (n = 49)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>34</td>
</tr>
<tr>
<td>UK</td>
<td>6</td>
</tr>
<tr>
<td>Canada</td>
<td>6</td>
</tr>
<tr>
<td>Australia</td>
<td>2</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>1</td>
</tr>
</tbody>
</table>
### Table 5.6 Teaching—best evidence papers (listed alphabetically)

<table>
<thead>
<tr>
<th>Study</th>
<th>Study</th>
<th>Study</th>
<th>Study</th>
<th>Study</th>
</tr>
</thead>
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Results are presented first by type of study (quantitative, qualitative, viewpoint), with capsule reviews of high quality studies of each type and then summarising the contribution to the literature from the collective studies of each type. I then examine major themes that emerge across the literature of teaching professionalism.
Studies by type

Quantitative Studies

Baernstein and Fryer-Edwards performed a randomised controlled trial (the only one we found) to determine whether writing a critical incident report, participating in an interview with a faculty member, or a combination of the two enhanced the quantity or quality of medical students’ reflection on professional practice (Baernstein and Fryer-Edwards, 2003). They found interview more constructive than writing in that students addressed more issues of professionalism in interview, and also explored the issues in greater depth.

Boenink’s team in the Netherlands (Boenink et al., 2005) compared the professionalism of students before and after an educational program on professionalism and also compared early year students with students from later years, using a set of scenarios (vignettes) each describing a professionalism dilemma as their assessment triggers. Students’ ratings of professional/unprofessional behaviour in each scenario were rated against expert consensus. They found that the educational program had a positive effect on students’ ability to correctly characterise a scenario as an example of professional or unprofessional behaviour, but that when new scenarios were subsequently introduced, students were less able to judge professionalism demonstrated in them appropriately. They speculate that further use of this technique (a continued, greater series of scenarios over time) may be an effective tool to teach professionalism.

A survey of US medical students at one university (Roberts et al., 2004) found that they considered clinically-associated training (role modelling, case conferences) as most effective in teaching professionalism, multidisciplinary expertise approaches (discussion with ethicists, attorneys, chaplains) effective, and formal didactic approaches (lectures, videos, grand rounds presentations) as least effective. As
much of the discourse on professionalism is directed towards individually oriented teaching and learning methods (web based education, reflective writing). it is interesting to note that students in this study saw such learning methods as neither particularly effective nor ineffective.

Shapiro’s group at the University of California Irvine employed a mixed methods design to evaluate whether discussion of literature affected students’ capacity for empathy, finding that it did (Shapiro et al., 2004). They subsequently instituted an ‘art of doctoring course (unit), and have been refining it since 1997 (Shapiro and Rucker, 2003, Shapiro et al., 2006c). As part of this, they have measured ‘point of view writing’ as a learning tool (Shapiro et al., 2006b), taking Charon’s recommendation (Charon, 2000) that such writing should be in plain language and from the perspective of patients, trying to capture their response to the illness experience.

These studies are all of a very preliminary, pilot nature, indicating possible future directions but not establishing validated replicated teaching methods.

**Qualitative Studies**

Qualitative methodology studies focused on students’ perceptions of the quality of the teaching on professionalism they were exposed to (Stephenson et al., 2006a, Lempp and Seale, 2004, Hatem and Ferrara, 2001, Nogueira-Martins et al., 2006, Wear and Zarconi, 2008) and the quality of their writing on professionalism (Wear and Zarconi, 2008, Rabow et al., 2009, Hatem and Ferrara, 2001), as well as on medical teachers (Weissmann et al., 2006a), and heads of medical education programs (Stephenson et al., 2006a).
Wear and Zarconi (2008) found reasons for both dismay and hope in a study on student views of professionalism teaching. Asking students to allow them to review for research purposes capstone essays which were required for these students’ training programs, they got about half to accept. From these essays, Wear and Zarconi gleaned that students were sick and tired of professionalism being “shoved down our throats” (p. 950). They considered that they came to medical school with compassion and altruism, but had these qualities assaulted and challenged, largely through clinical experiences in systems where productivity and efficiency, “an assembly line mentality” (p. 951), were everything, compassion and empathy nothing. They recommended grooming more competent role models up to the task and ensuring that students are afforded opportunities to de-brief and critically reflect on their experience, both positive and negative, with trusted faculty. Stephenson’s group (2006b) found a similar effect; that clinical ‘hidden curriculum’ experiences often negate carefully developed professionalism teaching in earlier pre-clinical years.

At the University of Minnesota (Zink et al., 2009), student essays submitted over 5 years were analysed in reference to Van de Camp’s definition of professionalism (Van De Camp et al., 2004). Professionalism was learned through long term continuity of experience guided by positive role models in real practice settings. Keys to success were the longitudinal nature of the learning, the student-centred ethos of clinical supervisors, and witnessing professional behaviour in a health care delivery context.

Themes identified across these studies included a lack of consistency on the teaching of professionalism (Lempp and Seale, 2004, Stephenson et al., 2006a), the undermining influence of the hidden curriculum (Stephenson et al., 2006a, Lempp and Seale, 2004). Critical reflection (Goldie et al., 2007, Hatem and Ferrara, 2001),
role modelling (Brownell and Côté, 2001, Weissmann et al., 2006a), and early clinical contact (Goldie et al., 2007, Nogueira-Martins et al., 2006) were identified as best teaching models.

**Viewpoint articles**

We considered viewpoint articles to be high quality evidence articles if they contained well reasoned discourses on curricular approaches and/or teaching techniques that draw on a body of theory or evidence. Lower quality viewpoints were incidental remarks, editorials, and responses to published work that contain at least some substantive new contribution of thought.

Shapiro and Rucker (2004) defined a ‘Don Quixote Effect’- a ”short-lived ‘spurt’ of cognitive and emotional idealism” (Coulehan, 2004) (p. 453) that medical students experience when exposed to depictions of healing in literature or film, or through exposure to a positive role model. This experience can be harnessed as a learning tool through stories, songs, and art (Kumagai, 2008).

Amanda Howe stresses attitudinal learning as fundamental to professional development. She writes: “Attitudes are at the interface between the personal and public psyche, relying more on individual experience and the accumulated impact of social and cultural interpretations than on propositional knowledge, and are therefore less amenable to factual or didactic teaching” (Howe, 2002) (p. 353).

The University of Michigan instituted a ‘Family Centered Experience’ program in 2003 (Kumagai, 2008). In this program, 1st and 2nd year medical students spend time with home bound chronically ill patients, listening to their stories and reporting back on their experience in a small group setting guided by a trained faculty member. The program also involves students engaging in improvised interpretive projects,
working in pairs, with the aim of learning to understand and express their personal reactions to such stressful patient stories, and thus develop empathy. The difference in stories between patients from different backgrounds experiencing the same medical condition brings an awareness of the individual nature of response to illness, and therefore hones the students’ ability to adapt to each situation and respond with appropriate emotional engagement.

Arno Kumagai, Director of this Centre, calls this transformative learning; “learning on cognitive, affective, and experiential levels” (Kumagai, 2008) (p. 656) that results in a new way of viewing reality, a higher consciousness. To date, no formal research or evaluation has been published by this program, but it is one to watch.

Boston University (Wiecha and Markuns, 2008) reported success with an online clerkship curriculum emphasising humanism. Compared to students enrolled in a face to face delivery, online students did significantly better at self-assessed competence. Objective assessments were not made.

Thematic analysis of the non-intervention literature viewpoint articles (opinion pieces on how professionalism might be/should be taught), identified six major themes. We identified these themes based on prominence (highest citation count and frequency of appearance in the literature) and our collective views on importance of the concepts presented for serving as a basis for teaching professionalism. Themes were;

- Focus on the institution and its modelling of values (Branch, 2000, Branch et al., 2001, Kenny et al., 2003a, Gordon, 2003a, Cruess, 2006b, van Mook et al., 2009)
• Adopt a focus less on narrow biomedical aspects of medical education and more on moral development (Branch, 2000, Wear and Castellani, 2000, Stern and Papadakis, 2006, Howe, 2002)


• Select students with well developed humanist traits, thus more amenable to assimilating professional traits (Wear and Castellani, 2000, Gordon, 2003)

• Professionalism must be taught as experiential, not theoretical (Branch et al., 2001, Kenny et al., 2003a, Cruess, 2006b, Goldie, 2008)


Themes emerging

Surveys of existing teaching strategies

A team at the Association of American Medical Colleges led by Swick undertook a two stage survey of US medical deans in 1998 (Swick et al., 1999), achieving very high response rates. Nearly all schools contacted had a professionalism curriculum. Seventy nine percent of US medical schools addressed professionalism during orientation, usually through the “White Coat Ceremony” devised by the Arnold Gold Foundation (Russell, 2002, Swick et al., 1999, Kumpfer et al., 2002). Sixty percent of schools spread professionalism training over a number of curriculum components, usually as part of a course focusing on a variety of topics, (20 of 41 schools responding to this aspect of the survey), indicating that in these schools
professionalism, while addressed, may be dumped into a catch-all course (unit) that may have limited prominence. Schools indicated a need for assessment instruments (85%), faculty development (82%), and teaching materials or models (77%). Most schools include professionalism in early years of the program, fewer addressed it during later years (8 of 41). Ten per cent had no professionalism curriculum content. This is one of the most highly cited papers found in the search. The authors note that a lack of a commonly accepted meaning of professionalism and all that it encompasses proved a barrier to teaching in the late 1990s. The authors conclude that the teaching of professionalism needs to be enhanced, through development and dissemination of models for how such teaching could be carried out, particularly as relates to experiential learning in later years of a training program.

Lown and colleagues surveyed US and Canadian medical school associate deans and curriculum leaders to determine priority of teaching of ‘caring attitudes’, and list small group discussions and didactic sessions in early training years, and role modelling and mentoring in clinical years, with skills training used though out curricula as formal teaching methods (Lown et al., 2007). A disturbing finding was that there is insufficient faculty development in the area of professionalism in the schools surveyed, with less than half reporting that they provide formal faculty training in teaching communication and mentoring, and only 8% reporting formal triaging focused on how to develop and nurture professionalism in their students (Lown et al., 2007) (p. 1519).

A similar survey of UK medical schools was undertaken by a group from King’s College (Stephenson et al., 2006b). In this study, as in the US study, a majority (18 of 23 medical schools) responding to their initial survey considered that training of clinical educators in professional attitudes was deficient. They also found that the hidden curriculum was very influential in undermining formal teaching, through
giving students mixed messages. Students realised that appropriate attitudes and behaviour, taught in the formal curriculum, could “legitimately be side-stepped when the pressures of the job come to bear in the real world” (p. 1076).

Finally, Stern et al reported on an International meeting convened by the (U.S.) Gold Foundation in 2007 to review and discuss submitted abstracts on teaching elements of humanism. Teaching strategies reported as effective by participants are those that impart to students the perspective of their patients, allow structured time for reflection on learning experiences, and provide guided mentoring to assist students in making sense of it all (Stern et al., 2008)(p. 502).

**Role Modelling**

Professionalism appears to be learned most effectively through the influence on students of clinicians they encounter in the course of their education, rather than through didactic classroom sessions. Thus role modelling (Levenson et al., 2010, Ambrozy et al., 1997, Kuczewski, 2001, Lombarts et al., 2010, Yazigi et al., 2006) (Wright and Carrese, 2002, Brownell and Côté, 2001, Cohen, 2007, Coulehan, 2004, Goldie et al., 2007, Gordon, 2003a, Skeff and Mutha, 1998, Lown et al., 2007, Ratanawongsa et al., 2006, Shapiro, 2002, Stark, 2003, Weissmann et al., 2006a, Yazigi et al., 2006, Quaintance et al., 2010, Wright et al., 1998, Finn et al., 2010, Branch et al., 2001, Kenny et al., 2003a, Edelstein et al., 2005) and the ‘hidden curriculum’ are of most importance in determining the makeup of a medical practitioner after formal education. Sheehan observed that “usually the role model is the one that is smart and technically slick and treats other house staff well” (Sheehan, 1994) (p. 294).

Role modelling and mentoring are frequently identified as being essential and are employed as formal delivery methods for professionalism education (Lown et al., 2007, Kenny et al., 2003a, Ratanawongsa et al., 2006, Haidet and Stein, 2006). But the
medical profession has a wide range of roles and practices in systems that put great limits on personal autonomy, making role modelling problematic (Cruess, 2006a).

It is the behaviour observed/witnessed by students (Wright and Carrese, 2002, Michalec, 2012), and the influence of role models (Cruess, 2006a, Huddle, 2005, Johnston, 2006, Wright and Carrese, 2002, Mann, 2002, Levenson et al., 2010), that will form their professional personas, more than the behaviour formally taught. Educators manifesting behaviours that may be deemed inappropriate are protected to a great extent by the system, in which they have achieved a position of high status. Students, being impressionable and vulnerable, will be likely to emulate the modelled behaviour, or at least not challenge it (Brainard and Brislen, 2007).

In a similar vein, Christianson et al advocate a patient-centred curriculum in early years of training as a way to bring about organisational cultural shift towards an outward rather than inward focus, countering the hidden curriculum and enhancing development of professionalism (Christianson et al., 2007).

**Place in curriculum**

There is disagreement in the literature regarding whether a standard curriculum can be devised that will work in any medical education setting (Remen et al., 2008, Remen and Rabow, 2005a, Howe, 2003), or whether such curricula must be devised specifically for an individual program (Cruess, 2006b, Cruess, 2006a).

A matrix recommended by Van De Camp’s team (2004) sets out which elements of professionalism should be learned at each stage of medical education that has influenced the development of other curricula (Zink et al., 2009). Viewing the literature as a whole, however, there does not appear to be any consistency across medical schools either in what elements should be taught nor when they should be taught.
The team of Sylvia and Richard Cruess, who feature prominently in this literature individually and jointly, have argued for an essentially pragmatic approach that resonates with much of the teaching approaches that have been attempted in curriculum developments; “(T)he teaching of professionalism should start with the recognition that there is a cognitive base to professionalism which must be taught explicitly and then be reinforced and internalized by the student through experiential learning.”(Cruess and Cruess, 2006b)(p. 207). In a series of 3 articles (Cruess et al., 2006, Cruess, 2006a, Cruess and Cruess, 2006b) and a book chapter (Cruess and Cruess, 2006a) published in 2006, and culminating in a multi-authored text, which they edited, in 2008 (Cruess et al., 2008), they have mapped out a broad conceptual and practical framework for the teaching of professionalism.

The Cruess’ are advocates of situated learning theory as a basis for developing a teaching program for professionalism (Cruess and Cruess, 2006b, Cruess, 2006a, Cruess, 2006b), as are others (Goldie, 2008, Maudsley and Strivens, 2000, Kenny et al., 2003b). They caution that a general professionalism curriculum is impossible, but rather that such a teaching program must be tailored to each university’s environment. It must take into account the tacit learning that exists in all medical education situations, be practical, rather than theoretical, in focus, and that critical reflection (they use the term ‘mindfulness’) (Cruess, 2006a) (p. 182), is the key activity to encourage in the student.

Gordon observes that some see formal professionalism curricula as an attempt to “force all students into the straightjacket of political correctness” (Gordon, 2003) (p. 342). She goes on to give examples of how students could master what they think is expected of them to score high marks without actually taking on board the desirable attribute, for example by willingly engaging in teamwork exercises even though they hate
teams and would avoid working collaboratively at all costs in actual practice (Gordon, 2003) (p. 343). She develops a framework for integrating professionalism into a comprehensive medical curriculum. Since a medical education program must proceed in stages, integrating and building on content as the student moves through the process, it is practical to approach professionalism as a set of interlocking components (Kuczewski, 2001), some of which can be taught in discrete curriculum modules.

Early patient contact appears to progress the learning curve (Goldie et al., 2002). Research into doctors’ conduct in practice is lacking, and could enhance curriculum development (Gordon, 2003). As with all aspects of curricula, a systems approach (Armstrong et al., 2004, Engel, 1977) is necessary to ensure acceptance, success, and to anticipate and neutralize resistance.

Workplace learning, especially in long continuous attachments, what Dornan et al refer to as ‘participation in practice’ (Dornan et al., 2007), appears to be conducive. Huddle says “trainees are subject not merely to a curriculum but to a new way of life” (Huddle, 2005) (p. 888), and Kenny that “Excellence in professional practice is learned... through experience and critical reflection on its expression in the clinical encounter” (Kenny et al., 2003a) (p. 1209).

Students will encounter situations where they witness a temporary lapse in professional behaviour far more often than they will witness a truly bad doctor. Ginsburg has examined students’ reactions to these situations, and has captured the nature of their responses using case studies (vignettes) to capture students’ immediate responses (Ginsburg et al., 2003b). They found that students responses were based in classic principles of professional behaviour (termed avowed by the researchers), including honesty and fairness to patients.
They also found responses grounded in other principles, such as deference to seniority, obedience, and team allegiance, not taught in the curriculum, nor necessarily antithetical to it. They are not, then (in Ginsburg’s words) disavowed, but rather unavowed. They stem from students’ rational and necessary accommodation of meeting the avowed principles they were taught (or believe they ought to manifest). As students, they are at the low end of the professional power spectrum and see an imperative to conform, to acquiesce, to not challenge, or else lose marks or be labelled troublesome.

This conditioning is certainly not specific to medicine. It undoubtedly contributes to a reticence to challenge professional lapses in colleagues or report colleagues for blatant unprofessional behaviour in practice years. Thus, it can be expected to contribute to the set of circumstances that sees unprofessional behaviour escape correction or sanction in the world of practice. Ginsburg suggests a strategy that incorporates formal acknowledgement of these responses in training. Rather than ignore them or consider them wrong, if students are presented with learning situations that compel them to develop an understanding of their nature, and the fundamentals of a coping mechanism, through “self-reflection and self conscious rationalization” (Ginsburg et al., 2003a) (p. 1021), the outcome could be a more balanced perspective on professionalism.

An alternative approach is to create a protected learning environment, focused on moral development, in which students can explore, through carefully constructed case scenarios, their reaction in terms of key professionalism aspects, thus to “exert a countercultural influence on the dehumanizing effects of the hidden curriculum” (Browning et al., 2007) (p. 905).
There are many musings in the literature that teaching professionalism didactically, as diagnostic and treatment skill is taught, is not likely to produce the best results (Huddle, 2005). The hard case moral issues are actually easier to identify and confront from a pure ethical standpoint than the everyday situations where routine diagnostic and treatment decision are overlaid by an opinion of the patient, pressures of time and system, and the intrusion of personal problems to cloud vision and distract focus (Huddle, 2005).

Coulehan and Williams (2003) criticise contemporary professionalism education as “too little, too soon, too late, too distant, and too countercultural” (p. 14). Too soon, because it is generally included in the first years of the medical curriculum alongside the rote memorisation of facts required by anatomy, physiology and the other hard sciences of medicine, and so gets glossed over as a priority. Too late because by the time reflection on professionalism take place, the socialisation process of the harsh work of clinical practice, especially in hospitals, has hard wired the student into attitudes, behaviours, and thought patterns that are the antithesis of professional. Too distant because case scenarios discussed in class often bear little resemblance to the much more nuanced situations in real clinical practice, and even if not are presented without the pressures of having to placate an authority figure. Too countercultural because “the culture of clinical training is often hostile to professional virtue” (p. 14).

**Discussion**

Teaching professionalism entails "setting expectations, providing experiences, evaluating outcomes" (Stern and Papadakis, 2006) (p. 1794).

There is still no unifying theoretical or practical model to use as a format to integrate the teaching of professionalism in to the medical curriculum that has gained wide
acceptance (Archer et al., 2008, Gracey et al., 2005, Gordon, 2003). Richard Cruess is of the opinion that such a curriculum is not possible, and that, rather, a professionalism curriculum (curriculum component) must be based on, and reflect, the environment of the institution in which it is taught (Cruess, 2006a) (p. 180).

The closest development to this gold standard appears to be The Healer’s Art, an elective course developed at the University of California San Francisco in 1992 (Remen and Rabow, 2005b). The course has subsequently been adopted by many medical schools, fifty nine as at 2008 (Remen et al., 2008), primarily in the US and Canada (Rabow et al., 2007). Unfortunately, there is very little evaluation data published on the course (Remen et al., 2008, Geary et al., 2009).

A group led by Weissman, Branch, and Haidet (Weissmann et al., 2006b, Branch et al., 2009, Lown et al., 2007, Gracey et al., 2005, Branch et al., 2001) has also developed an integrated curriculum that has demonstrated success across a four university study group.

Considering that the modern professionalism debate has been going on for almost two decades, it is surprising that the literature does not contain more positive examples of how professionalism can be taught. Professional organisations in almost all western countries have established criteria for professionalism, and various authors have established conceptual and methodological approaches (Collier 2012), but we have not found evidence of concerted effort mounted by cooperating institutions that has demonstrated validated, productive, replicable teaching methods for professionalism to be lacking.

Professionalism appears currently to be lacking both in accepted theory and in a set of accepted practice criteria (Stephenson et al., 2006a, Wear and Kuczewski, 2004,
Hafferty and Levinson, 2008). Eckles et al. (2005), while different in focus to this review (undergraduate, excluded professionalism) also found a lack of studies forming a theoretical basis for teaching professionalism.

This study benefits from the comprehensive nature of the review we undertook and the depth and breadth of thinking about teaching professionalism that emerges from the literature. The major caveat we offer is the necessarily subjective nature of our evaluation of the quality of that literature. Other limitations include the new and evolving nature of the data synthesis techniques that we have incorporated and the conclusion, from our review of the literature, that much of what is being done to teach professionalism has not been evaluated or published.

**Conclusion**

Evident themes in the literature are that role modelling and personal reflections, ideally guided by faculty, are the important elements in current teaching programs, and are widely held to be the most effective techniques for developing professionalism. While it is generally held that professionalism should be part of the whole of a medical curriculum, the specifics of sequence, depth, detail, and the nature of how to integrate professionalism with other curriculum elements remain matters of evolving theory.

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Chapter 6: “They liked it if you say you cried”: Medical students’ perceptions of the teaching and assessment of professionalism

“...there is a rather large void between the ideology of professionalism, as expressed by medicine’s academic and clinical elite, and the value stance(s) expressed by the current generation of trainees”
Fred Hafferty (2003) (p. 148)

Introduction

Professionalism has become an important component of medical training (Gordon, 2003, Hilton and Slotnick, 2005, Parker et al., 2008). While professionalism is a topic that has been amply studied and written about in the past two decades, including studies of means of measuring and teaching the attributes and traits of professionalism (Lown et al., 2009), there is scant research that captures the perspective on professionalism held by enrolled medical students (Ozolins et al., 2008, Finn et al., 2010) or, in fact, on the development of professional identity in doctors in training in general (Reis, 2008, Cohen et al., 2009). Research is especially lacking on how the socialization process of medical education molds professional identity through the dialogue and interactions that take place in practice settings (Apker and Eggly, 2004) and in generational differences influencing how and how well young students learn (Borges et al., 2006).

Through this study I wanted to discover what medical students think about the professionalism component of their medical education. I wanted to capture what views students had developed as a result of their training and also to find out what beliefs and attributes they hold as a result of life experience.
Professional development is acquired through attitudinal learning (Howe, 2002a, Slotnick, 2001). As medical students learn the skills of clinical practice through their clinical training from preceptors, and others (registrars) senior to them in the medical hierarchy, they also develop (evolve) attitudes regarding the norms of professional behaviour demonstrated by those preceptors. The process through which this occurs has aspect of ritual (Apker and Eggly, 2004), in which behaviour conformant to dominant ideology is encouraged and deviance discouraged as students acquire an identity as doctors (Slotnick, 2001).

It is a useful construct to consider students engaged in the process of acquiring these identity traits as “proto-professionals” (Hilton and Slotnick, 2005). Howe uses the term “adolescent professionals” (Howe, 2002b) (p. 355). Through the evolution from student to doctor, learner to caregiver, assimilating and assuming identification as a professional (transiting through an “imposter syndrome” along the way (Cohen et al., 2009)), the student overcomes the ‘role resistance’ (Ginsburg et al., 2002) of the initiate through their learning experience, as guided by academic faculty and practice preceptors.

The Noguiera-Martins (2006), asking year five Brazilian medical students about their perceptions of learning professionalism, suggested that these students were in a “transition zone”, calling into question the idealism and sense of ethics they came to medical school with. They appear to be evolving a more cautious, emotionally neutral and self-protective approach to their future practice personas. The Noguiera-Martins recommend early clinical exposure, involving multiple disciplines in teaching, including psychology practitioners, and continual staff development as means to the end of professionalism in doctor-patient relationships.
More recently, Moyer, Arnold, and their team performed a grounded theory study (Moyer et al., 2010) similar to this one. They found that the major factors enhancing humanism were “authentic, unique, and participatory experiences before and during medical school, and the opportunity to process these experiences” along with positive role models.

The formative process of professionalism is one of situated learning (Steinert, 2008, Quaintance et al., 2010, Mann, 2002, Lave and Wenger, 1991, Billett, 1996, Maudsley and Strivens, 2000, Goldie, 2008), which balances didactic teaching with participatory experience in the content realm. Students are transformed from members of the lay public to doctors through intensive guided experience where knowledge is delivered within the contextual realm in which it is used, a realm with distinct cultural as well as physical barriers to the lay world. In the process, these students come to challenge the knowledge they have acquired in the classroom, as it is tested against the reality of practice (Maudsley and Strivens, 2000, O’Brien et al., 2007). As students progress through their program of study, they encounter increasingly complex and nuanced ethical dilemmas. Professionalism training should introduce students to such situations in a controlled setting, allowing them to think through ethical as well as clinical considerations before they are challenged to make complex decisions rapidly as practitioners.

Professional competence, reflecting the “situational relationships among doctors, their patients, and the systems in which they perform” (Klass, 2007) (p. 529), is a function of settings and systems, and also of individual personality traits and past experiences (Gude et al., 2005, Wear and Zarconi, 2008). Thus, an examination of students' formative experiences within these systems, formal, informal, and hidden curricula (Hafferty and Franks, 1994, Mann, 2002), their reflections on them (Monrouxe, 2009, Monrouxe et al., 2011), and the traits, motivation, and attributes that they bring to
the process (Kusurkar et al., 2011a, Millan et al., 2005, Kusurkar et al., 2011b, van Tongeren-Alers et al., 2011) are essential to the development of effective professionalism.

Students learn from a cognitive perspective, the (usually formal) aspects of curriculum that contribute to the shaping of their abilities to think and reason. They learn much more from their clinical placements, where their thinking and actions are molded by the social and cultural environment in which they are placed (Mann, 2002, Michalec, 2012). This is usually referred to as the informal or hidden curriculum (Hafferty and Franks, 1994), although a better term might be the experienced curriculum, and there is nothing informal about it (Billett, 2006). The stresses brought on by the intensity and duration of their intellectual engagement with the learning process of medical school, the power imbalance between teacher and learner (Committee on Ethics, 2011) and the high stakes nature of the endeavour, particularly during their early clinical experiences (O’Brien et al., 2007), transform them (Cohen et al., 2009) from young citizens, possible naïve, to doctors, possibly jaded (Hren et al., 2011).

Hafferty has argued that medical training, in terms of socialization to the discipline, or personal transformation from students to doctor, is “more disjointed and chaotic than unifying and directive” (Hafferty, 2008) (p. 61). While training in clinical skills is formulaic, exacting, and continually reinforced through various teaching modalities, professionalism training has long been relegated to the informal and hidden curricula, not so much taught but assimilated through observation of comportment and behaviours of tutors, clinical supervisors, and residents/registrars. In this realm, Hafferty considers medical students to be “perfect objects” for socialization, as they are “high achievers placed within settings of considerable tension and ambiguity, where all intently want to become in-group members” (Hafferty, 2008) (p. 61). This tension will then be
magnified and become more complicated in their next (internship) stages of training (McDougall, 2008).

It has been suggested that medical educators would be well advised to include students in developing theories of and modes of teaching professionalism (Wear and Kuczewski, 2004). Students are aware that much of what they learn about the culture of medicine comes from the informal curriculum (Ozolins et al., 2008).

Teaching techniques that have been advocated for teaching professionalism in postgraduate students include didactic teaching methods, narrative reflection (Clandinin and Cave, 2008, Baernstein and Fryer-Edwards, 2003, Quaintance et al., 2010, Lachman and Pawlina, 2006, Shapiro et al., 2006, Aronson, 2010, Bell et al., 2011), role modeling (Bryan et al., 2005, Stark, 2003, Mann, 2002, Wear and Zarconi, 2008), reflection on practice with peers/mentors (Mann, 2002, Wear and Zarconi, 2008, Cleary, 2011), and various combinations of these methods.

**Previous research findings**

Hafferty, through several years of interrogating medical students in class in an informal qualitative method (Hafferty, 2002), identified several themes consistently expressed by these students. First was a fiercely individualistic approach to their chosen profession, resisting notions of subordination of self-interest and obligation (in the form of oath taking) to the profession, although they appreciated an importance in looking the part. Since they had already been admitted to a medical school, with swearing allegiance not being part of the admissions process, they felt entitled by virtue of this acceptance. For them “all principles reside within the individual” (p. 392).
Students in Hafferty’s classes did not find professional standards compelling or intrinsically worthy of allegiance. They were unclear about both the meaning and importance of the trait ‘altruism’. He concluded that entering medical students at his school were ill-prepared, either through exposure to formal presentation or through self reflection, to understand, let alone acquire, the essential attributes of professionalism.

Wear and Zarconi (2008) found reasons for both dismay and hope in a study similar to the present one. Asking students to allow them to review, for research purposes, capstone essays which were required for these students’ training programs, they got about half to accept. From these essays, Wear and Zarconi gleaned that students were sick and tired of professionalism “being shoved down our throats” (p. 950). They considered that they came to medical school with compassion and altruism, but had these qualities assaulted and challenged, largely through clinical experiences in systems where productivity and efficiency, “an assembly line mentality”, were everything, compassion and empathy nothing. They recommended grooming more competent role models up to the task and ensuring that students are afforded opportunities to de-brief and critically reflect on their experience, both positive and negative, with trusted faculty.

The teams of Jha (2006) and Monrouxe (2011) found that students placed great importance on in looking the part of the professional, as well as dissension on the relevance and practicality of altruism.

Wagner and colleagues (2007), performed a study that sought to identify the meaning of professionalism to medical students, resident physicians (registrars in Australian/U.K. parlance), medical academics, and patients. As might be expected, students, just beginning to conceptualise the patient relationship, had mental models
that were more similar to patient participants in the study than to residents or academic faculty. This manifested in a focus on the relationship (patient/doctor) itself, with an emphasis on respect and character virtues. Students were more concerned with their potential to hurt someone than were other groups investigated. These investigators found a progression of knowledge and attitudes across their participant groups, with students and patients concentrating on the nature of the patient/doctor relationship while residents and academic faculty concentrated on knowledge and skills.

Hanlon and colleagues (2010) found respondents who perceived a “pervasive” generational erosion of professional values, with current students, in British Columbia, being seen as demanding a work/life balance with a strong life component. These students were perceived to have less dedication to the profession and less willing to accept personal sacrifice to be doctors. On the positive side, these students were perceived as being more able and willing to work in primary care teams.

Blue and colleagues (2009) found that entering American medical students whom they surveyed had an understanding of the attributes of professionalism, particularly, humanism, but that they lacked an understanding of how these attributes worked in practice.

Lempp and Seale (2004) looked at the impact of the hidden curriculum on the education of undergraduate medical students in Britain. They found that humiliation, manifest as an expression of hierarchy, was an aspect of clinical teaching frequently reported by students they interviewed (twenty one of thirty six). Twenty six of the thirty six identified a specific clinician who they felt was a positive role model benefiting their education. Lempp and Seal also found that these
students viewed their teaching as “haphazard”. These students viewed “competition rather than cooperation” (p. 772) as being the “defining characteristic of medicine.” The authors note that while medical practice is heavily regulated and reviewed, teaching in clinical practice has no such set of elaborate evolved checks and balances.

Egnew and Wilson (2010) found that general practice placements worked better than hospital placements in facilitating students’ assimilation of professional roles. This was due to direct teaching by general practitioners (GPs) using explicit methods. It was also associated with the perception by students surveyed that GPs made better role models. Students found the transition between preclinical years and clinical placements a rude awakening. While they were taught to be patient centered and empathetic in training, they found that the clinical world demanded production in tight time limits, with no room for protracted doctor/patient interactions other than the necessities of the task at hand. Faculty who taught professionalism in classrooms were not present in clinical settings, and students developed an opinion that “they don’t know what you’re actually like at patient-doctor interactions” (Egnew and Wilson, 2010) (p. 202). Clinical educators believed that professionalism had to be learned in the context of interaction with patients, not in a classroom. While GPs were charged with giving students feedback on their professionalism skill, doing so was inconsistent and largely lacking. Informal feedback from GPs and junior staff was considered valuable.

The literature contains a few reports by medical students (Skiles, 2005, Fehser, 2002), largely critical of the teaching of professionalism that they have experienced. Brainerd and Brislen (2007), sharing admittedly anecdotal observations about their experience and that of other medical students, noted, as have others (Mosley, 2003, Reddy et al., 2007), that the chief problem was the disconnect between what the curriculum taught and what the conduct of their teachers actually was. Once entry
in to the profession is established, faculty and medical staff are perceived by medical students as being protected by the hierarchy. Students, as green recruits not yet admitted into the fold, are vulnerable, suffer indignities at the hands of their masters, and emerge jaded if not disillusioned by the experience. Students are routinely scrutinized and assessed on their professionalism, the professionals are not. What is actually learned is a set of values in opposition to those professed as desired qualities. In their view: “…professionalism is in the eye of the beholder regardless of the written definitions” (Brainard and Brislen, 2007) (p. 1011). Conformity is what is really valued, not the lofty attributes contained in the standard definitions and position papers. Students become “‘professional’ and ‘ethical’ chameleons” (p. 1012) in order to achieve their goals and just to get by.

Leo and Eagen (2008) concur with the views expressed by Brainard and Brislen, especially the double standard between what is expected of students and what is freely tolerated in accepted members of the profession. They further note that the discourse on professionalism is largely a negative one, “a persecutory environment focusing on the shortcomings of medical students” (p. 510), rather than highlighting, encouraging, and, more importantly rewarding positive actions.

Pitkala and Mantyranta, in a qualitative study of Finnish medical students, found that students’ identities as doctors, and their attainment of a feeling of credibility in that role, derived from the responses they received from patients they encountered (Pitkala and Mantyranta, 2003).

Finn and colleagues (2010) studied early year medical students, finding that they were struggling with the nature of identity and the notion that a professional identity, like a virtual online identity, can be switched on and off. Even at their early stage of socialization to the profession, the students in Finn’s focus groups
recognized that professionalism was a “cumulative attribute” that would only come to fruition after their five year journey through medical education (p. 822).

Finally, Levenson, Atkinson, and Shepherd (2010), working on behalf of the major health professional membership organisations in the UK, ran a series of ‘student road shows’ throughout the UK soliciting medical Students’ views on professionalism and the teaching of it. Their findings were mixed, with students divided between nature and nurture (character built from early childhood vs. formal teaching in the medical curriculum) as the root source of professionalism. As in this study, they did not look at teaching methods.

**Methodology**

My aim in this study was to capture the perceptions of medical students of their conceptions of, and the quality of the training they were receiving, in medical professionalism.

When I designed the study, my goal was to provide a rich description, perhaps one that could guide development of a grounded theory (Glaser and Strauss, 1967) of what medical students perceive medical professionalism to be, based on their training program experiences. I was, as Walsh and Downe put it; “concerned with how shared experience is constructed within an environment, and the assignment of meaning within the culture” (Walsh and Downe, 2005) (p. 207), and thus approached this study, and that in chapter 7, from a perspective of ethnography.

I started with the assumption, following the work of Lave and Wenger (1991), that especially in their clinical years (later years of a 4 or 5 year medical education program) students learn medicine, and more specifically begin to take on the
attributes of a professional, through situated learning in a setting (clinical placement) where the student is not a fully legitimate, active participant, but not just a passive observer either. Lave and Wenger called this ‘legitimate peripheral participation’. In this state, the perspective of the learner is changing rapidly from outsider to insider, student to practitioner. I would expect this to be a highly challenging, stressful time, with wide swings in self confidence, ability, and competence- a time in which these students would be thinking and reflecting deeply and extensively about professionalism.

A qualitative methods approach was deemed most appropriate for this study. I was looking for local truths, the truth of what professionalism is and how it can best be taught from the perspective of those teaching it and learning it in clinical placements in later years (primarily year 4) of an Australian medical education.

Identification of subjects/participants/respondents for qualitative research is not, per se, a matter of ‘sampling’, as this applies examining a subset representative of some larger group, from which to get a finding representative of the experience/beliefs/opinions of that group. Rather, the goal here is to select persons who can provide answers to my research questions by virtue of their particular experience (Maxwell, 2005) (p. 88).

I didn’t adopt any particular conscious theoretical framework or hypothesis at the outset. Rather, I allowed theory to evolve through the voices of the students, and sought to refine it through iterations of data collection and analysis. In qualitative enquiry, theory does not have to lead, but can follow on (Carter and Little, 2007), arising as and when the data lead.
Student perceptions capture what is taken from the learning experience, not what
the intent of the designed curriculum was (Mattick and Knight, 2007). By studying
their impressions, I sought to capture not just the people, but the settings they are
learning in (Maxwell, 2005) (p. 87).

Focus groups have become an increasingly useful method in medical education
research (Barbour, 2005). I used them in this study because my aim was to capture a
rich understanding of participants' experiences and thoughts concerning
professionalism through the dynamic of their interaction on the topic. I encouraged
participants to describe not only what their views on professionalism were, but to
explore, through their discussion in focus groups, how they arrived at those views.
Group processes such as this enable participants to examine their views and achieve
clarity more readily than through one on one interviews or written surveys
(Kitzinger, 1995). As this topic is one that is under-studied, focus groups are an
appropriate choice for studying it (Britten et al., 1995).

Focus groups enhance understanding through the power of collective critical
reflection and exchange of ideas to reveal consensus and underlying assumptions.
One person’s contribution can serve as a catalyst to open up thoughts in other group
members, resulting in a richer examination than may be possible in a one on one
interview. Focus groups also provide a supportive peer group setting where
hierarchy and intimidation are minimized (Kitzinger, 1995), appropriate to the study
of an issue likely to elicit feelings of apprehension, uncertainty, and insecurity.
Focus groups can allow reflection, and thus enrich insight, in ways that no survey,
even an open ended one, can (Dolan et al., 1999).

On the other hand, focus groups set up a social environment in which participants
can be expected to be reluctant to risk personal embarrassment or perceived as
holding a wrong view on some important point. Thus they may express agreement with points of view expressed by a more assertive member of the group (a leader/follower effect (Musselman et al., 2005)), or views that seem to be communally acceptable. This can result in participants’ speaking so as to conform to their perception of what the consensus of the group is rather than what they really think. Goffman says “when an individual appears before others his actions will influence the definition of the situation which they come to have” (Goffman, 1978) (p. 6).

There is dissension in the evolving literature on qualitative methodology regarding whether members of a focus group should be known to each other or not. There is also a tension in the literature regarding whether it is sufficient to analyse the content of dialogue produced by a focus group or whether it is also necessary to analyse the nature of the interactions taking place (Halkier, 2010). We construct all of our conversations to challenge or conform to the consensus view of those we are speaking with to suit our own aims- to try to make other people like or respect us or at least not to think us aberrant. In our social performances, says Goffman, we are sustaining and broadcasting our own mental construct of who we are.

I decided to use individual interviews as a complementary technique to the main data collection method. Interviews are a useful tool on projects such as this, where the aim is to capture and characterise the meaning that an individual ascribes to particular social phenomena. Reasons that I deemed one on one interviews useful include the possibility that an individual may bring up an issue that a group member might not, that an individual discussion may be able to follow a thread of consciousness in more depth, without interjection by others, and in order to broaden the sample by including students from other medical schools who, due to logistics (convenience) reasons were individually but not collectively available.
My topic, the development of professionalism through medical education, involves complex overlapping and interactive systems (curricula, placement protocols, student backgrounds). It would be foolhardy, if not impossible, to attempt to fit a linear model of cause and effect focusing on a discrete intervention or isolated factor. In qualitative research, the potential exists to either over-analyse or under-analyse data. Under analyzing generally takes the form of relying over-heavily on participants’ quotes (Daly, 2009), without attempting to make the connections and fathom the deep meaning of what is being expressed, and (more importantly) why. The temptation is to superficially skim the texts being analysed, picking out the most outrageous quotes or the ones supporting the observer’s pre-conceived notions.

Over-analysis comes from ascribing too much meaning to innocuous utterance, or imputing motivation or ulterior meaning where the speaker intended none. Taken to its extreme, a focus group can be analysed using discourse analysis (Hodges et al., 2008) with each pause, no matter how brief, timed, and even an attempt made at reporting whether a respondent inhaled or exhaled before or after uttering a particular word or phrase. While the pregnant pause can speak volumes, it is far more often the case in speech that a speaker will pause to frame a thought before speaking it, react to a minor distraction in the environment, or be distracted by a momentary thought of something completely off topic—sex, say. A technique for avoiding over-analyses is a low-inference descriptor approach (Seale, 2007) (p. 80), allowing participants’ words to carry the weight of the argument presented, with minimal interpretation from the investigator. The risk with such an approach is that of under-analysis through over quotation (Antaki et al., 2003).

To ensure that my analysis captured the true intent of my participants’ words—what they really felt or meant, I planned for a member-check focus group to allow participants to review the results and discussion of analysis (Manning, 1997).
Methods

Since the intent was to capture views, reactions, and opinions, I chose a focus group/interview data collection methodology.

I designed scripts for interviews and focus groups to elicit students’ conceptual understanding of professionalism, including mental models of various traits and skills that may influence professionalism, and also the relevance and importance with which they view the professionalism training they have experienced. I also sought to capture their ideas about the way they had been taught professionalism.

Ethical issues

As I am a member of the teaching faculty of the program in which most of the students I wished to speak with for this research were enrolled, there could be an intimidating power differential that might make students feel compelled to participate even if they might prefer not to. To offset this, student coordinators made initial approaches to potential participants. Student coordinators are administrative personnel of the department who are in charge of managing the logistics of student placements. Approaching students in this one step removed fashion avoided intimidation and ensured that students wary of participating felt secure in declining the offer. No invited students declined to participate. Ethics approval for this research was obtained through the University of Sydney Human Research Ethics Committee, Protocol ID 12759, granted 4 June 2010. Ethics approval is included in Appendix D.

Recruitment of participants

The sampling frame from which participants in this research were selected consisted of medical students in later years of study, in either undergraduate or graduate entry programs. Since I had ready access to such students through clinical placements
I developed a recruitment plan using a theoretical sampling approach (Mays and Pope, 2000, Kuper et al., 2008a), with the aim of maximizing diversity of background and experience in training programs. My first goal was to recruit students who were representative of the experience of medical education in eastern Australia (states of New South Wales and Queensland). These students were undertaking clinical placements in the later years of their medical education program. Reflecting this, these students were mainly postgraduate, although I also included some undergraduate students, as both postgraduate entry and undergraduate entry medical programs exist side by side, with similar curricula. To capture a wide range of experience I recruited from five medical schools. I particularly sought out extreme cases,

Because the realm of people and settings I was interested in was small, and because I was more interested in consensus opinion than difference, I did not seek to establish particular comparisons between individuals (or schools) to identify reasons for differences between settings/ students.

I attempted to minimize key informant bias (Maxwell, 2005) (p. 91) by mixing focus groups and individual interviews, by sampling broadly and inclusively (given the relatively small pool of possible participant candidates), and by seeking out aberrant views as these might be particularly interesting.(Maxwell, 2005) (p. 89).

Sampling was purposive, with the intent of capturing the views of medical students who have shared experience in their program of study, and who therefore could
provide rich commentary based on that shared experience. Convenience was also a factor in recruitment, as I had ready access to a suitably diverse and broad group of students suitable for providing data to the study.

These were Generation Y students, who, as a cohort, have been characterized as technically literate, mobile, socially connected, and viewing work/life balance as a key component of a medical career (Mitchell, 2008).

Students were approached through available networks in training locations. Study participants were recruited from five Australian Medical Schools in later years (primarily year 4) of training. These students were undertaking intensive long term (1 year) placements in clinical practices as part of their training.

The students sampled were aged between 23 and 32, with a mean of 26. There were 16 women and 24 men. Fourteen (8 women and 6 men) of the 40 were of primary ethnic origins other than white Australian. None of the participants was of Aboriginal or Torres Strait Islander origin. One of the students had come to the medical school from outside Australia. Most students (30 of 40) were from regional as opposed to capital city homes. This reflects the student profile of the five medical schools, which have made major efforts to recruit regional students, women, and students from ethnic backgrounds.

More detailed demographic information details on respondents would make some easily identifiable, compromising their anonymity (Morse, 2008), and so I have not presented a detailed demographic profile of the respondents. A breakdown of focus groups by university and duration is included in Table 6.1.
Matters of reflexivity

Most participants knew me prior to participating in this study. For many, I was the supervisor of the research projects (mainly descriptive epidemiology) that they were required to develop and carry out while on placement. I was not an assessor of these students’ progress— that role being filled by a second supervisor at their main campus. They also knew me as a lecturer in epidemiology, evidence based practice, and population health topics, and as a senior academic faculty member of the department (the North Coast Medical Education Collaboration) coordinating their long term placements.

Roughly 40% of students interviewed had no formal association with me outside of the focus group or interview for this project. Since I was a facilitator, not an assessor, of their learning, I was comfortable that there was low potential of an imbalanced power relationship between subject and investigator in our formal program relationships. An imbalance could be construed from my age (the generation of their parents) and as a member of the medical faculty, although this would be mitigated by my status as being outside the realm of clinical practice.
Table 6.1: student focus groups
Sampling frame: year 3, 4, and 5 medical students in NSW medical school, both undergraduate and graduate entry, in clinical placements in rural NSW.
Sample characteristics:

<table>
<thead>
<tr>
<th>Focus group</th>
<th>date</th>
<th>University</th>
<th>status</th>
<th># male</th>
<th># female</th>
<th>Incentives?</th>
<th>minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 June 2010</td>
<td>1</td>
<td>grad yr 4</td>
<td>8</td>
<td>2</td>
<td>no</td>
<td>48:48</td>
</tr>
<tr>
<td>2</td>
<td>9 June 2010</td>
<td>1</td>
<td>grad yr 4</td>
<td>3</td>
<td>5</td>
<td>no</td>
<td>43:52</td>
</tr>
<tr>
<td>3</td>
<td>23 Aug 2010</td>
<td>2</td>
<td>grad yr 4</td>
<td>4</td>
<td>3</td>
<td>yes</td>
<td>110:45</td>
</tr>
<tr>
<td>4</td>
<td>22 Sept 2010</td>
<td>2 member check</td>
<td>grad yr 4</td>
<td>5</td>
<td>3</td>
<td>yes</td>
<td>66:23</td>
</tr>
<tr>
<td>5</td>
<td>30 Sept 2010</td>
<td>3</td>
<td>Undergrad yr 4</td>
<td>4</td>
<td>3</td>
<td>yes</td>
<td>57:01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>10</td>
<td></td>
<td>327</td>
</tr>
</tbody>
</table>

Data collection
Primary data collection was through focus groups. All focus groups were convened in conference rooms on campus. Two were held following regularly scheduled didactic teaching sessions, and four during evening hours. Five focus groups were held, totaling 5 ½ hours. A light dinner was provided to participants in the evening focus groups as an incentive and in appreciation for their time and effort. Only the researcher and participants were present during focus groups.

Total: 66:34
I undertook a few individual interviews as well. Interviews were designed to capture candid individual views, uninfluenced by the presence of peers, and to augment focus group data by including students from other Australian medical schools. Early focus groups and interviews served as pilots, with modifications to questions made as a result of analysis. The schedule of interviews and focus groups was driven by available opportunities to fit these into students; busy rural placement schedules, with no particular sequence deemed necessary.

Focus groups and interviews were recorded through a high quality internet protocol (IP)-based videoconference recording and streaming system set for audio only, with a hand held digital recorder used as a backup in case of failure of the main system. All audio recordings were sent to a professional transcription service in the USA, using a digital drop box to transfer the large size audio .mp3 files. Audio files were transcribed verbatim transcripts were transferred back through the drop box as Microsoft Word files.

I reviewed transcripts while listening to the original audio recording for each session to ensure transcription accuracy. As the study did not require sociolinguistic analysis, I decided that fine nuance of inflection, pause timing, or other full density transcription annotation was not necessary. My transcriber did annotate emotional content and tone (laughter, sarcasm) and multiple speakers talking over each other when these occurred.

I prepared Word document transcriptions for analysis using Bazeley’s suggested conventions (for structure, headings, etc.) (Bazeley, 2010), and then entered them into, NVivo version 8 software (QSR International http://www.qsrinternational.com/products_nvivo.aspx ) for thematic analysis (Braun and Clarke, 2006). I also highlighted and annotated transcribed texts in their original
Word format, as I found this an easier form to work with the data in for quickly reviewing transcripts and for identifying key quotes. My coding system developed with my reading of the transcribed texts. Table 6.2 contains the final coding frame from the data.

Table 6.2 coding frame (after Howe et al., 2009)

<table>
<thead>
<tr>
<th>Heading (broad category)</th>
<th>Nodes</th>
<th>Number of coding references under this node</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach (professionalism)</td>
<td>reflection</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>teach how</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>can’t</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>in placements</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>legitimacy</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>can students do it?</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>bad examples</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Teach ethics</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>waste of time</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>better in phase III than phase I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>observing</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>patient rapport</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>by tutors</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>by patients</td>
<td>1</td>
</tr>
<tr>
<td>Learn</td>
<td>in placement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>through experience</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>reflection with peers</td>
<td>3</td>
</tr>
<tr>
<td>Assess</td>
<td>performance review</td>
<td>16</td>
</tr>
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<td></td>
<td>assess</td>
<td>32</td>
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<td>negatives</td>
<td>32</td>
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<tr>
<td></td>
<td>gaming the system</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>oral reflection</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>by patients</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ability to sort good from bad</td>
<td>4</td>
</tr>
<tr>
<td>Attributes</td>
<td>individual attributes</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>character</td>
<td>9</td>
</tr>
<tr>
<td></td>
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<tr>
<td>appearance</td>
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<tr>
<td>Evolution</td>
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<td>specialty differences</td>
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</tr>
<tr>
<td>gender differences</td>
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<tr>
<td>generational</td>
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<td>selection process</td>
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</tr>
<tr>
<td>Definition of</td>
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<td></td>
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<tr>
<td>Mentor</td>
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<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Bad stuff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>example of unprofessional behaviour</td>
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</tr>
<tr>
<td>fear</td>
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<td></td>
</tr>
<tr>
<td>bullying</td>
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<td></td>
</tr>
</tbody>
</table>

Additional areas for further probing in subsequent rounds of data collection and analysis were identified in the pilot round and subsequently incorporated into the methodology. Sampling proceeded until thematic saturation was achieved. The script of triggers used for focus groups is included in Appendix C.

Most students who participated in this research were enrolled in curricula that identified the portion of the curriculum dedicated to the attributes of professionalism in medicine as Personal and Professional Development, or PPD. I have used that shorthand in my accounts of their responses. The first part of each interview or focus group was spent establishing the aspects of their training that I was interested in to avoid confusion in terminology. I have retained the ‘PPD’ abbreviation in the results section.

As is standard practice in qualitative research, I modified questions to fit the circumstances of the interviews and focus groups, primarily to explore emerging themes. Efforts to ensure authenticity, trustworthiness, and reflexivity (Finlay, 2002, Hall and Callery, 2001, Manning, 1997, Graneheim and Lundman, 2004) included...
asking follow on questions to clarify apparently important points as they arose in focus groups, queries of the group as to consensus on key points, paying particular attention to any dissenting voices, and review of key themes identified with academic staff to verify plausibility.

**Analysis**

I followed a general inductive approach to data analysis (Thomas, 2006). I attempted to achieve a rich description that took in the whole data set by performing a conventional inductive content analysis (Graneheim and Lundman, 2004, Hsieh and Shannon, 2005). I transcribed the initial two focus groups myself, then retained a professional transcriptionist for the balance of the work. I read and re-read each transcript, deriving coding categories from the raw data (Moretti et al., 2011). I sought to gain insight from these students on how relevant they perceive their professionalism training to be, how effective they think it is, and, more broadly, what positive and negative attributes of this training exist that may be enhanced or eliminated, respectively, to improve such training.

I followed Seale’s approach of maintaining a focus on reflexivity and using low inference descriptors (Seale, 2007) (p. 80), letting the voices of the participants convey their own meaning and adding my interpretations only after establishing that. I looked for meaning, primarily manifest content (Graneheim and Lundman, 2004) through a methodical identification of themes that were common across focus groups, as each group consisted of students from a different university.

I re-convened one focus group as a member check to validate my analysis (Kuper et al., 2008b, Miles and Huberman, 2002) (p. 258-259). The members of this group were provided with a write-up of results and discussion of the first round prior to our second group meeting. During this second focus group, these participants were
invited to comment on how well I had captured what they meant to say, what they really thought of their professionalism training, and whether my analysis and conclusions were reasonable. This also resulted in new data being generated, as participants engaged in further reflection framed by the draft text they had reviewed. The script of triggers used for this follow-up focus group is included in Appendix C. Final transcripts totaled 48,941 words.

Results

Twelve major themes were derived from the data; relating to concepts of professionalism, teaching methods, and assessment methods. Table 6.3 summarizes themes arising from the data, each of which is explained in detail below.

<table>
<thead>
<tr>
<th>Table 6.3: Themes arising from the data</th>
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<tr>
<td>These students;</td>
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<tr>
<td>1. have a low regard for the professionalism teaching they have experienced</td>
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<tr>
<td>2. do not express a clear definition of professionalism that is concordant with ones published/stated in learning objectives</td>
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<tr>
<td>3. have not experienced bullying or flagrant unprofessional behaviour</td>
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<tr>
<td>4. have witnessed transgressions of professionalism which they felt were not adequately dealt with</td>
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<tr>
<td>5. do not recognise the legitimacy of someone other than a doctor with clinical practice experience teaching them professionalism</td>
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<tr>
<td>6. consolidate what they learn, and form their individual mental model of professionalism, through group reflection with their peers in medical school</td>
</tr>
<tr>
<td>7. learn to ‘game the system’- giving assessors the results on reflective writing assignments that they believe their assessors want to hear, and that will obtain for them a passing grade</td>
</tr>
<tr>
<td>8. have a low regard for the ways in which professionalism has been assessed in their learning programs</td>
</tr>
<tr>
<td>9. see a difference in professionalism capacity and necessity between various medical specialties (e.g. GPs need lots, anaesthetists and pathologists less)</td>
</tr>
<tr>
<td>10. value the teaching of ethics and the legal parameters in which they must operate</td>
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11. see the situations they experience in clinical placements as being far more complex than the ones they are presented with in didactic teaching sessions, which they consider superficial or trivial
12. see experiential learning- observing good professional practice, as the best way (some view as the only way) to learn professionalism
13. are confident in their developing professional personas. They do not see great difficulty with their ability to act in a professional manner

Respondents are identified by gender, year in training, and whether in an undergraduate (U) or graduate-entry (G) medical education program, when such identification is relevant to their comments. Hence F4G equates to a female respondent in the fourth year of a graduate entry program. I = interviewer.

Defining Professionalism
Students did not define professionalism using any of the various formal definitions generally found in curriculum documents or in the literature on professionalism, but they had firmly developed concepts of what professionalism is. Their framework was more or less congruent with accepted definitions.

They did recognize the importance of professionalism, and the justification for making it an assessable component of curriculum;

R: “I know some people, or at least one I can think of, who've failed part of the course on PPD, and they probably clearly needed to because they were so outside the bounds of what would be expected to be acceptable behavior. And I guess they would if that person would have got through.

I: So that would indicate that the teaching, or the assessment of it, works.

R: Yeah. And they wouldn't have been able to fail the person, because they were quite intelligent in other courses.”

They also saw professionalism largely as a function of character and upbringing.

Like 90 percent of the situations you encounter everyday it's an outcome of your upbringing and your life experience, and someone standing up and saying, “You shouldn't do this, you
shouldn’t do that,” is not going to be what you remember when you see the patient with the problem.

… I really think that if you can't do the right thing, inherently, if you can't see a situation of what’s right, … I don’t really think that … that one hour or 45 minute ethical lecture is going to change somebody who just can’t see those things anyway.

If they don’t have it already that lecture's not going to do it.

And as something that they would develop themselves, almost despite the teaching they were exposed to.

For me it conjures up a private, personal process that happens by itself without the help of faculty over the course of your degree and future life.

An interesting observation made by one respondent was that professionalism should provide a standardized approach to medicine;

I think that professional development is about assuring a similar type of care or type of behavior across the whole profession, so that when you go to one doctor you know what to expect when you go to him because he's going to behave and have similar behaviors to everyone else in the profession, so it's kind of standard setting

Undergraduate students emphasized appearance (wearing a tie or not) and comportment (Behaviour around patients, other medical professionals) as being important to professionalism, graduate entry students did not mention these.

**Teaching professionalism**

Students had a low opinion of the way professionalism is currently taught at their universities;

From focus group 1

*I: When I say ppd, what does that bring to mind?*

*Stupid university reflections.*

*[Laughter]*

*Fear*

*Waste of time.*

and
it’s just mind-numbing and it usually lasts for two days

From focus group 5, undergraduate entry med students

I: Is it important that we teach ppd in medicine?

Not formally.

I: Not formally? Why not?

I don’t think it works.

I: How come?

Because it’s not official, anyway. There’s – you get taught by association with the profession, you learn those rules, like the guidelines. I think ethics is important to teach, but not so much -

FU1 You can’t teach ethics.

MU1 Yes you can.

A reduction to a rote, formulaic approach left them confused, unable to differentiate between different elements of their professionalism training, which they considered less useful than clinical skills.

MR1: Yeah, I just think that they make it out being the four different domains that we’re taught in, and PPD is just as important as -

FR2: Are there the eight questions?

MR1: There’s like, basic and clinical sciences, community, pop med, PPD and patient document.

FR1: I think the eight questions related to pop med.

MR1: No, that’s PPD. The eight essential questions of PPD. Like about autonomy and those ones.

I: Resilience, life-work balance -

MR1: Yeah, those ones. No, I think there’s eight of them in pop med as well. The themes of pop med.

FR2: Wait, what are you talking about resilience and stuff?

FR3: If you look at the ethics essay we have to write, which is probably worthwhile because you choose your own case that you’ve come across and you write about it, but there’s eight things that they suggest that you address as a guide.
Redundancy and oversimplification of professionalism teaching were recurring themes.

95 percent of us get it, and the folks here that don’t get it are not going to change their minds by this lecture.

Students challenged the legitimacy of lecturers who were not medically qualified:

Whereas mostly at uni the person teaching us PPD was not a doctor.

Was just a professor or something.

A professor of psychology.

It’s not legitimate, you know? Dr. X is really, really legitimate because [the person is a doctor]

I: But couldn’t you make the argument that PPD has more to do with psychology than with anything else, so that would be -

Well, I think it’s taught through experience.

Yeah, I agree. It is out of psychology, but you’re not actually seeing those people in practice. They’re giving you a didactic lecture on how you should perform, rather than us seeing how they perform in the same scenario, and you can then yourself decide, “Is that the way that I want to perform this same scenario, or is that the way that I don’t want to perform this scenario?” So I think it’s worthless just because it’s a lecture on it.

Yeah. It’s a bit insincere – it’s like they’re telling you to do something - they’ve never actually sat in with a patient and tell them that they’ve got cancer.

“You just can’t relate to it when it’s psychological— They can’t really relate to what you actually do when you’re a doctor, and that’s what you need, somebody who can really tap in and understand what you need

and

I think another problem with the teachers, and I do feel mean for saying this, it’s maybe taught by people who shouldn’t teach it, but being taught by people who’ve sat on disciplinary tribunals and things is again a long way from two standard deviations from the majority of the medical profession.

Students felt that a seminar style instructional setting worked better than a lecture format. Reflecting back on their early year training, the type of training they felt they received the most value from was through presentation of a dilemma involving ethical or legal issues, with a challenge to decide a proper course of action guided by an ethicist or medico-legal expert. They also felt that their early year tutors should
be an important source of professionalism instruction, but that these people weren’t in the current curriculum structure.

with one day a week with our tutor, and if you do have a good tutor, they are a mentor, they are your PPD guide, they’re the one that teaches you how to be a doctor pretty much in those days. Like, you learn the physical exams and that kind of stuff, but in my case I saw my tutor sit down on the bed with the patient, would come around and say, “How are you doing today?” And be really nice and comfortable with them, and that taught me more PPD than any lecture could.

Students considered education on the theme of professionalism to have more relevance, more value, later in their training years than it did early on, where professionalism education is concentrated.

“it was just a bit early in the course, because we all don’t remember it that well.”
“It seems more relevant now than it does in the first years.”
“professionalism being taught now as we’re about to enter the work force, I think, would be so much more valuable towards the end of your degree than at the very start…”

“I: What have you learned about PPD through your placements with GPs …? I’m not talking about formal teaching, I’m talking about experiences that you think will have made you a better doctor in this regard. Anybody have anything in particular that comes to mind?

RF1 I think … GP has been the biggest learning curve of PPD for me.

RF2 Yeah. Same.

I: In that - ?

RF3 In that you also model what you see as well. You really start to become a lot more like the doctors that you spend the majority of time with, I think.

RF1 And I think you have continued exposure to the same patients and you start forming relationships with those patients, and I think that tests a lot of your personal and professional boundaries, and you’re living in the community that you’re working in, that’s also building and learning about your boundaries. It’s just different to seeing a patient in the hospital, they’re there for two days, you go and say, “Can I please examine you?” You examine them, you never see them again. You don’t form that kind of relationship”
Participants thought that professionalism should be taught in a practice context, not as a stand-alone module removed from clinical elements of their training.

It’s like a different course.

And it shouldn’t be.

It kind of makes it seem like the basic science people or the clinical people don’t care about it because it’s an entire separate thing. It’s not the issues anymore. Where, it is their issue and they do care about it, but they’ve tacked on this whole…

I: Well, isn’t everything that you’re taught specialized? Don’t you get cardiologists for cardiology and anatomists for anatomy?

But PPD belongs to all of those things.

I: It does, but my point is when you’re taught whatever you’re taught, isn’t it taught by somebody who specializes in that realm?

But who specializes in PPD?

They don’t see their views on teaching of professionalism taken into account. They saw hypocrisy in teaching programs that stressed the need for them to be professional, but overlooked unprofessional approaches to teaching on the part of faculty.

… there was a [person] who gave this talk at the PPD three-day intensive last year, and … was completely inappropriate…. We hated [the lecturer]. And people wrote things like, “The only thing I’ve learned from these three days is that I don’t want to be a doctor like [that lecturer].” And you never heard – we’ve never seen the feedback from that whole three days. It was probably too embarrassing to publish. So then you just think, again it’s farcical.

They don’t listen to us.

Or they take it on board but they won’t admit their mistakes.

Peer support was seen as a key component of professionalism development. Students relied on each other for reflection on their learning and for moral support, and felt that this solidarity within a student cohort contributed more to their professional development than any other single aspect of their training or clinical
experiences. They reported that their sense of professionalism was improved by their informal discussion of the teaching they were exposed to and the experiences they were having on placement.

“my mentors are the students around me, and I think that’s not assessed at all. Like, we talk to each other about everything all the time, and that’s not being noticed by the university as a form of PPD, and yet I think for me it’s the most important form of PPD.”

In our PBL groups, if there’s an ethical component to the case it gets discussed just naturally, not with any prompting or forwarding or anything like that, just around our kitchen table. We regularly discuss.

We debrief every day.

And we see amazingly ethical conundrums all the time, and we discuss them just because we care about our patients and we care about what happens to people.

and

MR1: I liked that one in the psych thing the other day about the woman with the baby. Whether she was right to be discharged or whether you should try and keep her for the next six months because she was going to harm her unborn baby.

...MR2: And we argued about that for hours between us by ourselves, and no one signed anything off.
And we all learned something from that and we all remember it and understand it and developed from it professionally.

Assessing Professionalism

As they held a dim view of the teaching methods they were exposed to, so too did they hold assessment methods in little regard

Arbitrary and useless and trivial

They found the scenarios they were given too simplistic:

We see amazingly ethical conundrums all the time, and we discuss them just because we care about our patients and we care about what happens to people… The natural ones you find are always more interesting than the ones that they give you.
All of the schools in this sample used written reflection as an aid to learning professionalism, and for assessment. Students find these reflections artificial restrictive, and frustrating.

This exchange occurred in focus group two. The speaker described a memorable experience in a placement with a tutor who had an alternative lifestyle and an approach to medicine to match;

MU1…That was one of the best occupational experiences I’ve had in med school.
FU1 You should reflect on that.

MU1 No, I don’t want to.

I: Wait a minute – why don’t you want to?

MU1 It won’t fit the criteria.

I: Really?

MU1 I can’t relate that to any of the articles that we have.

FU1 The way that we’re doing it, it’s quite restrictive, and that’s the problem.

MU1 I talked about something that was outside of that, and then they said, “Well, you’re not actually covering any of the topics at the moment.”

Students quickly learned to ‘game the system’, writing their reflections to meet the assessment criteria and thereby obtain the desired result (a passing grade). This was voiced by graduate entry students;

GR1 “I wrote a true one, my first one was true, and I failed it, and since then I’ve written fictional ones… and I’ve got excellents.”

I: So the first one, you gave your genuine feelings. What didn’t they like about that?

GR1 It didn’t fit the criteria, the formula. So yeah, I failed it. Since then I’ve got all excellents for every one, and every one’s been engineered completely by following the criteria.

GR2 If you make it up you can follow the criteria easier.
GR3 I think what everyone’s kind of saying, Hudson, is that personal and professional development is very personal to your own experience, and if you have to write it to a very, very specific marking criteria it’s really difficult, and most people – I mean, I know someone who wrote one and it actually helped them by writing it, and they actually got something out of that reflective process, but they failed it. And I just think that’s silly, because if you just do it, and you do it truthfully, you should pass it. Because it just – they were just really strict. If you just didn’t adhere to one tiny marking criteria, you failed it, and that’s not the point of personal and professional development, it’s that you are learning from that exercise. I don’t think it’s a particularly bad exercise, I just think that it’s done the wrong way.

G4 And this year they’ve given us topics, which is even worse, because the last one we had was on community engagement and leadership, and -

G1 It just means you have to engineer it even more.

G5 I didn’t have any experiences of community engagement and leadership during my phase three program, so what am I going to write about?”

GF2 They liked it if you said you cried.”

GF3 Did they? I never said that.”

…and also by undergraduate entry students;

MU1 It feels fake and it doesn’t feel productive.

FU1 … The first time I was told to write a reflection I was like, “Okay, let me see what other people have written.” And I’m like, “Oh my God, that’s so good. I have to think of something that good.” So I end up embellishing a little.

MU1 I think everyone embellishes.

FU2 Yeah, you need to make it dramatic.

They perceive that grades on assessment are judged harshly, but incidents of unprofessional behavior in fellow students are treated leniently.

I don’t think any assessments matter at all if, at the end of the day, there’s no real consequence.

and

So the faculty claims to take PPD very, very seriously with all the horrible threatening letters we get for nearly failing PPD routinely. But when somebody actually behaves in a way that is professionally inappropriate, nothing happens.
Nothing of consequence….

Essentially through those actions they’ve proved they don’t take PPD seriously.

Students saw value in patient assessment of medical students, in including professionalism in an Objective Structured Clinical Exam (OSCE), and in personal reflection

“I personally think that the reflection is a good idea, but it should not be so strict or formalized or topics. You should be like, “I can write about something that’s happened to me in the past six months or something, and what I’ve learned from that.” Everyone then will be able to think of something, and I really think no one would lie. Someone would actually talk about their real life experiences, and they would learn from it, because you do learn by writing down things”

Life Work Balance

Here again, Students were critical of their schools’ approaches

They try to keep introducing the concept of self-care to us with these outrageously ridiculous sessions on, “Now, do you know how to study?” I have a degree already. I have passed all high school, HSC, undergrad degree with honors, and now I’m up to third year in this course. I know how to study. I know how to take care of myself when I study. We find it a little bit condescending.

Yeah, and it’s the same information over and over again since week one…. You’re sitting here telling us to take care about sort of our emotional selves and we have all this work to do, and we’re forced to sit here listening to this again when we could be doing something useful or something actually fun that would actually make me feel better, and therefore something positive for my emotional health.

Professionalism in practice

These respondents were mindful of the fact that the selection process they went through was geared to identifying people with a good sense of self and of ethics. Their observation, shared by many, is that some specialties (neurosurgery and radiology were mentioned) do not require the same degree of patient engagement as, say general practice or psychiatry. Students saw a differential need for professionalism attributes between different specialties, viewing specialties like anaesthesiology and pathology as needing little in the attributes that are of crucial importance for a GP.
Speculating on the filtering effect this may have on candidates for the intensive, introspective specialties, this exchange occurred;

“But you’d hope that most people choose medicine because they actually enjoy communicating with patients and people.

Maybe that’s why we have a shortage of pathologists and radiologists, because we’re excluding those people from our courses due to their total incompetence with patients, but no people person wants to do that job.

That’s true. No one wants to be a radiologist or pathologist, because of the exact reason you go into medicine, it’s not – you don’t get that from being a pathologist or a radiologist.

Yeah, so there is a clash there.

Yeah.

So what do you do at an interview then, say “you didn’t make it through the rest of medicine but we think your anti-social personality will be perfect for being a radiologist or pathologist.”

FR1: I was just talking to a psychiatrist the other day about how, in their specialty, you don’t touch people at all and just you talking about touching and holding hands and having good patient rapport, it’s totally different for really good reasons.

But they also saw need for elements of professionalism in every discipline, and expressed that professionalism should be taught in a discipline- specific context.

Here is the dialogue following the last quote above (FR=female respondent, etc.):

FR1: For very good reason, but that’s a totally different skill-set, because it’s much harder to have a really good relationship with someone when it’s always a meter apart.

MR1: I think that the underlying principles of that interaction are the same. You’re thinking about personal and professional interactions. You’re thinking -

(overlapping conversation)

MR1: It’s being able to understand those situations. That is what PPD should be trying to teach you, not, “In this situation you act like this.” It’s more about the underlying philosophy behind how you deal with this different situations.

FR1: That is hard to teach, though.
FR2: And that’s kind of what we’ve been saying. It’s very difficult to teach.

MR2:: I think the faculty should try and find a way to… integrate it, because right now PPD is very much a “thing”.

One group described an incident of grossly unprofessional behavior- an incident where it was discovered that one of their fellow students had been impersonating a doctor, making a profit by doing so running a clinic in a remote area. These students were distressed and embittered that there were no real consequences for the student.

Discussion

Since respondents were from different medical schools, with different approaches to teaching professionalism, there was a surprising concordance to these students’ responses. Their positive and negative views of teaching and assessment of professionalism were strikingly similar across institutional boundaries. I would have expected to identify differences between undergraduate and postgraduate students stemming from differences in maturity and life experience, but none was apparent.

As has been demonstrated elsewhere (Thompson et al., 2010, Levenson et al., 2010), students clearly saw a disconnect between their internal ideals and those the set reflection pieces tried to prize out of them, leading to their jaded view of such assessments and their willingness to submit whatever they felt necessary to pass.

These students do not see themselves as being dishonest in providing reflections that match what they perceive (rightly, it would seem) with what their assessors want to see. Their own view of their integrity and honesty remains intact, it is just expedient, in the context, to perform by rote to deliver what is needed in order to
advance to the next stage in their training (Rees and Knight, 2007). The danger, however, is that they are learning to go through the motions of being professional without that ‘professionalism’ being grounded in a fundamental belief in the virtues that should underpin it (Cohen, 2007). These students are wary of expressing what they really think and feel, as that may well be adverse to their goal of progressing, with good marks, though the educational program. In fact, it may well play against them. So, they need to provide what the assessors want. This flips the teaching of professionalism on its head.

Use of reflective writing, or audio diary keeping (Monrouxe, 2009), as a learning aid and assessment tool is growing and evolving (Kelly, 2010, Wald and Reis, 2010, DasGupta and Charon, 2004, Kind et al., 2009, Wear and Zarconi, 2008, Bell et al., 2011, Howe et al., 2009), with lessons still to be learned. Hatem and Ferrara (Hatem and Ferrara, 2001), though, reported success in employing this technique where students were given leeway to write what they felt, including using fictionalized accounts and composing poetry. The process of orienting students to reflective writing should be undertaken in a systematic manner, with the goals and usefulness of such reflection clearly presented to students in advance (Shapiro et al., 2006), and an interactive process with a reader, in order to build up ability for in-depth reflection (Wald et al., 2009).

A recent medical blogger termed current efforts to teach professionalism ‘preachy and insincere’ (Arora, 2010), and despised by students. Medical students are famous for offering resistance to curricular exercises they see as trivial or time wasting (Steele et al., 2001, Wear and Zarconi, 2008), and these students were no exception. Leo and Eagen (2008) found cringe, disdain, frustration, and hostility as students’ reaction to the mention of professionalism.
Students in this study viewed their professionalism curriculum with similar distaste. They were clear in making a distinction between the expectations of professionalism required of a GP as opposed to a sub-specialist, as have others (Rowley et al., 2000, Garfield et al., 2009). They took a very pragmatic approach to defining professionalism, using descriptors of very functional activities as their basis for definition, with ethics, communication skills, and general comportment (playing a central role in patient care) being key themes. This resonates with the findings of (Monrouxe et al., 2011). Attributes more removed from clinical skills, like resilience, featured much less prominently. They also manifested concern for the “imposter syndrome” or “as if” doctors (Cohen et al., 2009).

Most of these students had little regard for professionalism being taught by someone other than a doctor who had practice experience. They saw psychologists and ethicists as illegitimate in this teaching role. This begs the question, should we be teaching them through methods that engender more respect for specialties other than clinical practice, and that give them an awareness of the value that such disciplines can bring to their medical education, or should we be teaching PPD exclusively through doctors who have ‘been there’, and so can speak with the perceived legitimacy of experience? The sixth of the well respected “six Cs” paradigm for teaching clinical ethics (Siegler, 2002) from the University of Chicago calls for clinicians as instructors, for credibility. The essential attribute that makes them most qualified for this role is that, these are the people “responsible for solving- rather than just for analyzing- issues of professionalism” (p. 408). Gordon and Evans (2010) also caution that attempts to teach professionalism using non-medical teachers will not be seen as credible by students. The true meaning and purpose of a professional activity are deeply embedded in the social constructs and lived experiences of the members of the group undertaking the activity. Without this context, the ability to
successfully engage in the activity, rather than just the ability to appreciate the theoretical construct, cannot be effectively taught (Brown et al., 1989).

There is evidence in the literature, however, that teachers who do not have content expertise, but are nevertheless good at teaching, can not only be competent, but surpass content experts as teachers (Peets et al., 2011), apparently refuting earlier contrary evidence (Schmidt et al., 1993, Brown et al., 1989). The issue is fraught with peril (Naftulin et al., 1973) and thus remains a question deserving further exploration.

These students seem to have developed their concept of professionalism more despite than through what they were taught in early years of training. Clearly professionalism should be taught, or at least reinforced, later in the curriculum when students are starting to experience, first hand or as observers, the types of situations that challenge professionalism. Attempts to address professionalism fully and comprehensively in early years of their training program, instead of introducing ever more sophisticated and expansive nuances as students move into a clinical setting and take on more of a professional mind-set of their own, appears for these students to have led to the formation of a dim view of their professionalism teaching, rather than the firm foundation it was intended to provide. At the same time that they are introduced to basic science and anatomy, which they view as key and relevant content matter, they are compelled to engage in learning something which does not seem relevant because they do not yet have the context of direct patient care which would make it so (Coulehan and Williams, 2003). They view a lot of the content as intrusive and those who teach professionalism less than credible because they are largely faculty from disciplines other than the basic sciences or patient care. Psychologists, arguably the best trained academic to teach professionalism, are seen in a particularly critical light.
These students’ descriptions of their responses to the professionalism component of the curriculum resonate with those of other student reports in the literature (Reddy et al., 2007, Leo and Eagen, 2008, Brainard and Brislen, 2007, Levenson et al., 2010, Fehser, 2002, Baernstein et al., 2009), especially as regards failure of currently used professionalism assessment methods to provide truth instead of what the examiners want to hear (Brainard and Brislen, 2007), in viewing course content as repetitive and patronizing (Goldstein et al., 2006, Wear and Zarconi, 2008), in resenting cursory reviews by faculty of portfolios and reflective pieces that they have agonized over (Levenson et al., 2010), and in writing reflective pieces to get a grade rather than to truly reflect on their experience (Hays and Gay, 2011).

These students learned to compromise their own views in order to provide the answers they knew their evaluators expected to hear (Slotnick, 2001). As has been found elsewhere (Roberts et al., 2004, Wear and Zarconi, 2008, Morreale et al., 2011, Michalec, 2012), clinical learning situations (patient encounters, discussion with respected faculty) had more impact than classroom based learning (lectures, standardized evaluations, written reflections). The early years of a medical education program are spent in an individual mastery of vast amounts of basic science and the biological basis of clinical practice, while clinical practice itself is a social undertaking (Egan and Jaye, 2009). Communal learning, especially reflective debriefings with peers, was considered by these students to be important, if not essential, whereas individual learning experiences were hardly mentioned. Professionalism is not learned best in isolation.

It is encouraging that this study did not reveal incidents of frank abuse of patients or students, as described in previous literature on student experiences with professionalism in practice (Brainard and Brislen, 2007, Stark, 2003, Wear and
Kuczewski, 2004, Pitkala and Mantyranta, 2003, Finn et al., 2010, Lempp and Seale, 2004, Howe et al., 2002, Rees and Monrouxe, 2011, Premadasa et al., 2011, White et al., 2009, Michalec, 2012). Indeed, a recent study on formative experiences in medical education (Murinson et al., 2010) also elicited no bullying episodes among student respondents. This aspect of medical education may be finally disappearing from the socialization process in Australia, with the possible sole exception of Dr. Alecto, whom you’ll meet in Chapter 8.

Absent from the students’ conversations was any mention of formal codes of professional conduct or anything from the body of research that has been published over the past two decades. Their concepts of professionalism derive largely from their collective group reflections. Their formal classroom teaching engendered largely negative reactions. Wagner’s team (Wagner et al., 2007), found congruence with some principles of the Physicians Charter (Sox et al., 2002), but found others, particularly those relating to social justice, to be missing in their assessment of students’ perceptions of the meaning of professionalism,

One of the strongest influences on the development of an ethos of professionalism in a medical practitioner comes from witnessing unprofessional or outright abusive conduct directed against themselves as students or junior doctors, or at patients, by their supervisors or other clinicians senior to them (Musselman et al., 2005, Monrouxe, 2009). These students resolved, through reflection on such episodes, to ensure that their behaviour never followed this path. Students in this study, who did not report experiencing such abuse, have derived their view of professionalism through collective reflection in opposition to negative experiences of their formal didactic training in the early years of their medical training program, primarily by lecturers whom they did not respect and whose content they found faulty or lacking.
In line with previous observations (Brainard and Brislen, 2007), this study suggests that subjective (reflective, portfolio) exercises, have little value for assessment purposes, other than perhaps to provide a challenge against which students can resist. In the negative sense, this resistance can take the form of ‘gaming the system’ to get the desired result (a passing grade). However, reflective exercises seem, on the basis of my research, and that of others (Mann et al., 2009, Howe et al., 2009), to have substantial value in enabling a student to frame the process they are going through in becoming a professional and defining their own mental model of what it means to be professional. These students described extensive discussion within their peer group about ethical problems, communications issues, and other aspects of professionalism. This appears to be an important formative tool or (reflective) learning activity in the development of professionalism in medical students (Howe et al., 2009), although one that is part of the hidden (Hafferty and Franks, 1994), rather than the formal, curriculum. They seem to be engaging in critical reflection, rather than merely revisiting superficial details of an experience (Aronson, 2010).

There is value when the reflective process, as an extension of what is required for assessment, catalyses the kind of joint reflection these students engaged in, testing with each other what they learned and what they experienced. Through this testing, professionalism, or at least socialization into the profession, will out.

Through their peer support network, these students engaged in an informal, but vital, learning process (Mann, 2002, Baernstein et al., 2009) on their path to becoming professionals, as has been shown elsewhere (Krych and Vande Voort, 2006, Lewin and Lanken, 2004). Probably because they were at a late point in their career as medical students, they did not focus much attention on the superficial aspects of professionalism (dress, grooming, etc.) (Nahai, 2011, Finn et al., 2010, Marcus, 2006), instead focusing on significant issues such as ethics. Seminal events, episodes
during training that left a positive perspective on professionalism and how it is incorporated into practice (Branch et al., 2001), were evident. It has been shown that peer reflective groups such as these students describe help students understand themselves and their professional thinking and ability. (Schaub-de Jong et al., 2009), and an instrument to rate educators' ability to facilitate reflective learning in small groups, based on student perceptions, has been developed (Schaub de Jong et al., 2011).

Life/work balance did not seem to be a struggle for these students, but something they knew how to strive for and would achieve as professionals. Hard working and dedicated to studies now, they had no problem envisioning a future where their practice and their life could be well integrated. This is considered by some a positive attribute of Millenium generation students such as these (Smith, 2005), and others a detriment (Hanlon et al., 2010).

Professionalism should be taught in consort with the intended learners (Wear and Kuczewski, 2004, Horlick et al., 2006). Could senior level (year 4 or 5) students be given a teaching role in professionalism? Some medical schools in the US think that the answer is yes, and have instituted students-as-teachers programs to pursue this (Soriano et al., 2010). Some medical students feel confident that they can contribute to the development of their professionalism curriculum (Leo and Eagen, 2008). Certainly by the time they reach the level of registrar (resident), doctors are expected to assume a teaching role, and are probably well placed to include professionalism (Hatem, 2003). The University of California School of Medicine, Los Angeles, has had success in incorporating fourth year medical students to teaching roles as “Doctoring Teaching Scholars” (Wilkes et al., 2006). Wilkes and colleague are careful to point out that these students are not representative, but have a particular passion to teach and are self-selected Perhaps some students would have this
capacity, being able, by virtue of their recent and deep engagement with the concepts, to serve as such humanism connoisseurs. However, students participating in the member check focus group for this study expressed skepticism about taking on a teaching role.

One of the major points of debate on approaches to the mastery of professionalism by doctors in training is the question of how much of professionalism relates to character traits that are formed at a young age and are ‘hard wired’ by the time a person is of age to become a medical student. There are cogent arguments that the development of character traits or virtues can be accomplished through medical education (Radden and Sadler, 2008, Bryan and Babelay, 2009, Kopelman, 1999). There is a counter view in the literature that this is not so (Duff, 2004, Du Preez et al., 2007), and many of these students held that opinion. Wear and Zarconi (Wear and Zarconi, 2008) are not only sure that ‘virtues can be taught’, they demonstrate how they do it.

Limitations and Strengths
Potential weaknesses in this study include that the primary investigator was known to research subjects, having been a supervisor previously or currently of a portion of their learning program, and this may have been an intimidating factor. To offset this, an ‘arms length’ approach to recruitment was used, through student coordinators rather than through the investigators directly. As in any research endeavour, but particularly in a qualitative study, the researcher’s own expectations, frames of reference, and opinions always have the potential to act as a filter for results perceived.

There is a risk that, despite assurances of anonymity of data collected and results published, students may have held tacit concerns that the project might be used to
feed their views directly back to faculty, and thus have been reluctant to reveal some details. Students were assured at each stage that this was not the case and that the data would in fact not be able to be linked to individuals. Biases such as investigator bias (Hall and Callery, 2001) and Hawthorne effect (Holden, 2001) cannot be ruled out. As well, the opinions and experiences of these students cannot be construed as necessarily representative of all medical stunts, even from their own schools.

A potential weakness inherent in focus groups is that the dialogue that emerges tends to be the dominant one within a group, with shyer participants not contributing and dissenting thoughts left unsaid (although the reverse can also be true) (Kitzinger, 1995). Since these students had long experience and familiarity with each other as a group, I consider it unlikely that such intimidating factors were present among these individuals, who appear to have a high level of trust within the group. It may also be that as they have spent considerable time reflecting on their medical education program, and the professionalism aspect of it, that the views expressed during the focus group were already a distillation of commentary and reflection that these groups had collectively engaged in.

Strengths of this study include the number of participants providing data and the variety of medical curricula represented through participants. I had ready access to the participants and was familiar with them, which I hope and expect engendering trust. The venues I chose provided a good forum for carrying out the project. The methodology I used (focus groups, interviews) is sound for exploring a question of this nature.

A good cross section of students in both undergraduate and graduate medical education programs was obtained. Being in their final year as students, these participants had the time to witness the ways that the attributes of professionalism
learned through didactic training in their pre-clinical years actually manifested in clinical practice, and had also had time to reflect on that, their placement experiences (of a year’s duration) were nearing an end. Since participants had a good degree of familiarity and apparent comfort with me (and for most the supervisory role was a past, not current one) they appeared relaxed and quite willing to engage in in-depth critical analysis of professionalism.

**Conclusion**

This study examined what medical students think about professionalism as a concept, and about the processes they were experiencing that were designed to instill professionalism in them. It was not an effort to ascertain their degree of professionalism development or the quality of their curriculum; it was an engagement with them to allow them to reflect on their experiences.

Achieving professionalism doesn’t begin with entry to medical school, and it doesn’t end with graduation (Krych and Vande Voort, 2006), or even completion of certification. It is an ongoing process, reversible in direction, continually renewing. It can’t be accomplished strictly through didactic teaching. The importance of experiential learning and reflection, allowing students to make sense in the real world of what they are presented a conceptually, must be acknowledged (Monrouxe et al., 2011). The students who participated in this study are experiential learners, as are all good students. They saw professionalism as context dependent, and so best taught in context of clinical practice, not as a stand-alone module. Students should be challenged to become more actively involved in this aspect of their training, and should receive direct, substantive feedback, not merely ticked off checklists.
Directions for improving the teaching of professionalism in medicine could include incorporating greater feedback from students and longitudinal follow-up of students to ascertain their professional development over time. Potential gender differences should also be explored (Woloschuk et al., 2004). It may be useful to involve 4th year medical students in developing professionalism modules, both as an enhancement of their own development as professional and as an effective way to frame the concepts of professionalism for their juniors in ways that are more sensible and accessible to them. If not as teachers, then at least as peer reviewers, students may be able to contribute to the teaching and assessment of professionalism (Levenson et al., 2010).

Doctors today remember incidents of bullying and unprofessional behaviour, and developed as professionals because of or in spite of these. These students did not relate such experiences. While they may remember teaching of professionalism that they considered less than stellar, they nonetheless seem likely to become professional medical people with very professional approaches to their life’s work.

Studies such as this one are useful to identify the disconnect between what is intended to be taught and what is actually learned (Wear and Skillicorn, 2009). As Roberts and colleagues eloquently put it; “the most poignant lessons of professionalism and ethics are those that are lived out, discussed, and made meaningful in clinical situations” (Roberts et al., 2004) (p. 179).

The true worth of teaching of professionalism, the true weight of impact of it, of course resides in current students. After enough time has passed, we can identify the professional traits that these students have assimilated, and perhaps rate them as new doctors on how professional they are. But while they are still in medical school they reflect not only their current formal teaching, but their assimilation of
influences from the experiences they are having; from the null, formal, informal, and hidden curricula. All of these influences are processed through individual and group reflection. The bonds of camaraderie and deep friendship that these students form guide their professional identities, framing their socialisation into the medical fraternity and sorority. We should be able to identify the current of learning taking place, the dynamic flow of ideas and attitudes that are (and should be) the result of process that we as educators put into place (Monrouxe et al., 2011). This will take more than user satisfaction evaluations of these aspects of the curricula, and current assessment methods do not seem able to capture the rich detail of experiences and the processes, outside of those we put in place and control, that create the professional we ultimately let loose in the world.

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Chapter 7: Clinical educators’ views of professionalism: what is it and how can it best be taught

“The notion of a dynamic versus static conception of professionalism is key to understanding the nature of (more than the definition of) professionalism, and is an issue infrequently addressed in most treatments of professionalism.” Fred Hafferty (2006) (p. 197-198)

“…what the teachers are needed for [is] not to teach the basic facts, but to give the experience and to interpret that experience in a practical way so that students can take it on and can be confident about how they approach a particular topic”. Respondent 12

“people talk about work-life balance, but it's all life, actually” Respondent 6

Introduction

The aims of the study described in this chapter were to determine the conceptual framework of professionalism held by clinicians who have been recruited to serve as clinical preceptors/supervisors for medical students and how they think it can best be taught.

Professionalism includes the ways in which a practitioner thinks about her/his approach to practice, how the practitioner engages with their patients, the ethical framework within which a practitioner operates, and the life/work balance within which the practitioner operates.

Professional development is based on attitudinal learning (Howe, 2002). As medical students learn the skill of clinical practice from their preceptors through their training, they also develop (evolve) attitudes regarding the norms of professional behaviour acquired from these same preceptors. It is a useful construct to consider students engaged in the process of acquiring these identity traits as “proto-
professionals” (Slotnick, 2001). Through this evolution from student to doctor, learner to caregiver, assimilating and assuming identification as a professional, the student overcomes the ‘role resistance’ (Ginsburg et al., 2002) of the initiate through their learning experience as guided by the preceptor.

The process through which medical students begin to learn professionalism in practice in their early clinical experiences has been termed situated learning (Lave and Wenger, 1991, Steinert, 2008, Quaintance et al., 2010, Mann, 2002, Billett, 1996, Maudsley and Strivens, 2000, Goldie, 2008). In these early clinical encounters, didactic teaching is balanced with participatory experience. Under the guidance of their clinical preceptors, doctors in training begin assimilating the role of the doctor through intensive guided experience, where knowledge is delivered within the contextual realm in which it is used.

In their final years of medical school, students are engaged progressively more in real clinical situations under the guidance of a supervisor or preceptor. While medical teacher in the early years of training will generally focus on one aspect of medicine, a clinical supervisor is more likely to focus on the entire role of the doctor (Stenfors-Hayes et al., 2011), this acting as a role model and enhancing the student’s development as regards professionalism.

Professional competence, reflecting the “situational relationships among doctors, their patients, and the systems in which they perform” (Klass, 2007), is as much a function of settings and systems as it is of individual personality traits and past experiences (Gude et al., 2005), and so an understanding of the system in which students will be placed is essential to success in professionalism training.
Previous research

Doctors in practice are increasingly relied upon to fill the (often unpaid) role of clinical teachers or preceptors. Clinical preceptors generally enjoy this role and find it rewarding and not overly disruptive to clinical practice (Walters et al., 2005, Walters et al., 2008). To be successful, they need clear learning objectives and assessment criteria to use, along with advance planning (Hashim et al., 2010).

O’Brien’s team at the Carnegie Foundation for the Advancement of Teaching (O’Brien et al., 2007), drawing on a large body of data from a large US national study of clinical teaching, identified the struggles that students go through in making the transition from student to doctor from both students’ and preceptors’ perspectives. Students identified role expectations and adjustments to the clinical environment as key challenges. They felt apprehension about what their role was on the team and how to fulfil it. Some clinical teachers understood this to be a natural response to the transition between lay person and professional that these students were making, while others viewed it as indicating a lack of motivation or proper preparation for a professional role. While some teachers felt that assimilation of the necessary approaches and skills would come naturally with time and experience in to the clinical environment, others felt that this process needed guidance through structured learning activities or readings.

Wright and Carrese (2001) surveyed attending physicians charged with teaching residents (registrars) at 4 Canadian and US teaching hospitals to determine what value or attitude these teachers considered most important to pass on to their charges. Frequent responses centred on ‘caring’ (empathy, compassion, showing concern), followed by respect for patients, effective communication, and personal integrity.
Examining the issue from the reverse perspective, polling senior residents in Canada, Brownell and Côté (2001) similarly found respect, competence, and empathy to lead the list of desirable attributes. Consistent with the majority of the literature, these respondents named role models as their most important source of enlightenment on these attributes. No gender differences were found. The authors noted that the values considered important were those focused on the daily activities of a care giver, rather than overarching issues such as the doctor’s place in society, codes of ethics, or self-governance of the medical profession.

A recent qualitative study in New Zealand found that general practice presented a learning environment superior to hospital clinical placements to learn the doctor-patient relationship (Egnew and Wilson, 2010).

Wear and Zarconi (2008), examining how 4th year medical students derive their construct and ethos of professionalism, found three sets of influences to be important: foundational influences, which include character developing influences of their youth; preclinical educational influences, consisting of their formal training experiences before entering medical school, and clinical education influences. Here also, doctors who serve as role models are influential in all three aspects, particularly in the clinical education years.

More recently, Bryden and colleagues (2010) convened focus groups of Canadian medical faculty members to determine how these teachers thought that professionalism should best be taught. Their respondents felt that since role modelling is widely acknowledged as the preferred or most effective teaching modality for professionalism, their own personal professional lapses were the greatest barrier to their being effective teachers. This group’s main finding was that these clinical teachers saw professionalism as a changing and evolving concept,
difficult to define. As a result, these respondents also saw it as difficult to teach and measure. This group also perceived lapses in professionalism as a frequent and pervasive problem, but one they felt unable to solve, due to their lack of power, confidence in their judgements of peers, and fears of repercussion.

Developing professionalism in medical trainees essentially involves building character. Character is a person’s innate attributes of morality, of a sense of right and wrong behaviours, of personal integrity and honesty, her or his “enduring dispositional tendencies in behaviour” (Lapsley and Narvaez, 2006) (p. 2). As such, character is formed very early in life through the influences of parents, siblings, teachers, and lived experiences in particular social and cultural environments (Park, 2004). As such, an argument could be made that a person’s character is essentially formed well before the person attains an age at which entry to medical school is possible—“once formed, character endures” (Davis, 2003) (p. 34), or indeed, that charter can be taught at all (Davis, 2003).

Wagner’s team (2007), through a qualitative study of students, residents (registrars), patients, and faculty, found that all groups identified character virtues as important teaching elements, with faculty singularly highlighting maturity as a key virtue. Siegler (2002) doubts that character can be identified accurately in applicants, let alone taught to medical students, but he is also optimistic that the “moral pilgrimage”(p. 409) that students embark on in undertaking progressively more responsible and independent action in caring for sick people does instil character.

Whitcomb (2005) is also sceptical that character virtues can be taught, but his scepticism is centred on the teaching environment. In his opinion “…very little progress has been made in addressing a fundamental issue: the nature of the clinical environments in which students and residents learn medicine…if students and
residents are not immersed in clinical learning environments that embody the highest ideals of medical professionalism, it is highly unlikely that most of them will be deeply grounded in those ideals when they emerge from their training. And it is also clear that it will be extremely difficult to change those learning environments.” (p. 883).

Coulehan (2005) makes a distinction between “rule-based professionalism- those definable and measurable attributes that are formally taught and assessed in a medical curricula, with “narrative-based professionalism”, those values and beliefs that are forged and then transmitted through clinical experience, the “learning and socialization processes that instill (sic) professional values and identity without explicitly articulating those issues.” (p. 894).

Borrero et al. (2008), looking for a generational gap in concepts of professionalism between current students and faculty, found none at their U.S Medical School. They speculate that doctors, and by extension, medical students, may constitute a homogeneous group as regards core values, so differentiating them from other occupational groups.

Professionalism, then, is acquired by students through their clinical training experiences, if it is acquired at all, and those charged with teaching medicine, and the settings (physical, social, cultural) in which it is taught determine the success of the endeavour.

**Methodology**

The purposes of this research were to discover the meaning that the term ‘professionalism’ and its variants, has to clinical educators, to ascertain their
impression of the professionalism of students coming to their practices after three years of mostly classroom training, to determine how these clinicians arrived at their conception of professionalism, and, most importantly, to capture their views on how it should be taught.

As such this was a search for meaning and interpretation, to capture the conceptual knowledge and opinions of these educators, as formed by their life experiences and formal training.

The best methods for deriving meaning are through focus groups and interviews. I chose in depth, semi-structured interviews as the main data gathering technique as these are most suited for exploring the issues in depth with a single informant (DiCicco Bloom and Crabtree, 2006, Abramson and Abramson, 2008) (P. 187). An individual interview allows an informant to voice deeply held, sometimes sensitive feelings and thoughts, by providing a measure of security- no one else is listening and the informant’s contribution can’t be individually identified.

The downside is that this may not occur if the interviewer has trouble establishing a relaxed rapport with the participant. A preliminary chat, prefacing the main interview and occurring at the beginning of the session but before any research questions are introduced, can be useful in establishing some shared experience, identity, or association that can take the person being interviewed from initial apprehension towards full cooperation and ease in conversation, and so I began each interview in this way.

I anticipated that my respondents would be very savvy regarding research methodology and interview techniques, and that they would see me as a relative outsider- a medical educator, but not a doctor with clinical experience- perhaps
worse, an academic. I was conscious that I was unsure where my enquiries would lead, nor where they should lead in the face of my respondents’ views and beliefs, which might cover a wide range.

Rather than seeking to construct precise questions which would engender precise factual responses, I was frank about my research approach, my naiveté, sharing as much as possible my conceptual understandings of their work. In applying what Pawson and Tilley call “conceptual refinement function”, (Pawson and Tilley, 1997) (p. 167) I tried, through my interview approach, to allow respondents the opportunity to challenge my existing preconceptions, to describe their own context in response to my basic questions, and also to offer them an opportunity to correct any misconceptions they perceived in my approach, refining their explanations as the interview progressed, putting their answers and my thinking into the contexts in which they view their professional reality reflected on their own thinking (Pawson and Tilley, 1997) (p. 168).

Focus groups can be useful for validating theories and concepts identified through other research methods (like interviews) (Barbour, 2005). I planned a follow-up focus group as a member check and to see if any further insights might be generated through collective reflection on my initial findings.

**Methods**

A systematic review (Jha et al., 2007) provided some guidance to the development of the methods. Models and measures have been published which served as guides to the development of the present study (Stebbins, 2005, Stern, 2006).
**Recruitment of participants**

The group from which participants in this research were selected consisted of clinical educators, primarily working in rural settings, from three Australian medical schools: two postgraduate entry and one undergraduate program.

I developed a recruitment plan using a theoretical sampling approach (Mays and Pope, 2000, Kuper et al., 2008a), with the aim of maximizing diversity of background. My first goal was to recruit people who were representative of the settings and activity where professionalism is taught along with clinical skills in an apprenticeship type of long term (1 year) placements, which are the current teaching mode at these medical schools.

I did not seek to establish particular comparisons between individuals (or schools) to identify reasons for differences between settings/students, because the pool of potential subjects was small, and because I was more interested in consensus opinion than difference.

I attempted to minimize key informant bias (Maxwell, 2005) (p. 91) by sampling as broadly and inclusively as possible, given the relatively small pool of possible participant candidates, and by seeking out aberrant views (for example, hospital based specialties other than General practice), to provide interesting contrast to consensus views. (Maxwell, 2005) (p. 89).

Sampling was purposive, with the intent of capturing the views of clinical educators who are actively engaged in teaching the current generation of medical students in intensive, long term clinical placements, and so providing direct influence to them, through role modeling, mentoring, and direct supervision, to shape the students’
resultant conception of and capacity for professionalism in practice. Convenience was also a necessary factor in recruitment, as I had to arrange access for participants with busy schedules across a wide geographic area. Most interviews were conducted face to face, some by telephone. Twelve clinicians were interviewed.

I identified potential participants by referral from colleagues, who in most cases served as intermediaries introducing (and thus vetting) my research interest to them while providing me with a list of candidates to choose from. No invited clinicians declined to participate.

Study participants were recruited from three Australian medical schools. The participant group contained diversity in cultural background and ethnicity, and gender balance. All were clinicians who teach in practice, and all had been in practice for over 10 years. Demographic information on respondents would make some easily identifiable, compromising their anonymity (Morse, 2008), and so a detailed demographic profile of the respondents is not presented. I particularly sought out extreme cases, as these might be particularly interesting (Maxwell, 2005) (p. 89).

Matters of reflexivity
About half of participants knew me as a professional colleague before being approached for this study. There was no likelihood of a perceived imbalanced power relationship between subject and investigator. In fact, the reverse could well be inferred to be the case, as I am not medically trained.

Efforts to ensure validity and reflexivity (Finlay, 2002, Hall and Callery, 2001) included asking follow on questions to clarify apparently important points as they arose in focus groups, queries of the group as to consensus on key points, paying
particular attention to any dissenting voices, and review of key themes identified with academic staff to verify plausibility.

Data collection and analysis
Data collection and analysis were undertaken concurrently. Primary data collection was through semi-structured interviews. Only the researcher and participant were present during interviews.

The script for these interviews was designed to elicit clinicians’ conceptual understanding of professionalism, including mental models of various traits and skills that may influence it, the relevance and importance they give to professionalism, how they learned it, and how they think it should be taught. As the study sought to capture their perceived reality of professionalism instruction, it was an ontological study. Interviews were designed to capture candid individual views.

Early interviews served as pilots, with modifications to questions made as a result of analysis. As is standard practice in qualitative research, questions were amended to fit the circumstances of the interviews, primarily to explore emerging themes.

Additional areas for further probing in subsequent rounds of data collection and analysis were identified in the pilot round and subsequently incorporated into subsequent interviews. Interviews were conducted until it became apparent that thematic saturation had likely been achieved. The interview script is included in Appendix C.

Interviews were recorded through either a high quality internet protocol (IP)-based videoconference recording and streaming system set for audio only, through a
dedicated telephone recording system (Codian), or with a portable digital audio recorder. Most interviews employed a combination of recording technologies, with the portable device used as a backup in case of failure of the main system. All audio recordings were sent to a professional transcription service in the USA, using a secure, password protected digital drop box to transfer the large size audio .mp3 files. Audio files were transcribed as verbatim transcripts, which were then transferred back through the drop box as Microsoft Word files.

Transcripts were reviewed while listening to the original audio recording for each session to ensure transcription accuracy. As the study did not require sociolinguistic analysis, fine nuance of inflection, pause timing, or other full density transcription annotation was not necessary. The transcriptionist did annotate emotional content and tone (laughter, sarcasm) and multiple speakers talking over each other when they occurred.

Word document transcriptions were prepared for (Bazeley, 2010), and then entered into, NVivo version 8 software (QSR International http://www.qsrinternational.com/products_nvivo.aspx ) for thematic analysis (Braun and Clarke, 2006). Transcribed texts were also highlighted and annotated in their original Word format.

Transcripts were analysed using constant comparison techniques (Van De Camp et al., 2004). Findings were reviewed in process with several key participants.

I attempted to achieve a rich description that took in the whole data set. I sought to gain insight from these clinical educators as to how relevant they considered their own training to be to their current role as teachers, what they perceive as their role in the course curriculum and teaching professionalism, and what positive or negative
attributes of this training exist that may be enhanced or eliminated to improve such training.

Member validation was carried out (Kuper et al., 2008b). A focus group was convened as a member check. The members of this group were provided with a write-up of results and discussion of the first round prior to their second meeting with the investigator. During this focus group, participants were invited to comment on the truthfulness of the preliminary findings and the reasonableness of the conclusions that they drew from them. This also resulted in new data being generated, as participants engaged in further reflection framed by the draft text they reviewed.

Rather than generalisability, the goal of most quantitative research, the goal here was to capture meaning in a specific context. The challenge is to identify ‘goodness of fit’ with other situations and other players. Ethics approval is included in Appendix D.

**Results**

I interviewed twelve clinical educators for the study; eight General Practitioners (GPs), and four from specialties other than GP. All were mid-career professionals, with 11 of 12 having greater than ten years experience in practice. Gender was evenly divided. Nine work in community-based practices, three were based in hospitals. Five held significant academic appointments (Associate Professor, Sub-Dean) in addition to their role as clinical educators/preceptors. Table 7.1 summarises the participants’ attributes. By the end of these interviews, I felt confident that I had reached data saturation.
It is important to note one specific feature of the respondents. They all practice in regional Australian communities, and so had made a particular set of career/lifestyle choices that influence their views. As one respondent put it;

9. Because I have chosen to come and work in a certain area and get involved in education, so my colleagues are doctors that work in this area that have chosen to come out of the city and work in a lovely coastal environment, and they are people that are involved - and probably the ones that I particularly admire are my medical education colleagues who have chosen to give part of their time, or spend part of their time in education. And they are a particular subset of doctors, which is probably very unrepresentative of other doctors in other areas...I think they balance their clinical and their “other” - whatever that other may be – really, really well. And they do nurture it in various ways by just taking time out or pursuing that they really enjoy. And I guess seeking out, then, colleagues that are like-minded that support them in that.

Respondents’ concepts of professionalism

These doctors expressed cogent conceptual mental models of what professionalism should consist of. Their conceptions tended to be pragmatic and holistic;

10. The essence and most important part is your own integrity... I think that’s an area where you have this interface between the practicality of medicine, emotional medicine and often what you would call spiritual medicine or whatever – the medicine of your soul. And that interface is a very interesting place, because each of those has to be addressed. You’re not looking after that patient if you’re addressing looking after their soul, but forgetting that they’re in terrible pain. Equally, you’re not looking after the patient if you look after their lymphodema, but you’re not noticing or being aware
that they have a terrible fear of dying because of their Catholic belief in sin. So you have to address all those interfaces to be a kind of integrated doctor.

8. a humanistic approach while still applying academic principles, there’s a gear crushing that takes place. Real people are not like text books. I guess that’s the only way of describing it… the whole process of having an encounter with a patient relies on your own concept of self, your concept of other people, and then whether or not you have been able to convince the person to trust you enough to allow you to help guide them in their decision-making process.

6. I try to model it in the way that I relate to my patients and to the registrars and students, and then in terms of how do I do it in terms of content, is I tell stories a lot. So I use stories as a means of illustrating the humanistic side of being a doctor… including its component attributes, such as empathy

10. … you can be empathetic, but in that empathy, don’t go into the emotions of it. Don’t damage yourself within it, don’t allow other’s emotions to be projected on you and damage you. Because you’re not useful in that way.

Respondents’ experiences of practice

These doctors expressed an insight on professionalism gained through reflection on their professional experiences.

9. that’s still one that I struggle with, with how to teach [professionalism], I think for myself, if I look at my own experience, I look back now with horror at some of the things that I did earlier with all the best intentions in the world.

8. As a doctor, you are not created as a perfect human, but there are by the nature of your occupation now ascribed to you perfections of humanity, which in some cases are unrealistic, but that’s what we expect.

10. I think in any situation you’re talking about this general term which is observe and not absorb, and I think it starts with working on yourself on a very personal level, …and then from there, being able to cope with other people’s emotions. I think that takes, to a certain degree in our work, counselling skills, because you have to be able to acknowledge other people’s pain. You have even to be able to have an understanding of other people’s pain. What you don’t want to do is absorb other people’s pain so that it becomes your pain and it damages you. And so I think you start to teach on those kind of terms. You teach communication at a somewhat deeper level than it’s taught. Does that make sense?
These doctors practice rurally, in small communities, so maintaining a doctor/patient boundary with no relationship outside of the clinical setting, which can be maintained easily in a large city, was more difficult, if not impossible, to achieve for them.

9. I’m completely comfortable now with having friends that are my patients as well and it doesn’t worry me in the slightest because I know that I can – I’m very good at just putting that hat on and off, and I can look at someone completely differently depending on which hat I’ve got on at the time.

They experience time pressures;

10. general practice tends to be very fast, tends to have a lot of time pressure so that you end up just simply dealing with the practicalities of a person’s problems, whereas my own interest lies a little deeper, so I would like eventually to have a practice which is a whole lot slower and where I can really practice what I believe in, which is what I feel I wasn’t doing.

1. Sometime you’re just so bust that you don’t have time to do these things [connect with the patient on a human level], don’t even have time. You have 5 minutes per patient. So looking at the hard data, test results, oxidations, just examining them, and then making a core clinical decision, and then your time pressure just doesn’t allow you to spend more time doing these other things.

I Is that time pressure changing?

Yes, changing for the worse. If you end up working until 10 at night you can’t do that for very long. You begin to hate people that demand that kind of time from you because they’re taking that time from your family. Book a 15 minute consult and a patient takes half an hour, that time has to come from somewhere.

…and financial pressures. GPs’ teaching activities compete with their need to run the business of their practice.

1. If you’re taught this is how you treat each patient; you give them the time to talk, then you find out that the reality of the world doesn’t allow you to do that, well what’s going here? We were taught this, that means other people must be doing this. It has to be tempered with the fact that the real world alters this

1. As well as being a profession it’s also a job, and in private practice a business. A lot of those concerns have to take priority.

But teaching also helps them to keep their own skills sharp;
1. You’re not allowed to get into bad habits because the students drag you back and ask why are you doing that, so unless you have the answer for them maybe you’re heading in the wrong directions. They keep you down the right road, keep you from straying too much from good medical practice.

**Learning professionalism- The doctors’ past experience**

There was general consensus across the group of respondents as to how they learned professionalism. They didn’t. At least, there was no formal component in their training categorised as professional behaviour or personal and professional development. Ethics maybe. Each respondent had a story to tell regarding when and how the idea of professionalism in practice dawned on them in a way that caused change in their outlook. It was usually experiencing or witnessing a particularly unprofessional behaviour and reflecting on that. More infrequently, it was the beneficial influence of someone wise and compassionate that they encountered early in their medical career;

3. I lived in a small town ... and I lived up by the hospital, so I saw him [the one local doctor] coming around with his pyjamas sticking out of the bottom of his trousers, the hero saving lives in the middle of the night.

4. I had an excellent mentor in the general practice I joined who is… retired some 9 years ago, and was a gentleman and a scholar and the sort of person I would aspire to be, but he taught me a lot of medicine, he taught me a lot of attitudes to patients, …for instance, very early in the piece I was doing a house call and I came back and said, “Oh, I’ve done this call in the evening and this 19-year-old was so arrogant,” and I hadn’t really known how to deal with it, and he said, “Ah, when they’re like that, get them down to their undies, put the sheet over them, and make sure they’re on a bed or a bunk lower than you and examine them, and then you’ll be right.”

9. It really wasn’t taught, and I don’t think I did learn it …[medical training] was all about pleasing the right people in the profession,…There was something really sick about this environment.

10. At medical school we had very little training in communication. …we had very little training in … dealing with other people’s emotions, but particularly in dealing with our own emotion. We were – first day in medical school we were put into a room with 40 corpses which had been pickled, and of course how do we deal with it? We dealt with it by laughing because that’s the only way we knew how.

12. You know, I had never had a lecture on ethics in my life. …in fact, one of the great shocks of my life was that I inherited the chair of an ethics committee. But what that meant was that I had to go out and learn it.

11. …if I did learn it from anyone, I learned it from my mother.
Training was tough in earlier decades, and that was expected. One respondent described a professor of medicine thus;

6. He could be incredibly mean, like quite condescending and he used to call me his little pachyderm, because he reckoned he could heap a lot of criticism on me and I was so thick-skinned that I could just take it… certainly there was a lot of that kind of teaching by humiliation that went on at that time.

And yet, this respondent had an overall favourable rating of this professor;

he was this incredibly well-rounded person who had such a broad range of knowledge…there was something about him that really appealed to me.

This respondent has been able to put their learning situation into a context that makes it a positive factor in their training;

You’ve got to look at the context of the times. That’s how teaching occurred in those days, so that’s probably how he would have been taught, and certainly there was a lot of that kind of teaching by humiliation that went on at that time.

Learning Professionalism: perspectives on current students

These clinical educators had very well formed ideas regarding how current students are learning professionalism, and about how they should be learning it;

4. The phase three student I have at the moment is a lot better at it than she was a month ago.
1: What brought about the change over the month, do you think?
4: Just confidence.

9. Some of [the attributes of professionalism] are going to come with experience, some of them are going to come with wisdom, some of them you can teach, some of them you just have to get right yourself, and some of us do that sooner rather than later.

They considered character to be important;

6. assume that the people coming in as students already have these innate human qualities and skills, and that it’s a matter of allowing them to retain and maintain them through the bastardization process that occurs in medical education.
6. people talk about work-life balance, but it’s all life, actually.

6. … at first [I put] a lot of effort going into trying to work out how I need to be as a doctor. So yeah, it has evolved. It’s not something that just came naturally to me. That is something I see a lot with the new graduates, that they’re really struggling to find themselves, and they’re quite different at work to how they are out of work in themselves like their whole persona, and I think it’s really exhausting for them. They get really tired from their work through trying to be what they think a doctor should be.

10. …you have to be very dedicated to get through medical school, you have to be hugely dedicated, and sometimes that comes with a bit of an obsessive kind of personality, and when a mistake is made it’s just devastating.

**How to teach professionalism**

These doctors shared a belief that professionalism develops in the clinical training years, when students are in the setting where medical care is provided and where they are beginning to participate in decision making and to see the consequences of that decision making. They did not see learning professionalism as separate from learning clinical skills, and shared a quiet confidence in the ability of their students, if mature enough and with suitably good upbringing, to develop an appropriate professional ethos while under their tutelage;

4. you lay the foundation in the pre-clinical years …, but really you can’t build on it till you’re out in, you know, with a longer-term placement.

6. try and weave it into the teaching about everything so it’s not a separate subject, but it’s implicit in every subject. So in a way separating it doesn’t help in the teaching of it. So weaving it into all aspects of training makes it more likely to be learned.

6. just to reinforce the importance of trying to build it into everything rather than have it as a separated subject, and I think there would be much greater acceptance of it by the students if it was just like the foundation and all the other things were just built on top of it.

9. I think a lot of it has to be by apprenticeship model.

10. …it’s really important that we teach the student to first of all value themselves, and be kind to themselves and look after themselves, and from there go out into the community or into their workplace and practice what they’ve learned about themselves for other people…. you can teach students to be aware of energy and to be aware of emotions, to be aware of the effect of others’ emotions can have on them, and
the effect their emotions can have on others… they need to be trained to be very practical physicians in a very practical way because without that training a lot of the rest of it doesn’t work.

These doctors were all conscious that as well as being supervisors, they served as role models, and were comfortable in that role. They were also mindful that their professional character had taken years for them to understand and define in their own terms. How then to pass this on in a brief, cluttered time, to their students?

10. I guess it is kind of a question for me is how do you translate this level of knowledge or wisdom or whatever you like to term it, how do you translate that into something that you can give students which they are going to value, because they are young, they come from a different world, they’ve got life’s journey ahead of them and you don’t want to impose on them, nor do you want them to think you’re crackers or a bit potty? But to find that road that you can – you know, you’re on a ground that you can share and care and hopefully demonstrate something – Well I guess what it is is holding that light, metaphorical light, and hopefully showing the way without being imposing or being critical or appearing a bit ‘round the bend.

Thus the inner sanctum of true professionalism was something an outsider, even a novitiate in the profession, might find “a bit potty”.

Specialty differences

There was a distinct difference in attitude between GPs and sub-specialists, with sub-specialists (with one exception) emphasising clinical skills over professionalism/humanism.

Sub-specialists used the term ‘hard nosed’ to denote a focus on technical competency in clinical decision making, diagnosis, and treatment that inherently de-emphasised professionalism. They viewed this as not only a good but a necessary thing. GPs used the same term in the same context, but viewed it as a mildly pejorative trait. One GP, though, felt very strongly about this;

My experience has been that what happens to my patients [when they visit a doctor whose skilled technically but hasn’t professionalism skills] outcomes are often very unsatisfactory for the patients in terms of medical care. The outcomes aren’t very good. I’ve seen this over many many years of observation.
Without that ability to empathise, listen and care, things go wrong, and they go wrong from the very beginning. You might be great at doing operation X, but if operation X is not really what is required and if you got something wrong, the outcome won’t be very good.

4. …if you’ve got dreadful social skills, be an anaesthetist or a pathologist. If you are really, really arrogant, be a neurosurgeon or an orthopaedic surgeon.

6. some of the most humanistic doctors that I know are those who were involved in GP training.

1. Paediatricians, neurosurgeons, transplant units, you need those hard nosed people who just get in there and do the job. There are some specialties where you have to be hard nosed, very aggressive, very black and white, and have to make decisions there and then. Can’t afford the time or the luxury to just see how things go. Orthopaedics, ED. Others that lend themselves to time- Psychiatry and there’s a spectrum in between. Most specialties can be put on a spectrum with trauma at one end, psychiatry at the other. People tend to gravitate towards the type of practice that best suits them along that spectrum. The type of practice that best suits their personality along that spectrum.

One GP, discussing whether surgeons needed the same attributes of professionalism considering that their main interaction with patients occur while those patients are under anaesthesia, argued that even though these doctors did not have to deal with the patients’ emotions in theatre, they still needed to have what the GP termed “energetic integrity, emotional integrity”, by which the respondent meant being totally in the room with the patient, with other potentially intruding issues warded off.

Work/life balance

These doctors were unanimous in the view that work/life balance wasn’t discussed, and wasn’t recognised as an issue of any importance, in their own training. They do think at their present stage of their career, that it is important. Some think that the current generation of medical students place too much value on this, and are concerned that this could be to the detriment of health systems and staffing capabilities. None voiced concern that this attitude would interfere with a new doctor’s focus on the patent and ensuring that patient care was given priority;
4. when you’re skiing you can’t think about anything else really. But it’s also the social interaction you have with people when we’re down there. And I guess because it’s physical

6. First thing is not do to the same thing every day. …And then having other things outside of work that are really important to me has helped enormously. I could go on for hours about those sorts of things.

9. …there’s a lot more knowledge and expectation these days, with new graduates and younger doctors and doctors in training to look after their lifestyle, and to be fair a lot of them have probably chosen general practice for that reason, so I’m looking at a particular subset of doctors who have chosen general practice and for a lot of them that was one of their main reasons for choosing it.

I: How do you balance your life in your work?

11. I don’t. All I do is work.

12. in my training we had no thought about work-life balance. …— when I first started doing surgery and surgical training it was nothing to walk into the hospital at 8 o’clock on a Friday morning and not walk out till about 8 or 9 o’clock on Monday night, … And that was just the way it was, and you did that because you had to gain credibility in your particular line of interest to show that you really wanted to do surgery, and therefore that you’d get selected to the next stage up, and that was the commitment. It was done that way.

I: So sort of a hazing ritual, you make it sound.

R: Well, it was, but it had an advantage, and the big advantage of it was that we gleaned a lot of information and we gained a lot of experience in a very short time. And that is a concern now, that there is a strong emphasis on regulated hours. There’s an understanding about fatigue, and we need to take that into account, and the spin-off from that will be that experience comes with hours on the ground, and the hours won’t be there in the same way. …the learning process will have to occur in other ways, because the end-point won’t change, the experience that’s needed to practice is not going to change. So it’s going to have to be got in other ways. …Work-life balance also goes to the understanding that you do have a life outside of medicine, …I guess that was the other thing we didn’t have [in training]. We never really believed we had a right to pursue an alternative life to the work.

A female GP who thought that female GPs had a particularly hard time getting work life balance right;

8. When they come into your room, they may have already been waiting for a while because you’re running late, and you feel it’s really important that they get their full share of your attention, so rather than cutting their consultation short to get the time, you allow them to run on for an extra few minutes because you’re feeling a level of guilt that you kept them waiting so then you actually add an extra five minutes onto the end of it. So the more late a female doctor becomes, the longer the consultations for each individual patient become.
and had developed means to compensate;

You’re better off working whole days… and then having whole days off, than by having several half days where you actually work three-quarter days where you don’t actually get the time off in the course of the week … Trying to leave half an hour early never works. Not [being scheduled] at all on a day, you’re more likely to actually get your day off.

As country doctors, they have developed a much more intimate association with their patients, by force of geographical necessity, than City doctors would need to, or even be able, to do;

9. [Medical students, registrars] come to the country, often from the city, and they have often this idea that you just don’t – ethics is easy, you just don’t befriend your patients. Well, that’s all very well, but you’re going to be very lonely in the country if that’s your attitude because you might be the only practice in town.

Conflicts between professional outlook and job requirements.

Most respondents were GPs, and so were not stuck in the hospital/health care system. They, do, however, interact with this system and it does influence their practice and outlook. They view with some apprehension the changes happening in the system, both deliberate changes being made by the drivers of that system and changes resulting from the dynamics of the sociocultural environment in which the health care system operates;

Perhaps we need to work better to ensure that the kind of grassroots people feel they’re being heard. At the moment you know there are a lot of changes happening in the health landscape, more coming, and although the government does seem to be consulting, it’s not certain who they’re exactly consulting with, and it’s not certain that – well, it’s not being conveyed down to people at the grassroots level that their views are being heard. … people’s well-being is very, very closely related to how much control they feel they have over their lives. It’s really going to be imperative in the future that GPs in particular, who are [where] the vast bulk of where people passing through medical school end up, are going to need to organize themselves and have their voice heard so that people really do feel they have some control over where their professional life is going. And I’m sensing at the moment that’s not quite happening.

Selection of students

One of the areas of medical education that seems to these doctors to have changed the most is that of the selection of medical students. One doctor bemoaned the fact
that young people with Asperger’s Syndrome were now weeded out of the selection pool because as he saw it they made the best pathologists and radiologists.

1. One of my sons did the exam, the GAMSAT, and just the nature of the questions were very oriented towards how the patients feel and this sort of thing. We never got any of that. But I think what they’re not prepared for is the practicalities of practice.

1. Considering, as you’ve said, that, specialists, neurosurgeons for example, have different orientations, might we be selecting for people who would make better GPs but selecting against the people that don’t have people skills but would be eminently skilful surgeons?

1. Absolutely. You need all sorts. In fact, I don’t think that getting people straight from school is necessarily a bad thing. You get a wide mixture of people and people find their niche, and neurosurgical personalities do neurosurgery. …Neurosurgical departments are having trouble enlisting trainees. …Obstetrics, it’s very hard to find people who want to do obstetrics, not because obstetrics itself is something they don’t want to do, it’s they don’t want the time pressure- on call 24/7.

This doctor also saw the increasing threat from the legal profession, following the trend in the US, as being a threat to a healthy practice mix in future cohorts of doctors;

1 What about the malpractice burden?

1. That’s coming into it too. That’s another reason why certain specialties are being avoided. Orthopaedics and neurosurgery are two big ones, obstetrics is always a big one. Not only are you weeding out the personalities who would do that, and also probably the personalities who would be less concerned about malpractice, because they know that as long as they do a good job then the nature of their work will protect them to some degree, and those who, if they were to get sued wouldn’t take it so personally. …There are some people who are able to take those sorts of pressures and just keep carrying on, while there are others who aren’t, so of course you’re going to avoid those areas that might potentially lead you to being sued. Even if they do get sued, a lot of GPs, their practices have been destroyed, they’ve left practice, even if they weren’t actually found to be at fault, just the very nature of what happened. Many doctors leave practice as a consequence of that.

Behaviours modelled by doctors doing the formal teaching were picked up or expressly avoided by these clinicians. Participants exercised broad initiative, and seem to have developed considerable ability for self-reflection, by this exposure, particularly to negative experiences (bullying, gross professional misconduct);
3. Negative experiences can be very powerful learning tools if you let them be… Use those as a learning experience rather than something to defend yourself against. Something to make yourself better.

2. I’ve been practicing – well, my thirty-year reunion was last year, so obviously I’ve been practicing a while. I had an excellent mentor in the general practice I joined who is now 91, and retired some 9 years ago, and was a gentleman and a scholar and the sort of person I would aspire to be, but he also – he taught me a lot of medicine, he taught me a lot of attitudes to patients.

1. I’ve had some bad experiences in my own training which actually strengthened me. It could have turned the other way, made me callous, but I vowed that I wasn’t going to treat anyone the way I was treated by these bosses.

I can think of the people perhaps more than the actual process of teaching that was applied… The people were people who were very respectful of their students and their patients. They – if I had to apply some words, they were people who seemed to have life skills, wisdom, deeper understanding, and often in their teaching they brought in aspects that were more than just the clinical. I think of one paediatrics professor, for instance, who would always talk about the parents and the rest of the family, and how the illness in the child was impacting on that, to never ignore the mum’s wisdom - you did that at your own peril - and who just brought a more holistic approach to their teaching, as well as their medicine.

Respondents described learning from bad behaviours (bullying) by vowing never to engage in such practices when they were teachers (which they are now). They also expressed a conscious emulation of good behaviours (some gave examples). What this research has not discovered is: what behaviours have they taken from their training that they manifest but are unaware of (both good and bad).

While they generally concede a place for professionalism in the formal curriculum, these doctors also feel strongly that the best way to learn professionalism is experientially, through an apprenticeship type model. This is partly due to their belief that it is hard to teach professionalism because it is context dependent, and partly because they are left with a strong impression from their experience that professionalism has to be learnt at the proper time and in the proper setting- after experiencing certain aspects of training and practice that generate or stimulate reflection and growth.
The negative experiences seem to have catalysed the development of positive attributes through reflection;

*There was something really sick about this environment.*

These doctors view the current generation of students as being well prepared to assimilate professionalism along with the clinical skills they are learning.

Respondents considered that the students they are currently teaching are not only bright (these doctors expect that as a given), but good at complex thinking. Some thought that since they were older (respondents up to this point in the research universally teach postgraduate medical students), and thus had more life experience, they were better able to assimilate professionalism traits.

A minority opinion was that these students weren’t as engaged with their communities or with national or world affairs as was their own ‘baby boom’ generation. Respondent 3 felt particularly strong about this.

These doctors reported having achieved a life/work balance that works well for them. Means by which this has happened have varied, but all said that they are actively and constructively engaged in all facets of their lives, and none expressed views that suggested burnout (although this could be an artefact of the interview process, especially with a non-medical interviewer).

They certainly weren’t taught the importance of balancing life with work;

*There was no talk of life. You didn’t have a life. You weren’t there to have a life. There was almost negative training in that it was almost frowned upon that anyone would want to have a life. You were meant to be devoted to the career, and do we want to be there to all hours of the night.*
All described making time for family and friends, and not feeling guilty about it. Most placed a value on physical and/or creative activity as necessary. This resonates with other research on work/life balance in Australian GPs (Shrestha and Joyce, 2011). A strong minority stated that work equals life, or that they didn’t differentiate overly much between time spent at or away from the job in terms of how they feel about themselves.

One respondent described having a “knock down” early in training. This respondent felt that the experience occurred early enough in training not to derail their career path and that it was a valuable learning experience in that it left this respondent able to gauge stress levels, anticipate what effect those would have, and initiate effective coping skills. This respondent was female. I expect that it would be extremely rare for a male Australian doctor of this generation to candidly describe such an event.

These doctors had to figure out the necessity of this balance for themselves, and appear to have done so. They seem to have thrown off completely the ethos with which they were infused in training. Universally, this was described as one of work above all, with any hint of an outside life or even leaving at the scheduled time being interpreted as a weakness or failing and punished accordingly;

I, very early in the piece, decided that I had to be selfish and look after myself if I was going to give to other people.

I think physical activities are absolutely critical. And I’m trying to include a creative component to my life, because again, I feel that the best natural anti-depressants are physical activity and some kind of creative activity.

I’ve pretty much learned to be myself at work. That’s been a really important thing for me, to figure out how I can be (myself) when I’m both at work and not at work, because people talk about work-life balance, but it’s all life, actually.

I haven’t got a good work-life balance, in terms of rest and work, but I have in terms of a great variety of
things that I do, and really enjoying the things that I do.

Table 7.2 lists themes arising from the data.

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<th>Table 7.2: Themes arising from the data</th>
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<tr>
<td>These clinician/educators;</td>
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<tr>
<td>14. Comfortably articulate a cogent conceptual definition of professionalism that is pragmatic and holistic</td>
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<tr>
<td>15. Experienced bullying and flagrant unprofessional behaviour that went unchallenged in their training</td>
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<tr>
<td>16. Are divided in their opinion of whether there are differences in either approach to professionalism or differences in professionalism between different medical specialties</td>
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<tr>
<td>17. Learned professionalism through role modelling- either by witnessing exemplary doctors and vowing to emulate them or by witnessing doctors who lacked attributes of humanism and vowing not to be like them. Usually a combination of the two</td>
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<tr>
<td>18. Consider role modelling in real clinical situations to be the best (some say only) way to learn professionalism</td>
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<tr>
<td>19. Have engaged in considerable personal reflection through which they have arrived at their personal professionalism ethos</td>
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<tr>
<td>20. Consider the students that they are currently teaching well prepared through their early years of training to assume an appropriate professional approach to medicine</td>
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<tr>
<td>21. Are somewhat bemused but tolerant of their students’ views on life/work balance (that they covet time away from medicine)</td>
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<tr>
<td>22. Are confident in their professional personas. They do not see great difficulty with their ability to act in a professional manner</td>
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Discussion

In contrast to the findings of Bryden et al (2010) these respondents had no trouble in defining professionalism in their working and teaching contexts. As might be expected, considering that all respondents are engaged in teaching through clinical placement, they were firm believers in the effectiveness of assimilation of
Professionalism attributes through exposure and experience through these apprenticeships.

The GPs in the group were mindful of the need to balance professional practice and educating students with the running of a business. This adds a further challenge to their role as clinical educators and another aspect to what it means to be a professional. Castellani and Wear interviewed fifty US doctors and found the same concerns. This is one of their respondents; “There are doctors who will tell you that all you have to do is be a good doctor and everything else follows. That is no longer true. A certain amount of time physicians have got to spend on understanding and managing the business of their practice, or they’re out!” (Castellani and Wear, 2000) (p. 500).

These doctors learned through role models and take their own responsibility as role model for their students seriously. They have found ways to balance life with practice (and with teaching) and were quite comfortable with their mix of activity. While all recounted histories of their own learning situations that were stressful, none expressed being stressed currently, although that may have been for the benefit of the interview record.

Magee and Hojat found among doctors formally identified as role models score highly on traits such as conscientiousness, competence, assertiveness, altruism, and trust, and were lower than the general population on vulnerability. Differentiating by gender, male role models were more agreeable and females more extraverted, open, warm, and better at fantasies than the population norms, while scoring lower on hostility and neuroticism (Magee and Hojat, 1998).
Doctors across this group said that they learned professionalism from an influential mentor during their training. They further think that this is the best way to impart these traits. Others, more involved in formal didactic teaching, mentioned the value of role play or the importance of the institution instilling this in the first years of training, before clinical rotations that are the focus of these doctors’ teaching activities.

Most alluded to situational learning (Cohen et al., 2007) (p. 33) and legitimate peripheral participation (Cruess et al., 2008) (p. 37), though not calling it that. Respondent 12’s remarks on never having received formal training in ethics, but nonetheless being nominated to chair an ethics committee is exemplary of the amount of knowledge that has been assumed (in both senses of the word) without being formally taught, are typical of medical educators (Jonas, 2000).

The perception of these doctors that the essence of what will become professionalism is entrenched in character traits developed quite early in life, such that professionalism is an attitudinal competency, is widely held (Lucey and Souba, 2010, Michalec, 2012). There are streams of debate in the literature that say that character traits can (and should) be taught successfully in medical school (Bryan and Babelay, 2009), and that these can (and should) be used as criteria in the selection of medical students (Bore et al., 2005, Bore et al., 2009). Others are more sceptical that these traits can be taught (Siegler, 2002), at least in the current environments in which medicine is practiced (Coulehan, 2005, Whitcomb, 2005).

The strong collective opinion was that professionalism increases over time as a result of experience and reflection. Respondents felt quite comfortable in their roles. Some concerns were voiced regarding the possibility of committing inadvertent lapses, or of engaging in compromising professionalism behaviour because of the nature of
practicing and living in the microcosm that is a country town (Roberts et al., 1999). Is it permissible to befriend a patient? If so, under what circumstances? If you are the only GP nearby, and you are called out because of a major emergency (e.g. traffic accident), but you have had a few drinks, do you respond or not?

These doctors described a process whereby they acquired tacit knowledge in the course of their medical training. This process was in line with training modes of the time, which were oriented around a conceptual framework that held that clinical skills needed to be formally taught, but that the humanistic side of medicine was assimilated through tacit knowledge.

It has been argued that tacit knowledge (Coulehan, 2005, Polanyi, 2009, Collins, 2010), of the type that these doctors described as a result of their training, was imparted more effectively in the time when these doctors were training (circa 1950s-1970s is the time period of training for most of these, which fits) in that times were simpler and both the profession and society were more homogeneous than today (Cruess et al., 2008) (p. 2).

The current generation of practicing and teaching doctors has been characterised as having firm, appropriate notions of professionalism (Campbell et al., 2007, Jorm, 2012) (p. 59), including life/work balance. These respondents are then representative. Even though professionalism wasn’t part of their formal curriculum, the socialisation process- the informal and hidden curricula- seem to have worked to their credit.

But one doctor said that technical skill is the real determinant of good medical practice, and that bedside manner, good communication skills, and humanism are
incidental. This doctor maintains that this characterisation is especially true of sub-specialists.

Another doctor said that the most important attributes of a good doctor are the ability to communicate and show empathy. This doctor says that this is especially true of specialists other than general practice. The doctor says that in their experience, every time a patient is referred to a specialist who lacks these traits the outcome is invariably less than optimal.

If one of these doctors is right, the other must be wrong. Right?

One doctor is a sub-specialist. One is a GP. One is male and one female. One experienced a burnout early in life that they are sure made them a better doctor in the end. Both used the term hard-nosed to describe medical situations where technical skill was of the utmost importance in delivering care.

These two people had very different formative experiences, and this has resulted in very different outlooks to professionalism. Both are successful mid-career professionals. In light of this dichotomy, how can we teach a generic set of professionalism skills or attributes, or use any kind of assessment measure to accurately gauge a person’s ability to practice good medicine in their own personal and professional context? How do we answer Jack Coulehan’s rhetorical question “would you rather your surgeon have good hands, or good bedside manner?” (Coulehan and Williams, 2003). The literature supports the view that professionalism improves health care and is closely linked with other aspects of excellence in clinical practice (Mueller, 2009).
There is a widely held belief that different personality types are attracted to, or more suitable for, different medical specialties (Vaidya et al., 2004, Borges and Osmon, 2001, Borges and Savickas, 2002, Hung et al., 2011, Harris, 1981, Woolf and McManus, 1987, Burack et al., 1997, Hojat and Zuckerman, 2008, Tyssen et al., 2007, Furnham, 1986, McManus et al., 1996, Burford, 2012, Veysman, 2005, Hitchcock, 2012). This stereotyping may be exaggerating or oversimplifying an underlying reality (Bellodi, 2004, Pryor, 2010) (p. 176), and other factors, such as a positive clinical placement (Poole et al., 2009), can be decisive. Should we make psychological testing part of medical school entry, and enact counselling regimes to assist students in picking the specialty they are most psychologically suited for? Would this result in an appropriate skill mix among the specialties, reducing the possibility of a doctor going down a career path that is unsuitable for them and experiencing the misfortune of having to abandon years of preparation for more suitable occupation, perhaps outside of medicine altogether (Foster et al., 2010, Borges et al., 2009, Eley et al., 2009)?

Respondents were primarily GPs and the majority of students they are teaching are on a GP path. These students, in the view of the respondents, have chosen this path precisely because they can expect to have a career and also engage in productive activity (family life, outside interests) outside of their profession as well. These doctors do not in general view this in a pejorative light. Their own teachers would have (Smith, 2005). This observation is well captured in the literature.(Borges et al., 2006, Cruess et al., 2008) (p. 17).

The current generation of medical students doesn’t have to be told the importance of this, they demand or expect it (Bruno et al., 2012, Mitchell, 2008, Jorm, 2012) (p. 62). (Interview 9) This trait is borne out by observations of these respondents;

*A lot of them [students, residents] are very prepared for the work-life balance. And whether that's just a sign of the times, it probably is, I think there's a lot more knowledge and expectation these days with new*
graduates and younger doctors and doctors in training to look after their lifestyle.

I don’t know that I can generalize across the whole profession by any stretch, but certainly with the registrars I’m seeing, a lot of them do have very strong ideas about the work-life balance that they want, and they’re very good at establishing that from early days.

While they are concerned that their students may not have the same ethos they did at the students’ age, they consider the approach of the students to be reasonable. “Starting to teach the balance of the personal and the professional early in training would be consonant with the model of lifelong learning” (Louie et al., 2007) (P. 130).

Strengths and limitations
It is possible that the views I have captured are overly optimistic, as a result of doctors, being on the spot, even in an interview in which their confidentiality was assured, and being aware of the importance being placed on professionalism, through their reading of the professional literature on their own and on the explicit instructions for learning objectives conveyed to them by the host universities of these students.

Convenience sampling might have resulted in a group of respondents overly representative of a certain perspective. While data saturation appeared to have been achieved, more (and more varied) respondents possibly could have expanded the spectrum.

Conclusion
There is no abstract truth in the determination of doctors’ professionalism. I have tried to capture what these doctors think and how they act in the context of their work life and their life outside of work. Truths revealed (if any) are the individual
truths at the place and time I talked to them—the truth in their head space, and the truth that they wanted to share with me.

The current running through all this is that these are ethical, empathetic physicians and that the training the they received, more often the training they didn’t formally receive but the actions and attitudes they witnessed during their training, created a path to reflective practice that they have sustained, to the end that they now express confidence in their ability to practice at a high degree of professionalism and have their lives solidly grounded. Their lives embrace their professional conduct, they do not compartmentalise it.

By virtue of the fact that these doctors have been granted the responsibility of clinical teaching by major Australian universities, they must be perceived in the medical education community as good teachers. Are they good teachers because they have developed high degree of professionalism, or do good teaching skills and high professionalism go together?

The traits and attitudes that make up professionalism are not cast in stone, even in mid to late career professionals such as these. They are constantly being reformulated, and they are situational. The best doctors are potentially capable of applying actions (or inactions) in the face of the right environmental triggers, and the converse is also true.

The current generation of practicing and teaching doctors, if these respondents are representative, has firm, appropriate notions of professionalism, including life/work balance. Even though this wasn’t part of their formal curriculum, the socialisation process, the informal and hidden curricula, seem to have worked.
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Chapter 8: Dr. Alecto and the dolly birds

“Any medical culture intensifies the values of the larger culture it tries to serve. Medical culture intensifies the shadow of the culture as well.” Rachel Naomi Remen (2000) (p. 4)

“Sometimes we simply have to keep our eyes open and look carefully at individual cases—not in the hope of proving anything, but rather in the hope of learning something.” Hans Eysenck (1976) (p. 9)

“Actually, being a narcissistic sociopath is kind of a prerequisite for medical school” Hal Elliott (2010) (p. x)

Introduction

All participants in this research saw value in teaching professionalism save one, and that person, a self-avowed “misogynistic, antiquated, dinosaur of a ratbag” whom I will dub Dr. Alecto, was scathing in their view of this aspect of medical training;

I think it’s one of the most destructive things that has been introduced into medical education ever. ...I think the time that is spent on these sorts of processes in education is enough to make the average male puke. I think it even gets up the nose of some of the girls, although I’m sure women are a lot more sensitive to this sort of stuff than men, but I would suggest that the men are extremely negative about it. Well, I know they are.

Dr. Alecto sees room for improvement in the personal and professional development curriculum of the university that he teaches in;

I think they’ve obviously looked around and found the touchiest feeliest load of Mickey Mouse bullshit they could find and they bought that one.

In this chapter, I will examine this case in particular, to see where the views of an alternative voice fit into the scheme of things.

Methods

Methods used in collecting and analysing the data for this case are those described in Chapter 7: Clinical educators’ views on professionalism. I have analysed my
interview with this particular person as an individual case because his views were so extreme. While some of his views coincided in part with those of other doctors I interviewed, and with views found in the literature, his presentation of his views was quite different. He was an ‘outlier’, an extreme case.

Analysis of singular cases like this in qualitative study can be important not for the generalisations one can make from the, nor necessarily for the hypotheses that can be formulated from them, but rather for the insights they reveal; “a sensitivity to the issue at hand that cannot be obtained from theory” (Flyvbjerg, 2006) (p. 238-239)

The Case

This medical specialist practices in an urban environment. Dr. Alecto acknowledges that there is value in the attributes of professionalism, but takes issue with the ways in which it is being taught, and the way in which, in Dr. Alecto’s view, more important subject matter, such as basic science, is being removed from the curriculum to make room for the formal teaching of professionalism;

Dr. Alecto: [professionalism attributes] are important. I have no – that’s not the issue. I just don’t believe that that’s something that going to a few lectures and writing a few reflections on is going to make the slightest difference. In fact, I would have to say that having been bombarded with this sort of stuff for a few years, your average male medical student is going to write any goddamn thing he likes into the various reflections and reports or essays or whatever he’s got to do, even if only as an expression of his irritation…. I have had to go to these things myself as part of the process of being accredited to teach, and I could actually feel the anger and tension welling up in the audience. You know, it was an audience of maybe 20 old farts like myself, various specialists and GPs sitting down there and having a couple of dolly birds up on the stage doing cutsie-pie little re-enactments of dealing with a patient and everybody having to think, “Oh, isn’t that wonderful, that’s how we should be doing it,” the end result is that – well, one particular one is that a couple of important people just stormed out of the place, never to return, you know. They actually lost teachers on the basis of these ridiculous performances.

I think it [professionalism in the medical curriculum] is actually doing harm. It has not only displaced important subjects from the curriculum, but is actually doing harm. I don’t – I don’t know if it exactly does harm in the sense that these kids are going to be less empathetic or whatever because of it, but I think their responses to how they handle the projects or assignments or whatever they have been given to do – their reflections… The way the kids deal
with that is with contempt, and I don’t blame them, frankly. I think it is just worthy of nothing other than contempt. It’s part of a bigger picture, I think, that has eroded medical education, and that is that basic sciences are being sacrificed to make room for this rubbish. … It is so orientated towards this problem-based learning, which in itself is shit-brained…How do you create a framework, a lattice, of knowledge and understanding of a huge area by just taking a chunk here, a chunk there, and the kids have got no idea of what the structure is in between these chunks. It is just plain shit-brained.

So Dr. Alecto’s chief concern is that professionalism has been introduced to the medical curriculum at the expense of learning basic science, which has been crowded out. Modern Australian graduate entry medical programs can be contrasted with US medical programs (all graduate entry) of the 1960s and 70s, and, to a lesser extent, today. To gain entry into a U.S. medical program, the rite of passage was through a four year undergraduate pre-medical program, heavy on organic chemistry, physics, microbiology, and other hard science subjects. Subjects like organic chemistry, which require memorising vast amounts of arcane information, provide the barrier exams that determine whether a person can hope to become a doctor. Dr. Alecto thinks this is essential. He is not alone. David Weatherall, founder of the Weatherall Institute of Molecular Medicine at Oxford University, also thinks basic biological sciences are an essential part of early medical education, and that they should not compete with “humanities” courses in this period. He says: “a reasonable basis of knowledge that extends across the diverse sciences that underlie an understanding of disease, combined with an appreciation of how little we really know about the complexities of biological systems, is surely becoming a vital component of the professionalism required of tomorrow’s doctors” (Weatherall, 2011).

Dr. Alecto is appalled that a student did not know the position of strontium in the periodic table of elements, a fact that he considers basic and essential.

Dr. Alecto: Look, here’s an anecdote. Only a matter of a fortnight ago, talking to a bunch of kids about osteoporosis and its management, and this was a mixed-bag up at the hospital, it was a mixed bag of students and junior staff. And we were talking about osteoporosis management,
and the subject of strontium came up, to which I asked the gathered throng: of which column in the periodic table does strontium belong?

I: I wouldn’t be able to answer that. Second or third from the right?

Dr. Alecto: No. It’s second from the left. It’s an alkaline, it’s in the same column as calcium. But that’s not the point. I looked around and said, “Okay, which column?” Nobody knew. But then again, the bombshell came at the end where one lass said, “What’s the periodic table of the elements?” And I said, “Look, it’s over. Game, set, and match. That’s it.” We’re not going to win while that is the basis of people who are studying medicine.

I: Well, it is scary that somebody could get into a medical program, and some way into it, without knowing that simple fact, although I suppose the other side of me thinks, “Well, so what? What aspect of treating a patient requires you to know where strontium is placed in the periodic table?”

Dr. Alecto: That’s too simple a question, meaning the answer to it will be facile. The thing is that if you don’t know your basic sciences and if you do not know your basic biochemistry, anatomy and physiology, you will never be able to work your way towards solving a problem or judging, in effect, evidenced-based medicine if you do not have the tools to do so. You can only work on experience. If you have been subjected to problem-based learning and you have been subjected to a paucity of basic sciences, you can go no further than what your own experience is. You can’t deal effectively with something new from scratch. And that’s my point.

I: So if you don’t know the periodic table of the elements, it implies that there’s a whole heap of other things that you don’t know, a lot of which is important.

Dr. Alecto: Exactly. If somebody hasn’t gone that far in high school science, or hasn’t retained high school science to that degree - maybe high school science doesn’t even have that in it anymore. Wouldn’t surprise me. Probably do touchy-feely shit in high school forever too. Wouldn’t surprise me one bit. I certainly heard enough male teachers grumble in despair about the amount of touchy-feely shit that has infiltrated high school, so maybe it goes as far as the curriculum, too. Be that as it may, it certainly is a major feature, and a deficit, in medical education...

But to use an analogy, does a person need to be conversant in Fortran or Cobol (or more basic yet- machine language) to be able to use a personal computer running a modern operating system over the top of the core programming? The answer is clearly no. The underlying chemistry of biological function is linked to the higher functions where diagnosis and treatment take place in a more complex system, but the key point is; do we want to make doctors out of nerds or out of humanists?

There is an irony here. Medicine has become ever more technological and science based (Inui, 2003), but Dr. Alecto sees a falling off in scientific grounding of the
medical students he is seeing. Is the system now over-compensating for the view of doctors as cold, dispassionate scientists focusing on data instead of a person?

Dr. Alecto sees professionalism as an issue of character and upbringing;

...most of those issues, the important ones anyway, are things that if one has not learned them from one’s grandmother, one is not going to learn them from a 23-year-old psychology graduate standing in front of an audience of medical students performing little re-enactments of contact situations. These softer values, shall we say, what one acquires in one’s infancy or not at all…

...As I say, if your mother and your grandmother, who teach you how to treat the rest of the world, if you haven’t learned it from them, you aren’t going to learn it from some dolly-bird psychologist when you’re 23 or 24. That just isn’t going to happen. Alecto is not alone in that regard (Duff, 2004, Borges et al., 2006).

Dr. Alecto’s next point is that the introduction of women in ever growing numbers into the medical profession is a bad thing;

The whole business of problem-based learning and the emphasis on the touchy-feely crap, I no longer can separate them because I think they have buried within them, and this is where I get to be called a misogynistic ratbag, is that the feminization of medical education is anti-scientific… :

I: But young women beat guys out in science left and right. 

Dr. Alecto: What’s that? 

I: Young women tend to, these days, achieve higher test scores than men in maths and sciences. 

Dr. Alecto: Yes, but they’ve always been good at passing tests and doing exams, but that doesn’t make them interested in it. An 18-year-old girl is going to beat a male in any subject hands-down at tests. They’re just better at it. That doesn’t make them interested in it. That doesn’t make them live and breathe it. They do it because they’re good at it. Sure, they win the exams, they win the competitions, but if you take the whole damn lot of them as a group, and the whole damn lot of the boys as a group, the boys are going to be interested in the sciences and the maths and the girls are not. Okay, that’s a generalization, but I think it’s a pretty fair one. And having shifted the whole axis of medical education along feminized lines, the bit that suffers is the scientific element of it… The whole of academia here is top-heavy with women. I’m sure that’s probably getting to be much the way throughout the country, or the world, really…. the fact is that there are going to be graduation huge numbers of female graduates who will just play Mickey Mouse with the profession throughout their lives, and never really achieve anything and never really put any hard yards in. So we’ll have to continue bringing in IMGs [International Medical Graduates] to fill the gaps
Medicine is indeed becoming feminised (Levinson and Lurie, 2004, Serrano, 2007), with dolly birds soon to outnumber males in the total medical school students census (McMurray et al., 2002), including in Australia (Wainer, 2003, Britt et al., 2011, Joyce, 2012) (p. 20). Ironically, as regarding Dr. Alecto’s views, women in Australia appear to be drawn to medicine precisely because of its scientific aspect (Todisco et al., 1995). It is true that women are “traditionally socialised from childhood to be empathic and compassionate” (Coulehan and Williams, 2003) (p. 13), and that’s a good thing. Men should be too. Probably as a result, women provide more preventive care, conduct longer referrals (Harrison et al., 2011), are more patient centred, conduct longer consults, and let their patients speak more (Roter et al., 2002), although in the ever more corporatized and throughput-driven climate of modern medicine, this can be construed as inefficiency and underperformance (Bloor et al., 2008).

Certainly, Dr. Alecto’s use of language expresses a lower regard for women that Alecto makes no effort to cloak by conforming to politically correct language. Is Alecto a harmless curmudgeon or an obnoxious misogynist? Is Alecto better removed from teaching because Alecto’s views do not conform to the consensus view of reality and may dismay students experiencing them through being subject to this type of teaching or supervision? While women are more represented in the ranks of doctors, there are still barriers both horizontal (concentrations of women in certain specialties) and vertical (absence of women at higher academic ranks and in senior administrative positions) to women’s full participation in medical practice and education (Kilminster et al., 2007). While gender equality has been achieved in medical education in terms of numbers of students admitted, gender based discrimination in medical education still exists (Babaria et al., 2011, Risberg, 2004, Verdonk, 2007, Verdonk et al., 2009). The presence of medical educators who share Alecto’s views is responsible for that.
Alecto’s attitude towards women in medicine;

There's a couple of girls I've managed to get their back up about discussing their future careers and how they intend having a family with a practice of medicine, or whether they intend to just play with it for a few years, have a few babies, and then work two sessions a week in a Mickey Mouse clinic seeing well-babies or something? Or are you going to go back to being a real doctor? manifests a criticism Delese Wear and Mark Kuczewski (Wear and Kuczewski, 2004) have made about the way in which the current approach to professionalism is characterised, that “the rules, protocols, and expectations for physicians have always been developed by and for male physicians who traditionally have few domestic obligations”. However Alecto’s concern that primacy of life/work balance in selection of career options is motivating medical students to seek “lifestyle specialties” (Hafferty, 2003) (p. 150), (McKinstry, 2008) instead of being “real doctors” is shared by others.

The concern is not new (Courtney, 1920, Jorm, 2012) (p. 5). Tore Gude et al (Gude et al., 2005) found that women medical students, more than men, in Norwegian medical schools had difficulty identifying with the role of doctor. This was particularly true for women in the oldest medical school in the country, where the curriculum was traditional and the faculty male dominated, with few female role models, as compared to the newest medical school. However, other research has found that female medical students had better attitudes towards being a doctor, and keep them better than male students do through their medical student career (Woloschuk et al., 2004) (p. 531).

Can not professionalism learning start with a lecture by a dolly bird (I repeat the slur in the spirit of Lenny Bruce) (Bruce, 1975) just as a lecture presenting the periodic table (with strontium’s rightful place highlighted) lead to further understanding of chemistry, followed by organic and biochemistry, leading to medical formulary? Hopefully so, because even anatomy, the core of basic medical science, is now more
frequently taught by instructors not medically qualified, rather than the traditional career anatomist (Craig et al., 2010).

But Dr. Alecto is correct that students do not view lectures on professionalism by non-medically trained (and experienced) teachers as legitimate or credible (see Chapter 6 on student views). Alecto is also correct that hours devoted to basic sciences, such as anatomy, have declined in importance, with fewer hours devoted to anatomy in Australia (Craig et al., 2010) and lesser trained staff being allocated to do the teaching (Ramsey-Stewart et al., 2010, Regan de Bere and Mattick, 2010). There are reports that some doctors and current medical students share Dr. Alecto’s concerns (Cresswell, 2010a, Cresswell, 2010b).

Regarding Dr. Alecto’s views on Problem Based Learning (PBL):

you don’t forget that lattice that’s been built up in your mind in your youth, such that yeah, if you’re going to look something up, it all reassembles very quickly….. There’s two elements there, an abscissa and an ordinate, a horizontal and a vertical axis of information. And sure, the end result of this is there are holes in it. The consequence of the holes is that you spend the rest of your life putting stuff in the holes. But, having got that lattice, you’ve got an overview of the whole of your subject. You don’t have all the information, but you know the extent of the subject, and this is where problem-based learning falls down. It really just is a corner of the lattice up here, and another corner there, and a piece there and a piece there, and no real integration of how they all fit together… If you have been subjected to problem-based learning and you have been subjected to a paucity of basic sciences, you can go no further than what your own experience is…. These kids do not understand the fundamentals so that if they are given a problem that is outside their experience, I think they are not adequately equipped to run with the ball in any way, shape, or form. They cannot extrapolate a forward thought.

Alecto is probably wrong on this regard, as there is now a robust literature that reports that PBL learning systems improve competencies of doctors as measured after graduation (Koh et al., 2008, Schmidt et al., 2006), and clinical decision making and interprofessional cooperation in medical students (Nango and Tanaka, 2010). He may yet have a point, though, as there is a counter-argument that PBL provides an incomplete, constrained view of medical problems and decision making (Shanley,
2007, Goss et al., 2011). Many clinicians share Dr. Alecto’s views (Tavakol et al., 2009, Colliver, 2000).

All of the doctors interviewed for this research had a memory of being exposed to unprofessional behaviour. None said they were the worse for the experience. In fact, they considered themselves better doctors today because they reflected on their experience, realised what was wrong with the pictures engraved in their minds as a result of witnessing or being subject to the behaviour, and determined that they would not perpetuate such behaviour but would treat people as they should be treated (see Chapter 7 on clinicians’ views).

But perhaps these doctors were harmed by their experiences of bullying and unprofessional behaviour. Social learning theory (Bandura, 1977) posits that behaviours witnessed become behaviours adopted. Medical students exposed to unprofessional behaviour in clerkship are more likely to engage in such behaviour themselves if they see such behaviour as acceptable, or the norm (Reddy et al., 2007). They certainly see it as hypocrisy protected by an established hierarchy (Brainard and Brislen, 2007). Such behaviour in ‘role models’ can undermine role modelling as a teaching strategy (Larkin, 2003), especially if it is the primary teaching strategy (Gordon, 2003), although students may be able to learn from both positive and negative role models, rejecting the obviously undesirable and assimilating positive traits (Michalec, 2012).

If we consider Dr. Alecto’s views unacceptable, why should we allow him to continue in his position? Unprofessional behaviour is very hard to define, and processes to deal with it contain potential harm for those who would like to act, as well as taking inordinate amounts of time away from more urgent and rewarding academic and practice activities (Bryden et al., 2010). Unprofessional behaviour thus
becomes entrenched, pervasive, and undercuts morale of other staff when it is not addressed (Hickson et al., 2007).

An optimal, effective methodology to incorporate teaching professionalism into a medical curriculum is yet to be found, and there is scepticism that the ‘professionalism movement’ is a fad, a distraction (Reddy et al., 2007). A recent contributor to a blog on the subject of medical professionalism on the ValueMD Medical Schools forum commented that “professionalism is now synonymous with compliance” (tegraphile, 2010). Compliance with established rules and protocols of a workplace, or compliance with the norms (largely NOT formally established) of an organisational culture?

The debate about whether professionalism, (in its meaning most closely aligned with humanism, incorporating patient empathy, work-life balance, etc.), has been selected out over pure technical clinical skill in modern medical education, implicit in Dr. Alecto’s remarks, is largely absent from the large body of literature on professionalism that has grown up over the past two decades. Where it is present, this debate leans towards humanism over technical skill as the aspects of medicine most important in the development of a good doctor (Howe et al., 2002, Bishop, 2008).

Alecto is forthcoming and strident in his views, but he may also be expressing thoughts held by others who may be too politically attuned to what is acceptable to express them this bluntly. The gruff, tough old doctor is a familiar fixture of health care culture, although vanishing from the scene. Consider these comments from another doctor interviewed for this research;

1. Patients want to be diagnosed and fixed. Some of these older grumpy doctors who don’t say anything, don’t ask questions, they just say “this is what you need to do”, there’s no two way conversations. That’s the old style. You don’t see much of that these days.
I: what has changed it?

I think more of an emphasis towards these things [professionalism]. These things have crept in, slowly, and perhaps more rapidly in the last generation or so.

I: In the medical education process?

But also in the way that students are selected. The point I was going to make, that a lot of patients, although a lot of those older style doctors would fail on each one of those points, they are still the doctor I’d want to see because they make the diagnosis and get them better. I think also patients do realise that the doctors are there to diagnose and to fix, and so a lot of them do, although they wouldn’t necessarily advocate that approach, they’re still quite happy that that particular doctor was their doctor if they got the results.

particularly when it comes to specialties other than General Practice;

1. Paediatricians, neurosurgeons, transplant units, you need those hard nosed people who just get in there and do the job. There are some specialties where you have to be hard nosed, very aggressive, very black and white, and have to make decisions there and then. …Most specialties can be put on a spectrum with trauma at one end, psychiatry at the other. People tend to gravitate towards the type of practice that best suits them along that spectrum. The type of practise that best suits their personality along that spectrum. People who are really into these sort of very aggressive, let’s get in there and do it; they tend naturally to gravitate towards those sorts of specialties. And then that becomes a self-fulfilling cycle, because then those specialties, because they’re full of those sorts of people, they become more like that, but they probably have to be. If you’ve got a busy A &E department, with lots of trauma coming in, you need people who are not going to fall apart. You need people who are going to be able to keep on top of it make big decisions and make them quickly.

But there is firm disagreement from other participants in this research;

2. My experience has been that what happens to my patients [when they visit a doctor who is skilled technically but lacks professionalism skills] …outcomes are often very unsatisfactory for the patients in terms of medical care. The outcomes aren’t very good. I’ve seen this over many many years of observation. Without that ability to empathise, listen and care, things go wrong, and they go wrong from the very beginning. You might be great at doing operation X, but if operation X is not really what’s is required and if you got something wrong, the outcome won’t be very good…Even a mechanic talks to the owner of the car

**Conclusion**

Does Dr. Alecto act in a professional manner, of the type which we would like role modelled to our students? And if not, why is he teaching at all?
To answer the first question, let’s measure his professionalism against a set of criteria, using Alecto’s own words to assess him. Van de Camp and colleagues (2006) developed an assessment tool for GP trainees, the EPRO-GP instrument, that measures attributes of professionalism. We can use this as a representative measurement system to derive a speculative assessment, based on Alecto’s’ own assertions, of where Alecto might fall on a professionalism scale (Table 8.1).

### Table 8.1. Dr. Alecto’s professionalism rating

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Dr. Alecto</th>
<th>Comment: Does Dr. Alecto conform to the attribute?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect for patients</td>
<td>you shed tears with patients, of course you do.</td>
<td>So far, so good.</td>
</tr>
<tr>
<td></td>
<td>patients come in two sorts. There are those that you literally cringe when</td>
<td>Oh no!</td>
</tr>
<tr>
<td></td>
<td>they walk in the door and you sit across the other side of the desk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>planning all sorts of horrible demises for them.</td>
<td>He means medical students</td>
</tr>
<tr>
<td></td>
<td>I even talk to the kids about punitive medicine, I even talk about that</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>to them. I say, “Look, you know, how many drugs have we got in our</td>
<td></td>
</tr>
<tr>
<td></td>
<td>armament that are really only designed to make a patient miserable?”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Some of the bastards may actually deserve it, but then again a lot don’t,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>so we're probably going to think our way through it.</td>
<td></td>
</tr>
<tr>
<td>Respect for other professionals</td>
<td>I have had to go to [professionalism training sessions] myself as part</td>
<td></td>
</tr>
<tr>
<td>(cooperation, collegiality)</td>
<td>of the process of being accredited to teach… having a couple of dolly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>birds up on the stage doing cutsie-pie little re-enactments of dealing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with a patient and everybody having to think, “Oh, isn’t that</td>
<td></td>
</tr>
<tr>
<td></td>
<td>wonderful, that’s how we should be doing it,” … I think it is just</td>
<td></td>
</tr>
<tr>
<td></td>
<td>worthy of nothing other than contempt.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>…after some of my expressions of discontent with the way things have</td>
<td></td>
</tr>
<tr>
<td></td>
<td>been running in academia the number two hero… has instructed me not to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>approach the dean, but take any issues directly to him. Well, that</td>
<td></td>
</tr>
<tr>
<td></td>
<td>just makes him and I enemies.</td>
<td></td>
</tr>
</tbody>
</table>

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The scope of this research does not allow me to answer the second question; why is Alecto still teaching? Thus, I will have to speculate.

The role of clinical educator is not highly competitive or sought after in Australia. Clinical teachers in practice receive very little, if any, reimbursement. Medical students take time out from a busy practice, and therefore have a negative impact on a practice (Garg et al., 1991, Grayson et al., 1998), although this impact can be minimised if the teaching program is well managed (Walters et al., 2008, Hudson et al., 2012). It is likely the case that the medical school(s) that employ Alecto have to take what they can get to cover the number of clinical placements they need for their student census.

Alecto, having been in practice for quite some time, may have support from patients, colleagues, and the community. These supporters would likely attest to Alecto’s competence as a doctor. If the university brought a charge against him or dismissed him, any such existing support network might turn antagonistic, perhaps with consequences that threaten the university’s mission of teaching in the community.
If a formal charge of unprofessional behaviour was laid against Alecto, we may be sure from the forcefulness of the views presented here that Dr. Alecto would fight such charges vigorously, and be a formidable adversary in doing so. Dr. Alecto may also file counter charges of false accusation or even defamation, which, even if not proven, would make life miserable for a very long time for anyone trying to correct Alecto’s attitude. While doctors feel strongly that their peers who are guilty of unprofessional practice should be reported, few who encounter such behaviour do so (Campbell et al., 2007, Roland et al., 2011). There are strong disincentives to taking action against unprofessional behaviour within a faculty (Bryden et al., 2010). Regulatory structures that might handle matters such as this are considered weak (Walton, 2008).

Dr. Alecto shows no interest in adopting the views of the majority in medical education; in fact Alecto takes pride in being the ‘ratbag’. Alecto’s employers may ascribe to former U.S President Lyndon B. Johnson’s philosophy that “It’s probably better to have him inside the tent pissing out, than outside the tent pissing in” (Halberstam, 1971) (p. BR2).

Dr. Alecto manifests a classic case of “the political-ideological connotations of gender creat[ing] resistance especially in traditionalists in medical schools” who then “form an obstacle [to] change” (Verdonk et al., 2009) (p. 144). Alecto’s values are in conflict with consensus views (Doukas et al., 2010). Dr. Alecto’s antagonism may also be due, at least in part, to frustration with the systems in which Alecto has to operate, and the resultant rules Alecto is supposed to follow (Lucey and Souba, 2010). This has not been without consequence; by Alecto’s own observation and that of others working in the same group, it appears that Dr. Alecto is being shunned by faculty peers for expressing aberrant views;
I prepared a number of modules which were non-examinable modules that I'd hoped the University would take up... teaching modules which I had written, prepared, and presented to the dean of the faculty down here to have them completely and totally discarded.

I: Did the Dean tell you why?

Dr. Alecto: No. Never spoke to me again. So yeah. Never heard a thing about them....Here I presented these modules to the dean of the faculty down here, and I have not heard a single word about them since.

I: So you didn’t get any feedback? It’s not, “These are crap, these are good”? just nothing?

Dr. Alecto: Nothing. Just nothing

Of course it could be that Alecto’s modules were substandard, although even if so, some sort of reply could reasonably be expected. But the avoidance behaviour seems to relate to other aspects of Alecto’s work as well;

...they [used to] ask me to come and do the selection stuff and I did do so...but ...I made such a nuisance of myself that they don’t ask me to do anything like that

I: ...I guess I can see why you’ve ruffled some feathers ...

Oh, well and truly they don’t talk to me anymore. They still need me to teach, and they still need me to fill in gaps when somebody – when the wheels fall off something that – I’ve had to do that.

Negative role modelling in clinical practice undermines the carefully crafted messages on professionalism taught through the formal curriculum (Stephenson et al., 2006). By allowing Dr. Alecto to continue teaching, despite Alecto’s misogynistic views and apparently unprofessional mode of expression to fellow colleagues and students, are those who continue to employ him guilty of hypocrisy, if role modelling is the most effective method of teaching professionalism (Duff, 2004)? Or is it better that students are exposed to such views so that they may reflect upon and challenge them? If we consider our students to be emotionally mature enough and intellectually gifted enough to succeed in medical school, perhaps we should consider them able to confront strident and contrary views held by their teachers. What better way to truly know professionalism than to experience firsthand its antithesis?
The organisational culture of an academic medical centre is a great influence on the resulting professionalism of its graduates (Ludmerer, 1999) (West and Shanafelt, 2007). The continued presence of doctors like Alecto is a holdover from past modes of thinking and practice. The shared held wisdom of today is that these views are anachronistic and outmoded, and they should be discarded. The changes in medical education that send Dr. Alecto into a pink fit are now well entrenched trends. Evaluations show that at worst the quality of medical practice is not deteriorating because of them, and at best published research shows them to be beneficial, although publication bias and researcher bias may skew this, so Alecto might yet be shown to be right.

If we retain teachers who hold such views, we must be prepared to accept the continued influence of a hidden curriculum (Hafferty and Franks, 1994), and a certain amount of hypocrisy that we do so while emphasising professionalism in our curricula. No amount of formal teaching of professionalism will have any effect other than to increase cynicism in medical students if we do not remove these negative influences from the pathway to becoming a doctor (Inui, 2003, Parker et al., 2010, Kenny et al., 2003, Babaria et al., 2012). But we can hope that Dr. Alecto and those who think likewise are a vanishing breed. Perhaps the most rational, and humanistic, response would be to tolerate their idiosyncrasies, praise their accomplishments and wish them well on their impending retirement.

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Chapter 9: Conclusion

“We could fail to connect professionalism with systems-based practice issues and thereby, turn professionalism in on itself rather than outward toward the role of the physician as civic leader” Mark Kuczewski (2001) (p. 5)

A ceaselessly changing complexity is the norm in social life, and this is the open systems predicament. Ray Pawson (2006) (p. 18)

Professionalism, in the sense that doctors are more than just mechanics, but people with a human engagement with their patients and the world, is as old as medicine itself. It has been re-examined as an important component of medical education, and a valued attribute of medicine, in response to external threats to doctors from those that pay for their services and those who regulate them.

Rachel Naomi Remen, being interviewed for a popular magazine over a decade ago (Remen, 2000), made some telling observations about the state of medicine in modern society. She said that culture casts a shadow over the people in its path, and that medical culture casts a double shadow on its newest entrants- both the shadow of the culture that encases it and its own shadow (informal curriculum) resulting from the heritage and baggage of tradition.

It is dismaying that with so much talk of professionalism, there is scant evidence that any of the furious activity surrounding it has payed off in any measurable benefit to current doctors (Collier, 2012). It may be that the socialisation process of medical education, as well as the curriculum contents, are too focused on acquiring technical skill, an “additive rather than transformative” process (Coulehan and Williams, 2003) (p. 9). Rachel Remen (2000) worries that that the advent of technology as a focus in medicine turned ‘education’ into ‘training’.
The picture isn’t all bad, though. I am convinced from my research that:

1. If the doctors I surveyed are representative, the doctors who are serving as clinical educators now are dedicated, competent, and professional.

2. Doctors practicing today can recite instances of brazen unprofessional behaviour in their mentors and their peers. Rather than being the worse for it, they seem to have benefitted from the reflection, from the mental exercise of coming away from a bad experience asking ‘what’s wrong with that picture’, and getting an answer

3. Students today are perceptive. They can differentiate between professional and non-professional behaviour, and effective and ineffective teaching methods for it. Unfortunately, the professionalism teaching they are exposed to in their early years of training is too often the latter.

4. An ideal, or even a proven effective, methodology for teaching professionalism has still not been realised. While the literature is now in disarray, there are some leading thinkers who have established a core of ideas on how to teach and assess professionalism that may prove effective. Further reflection is necessary, focusing on the ideas of Hafferty, Remen, Wear, and a few others

5. The larger problem is the smothering of medicine by regulators, bureaucrats, and (especially in the U.S.) payers who have usurped not merely the autonomy in practice of doctors, but the very medical decision making that only they should be entrusted with. The U.S. health care system is compromised because the dollars not only come first, they are the only criteria by which the system is driven and judged. THIS is the threat to adequate medical care in that country, and there is no solution in sight.

6. The true worth of professionalism teaching, the true weight of impact of it, of course resides in current students. After enough time has passed, we can identify the professional traits that these students have assimilated, and
perhaps rate them on how professional they are. But while they are still in medical school they reflect not only their current formal teaching, but their assimilation of influences from the experiences they are having; from the null, formal, informal, and hidden curricula. All of these influences are processed through individual and group reflection. The bonds of camaraderie and deep friendship that these students form guide their professional identities, frames their socialisation into the medical fraternity. It also should push back. We should be able to identify the current of learning taking place, the dynamic flow of ideas and attitudes that are (and should be) the result of process that we as educators put into place. By merely relying on cursory user satisfaction evaluations, we stand to miss the rich detail of experiences and the processes outside of those we put in place and control that create the professional we ultimately let loose in the world.

7. Viewed as a set of attributes, professionalism should be viewed as an aspect of a doctor that has variability depending on stage of care, outside influences, organisational culture, and a host of other factors. If we could objectively measure professionalism in real time, we could link a doctor up to a meter registering current capacity in any of these aspects (your altruism is at 90% today but your life/work balance is only at 35%) , but we can’t, although Larkin (2003) has suggested a scoring system for performance assessment that might be useful..

The term ‘apprentice’ has fallen out of fashion, but the concept has been revived in recent decades in medical education. One of the most prevalent curriculum models on Australia follows a traditional apprenticeship form, with students learning their craft from an experienced practitioner. Allowed to do some work unsupervised, and considerably more under close supervision, the student is acculturated into the
profession, while still mindful that he/she is not in the fold just yet. Lave and Wenger (1991) have termed this situated peripheral learning.

Rural intensive placements present particular problems and opportunities for teaching all aspects of medicine, including professionalism. These placements hearken back to a previous age, where medical education, like education in all occupations requiring specialised technique and lore, was done through apprenticeships, often offered only through guilds, membership of which was highly restricted. The guild sets the professional parameters under which the novitiate learned to operate (practice), setting the tone for the entire career. Ber highlights this point in relation to teaching professionalism: “the power of the teaching of ethical and professional rules is overruled by the power of everyday clinical experiences” (Ber and Alroy, 2002) (p. 528).

Inherent in this model, though, is a potential source of confusion in the difference in perspective between those who teach from a perspective of practice (usually clinical or adjunct faculty), and those whose teaching role is contained in a purely academic setting. The former are likely to focus on pragmatism and routine at the expense of theory, and the latter to focus on theory detached from (or only marginally informed by) practice in the ‘real world’.

Also, rural medical practice is different from urban practice in the context, content, and process of provision of health care (Smith and Hays, 2004), and so requires the consideration of more complex learning objectives. Rural General Practitioners are more likely to practice a certain and identifiable range of skills than their non-rural colleagues. These are determined by the rural or remote context in which they choose to practice, the range of general practice skills in which they wish to involve themselves, and their ability to access specific training
and continuing professional development. Students need to be encouraged to adopt greater independence in their knowledge-seeking behaviour in order to accommodate this broader and more complex role.

The doctor patient relationship, the centrepiece of medical professionalism, used to be just a two way relationship between provider and recipient of health care. Today the relationship also involves the parties that pay for the care and the institutions in which it is provided. The primary interests of the latter two parties (cost of care and efficiency of service provision) are not those of the patient or the doctor (quality of care).

The collective view of doctors about their profession, and the clinical, social, and academic environments in which they practice, are constantly changing. An example; in the course of my research for this project I came across a much cited paper from the 1940s (Hall, 1948) on the stages of a medical career, including the organisational and social culture of medicine in an “eastern American city” (likely New Haven, Connecticut) in the 1940s. The paper had a clearly pejorative view of religious/ethnic groups who were not white, Anglo-Saxon Protestant- the “Yankee élite” (p. 329) of the community. These views would not be condoned, and could not be spoken in professional or polite lay society today;

“It's true that the Italians and Jews don't seem to catch on there”, and “The Yankee Protestant hospitals have the most adequate facilities, those organised by the Catholics follow, while those organised by the Jewish group or by medical sects (sic) are the least adequate. The prestige of the hospital is ranked accordingly.” (p. 330) and “…the upper-class Yankee generally goes to an undergraduate school…proceeds to Harvard Medical School, interns at the dominant Yankee hospital, and enters the competitive practice of medicine from that vantage point. The Italian lad aspiring to a medical career would find these avenues almost completely blocked” (p. 330).

Hall is not judging, merely observing a state of affairs that he appears to accept as the natural order of things.
In merely two generations of citation links, that is through only one intermediary paper (Eron, 1958), I came to modern papers by authors who would never espouse the beliefs held by the seminal author (Arnold, 2002, Lucey and Souba, 2010). Viewed this way, change seems downright sudden.

A SWOT analysis (Piercy and Giles, 1989, Gordon et al., 2000) for medicine, as regards professionalism, might look like Figure 9.1.

Figure 9.1: SWOT analysis- professionalism in medicine

<table>
<thead>
<tr>
<th>Internal Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence based practice</td>
<td>Resistance to change</td>
</tr>
<tr>
<td>Credibility of medicine</td>
<td>Perception of doctors as privileged beyond justification</td>
</tr>
<tr>
<td>Consensus on importance</td>
<td>Lack of uniform, validated assessment methodology</td>
</tr>
<tr>
<td>Healthy work/life balance expectations</td>
<td>Lack of uniform, validated teaching and learning systems</td>
</tr>
<tr>
<td>Decline in unprofessional (bullying) behaviour in medical training</td>
<td>Ineffective systems to deal with unprofessional behaviour</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>External Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td>Changing gender balance in the profession</td>
<td>Changing generational values in medical workforce</td>
</tr>
<tr>
<td>More knowledgeable patients</td>
<td>Bureaucratisation</td>
</tr>
<tr>
<td>Advances in understanding of how to implement effective role modelling, reflective practice</td>
<td>cost-driven over quality driven focus</td>
</tr>
<tr>
<td></td>
<td>More knowledgeable patients</td>
</tr>
<tr>
<td></td>
<td>Increasing litigation</td>
</tr>
<tr>
<td></td>
<td>Disconnect between reality of medical practice and media depictions of it (especially TV)</td>
</tr>
</tbody>
</table>

Does Doctor Alecto demonstrate professionalism? No, Dr. Alecto does not. Can he teach professionalism? No, Dr. Alecto cannot. Can a student learn professionalism through the experience of having Dr. Alecto as a preceptor or supervisor? Yes they can. The lessons learned will come from reflection on negatives (Brownell and Côté, 2001). I found in my interviews with clinicians, this is the way the current
generation of clinical supervisors learned it. We shouldn’t take comfort that this is a just, fair, or efficient system, but we can have some assurance that students exposed to misogyny and bullying are more likely to rebel against it than adopt such mannerisms. There is also the potential that they will follow the lower track of Hilton and Slotnick’s proto-professionalism model, becoming embittered and abandoning the field.

Limitations

There are several areas where my analysis and conclusions may be subject to distortion or bias. I am confident that I achieved thematic saturation in my interviews and focus groups with medical educators and students, in that I reached a point where further such interviews reinforced concepts already voiced rather than adding new perspective. Nevertheless, I interviewed a small number of individuals, and they came from a rather small subset of Australian medical schools. The rural setting in which most of the clinical educators worked may impart a perspective not shared by metropolitan based doctors.

Logistical practicality (convenience) was a factor in my participant selection, and this is always a potential source of bias. Potential interviewer/subject power dynamics in regards to students I interviewed and the potential for clinicians to speak in a fashion perceived as politically correct as opposed to their authentic beliefs also may have affected my findings. I have addressed these at length in the relevant chapters (6 and 7).
A new model

The Model

From my findings, especially the interviews and focus groups with clinicians and students, I propose a conceptual model for the acquisition of professionalism in medicine (Figure 9.2). This model is meant to highlight the formative influences on professionalism, and provide a framework for understanding both professional and unprofessional performance that might be achieved in a long placement with a good role model in a non-hierarchical setting.

Figure 9.2 A new model of professionalism
This double triangle model of the development of professionalism attributes emerged from my thematic analysis of the student professionalism focus group data. After coding the data across all focus groups I grouped themes into a tree structure, and then explored relationships. The double triangle geometry of the model came out in N’Vivo after I had entered the structural data to form a relationships diagram.

This model begins with what I have called ‘evolution’. This is the set of dynamic, interlocking cultural and societal influences that influence professional development. It includes the ways that societies view doctors and their roles, the systems that govern and provide health care, and even the literature that portrays the role of doctors in a society. It also includes the character-moulding actors that are part of any person's upbringing. We can't judge such factors to be bad or good in them. Some people grow up in atrociously poor environments; substance abuse – affected parents, poverty stricken home environment, for example, and yet go on despite of (or because of) that upbringing to become individuals with great integrity. Others have everything handed to them from birth - wealth, education, two parent family, and yet still (again because of or in spite of) develop dishonest or immoral personalities. We have limited abilities to judge, yet alone form character, but we must acknowledge its centrality in the development of professionalism.

The second tier of my model, both in formation and in sequence, includes the learning process. I have divided this into what is taught and what is learned, putting these opposite each other to reflect the yin/yang tension between them. What is taught comes from formal learning programs, in this case more particularly the curriculum of the medical program a student goes through and the clinical placements, internships, and registrar positions that follow. Of the schemes reviewed in Chapter 3, Gordon’s (2003) seems the most useful in providing a framework for how this could be approached. Wear and Castellani’s (2000) approach
provides a *focus* for professionalism education— that it should be on the *means* by which medical students become competently professional doctors— the intellectual tools gained from studies ranging across disciplines, including sociology, literature, leading to the development of what Wear and Castellani call a "sociological consciousness" (p. 608). This is as opposed to the more usual focus on *ends*— the actual traits and attributes that constitute professionalism.

In parallel is that which is learned the informal curriculum, the assimilation through reflection on formal training, and the peer sharing that is an important, but often overlooked, aspect of the journey from lay kid to doctor. We put much effort into teaching, but effort appears, by what I have seen and read through this process, to be based on assumptions that certainly are not true for all. The message given and the message received, and the formation of the professional persona, will be shaped through parallel experience and by building upon the nature of the formative effect of the evolutionary foundation.

Learning and teaching are separate constructs— the means by which these students are acquiring professionalism traits include exposure to formal teaching, but also exposure to exemplary individuals, situations, and structures that they encounter while on placements (and, to a lesser extent, elsewhere).

The effects of the ‘hidden curriculum’ are at work in the learning ‘cloud’, but also in the cloud which I have dubbed ‘experience’, which can be considered as ‘character building (Bryan and Babelay, 2009). These are the negative experiences—unprofessional behaviour in fellow students and clinicians, failing a PPD assignment, etc., that have been essential learning episodes both in these students and in the clinicians who are teaching them.
Assessment factors in both as a measure of and a driver of acquisition of professional attributes. When assessment is targeted at ‘competency’ in individual attributes of professionalism, it is too often a trivial undertaking, seen so by students. The concept of competency loses meaning (Brooks, 2009). Assessment methods to capture an integrated professional persona, looking at an individual doctor’s holistic professional persona, are not yet evident. Guided reflection, properly designed and assessed (Aronson, 2010), appears to be the best method of capturing professional development and so I balance assessment with (largely unassessed) experience as the culminating influence on professional development.

As the students in this research revealed, assessment appears too often to be narrowly focused- looking for specific tick marks on specific performance attributes to pass muster required conformity to a set of criteria, not all of which may be spelled out. It is understandable and rational that students should try to navigate this system by creating that which will give them high marks, regardless of whether it is a view they actually hold. The adage that assessment drives learning can be taken too far.

Professionalism is situational, relative, contextual (Martimianakis et al., 2009, Christmas and Millward, 2011, Chandratilake et al., 2012, Horlick et al., 2006). A very few people will engage in egregious unprofessional behaviour. All will engage in unprofessional behaviour sometimes. While professionalism can be broken down into attributes which can then serve as foci of teaching and assessment, these attributes are neither easy to define or easy to measure; the “notion of demonstrating compassion is a vague and intangible object that is nearly impossible to quantify” (Larkin, 2003) (p. 168). Individuals who excel in one aspect of professionalism may be poor in others (Wilkinson et al., 2009).
There are, however, useful strategies that can be incorporated to provide a framework for presenting to students what is expected of them and how these will be measured. Rather than attempt an exact quantification, an assessment measure that incorporates a subjective component, such as a sliding scale from +2 to -2 (Larkin, 2003), or a more formal Likert scale (Savoia, 2007) can realistically portray a student’s progress.

Action verbs go with the links between ‘clouds. Teaching determines what can be assessed. Evolution influences both learning and teaching. Teaching, learning, assessment, and experience contribute to resultant professionalism attributes directly, evolution indirectly.

The domain of lived experience should perhaps be larger than the others. Depending on the preparation and orientation students bring to their formative years, this experience will mould them in ways particular and unpredictable-unmeasurable in essence. Hilton/Slotnick’s proto-professional model (Hilton and Slotnick, 2005) describes this situation. Some experience in some people produce negative results; bitterness, inability to relate to patients, inability to balance life and work. In worst cases, and evidently rarely, the sum total of these experiences in a person prone to pathological thinking results in a truly aberrant, unprofessional individual- a Dr. Death, a Mengele. In others, the experiences are cumulatively beneficial, with professional persona built even from the experience of negative or abusive experiences.

**How it might work**

Patterning professionalism education to incorporate this model would begin with student selection (Albanese et al., 2003, Powis, 2010, Ferguson et al., 2000, Lumsden et al., 2005, Poole et al., 2010). Students will have formed concepts of what
professionalism is upon entry to medical school, even before being formally introduced to the concepts (Michalec, 2012), but there is still much to be learned about how to be effective in evaluating this (Siu and Reiter, 2009, Kreiter et al., 2004).

As it is character that allows the full mastery of a professional ethos, this must be an important aspect of assessing candidate’s fitness for medicine (Gordon, 2003a, Vaidya et al., 2004). Character has lately been revisited in the leadership literature (Wright and Quick, 2011, Hannah and Avolio, 2011), and there have been a small number of medical educators who have reflected on the ability of medical schools to build character (Bryan and Babelay, 2009, Radden and Sadler, 2008, Stern, 2000, Vaidya et al., 2004).

This we already do, and the evaluation results of medical school admissions procedures that weight interviews, especially structured interviews, more than grades are promising (Kumar et al., 2009, Roberts et al., 2009, Foster et al., 2010). The mini interview process, for example, does not assess prospective students’ particular knowledge of healthcare or even basic science. The questions typically used focus on moral and ethical dilemmas. Emotional Intelligence is a closely related measure (Carrothers et al., 2000, Grewal and Davidson, 2008, Weng, 2008), as is personality (Knights, 2005).

By enrolling candidates through assessment of character, those charged with enrolling and training the next generation of doctors can have some assurance that the cohorts they enrol will be a credit to the team. There is, however, no assured method, no validated metric that can be trusted as a reliable measure.
Teaching in the early years.

The teaching of professionalism should be integrated into all years of the medical curriculum, and across all disciplines included in the curriculum. To set it apart leads to it being viewed by students as a drudge aspect of the course; a make-work, politically correct waste of time. Population health and research methods, among other curricular aspects, have long been viewed as such by medical students.

It makes sense to teach attributes of professionalism in early years. My use of the term attributes is very deliberate. The views of professionalism as an ethos and as a set of attributes have a large overlap. Ultimately it must be an ethos, but at present we are best able to teach and assess attributes. We must bear in mind, though, that the teaching of professionalism as a set of attributes, focusing on each attribute in turn, runs the risk of imparting narrowly framed knowledge, outside of the framework of a comprehensive patient care picture. This can lead to technical skill devoid of personal context. Science, devoid of art. Treatment, not care.

In the early years of a medical degree program, medicine is taught in an essentialist manner, as a training more than an education, with the role of the teacher being one of an expert who passes on knowledge rather than a scholar who teaches ways to think and thus develops wisdom (Freshwater and Stickley, 2004). A focus on ethics in these early years may foster the development of moral reasoning (Hren et al., 2011).

Fox’s caution, that the solution to this and other perceived problems in medical education is to “inject designated new course into the curriculum, as if they were intellectual magic bullets” (Fox, 1990) (p.204), should be taken to heart, but not as an absolute discouragement to curriculum reform. The problem is that whenever something’s
added to a medical curriculum, something has to be reduced or eliminated to make way for it.

As one clinician respondent put it:

Try and weave it into the teaching about everything so it's not a separate subject, but it's implicit in every subject. So in a way separating it doesn't help in the teaching of it. So weaving it into all aspects of training makes it more likely to be learned.

Early exposure to patients in a supportive clinical setting is one of the best means of embedding professionalism in students, more effective than didactic teaching. While my research on students involved those who were still in their pre-vocational years, I am encouraged by what I found to hold the view that a clinical placement, of a suitably long duration (certainly more than a few weeks) under the guidance of an experienced and empathetic supervisor/mentor/preceptor, can effectively catalyse the development of a professional persona that will endure and prosper further. If the present clinicians could come through the bullying experiences they had as students and rise above that to reject bullying and embrace the antithesis, how much better should the next generation of doctors be for not having to deal with that.

Teaching in the clinical years

Mentoring and exposure to positive role models have been demonstrated as effective in assuring professionalism in doctors, both by my findings and by a large body of literature. Guided reflection will make transient incidents and experiences true learning moments, solidifying and honing the professional persona of a young doctor in training. It will also provide the insight that unlike clinical skills, which, when once learned, can be mastered for all time, professionalism is tested and renewed continually.

Medical practice is an inherently high-stress calling, requiring critical thinking skills, and ability to reflect and learn from mistakes, and an ability to function in a
contentious environment. Clinical placements start the introduction to this ‘real world’ of practice, which is continued not merely through vocational training and residency, but continually, as the doctors I interviewed knew well, throughout a life of practice. The teaching of emotional intelligence (Taylor et al., 2011) may be either a viable alternative, or, more likely, an additional strategy to augment other methods of teaching professionalism (Weng, 2008, Weng et al., 2008).

But that teaching itself should also be professional. Ludwig von Hess (1775) (translated by Broman (1995) (p. 861)) bemoaned the fact that in 18th century Germany training of doctors was substandard or nonexistent. Flexner (1910) found a similar situation in the United States in 1910. Likewise today, Steven Jonas is bemused by the contrast that his qualification to be a ski instructor is continually and rigorously assessed, yet he has never had to demonstrate teaching experience or ability in his 30 year tenure as a medical educator (Jonas, 2000). I have been a medical educator continually for over 20 years, yet I have never received formal training, nor been formally assessed, as a teacher, other than through ‘user satisfaction’ evaluations filled out by my students, which don’t even factor into my annual performance review.

All of these influences on medical students are processed through individual and group reflection. The bonds of camaraderie and deep friendship that these students form guide their professional identities, frames their socialisation into the medical fraternity. It also should push back. We should be able to identify the current of learning taking place, the dynamic flow of ideas and attitudes that are (and should be) the result of process that we as educators put into place. By merely relying on cursory user satisfaction evaluations, we appear to be missing the rich detail of experiences and the process outside of those we put in place and control that create the professional we ultimately let loose in the world.
Finis

As I began with Dr. Klotho, so I will end;

Easter is traditionally a time of new beginnings, a time of renewal.
I write this in the hope that you may take time in the break to reflect on the fact that we all have the choice of working together to make our offices a more nurturing place to work.
Over the past few years I have been “the patient” rather too often but it has given me the gift, perhaps late in my career, to understand what patients may really need.

- I needed to be met, not as a person who was sick, nor as a doctor, but as me
- I needed to be truly heard with empathy and compassion
- I needed to be treated at all times, but especially if I was fearful, with tender loving care

I believe this is what we need to teach our students, but not through lectures but through example.
We can’t teach it if we don’t live it.
We have the choice to make our workplace a more nurturing and sustaining environment.
We can choose to be less critical and to be less judgmental
We can choose not to react with anger or frustration
We can choose to be more respectful and more understanding
We can choose to treat one another with the tender loving care we ourselves would like to receive.
This comes with love and the hope that we can learn to live more gently together and tread more lightly on the earth.

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VON HESS, H. L. 1775. Freymüthige Gedanker über Staatssachen.


Appendix A: Voluntary Clinical Eucatoras at the Sydney Medical School
“It’s an integral part of being a doctor”: Recognising the contribution of voluntary clinical teachers (a qualitative survey)

Reid, Sharon, Birden, Hudson, Usherwood, Tim;

Abstract

Medical education has followed the medical workload into the community, reverting to an older apprenticeship model of teaching in doing so. This study looks at the factor that GPs see as motivators and barriers in their assumption of a clinical educator role. We conducted semi-structured interviews with voluntary clinical educators teaching for the Sydney Medical School, asking them to discuss their experience and the benefits and detriments that they perceive in filling this role. Consistent with other reports in the literature, we found that clinicians teach because they receive personal and professional satisfaction from doing so, and consider educating the next generation of doctors an important contribution, if not a duty, to the profession. Their overriding problem is time management.

“…to teach them this Art, if they shall wish to learn it, without fee or stipulation” (Talley and O’Connor, 1996)

Introduction

As the traditional teaching hospital environment is becoming increasingly the domain of acute care and super-specialisation, much of the care of chronic conditions is now done in general practice. Medical education has followed the medical workload into the community, reverting to an older apprenticeship model of teaching in doing so. Hence,
doctors based in hospital and private practice, in General Practitioners (GPs) and other specialties, are increasingly taking the role of clinical educators (Parry and Greenfield, 2001, Pearce et al., 2007).

In most cases, this is an unpaid, voluntary role; an “unfunded mandate” (Inui, 2003). It has been found to work well (Kjaer et al., 2010, Howe, 2004), but depends on the clinical educators devotion to the profession, not any financial reward for themselves.

This study looks at the factor that GPs see as motivators and barriers in their assumption of a clinical educator role. Our assumptions were that clinical educators working in similar medical practices and teaching in the same curriculum would have similar thoughts and notions about barriers and motivating factors, but that based on practice location (mainly urban/rural), length of time in medical practice and in teaching, and type of practice (mainly GP/specialist) would also have distinct variations in views stemming from this diversity.

Considerable research has been undertaken to answer the question: ‘what makes a good clinical teacher?’ (Knight and Bligh, 2006, Chitsabesan et al., 2006). Voluntary clinical educators serve as teachers and role models (McLean, 2006) to students in the areas of medical expert, professional, scholar, communicator, collaborator, patient advocate, and manager (Snell et al., 2000). Doctors take on students and devote time to their training needs for the professional and personal satisfaction that the activity brings (Scott and Sazegar, 2006). Medical education is approached with a mix of ultra-modern, high tech approaches mixed with elements from the days of apprenticeships (Dornan, 2005, Walter, 2006, Brazil et al., 2002).

In order to be effective, clinical educators need extensive support systems and structures from the parent university (Hauer and Papadakis, 2009, Thistlethwaite et al., 2007b). These are not yet in place in most settings, although programs which develop and nurture teaching skills and provide support for clinical educators are starting to appear (Wilkes et al., 2006, Henderson et al., 2010). A survey of 195 GPs in greater Sydney identified a need for training programs for clinical teachers (Molodysky et al., 2006). A recent review of the literature on
GP clinical teachers in Australia found that there is a critical lack of academic support for GP clinical teachers (Christensen, 2008).

Supports/incentives for clinician educators may include clinical or adjunct academic appointments, which may have as added benefits access to on-line journals, textbooks, and other resources (Maley et al., 2006, Baldor et al., 2001) and assistance with developing research and publication skills. It is apparent that teaching has a cost associated with it.(Laurence et al., 2010).

Previous research has identified motivators to effective clinical teaching. These include as motivators duty to/pride in profession (Molodysky et al., 2006, Ferenchick et al., 2002, Latessa et al., 2007, Hanlon et al., 2010), enjoyment of teaching (Molodysky et al., 2006, Gray and Fine, 1997, Howe, 2000, Baldor et al., 2001, Ferenchick et al., 2002, Latessa et al., 2007, Haffling et al., 2001), teaching as a means to keep the clinicians’ learning & skills up to date (Molodysky et al., 2006, Gray and Fine, 1997, Baldor et al., 2001, Ferenchick et al., 2002, Latessa et al., 2007, Haffling et al., 2001), increased quality of patient care as a result of engagement in clinical teaching (Ferenchick et al., 2002, Gray and Fine, 1997, Howe, 2000, Baldor et al., 2001, Latessa et al., 2007, Haffling et al., 2001), financial reward (Gray and Fine, 1997, Baldor et al., 2001, Latessa et al., 2007), prior involvement in teaching (Howe, 2000), and access to University resources in exchange for teaching (Latessa et al., 2007).

In addition, barriers to clinicians taking up teaching roles have been identified, including lack of time to teach (Molodysky et al., 2006, Gray and Fine, 1997, Howe, 2000, Hanlon et al., 2010, Seabrook, 2003, Haffling et al., 2001), lack of adequate university support for teaching (Seabrook, 2003, Christensen, 2008, Howe, 2000, Baldor et al., 2001, Haffling et al., 2001), lack of space to teach in (Gray and Fine, 1997, Seabrook, 2003, Haffling et al., 2001), lack of opportunity to teach (Molodysky et al., 2006), lack of teaching skills or confidence in them (Gray and Fine, 1997, Howe, 2000), lack of remuneration or other tangible reward for teaching (Howe, 2004, Gray and Fine, 1997, Howe, 2000, Seabrook, 2003), increased stress from teaching (Rutter et al., 2002, Baldor et al., 2001, Haffling et al., 2001), negative effect on
the doctor-patient relationship in consultations where students are present (Haffling et al., 2001), and lack of recognition or appreciation from the university (Seabrook, 2003).

As health care delivery systems become more ever more focused on bottom line economic drivers, with non-clinician bureaucrats administering health services within which clinical teaching is carried out, voluntary teaching becomes vulnerable (Seabrook, 2003).

Clinician educators can experience some difficulty with the split role, primarily by having to redirect time from seeing patients to teaching, although it has been demonstrated that student supervision does not necessarily increase consultation time (Walters et al., 2008). The inconvenience can be offset by the benefits that will accrue from teaching activity, such as having students available to perform some limited functions, and by the opportunities to further develop their educational and clinical skills that will result from reflection on practice.

In Australia, Clinician/Educators in accredited practices can apply for a Practice Incentive Program (PIP) payment of $200 per day (Medicare Australia, 2007). This is intended to cover the costs of teaching time that is integrated with clinical practice, rather than dedicated teaching time. A similar scheme, Service Increment for Teaching (SIFT) exists in the UK.

**Previous research**

Simpson et al provide a useful guide to developing a clinical educator program based on their 15 years of success in building a faculty development program at the Medical College of Wisconsin that grooms general practitioners as physician educators. They credit support and endorsement by department leadership, alignment of educator roles and creation of durable educational materials with institutional needs, a multidisciplinary faculty development team, and extramural funding to enhance program structure and local creditability as keys to the success of their program (Simpson et al., 2006).
Thistlethwaite and colleagues (Thistlethwaite et al., 2007a) have enumerated the benefits of focusing medical education activities in community, rather than teaching hospital settings. These include breadth of clinical experience available in GP practices, ability to following the trend of illness care, increasingly is performed out of hospital (patient journey), allowing training to align with current conceptions of health, focusing on the whole individual and equalising efforts at prevention with efforts towards cure.

Being a clinical educator provides the doctor with intellectual challenge and personal academic opportunities through links with a university, but in the absence of salaried academic positions, current educational models are heavily reliant on a sense of ethical responsibility and goodwill. Shannon and colleagues at Spencer Gulf Rural Health School in South Australia found that 91% of preceptors view their role as a positive one for their practice (Shannon et al., 2006), although further research is necessary to determine the true impacts of medical education on the provision of patient care by practices who agree to act as preceptors (Walters et al., 2005). One study has found that students had a positive effect on general practitioner productivity, without any loss in patient satisfaction (Worley and Kitto, 2001).

Rural practitioners approach their work in ways that are subtly and not so subtly different from their urban counterparts (Hays and Sen Gupta, 2003). Rural doctors require a wider range of general and specialist skills than provincial and metropolitan doctors, with additional training to equip them for the distinctive and diverse work environment (Wise et al., 1992). Rural medical practice is different from urban practice in the context, content, and process of provision of health care (Smith and Hays, 2004), and requires the consideration of more complex learning objectives. Rural General Practitioners are more likely to practice a certain and identifiable range of skills than their non-rural colleagues. These are determined by the rural or remote context in which they choose to practice, the range of general practice skills in which they wish to involve themselves, and their ability to access specific training and continuing professional development. Rural clinical placements of longer duration have been shown to deliver benefits in quality of learning experience (Denz-Penhey et al.,
Howe (Howe, 2000) has described a ‘cycle of satisfaction’, a supportive teaching environment that develops when motivated teachers, well supported by a responsive team of practice partners and university colleagues combine with cohorts of well prepared students who are eager to learn. She (Howe, 2001) has also shown that students learn more from community placements by experiencing a longitudinal view of health needs in a patients’ social and environmental context. In primary care, the doctor/patient relationship itself is a therapeutic tool. Through this students gain a focus on person rather than disease, with an added benefit that they experience this, ideally, in a team-oriented approach. She suggests that an enthusiastic teacher, committed to teaching, may maximize the learning experience for students more than would formal teaching skills.

Methods

We obtained lists of clinical educators from Departments of General Practice within the clinical schools of the University and Divisions of General Practice (the regional bodies supporting GPs) of the University of Sydney. We defined as voluntary clinical teachers those medical practitioners who teach medical students and receive no direct financial compensation for this work. University-paid academics and conjoint appointees were therefore excluded, but doctors with honorary or clinical appointments were included.

We then used purposive sampling, choosing participants from these lists based on specialty and location. We selected clinical educators from a range of metropolitan and rural teaching sites of the University. While this sampling method may not have resulted in a sample that can be said to be truly representative of all clinical educators in the system, we are confident that it captures a broad range of perspectives and opinions.
We conducted semi-structured interviews with voluntary clinical educators teaching for the Sydney Medical School, asking them to discuss their experience and the benefits and detriments that they perceive in filling this role. Interviews were conducted by telephone and transcribed verbatim. Transcribed interviews were analysed using an iterative and interpretive process to identify major themes and provide insight into issues raised by the clinical educators. We continued the process until saturation was evident.

We were interested in identifying the range of views, ideas and suggestions expressed by voluntary clinical teachers, not the proportions of teachers who held these views. In order to collect as diverse a range of views as possible, we used a purposive sampling technique, maximal variation sampling (2). We identified four attributes of voluntary teachers that we could readily measure and that we hypothesised might be associated with differing views. These attributes were:

- Location (one of the four clinical schools of the Faculty, or rural);
- Employment classification (general practitioner, staff specialist, or visiting medical officer);
- Clinical (ie. honorary) academic status (clinical academic appointment held or not held);
- Specialist interest, if a staff specialist or visiting medical officer (medical, including paediatrics and psychiatry; or surgical, including anaesthetics, gynaecology, obstetrics and radiology).

Ethics approval was obtained from the University of Sydney Human Research Ethics Committee (Ref No.04-2008/10790).

Results

In Phase I of the study, carried out by SR, Fifty-two voluntary clinical teachers were approached. Three declined to participate or did not return phone calls. The 49 teachers who participated represented 34 of the 50 potential permutations of the sampling attributes. The shortfall occurred because 16 permutations were not able to be identified amongst
University lists of voluntary clinical teachers; there were no clinical academic general practitioners at two of the clinical schools, for example.

In Phase II, an additional seven clinicians were interviewed by HB.

General Practitioners and clinical educators in other specialties held similar views, although GPs, as small business operators, were more mindful of the economic impact of their teaching roles.

The potential for teaching to improve the clinicians’ skills was evident;

if you practice in a certain way for a length of time, then working with the students will often challenge or confront you in terms of why you make decisions in certain way. And having to explain them and justify them to the students, and provide evidence in terms of your approach I think helps to not only strengthen your knowledge, but also sort of reinforce continual evaluation of your skills

Although these clinicians are unpaid, they did appreciate that infrastructure supports were provided to support their efforts.

the university has taken a more active role in terms of education within the hospital, which I think is a real benefit, and they have huge strengths in terms of offering their resources to the hospital

Rural clinicians have a different set of concerns than their urban counterparts due to the intense familiarity that a small town can engender. This can be a detriment or an advantage;

The population doesn't hide you. So that when you know you’re doing well, your population encourages you, and that's great because – and I get people coming to me, and I'm not using this as a boast, but I find this personally gratifying, and I'll start the spiel about why they need this particular procedure, and they'll say to me, “Oh look, don’t worry doc, you operated on my sister and you operated on my Uncle Harry and somebody else, and they have said there’s no alternative. I have to come to you, and whatever you say should be done, should be done.” That doesn't mean that you don't go through the normal explanations, but it builds a much stronger confidence to be able to work with that particular person. And our community does foster that.

Clinicians may also be attracted by new opportunities to shape the career abilities of the student cohort in directions they collectively deem important for the future, for example in improving knowledge and skills in preventive and multidisciplinary care.
All participants reported benefits from their involvement with teaching. One respondent was unable to identify any personal benefit, but all those interviewed described professional benefits. The theme categories of reported personal and professional benefits are listed in Boxes 1 and 2 respectively. The majority of identified theme categories included responses from all subgroups of participants. However, in the areas of professional development and contributions to patient management, general practitioners tended to identify a direct impact on clinical care as a benefit, while visiting medical officers and staff specialists noted the value of being motivated to maintain basic skills, and of the reduced professional isolation that teaching involvement could offer.

Respondents all felt a strong compulsion, a calling, really, to give back to the profession that nurtured them through to professional maturity;

back in my day when there were university professors but there were no staff specialists, we all got taught our medicine by voluntary teachers who just gave their time and that was it. So I think all of us from that generation also want to repay that debt that we feel

if I’m not willing to donate my time in terms of teaching, then that means that ten years from now there’s not somebody who is competently trained coming up behind me as a colleague

If you care about the subject, you want to know that there’s going to be another generation that’s going to also care about the subject, that’s also going to be informed, trained

Box 1: Personal benefits reported by participants, with examples

<table>
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<tr>
<th>Joy of teaching</th>
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<td>“I love it”</td>
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<td>“enormously enjoy...satisfying”</td>
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<tr>
<td>“get a kick”</td>
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<td>“warm inner glow”</td>
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<tr>
<th>Interacting with students</th>
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<td>“pleasant people”</td>
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<td>“interaction...especially enjoyable with some students”</td>
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<tr>
<td>“excellent to have one-to-one contact with student”</td>
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<td>“to see their interest..to see their amazement is satisfying”</td>
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<tr>
<th>Keeping in touch with young people</th>
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<tr>
<td>“keep in touch with younger attitudes to medicine and life”</td>
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<tr>
<th>Reflecting on personal values</th>
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<tr>
<td>“may get picked up on values you put across...students will question”</td>
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Box 2: Professional benefits reported by participants, with examples

<table>
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<th>Professional development</th>
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<td>“students stimulate you to go back to the basics and first principles”</td>
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<td>“practice...reflection on the art of history taking...simple physical exam”</td>
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<td>“keeps you on your toes...especially outside your own field”</td>
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<td>“provides a focus to keep up academically”</td>
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<th>Contributions to patient management</th>
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<td>“Student often asks a question never asked before”</td>
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<tr>
<td>“opens up new slants on problems...provides patient insights”</td>
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<td>“think about the problem again...more critical of management...patients like it”</td>
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<th>Enhancing the workplace</th>
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<tr>
<td>“brightens the day...particularly in the country where students are a novelty”</td>
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<tr>
<td>“helps contribute to the team atmosphere in operating suite”</td>
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<tr>
<td>“allows a diversity of interests...clinical, teaching and research...lots of options”.</td>
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<th>Developing networks</th>
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<tr>
<td>“being around institutions allows social and professional contact with colleagues”</td>
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<tr>
<td>“establish contacts on campus”</td>
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<tr>
<td>“involvement with university enhances research opportunities”</td>
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<th>Promotion of own discipline</th>
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<tr>
<td>“waving the flag...role of (my speciality) in the bigger medical scheme”</td>
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<tr>
<td>“laying the seeds for rural doctors”</td>
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<th>Access to resources</th>
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<tr>
<td>“Internet access”</td>
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<tr>
<th>Kudos</th>
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<tr>
<td>“title an honour...looks good on published papers, court appearances etc”</td>
</tr>
<tr>
<td>“title provides academic standing, locally and internationally”</td>
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<tr>
<td>“kudos ...helps expand services”</td>
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The disadvantages of teaching

Respondents identified a range of disadvantages stemming from their teaching activity, categorised in Box 3 into six themes. The most frequently mentioned difficulties were the time commitment, and the resulting conflicts with professional and personal responsibilities. A number of respondents, especially rural doctors, reported feeling overloaded or stressed at the multiple demands that they faced. General practitioners and visiting medical officers also reported significant forgone income, either as the opportunity cost of giving up part of the clinical day to teach, or because the presence of students tended to slow their clinical
work. Most of the respondents were prepared to tolerate this, and many mentioned the professional obligation to teach (see Box 4). However, several expressed the view that money may become more of an issue in the future.

In addition to problems relating to the time commitment, several teachers mentioned difficulties arising out of the behaviour of individual students. There was a concern for being taken for granted that once a clinician has engaged as a clinical teacher the demands to do more of that work tend to expand.

the assumption is, that's just going to happen, because that's what you do

We are clinicians with a wealth of knowledge and a wealth of experience, but not necessarily teachers, and some people certainly seem to be very good, natural teachers and some people are less so. So I would have thought some way of having a program of teach the teachers would be an extremely good idea

As the medical curriculum has become fuller and more tightly scheduled, some clinicians feel stressed to make room for teaching:

often the time that is possible for them is not all that convenient for me

I belong to an era when to have an appointment to a teaching hospital was a mark of standing as a consultant, and teaching automatically came with that. But even had teaching not automatically come with that, I still would have wanted to do it

Individual clinicians don’t work in isolation from one another.

we all see each other every day at the hospital. We all talk to each other and we're all involved in the same things

A ‘town and gown’ separation was noted by some, especially as regards communication between the university and the clinician and an appreciation at the university level for the particular situation and needs of community clinical work especially in rural areas.

they just are unaware of the reality of things outside of the five-star teaching hospital

the environment in the hospital has to be one that facilitates education. I also think it has benefits outside of just medical education... it's going to permeate through all ... health care staff.
Box 3: Disadvantages of teaching, with examples

<table>
<thead>
<tr>
<th><strong>Time commitment</strong></th>
<th>“if you want to do it properly it takes time”&lt;br&gt;“time...a huge premium...working 84 hour weeks...need to squeeze in teaching hours”</th>
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<tbody>
<tr>
<td><strong>Conflict with other professional responsibilities</strong></td>
<td>“time constraints...need to get through the patient load...see all the patients I need to”&lt;br&gt;“time away from other things...research, clinical, earning money...”&lt;br&gt;“reduced interplay with rest of department......busy with medical students”</td>
</tr>
<tr>
<td><strong>Conflict with personal responsibilities</strong></td>
<td>“spend hours outside normal work preparing”&lt;br&gt;“longer day.....lose personal time”</td>
</tr>
<tr>
<td><strong>Feeling overloaded/stressed</strong></td>
<td>“can only give so much...will be concerned if demands increase”&lt;br&gt;“mentally taxing”</td>
</tr>
<tr>
<td><strong>Forgone income</strong></td>
<td>“may become an issue if load increases”&lt;br&gt;“loss of income not an issue for me but may be for future generations...not too many guys will be prepared to teach for nix....especially with the disparity between full time academics and visiting staff”&lt;br&gt;“giving time for nothing, especially difficult in (my specialty). Time equals lost income..in effect paying to have students there..inevitably see less patients..or longer to see the same load”</td>
</tr>
<tr>
<td><strong>Problems with students</strong></td>
<td>“type of student can be a problem...may create bad feeling in smaller communities”&lt;br&gt;“not always reliable...go to a lot of trouble and they don’t always turn up”</td>
</tr>
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</table>
**Box 4: The professional obligation of teaching**

“not a chore...an essential part of my role”

“passing on the baton”

“a commitment, an urge to teach...putting something back into the profession”

“part of academic life..involved with a teaching hospital..if not interested, shouldn’t be involved.......responsibility as a role model”

“an investment in the future...hand down to the next generation...we were taught...they gave time freely to us...if we don’t look after them who will?”

“fair to put something back...my little bit”

---

**Participants’ suggestions**

Participants in the survey made a range of useful and creative suggestions for appropriately recognising their role in medical student education. These included the following:

* A much greater level of acknowledgment by the University of the contribution of voluntary teachers, ranging from the courtesy of saying ‘thank you’, to a more streamlined and clinically relevant system of honorary academic appointments;

* Improved communication with voluntary teachers, including newsletters, meetings, and feedback of student evaluation;

* News of students’ progress;

* Involvement of voluntary teachers in curriculum design;

* A greater level of consultation with voluntary teachers as a part of curriculum management;

* A greater level of support for voluntary teachers, including training, guidelines and
appropriate course material;

* Improved access to University teaching resources, especially those available on the Internet;

* More tangible rewards, including payment, discounts on University professional development courses, texts and occasional social functions.

Discussion

Our findings are consistent with those of others studies, including in Australia (Molodsky et al., 2006): Clinicians teach because they enjoy it and consider it an important contribution, if not a duty, to the profession. Teaching does increase doctors sense of personal satisfaction and professional well-being (Kumagai et al., 2008). Their overriding problem is time management.

A number of other important issues have also emerged. Professional advantages such as enhancement of the workplace, development of professional networks and the promotion of their own speciality or location (especially for rural doctors) were highlighted by this study. Disadvantages emphasised by this study included the clinicians concern about competing demands on their time and the increasing significance of income forgone to teach.

In regard to how universities might better recognise the contribution of voluntary clinical teachers, this study seemed to support the importance of intangible rewards such as demonstrated appreciation, good communication, teacher feedback, consultation and inclusion as part of the University team. In addition, while practical teaching resources were also widely sought, there was variable attitude to gifts and tokenism. This study also highlighted the varying interest in academic titles and emphasised the importance of recognising clinical expertise.
We report the findings of our study as we feel that this is likely to be valuable information for medical schools other than our own. Voluntary clinical teachers are an heterogeneous group of people who clearly differ in what they enjoy and value, what they find unsatisfactory or irksome, and how they wish their contributions to be recognised. We adopted a purposive sampling strategy as we wished to identify as wide a variety as possible of these views and attitudes. However, no sampling scheme is perfect, and it is quite possible that further themes would have emerged had we continued to interview more teachers. In particular, we might have learned more about the perceived disadvantages had we interviewed doctors who do not teach students.

Our approach to data analysis is also open to criticism. Theme categories identified through the process of content analysis may reflect the unconscious assumptions and biases of the investigator as much as they represent the intended meanings of respondents (O'Connell Davidson and Layder, 1994). However, the method is widely used for studies such as this, and the theme categories that we identified do seem to have face validity.

With these caveats, it seems that voluntary clinical teachers obtain a variety of personal and professional benefits from their role, but that they also give up time, income and other advantages. Many are sustained by a sense of professional obligation to teach, but the University must beware of eroding their goodwill through lack of explicit appreciation, neglecting to communicate and to listen, and failure to provide support, access to resources and, when appropriate, more tangible rewards. Unless the voluntary teachers of our institution are particularly unusual, these conclusions seem likely to apply to medical faculties other than our own.

Conflicts of interest.
The authors are all salaried medical educators with the University of Sydney.
Acknowledgements

We are grateful to the doctors who agreed to be interviewed, to Heather Talbot for transcription services, to Rod Hart and the Faculty of Medicine bridge staff for facilitating telephone interview recording, and to the Departments of General Practice, Sydney Medical School, for providing lists of clinical educators.

References


HANLON, N., HALSETH, G. & SNADDEN, D. 2010. ‘We can see a future here’: Place attachment, professional identity, and forms of capital mobilized to deliver medical education in an underserviced area. Health and Place, 16, 909-915.


MCLEAN, M. 2006. Clinical role models are important in the early years of a problem-based learning curriculum. Medical Teacher, 28, 64 - 69.


Appendix B: Ethics Approval Letters
Dear Professor Usherwood

Thank you for your correspondence dated 17 May 2010 addressing comments made by the Human Research Ethics Committee (HREC). The Executive Committee of the HREC, at its meeting of 1 June 2010, considered this information and approved the protocol entitled “Personal and Professional Development in medical students: Identification of concepts and experiences of medical students”.

Details of the approval are as follows:

Protocol No.: 12759
Approval Period: June 2010 to June 2011
Authorised Personnel: Professor Timothy Usherwood, Mr Hudson Birden

Documents approved:
Participant Information Statement (Revised)
Participant Consent Form (v3 3 May 2010)
Email script
Invitation to Participate
Focus Group prompts
Interview questions

The HREC is a fully constituted Ethics Committee in accordance with the National Statement on Ethical Conduct in Research Involving Humans-March 2007 under Section 5.1.29.

The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Research Involving Humans. N.B. A report on this research must be submitted every 12 months from the date of the approval, or on completion of the project, whichever occurs first. Failure to submit reports will result in the withdrawal of consent for the project to proceed. Your report will be due on 30 June 2011, please put this in your diary.

Chief Investigator / Supervisor’s responsibilities to ensure that:

1. All serious and unexpected adverse events should be reported to the HREC within 72 hours for clinical trials/interventional research.
Dear Professor Usherwood

Thank you for your correspondence dated 18 May 2009 addressing comments made to you by the Human Research Ethics Committee (HREC). After considering the additional information, the Executive Committee at its meeting on **16 June 2009** approved your protocol entitled **“Personal and Professional Development in medical education: Identification of concepts and capacity in clinical educators”**.

Details of the approval are as follows:

**Ref No.:** 06-2009/11725  
**Approval Period:** June 2009 to June 2010  
**Authorised Personnel:** Professor Timothy Usherwood  
Mr Hudson Birden  
Dr Coralie Wilson  
Professor Liz Farmer

The HREC is a fully constituted Ethics Committee in accordance with the **National Statement on Ethical Conduct in Research Involving Humans-March 2007** under Section 5.1.29

The approval of this project is **conditional** upon your continuing compliance with the **National Statement on Ethical Conduct in Research Involving Humans**. We draw to your attention the requirement that a report on this research must be submitted every 12 months from the date of the approval or on completion of the project, whichever occurs first. Failure to submit reports will result in withdrawal of consent for the project to proceed.
Chief Investigator / Supervisor’s responsibilities to ensure that:

(1) All serious and unexpected adverse events should be reported to the HREC as soon as possible.

(2) All unforeseen events that might affect continued ethical acceptability of the project should be reported to the HREC as soon as possible.

(3) The HREC must be notified as soon as possible of any changes to the protocol. All changes must be approved by the HREC before continuation of the research project. These include:

- If any of the investigators change or leave the University.
- Any changes to the Participant Information Statement and/or Consent Form.

(4) All research participants are to be provided with a Participant Information Statement and Consent Form, unless otherwise agreed by the Committee. The Participant Information Statement and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee and the following statement must appear on the bottom of the Participant Information Statement. *Any person with concerns or complaints about the conduct of a research study can contact the Manager, Ethics Administration, University of Sydney, on (02) 8627 8175 (Telephone); (02) 8627 8180 (Facsimile) or gbriody@usyd.edu.au (Email).*

(5) Copies of all signed Consent Forms must be retained and made available to the HREC on request.

(6) It is your responsibility to provide a copy of this letter to any internal/external granting agencies if requested.

(7) The HREC approval is valid for four (4) years from the Approval Period stated in this letter. Investigators are requested to submit a progress report annually.

(8) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely,

Associate Professor Philip Beale  
Chairman  
Human Research Ethics Committee

Copy: Mr Hudson Birden  hudsonb@med.usyd.edu.au

Encl.  Approved Participant Information Statement – interview  
Approved Participant Consent Form – interview  
Approved Participant Information Statement – focus group  
Approved Participant Consent Form – focus group  
Approved Interview script  
Approved Invitation Letter  
Approved Interview Questions
2. All unforeseen events that might affect continued ethical conduct of the project should be reported to the HREC as soon as possible.

3. Any changes to the protocol must be approved by the HREC before the research project can proceed.

4. All research participants are to be provided with a Participant Information Statement and Consent Form, unless otherwise agreed by the Committee. The following statement must appear on the bottom of the Participant Information Statement: *Any person with concerns or complaints about the conduct of a research study can contact the Deputy Manager, Research Integrity (Human Ethics), University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).*

5. Copies of all signed Consent Forms must be retained and made available to the HREC on request.

6. It is your responsibility to provide a copy of this letter to any internal/external granting agencies if requested.

7. The HREC approval is valid for four (4) years from the Approval Period stated in this letter. Investigators are requested to submit a progress report annually.

8. A report and a copy of any published material should be provided at the completion of the Project.

Please do not hesitate to contact Research Integrity (Human Ethics) should you require further information or clarification.

Yours sincerely

Associate Professor Philip Beale
Chair
Human Research Ethics Committee
Appendix C: Interview and focus group scripts
Personal and Professional Development in medical students: Identification of concepts and experiences of medical students

Focus Group Triggers

Are you familiar with the term Personal and Professional Development (PPD)? What does it mean to you?

What does professionalism mean to you?

Would you add any traits to this list?

Is it important that we teach PPD in the medical curriculum?

What teaching methods/approaches for PPD are used in your medical program?

What do you think of them? What aspects work/don’t work?

How is PPD being assessed in your program? Do you think this is appropriate?

How do you think PPD should be approached in the curriculum?

We’ve been asking clinicians who teach about their views on PPD. Many say that they learned the important things that they have incorporated into their professional practice as part of their upbringing by parents and family. Many are sceptical that it is possible or necessary to teach these attributes. What do you think?

An even stronger view among clinicians is that the best way to learn PPD is through experience in a clinical setting, as that this will provide context and relevance that classroom teaching can’t. What do you think?
Do you think there will be a difference in approach to medical practice by your peers from that of the generation of doctors currently in practice?

Are the doctors you have been placed with good at PPD?

What have you learned that will be important to your PPD development that hasn’t come from formal training, for example, some informal experience you have had while on a training rotation?

If deemed useful based on answers to above

I’d like to mention several traits that are generally considered to be part of PPD. For each one, can you tell me what it means in the context of medical practice?

Resilience
Compassion
Empathy
Altruism
Receptiveness/responsiveness to change
ethical approaches to professional life
sensitivity and responsiveness to patients
respect for patients
self-awareness
time management
professional/personal boundaries
team-based (multidisciplinary) practice

[end]
Personal and Professional Development in medical students: Identification of concepts and experiences of medical students

Follow-up focus groups- Focus Group Triggers-

You have now had a chance to review my preliminary results and conclusions from the focus groups that you, and your peers from other schools participated in.

What is your opinion of what you’ve read?

Does it ring true?

Has anything been over-emphasised?

Is anything missing?

What do you think of the idea of recruiting students at your stage of training to actively work on development and presentation of a PPD curriculum?
[Interview begins]

Good [morning/afternoon/evening]. My name is Hudson Birden. I’d like to call you Dr. [initial of surname] in order to de-identify the audio recording of our conversation, as it will be sent to a professional transcription service. Do I have your permission to record this conversation?

I’d like to start by asking you a couple of basic questions about you and your practice.

1. Would you describe yourself as a General Practitioner or a Specialist?

2. Is our practice setting Urban, rural or remote?

3. How long have you been in practice?

As you know, the purpose of this research is to explore attitudes of current clinical preceptors regarding personal and professional development (PPD) of doctors. We define PPD to encompass an approach to medical practice that incorporates things such as:

- ethical approaches to practice
- receptiveness to change
- sensitivity to patients
- resilience
- time management
- professional and personal life balance

Do you have any initial thoughts on this set of concepts?

Now I’d like to ask you some specific questions about personal and professional development, or PPD

4. How can we teach it?

5. What is your approach to your own personal/professional development?

6. Can you think of a specific situation or way that you think that would highlight your approach?
7. Can you think of a specific incident during your training that you considered a good example of PPD?

8. Can you think of a specific incident during your training that you considered abusive, or a negative example of a teaching approach to PPD?

9. What did you [learn][take away from your training] as a medical student that you now consider valuable in building your PPD skills and traits?

10. How has our concept of PPD changed over time? That is, what do you now consider important that you didn’t appreciate when you first started practice? What brought about this change in your thinking?

11. What aspects of medical students’ personal and professional development are important to prepare students for placement in your practice?

12. What is your opinion of PPD throughout medical practice, as you see it in your peers?

13. How do you balance work and life outside of work? Can you give me an example of how you make this balancing work?

That concludes my questions. I’ll send you a copy of our results before publication. If you think of anything you’d like to add, feel free to call or email me.

Thank you for your time.

[Ends]
Appendix D: Consent and participant information forms
PARTICIPANT CONSENT FORM

I, ..........................................................[PRINT NAME], give consent to my participation in the research project

TITLE: Personal and Professional Development in medical students: Identification of concepts and experiences of medical students

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researchers.

3. I understand that I can withdraw from the study at any time, without affecting my relationship with the researchers, the University of Sydney, or my medical training program, either now or in the future.

4. I understand that my involvement is strictly confidential and no information about me will be used in any way that reveals my identity.

5. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

6. I understand that I can stop the interview or withdraw from the focus group at any time if I do not wish to continue and the information I provided will not be included in the study.

I understand that I can stop my participation in the focus group at any time if I do not wish to continue, however as it is a focus group discussion it will not be possible to erase my participation in the discussion to that point.

7. I consent to: –

   Audio-recording    YES ☐  NO ☐  
   Receiving Feedback YES ☐  NO ☐  

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If you answered YES to the “Receiving Feedback Question (iii)”, please provide your details i.e. mailing address, email address.

**Feedback Option**

Address: __________________________________________________

___________________________________________________

Email: __________________________________________________

Signed: .............................................................................................................................

Name: ..................................................................................................................................

Date: ....................................................................................................................................
PARTICIPANT CONSENT FORM

I, .............................................................................[PRINT NAME], give consent to my participation in the research project

TITLE:  Personal and Professional Development in medical education: Identification of concepts and capacity in clinical educators

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved (including any inconvenience, risk, and of their implications) have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher(s).

3. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Sydney now or in the future.

4. I understand that my involvement is strictly confidential and no information about me will be used in any way that reveals my identity.

5. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

6. I understand that I can stop the interview at any time if I do not wish to continue, the audio/video recording will be erased and the information provided will not be included in the study.

7. I consent to: – Audio-recording  YES ☐ NO ☐

Signed: ...........................................................................................................................................................

Date: .............................................................................................................................................................
Invitation to participate in a study into Personal and Professional Development in medical Students

We would like to make you aware of, and invite you to participate in, a research project that we are undertaking that may be of interest to you.

The aims of the study are to discover how medical students view PPD training as a component of their formal medical training, and to discover what their perspectives on PPD are, both as resulting from their training and as traits that they bring to that training. From the results, the investigators hope to identify effective methods of teaching PPD.

A review of contemporary research in this area reveals great diversity in conceptual framing of PPD skills and attributes and little research on replicable teaching methods for PPD. There is also evidence indicating that the attributes of most value in developing a doctor’s PPD either do not improve or actually deteriorate in the course of formal medical training.

The study is being conducted by Hudson Birden, Senior Lecturer in Population Health and Clinical Leadership at the North Coast Medical Education Collaboration (NCMEC) and will form the basis for the degree of PhD (Medicine) at the University of Sydney under the supervision of Professor Timothy Usherwood, General Practice, Faculty of Medicine.

If you agree to participate in this study, you will be requested to participate in a focus group or an interview. This study will take approximately 1 hour for a focus group or ½ hour for an interview.

All aspects of the study will be strictly confidential, with participants not identified in any reports.

For further information, please contact {student coordinator} on 02 6620 xxxx or at
Research study into Personal and Professional Development in Clinical Educators

PARTICIPANT INFORMATION STATEMENT

You are invited to take part in a research study into Personal and Professional Development (PPD) in medical education: Identification of concepts and capacity in clinical educators. The object is to discover what thoughts and experiences clinicians who have been recruited to serve as clinical preceptors/supervisors for medical students have on PPD, with the aim of improving teaching of PPD.

PPD is the set of attributes that cover the human side of medicine, including empathy, focus on patients, and ability to balance life and work. Current research shows that the personal attributes of most value in developing a young doctor's PPD either do not improve or actually deteriorate in the course of formal medical training.

The study is being conducted by Hudson Birden, Senior Lecturer in Population Health and Clinical Leadership at the North Coast Medical Education Collaboration (NCMEC) and will form the basis for the degree of PhD (Medicine) at the University of Sydney under the supervision of Professor Timothy Usherwood, General Practice, Faculty of Medicine.

If you agree to participate in this study, you will be requested to participate in an interview. You will need to be available by telephone at your convenience for an interview of approximately 25 minutes duration.

All aspects of the study will be strictly confidential and only the investigators named above will have access to information on participants. A report of the study will be submitted for publication, but individual participants will not be identifiable in such a report.

Participation in this study is entirely voluntary: you are not obliged to participate and - if you do participate - you can withdraw at any time. The audio recording will be erased and the information provided will not be included in the study. Whatever your decision, it will not affect your standing as a clinical educator with NCMEC or the University of Sydney.

When you have read this information, Hudson Birden will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Mr. Birden on 02 6620 7603.

Any person with concerns or complaints about the conduct of a research study can contact the Manager, Ethics Administration, University of Sydney on (02) 8627 8175 (Telephone); (02) 8627 8180 (Facsimile) or gbriody@usyd.edu.au (Email).

This information sheet is for you to keep.
Research study into Personal and Professional Development in Medical Students

PARTICIPANT INFORMATION STATEMENT

(1) What is the study about?
The aims of the study are to discover how medical students view Personal and Professional Development (PPD) training as a component of their formal medical training, and to discover what their perspectives on PPD are, both as resulting from their training and as traits that they bring to that training. From the results, the investigators hope to identify effective methods of teaching PPD.

(2) Who is carrying out the study?
The study is being conducted by Hudson Birden, Senior Lecturer in Population Health and Clinical Leadership at the North Coast Medical Education Collaboration (NCMEC) and will form the basis for the degree of PhD at The University of Sydney under the supervision of Professor Timothy Usherwood, General Practice, Sydney Medical School.

(3) What does the study involve?
The study will use focus groups and interviews to capture student views. Audio recordings will be made of focus groups and interviews. These recordings will be transcribed for analysis, with all participants de-identified. Location of focus groups/interviews will be at a venue arranged by the investigators either on campus or at a restaurant convenient to campus. Some interviews may be conducted by telephone.

(4) How much time will the study take?
Focus groups will take approximately an hour, interviews approximately 30 minutes.

(5) Can I withdraw from the study?
Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with The University of Sydney or NCMEC

If you participate in an interview you may stop the interview at any time if you do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

If you take part in a focus group and wish to withdraw, as this is a focus group it will not be possible to exclude individual data once the session has commenced.

(6) Will anyone else know the results?
All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study will be submitted for publication, but individual participants will not be identifiable in such a report.
(7) **Will the study benefit me?**
Not directly, but your insights into your medical education program may result in improvements which benefit future students.

(8) **Can I tell other people about the study?**
yes

(9) **What if I require further information?**
When you have read this information, Hudson Birden will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Hudson on 2 6620 7603 or at hudsonb@med.usyd.edu.au

(10) **What if I have a complaint or concerns?**

Any person with concerns or complaints about the conduct of a research study can contact the Deputy Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).

*This information sheet is for you to keep.*
Appendix E: BEME systematic review proposal
A Best Evidence in Medical Education (BEME) systematic review of the literature regarding personal and professional development skills in medical training

Version 10.0

Review team (alphabetical order)
The team includes a deliberate mix of nationalities and academic perspectives:
- Hudson Birden - American/Australian; medical education, research methods; team leader, NCMEC
- Nel Glass – Australian; Professor of Nursing
- Michelle Harrison - Faculty Liaison Librarian, Medical Sciences Libraries, University of Sydney
- Duncan Nass - Australian, Medical Student
- Ian Wilson – University of Western Sydney School of Medicine

Contact details
Hudson Birden, Senior Lecturer, Public Health & Clinical Leadership
The North Coast Medical Education Collaboration
PO Box 3074, 61 Uralba Street
Lismore NSW 2480 Australia
Ph: +61 2 6620 7603
hudsonb@med.usyd.edu.au

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**Background to the topic**

Personal and Professional Development (PPD) has increased in importance in medical education in recent decades. Among other things, PPD includes the ways in which a practitioner thinks about her/his approach to practice, how the practitioner engages with their patients, the ethical framework within which a practitioner operates, and the life/work balance within which the practitioner operates. Social learning theory (Harrison and McIntosh, 1992, Thyer and Myers, 1998) can be used as a construct to define and explain how attributes of PPD evolve in specific settings, in this case rural medical practice.

A survey of deans and curriculum leaders (Lown et al., 2007) identified pessimism in these groups regarding their ability to change aspects of medical education, particularly the “hidden curriculum”, that get in the way of efforts to impart caring attitudes to students. Understanding the personal and professional culture of the learning environment in which students will be placed will be critical to understanding the success of the NCMEC integrated three-university teaching program.

Professional development is based on attitudinal learning (Howe, 2002). Professional competence, reflecting the “situational relationships among doctors, their patients, and the systems in which they perform” (Klass, 2007), is as much a function of settings and systems as it is of individual personality traits, and so an understanding of the system in which students will be placed is essential to success in PPD training. Doctors who have been in practice for a long time can be expected to have a more narrowly focused and hardened perspective on PPD (Melnick et al., 2002), and this must be taken into account.

**Objectives and review questions**

The purpose of this review is to determine what the needs are in the area of personal and professional development (PPD) training in medical education in the areas of:

- Curriculum
  - Content
  - Educational strategy
- Measurement

This review will examine the evidence for what works in personal and professional development (PPD) training in medicine across the medical community, with particular focus on training through intensive clinical placements. The review will include a broad range of studies, including not only
PPD BEME

experimental designs but also descriptive papers to capture information about current practices and to provide context. Both qualitative and quantitative studies will be included.

Research Questions include;
• What is the conceptual framework of PPD among clinical educators?
• What processes, systems, and approaches have been found to work to ensure optimum personal and professional development in medical students?

Search sources and strategies
The search will meet the following criteria;
• Sensitive design
• Well documented search protocol
• Cover 10 years
• Quantitative and qualitative articles
• Not restricted by language of publication
• Well established policies for;
  review of citations
  coding of articles
  two person minimum review of quality for each citation
• Based on inclusion and exclusion criteria defined in advance

A search of the grey literature will be particularly important in this review. A systematic review has been published recently (Jha et al., 2007) which will provide some guidance to the development of the methodology.

Existing bibliographies
There is some previous work in this area that our team will use as a starting point. Veloski and colleagues performed a review of the literature (Veloski et al., 2005) with the purpose of ascertaining the utility of measurement tools for professionalism in medical students and residents. They came to a number of conclusions that will be of interest to this review;
• Research in this field has grown in the current decade, indicating that much research is in progress and will be published
• The instruments used in measuring professionalism may be used in other health care professional development settings, and so those bodies of work also should be searched to find the best instruments and their best use
The evidence base for content validity, reliability, and practicality as revealed through their review, was weak at that time (the review ended in 2002).

More recently, Veloski et al (Veloski et al., 2005) and Jha and colleagues (Jha et al., 2007) have also published systematic reviews focusing on instruments to measure professionalism.

Several members of the review group have personal bibliographies of PPD, including over 150 citations. The team will use EndNote as a reference manager to create the bibliographic database for this project, in the process pooling previously collected references, eliminating duplicates, and producing a set of articles for an initial scoping phase of the review.

Development of a set of search terms
The team will use concept mapping software to organise and refine the set of search terms in annex 1.

Procedure for Search
Databases will include Medline, the Cochrane collaboration, Embase, PsycINFO, Dissertation and Theses Full Text, Amazon.com. The search period will be 1999-2009 inclusive (10 year period). Seminal articles identified through searches of reference lists will also be included. Hand searching will be carried out in the following journals:

- Medical Teacher
- Medical Education
- Academic Medicine
- Education for Primary Care
- Clinical Teacher

Careful scrutiny of the reference lists of the large number of articles that are likely to be identified should lead back to previous literature.

The team will conduct a scoping search to refine the search strategy, narrow the inclusion criteria, and establish a ‘gold standard’ set of papers by which sensitivity and specificity of search strategies can be estimated. A definitive search will use Ovid Software. All articles with relevant titles will be retrieved in full text.
Study selection process
1. Identify potentially relevant studies through database searches, hand searches, etc. Enter results into reference manager
2. Merge search results using reference management software, remove duplicate records
3. Remove irrelevant reports through review of titles and abstracts (be oversensitive/inclusive);
4. Retrieve full text of potentially relevant reports;
5. Review for multiple reports of the same study –link reports
6. Examine full text reports for eligibility criteria;
7. Correspond with investigators, if necessary, to clarify study eligibility
8. Make final decisions on study inclusion

Study selection criteria
Any articles presenting viewpoints, opinions, or empirical research into the conditions, processes, or outcomes of personal and professional development, especially in clinical workplace learning, identified through the search methodology in Annex 2, will be considered subject to the following criteria:
- Any language
- Qualitative and quantitative
- Failed efforts are of special interest
- Undergraduate or postgraduate medical students
At least two people will independently assess each study for eligibility.

Exclusion criteria
- since this is an exploratory systematic review, no outcome measures will be excluded, at least initially
- Professions other than medicine
A table of excluded studies will be compiled and included in the final report (at least as an appendix). This table will include studies a knowledgeable reader might expect to see among the included studies. Studies will be grouped in the table by reason for exclusion. Included in the table will be;
- studies that may appear to meet the eligibility criteria but do not
- studies that do not meet eligibility criteria but nevertheless feature prominently in the PPD literature discourse
At least two people will independently assess each study for eligibility.
Procedure for reference management
Endnote will be used as the reference management software. Unused Endnote fields will be used to identify:
- the database/source from which the article was identified
- the category of the article (measurement study, opinion piece, etc.)
- whether the article was included in or excluded from the final review and, if excluded, the reason(s) for exclusion.

Procedure for extracting data
At least two people will independently extract data from studies.

In a pilot phase, a new version of the BEME coding sheet will be developed, evaluated, and refined. Data will be entered into an Access database, which will then be used for data analysis. The dataset will include:
- Full citation
- Details of the curriculum
- Stage(s) of the curriculum involved
- Study design
  - Comparative/non-comparative
- Context(s) in which learning occurred
- Number of subjects and their demographic details
- The intervention
  - Its nature
  - “Dose” and duration
- Free text description of every outcome
- Coding of the intervention and outcome
- Coding of any links between condition, process, and outcome demonstrated in the study
- For each outcome, an assessment of its strength, using the standard BEME 5-point scale
- A binary rating of the importance of each outcome, as Kirkpatrick level 1 (satisfaction) or higher
- Short narrative comment about the study

Each paper will be coded by two people; disagreements will be resolved by consensus, seeking the opinion of the whole group if they cannot be resolved.

Procedure for measuring agreement
PPD BEME

Formal measures of agreement, using kappa statistic, may be employed in the pilot phase and the reasons for disagreement will be explored, in order to determine suitability of eligibility, coding schemes, and competence of the review.

**Synthesis of extracted evidence**
Outcomes and their metadata will be clustered and organized into an explanatory structure, from which a narrative report will be written. This report will include
- a summary of the findings
- an identification of best practices
- an analysis of strengths and weaknesses of the evidence, with recommendations for future research

**Project timetable**
Nov 2008-Feb 2009: Pilot phase:
  a. Develop a search strategy
  b. Conduct a scoping search
  c. Review existing bibliographies
  d. Test proposed methods and develop a coding sheet.
Aug-Dec 2009: Conduct definitive search and identify relevant articles.
Jan-Mar 2010: Code articles
Mar - May 2010: Analyse
May 2010: Submit 1st manuscript for publication

**Conflict of interest statement**
No member of the review group has any conflict of interest to declare.

**Plans for updating the review**
The team will establish a current awareness search using the same syntax as the main search and maintain an up to date bibliography relevant to the review. A major change in the evidence base would prompt a reanalysis and further report.
Annex 1
PPD Literature Review – Suggested Search Strategy

Inclusion criteria:

<table>
<thead>
<tr>
<th>Include</th>
<th>Exclude</th>
</tr>
</thead>
<tbody>
<tr>
<td>medicine</td>
<td>Nursing / Allied Professions</td>
</tr>
<tr>
<td>Opinion pieces</td>
<td></td>
</tr>
<tr>
<td>Either process or outcome measures</td>
<td></td>
</tr>
<tr>
<td>Pre-clinical</td>
<td></td>
</tr>
<tr>
<td>postgraduate</td>
<td></td>
</tr>
<tr>
<td>Doctors in practice</td>
<td></td>
</tr>
<tr>
<td>Quantitative and qualitative studies</td>
<td></td>
</tr>
</tbody>
</table>

Search terms (to be used with appropriate truncations/wild cards)

- Professionalism
- Ethics, medical
- Humanism
- Behaviour
- Workplace learning/teaching/education
- Work based learning/teaching/education
- Clinical learning/teaching/education
- Clerkship
- Clinical rotation/attachment/experience
- Preceptorship
- Personal and professional development
- Apprenticeship
- Medicine
- Ambulatory learning
- Community based learning
- Clinical method attachment
- Learning environment
- Medical education
- Assess
PPD BEME

**BEME PPD systematic review**

**Annex 2: search strategy diagram**

1. TRG members’ libraries holdings → enter (#) →→→→→
2. Develop search terms, inclusion/exclusion criteria
3. Perform scoping search,
   test search strategy for sensitivity, specificity
4. Search relevant database (repeat for each)
   ↓
5. Retrieve sources
   not relevant ←
6. Scan for relevance → relevant → (#) enter
   ↓
7. Ref list?(#) Cited by?(#) Similar? (#)
   not relevant ←
8. scan for relevance → relevant → (#) enter
   ↓
9. Ref list?(#) Cited by?(#) Similar? (#)
   Not relevant ←
10. Scan for relevance Relevant (#) enter

Reference library

Core citations entered

citations entered from
database search (#)
Eliminate duplicates (#)
citations entered from
ancestry/progeny (#) of
generation 1 articles
Eliminate duplicates (#)
citations entered from
ancestry/progeny (#) of
generation 2 articles
Eliminate duplicates (#)

Library complete, proceed to
application of
inclusion/exclusion criteria
and study quality assessment

11. Search Grey literature
    ↓
12. Retrieve sources
    not relevant ←
13. Scan for relevance → relevant → (#) enter
14. Query field experts → enter (#) →→→→→
Narrative

1. Relevant citations of papers on PPD already identified by Topic Review Group (TRG) members will serve as the core of the reference library. These papers will also serve as the ‘Gold Standard’ to test for sensitivity and specificity of the search strategy defined in stage 2.
2. Search terms and inclusion/exclusion criteria will be defined by team members working to achieve consensus.
3. A scoping search will be performed to test the accuracy and precision of the search methodology, through ascertaining what portion of ‘gold standard’ citations are found/missed. The strategy will be refined until acceptable levels of sensitivity and specificity are realised.
4. For each database, a search will be run using the strategy developed in Step 3.
5. Citations identified through this search will be examined (title/abstract) for relevance using a ‘loose’ set of criteria so as not to exclude potentially relevant articles at an early stage.
6. Citations identified as potentially relevant will be entered into the library.
7. The reference list from all relevant articles will be scanned for additional relevant articles (ancestry). Citations for these will also be re-acquired within the database used, and a list of citing articles or similar articles (progeny) identified.
8. Citations retrieved through this stage will be scanned for relevance, and those deemed relevant entered into the database.
9. The set of citations identified in step 8 (second generation citations) will also be scanned for additional relevant citations (ancestry, progeny) as in step 7.
10. These citations will be scanned for relevance, and included where appropriate. This stage may have a low yield or produce results too redundant with the steps above to make the effort worthwhile, in which case a decision may be made to eliminate the step.
11. 13 Grey literature, including conference proceedings, governmental and institutional reports, unpublished studies, and policy documents from medical school curriculum papers, will be searched and relevant citations added to the reference library. Inclusion and exclusion criteria for grey literature may be different from those of the database searches. It will be important in this stage to search for evidence of strategies, approaches, and programs that did not work to promote training in PPD, as it will be beneficial to learn from false starts and misguided efforts of others.
12. Through citations collected from the search, prominent researchers in the realm of PPD will be identified. These individuals will then be contacted.
and invited to contribute any additional sources they are aware of, especially the types of sources that would be categorised as grey literature.
REFERENCES


Appendix F: BEME papers excluded
Papers excluded from final BEME synthesis


Newton, B. W., L. Barber, et al. (2008). "Is There Hardening of the Heart During Medical School?" Academic Medicine 83(3): 244-249.


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Regional Conference on Professionalism in, M., H. Singapore General, et al. (2006). Regional Conference on Professionalism in Medicine 2006: programme and abstracts /organized by SGH Postgraduate Medical Institute, Singapore General Hospital, Stanford University Medical Centre, Singapore ; Singapore General Hospital Pte Ltd.


Spencer, J. (2004). "Decline in empathy in medical education: how can we stop the rot?" Medical Education 38(9): 916-918.


Tetzlaff, J. E. (2009). "Professionalism in anesthesiology: "what is it?" or "i know tt when i see it"." Anesthesiology 110(4): 700-702.


