Supporting Physicians' Professionalism and Performance

A literature review

The Royal Australasian
College of Physicians

ACKNOWLEDGEMENTS

COPYRIGHT

© 1st edition RACP 2010

Table of contents

Executive summary

The Royal Australasian College of Physicians has commenced a project to develop a performance framework (Supporting Physicians' Professionalism and Performance [SPPP] framework) for the College and all its members.

This project is timely. The performance of medical practitioners is attracting increasing scrutiny both within Australasia and overseas, contributed to by the increasing complexity of medical practice, growing regulatory requirements placed on individual medical practitioners and their employers, and the widely publicised failures of a small number of individual medical practitioners.

This literature review provides contextual information to inform the framework development process. It presents an appraisal of recent literature in order to understand better the function of performance frameworks in supporting medical practitioners, to identify the performance elements commonly incorporated into performance frameworks and to explore how frameworks may be applied in order to facilitate performance development.

The literature describes a range of performance frameworks that have been developed within Australasia and internationally. Published frameworks generally include domains of professional practice relevant to the medical specialty that the framework supports. These domains capture both the technical aspects of performance, particularly the knowledge and skills required to deliver health services relevant to the specialty, and a range of non-technical aspects of performance, including communication, management, scholarship and professionalism—an element of the RACP performance framework.

Performance frameworks may be embedded within performance management systems in the workplace in order to increase their effectiveness. A range of performance management approaches is available, each with specific advantages and disadvantages. Most Australasian medical colleges embed performance frameworks within Continuing Professional Development (CPD) / Maintenance of Professional Standards (MOPS) processes. Participation in CPD/MOPS is a mandatory requirement for registration in New Zealand and Australia. As a result, CPD / MOPS is currently the performance management process with the greatest reach across hospital and community-based medical practitioners, both in clinical and non-clinical practice.

Performance management in the workplace and for regulatory purposes is commonly supported by performance appraisal activities. Self-assessment, peer-based assessment, feedback from patients and/or recipients of services and objective assessment methods may all be used. Performance appraisal reassures the individual medical practitioner, health care organisations, governments and the community that the practice of medical practitioners is being monitored and that minimum standards of practice are being exceeded. When conducted effectively, performance appraisal provides feedback to the medical practitioner that is positive, focuses on the strengths of the individual, and assists the individual to identify future learning needs. It is a forward looking process.

The literature regarding elements of performance that should be incorporated in a performance framework is largely descriptive in nature. Where empirical studies have been performed, the generalisability of findings across practice settings and according to practitioner type is

uncertain. Similarly, although studies conducted in health-care services with performance management systems in place demonstrate improved outcomes at the organisational level, the relationship between specific performance management approaches and the individual medical practitioner's performance is less certain. As a result, the specific performance elements or performance management approach that the RACP should incorporate into the SPPP framework cannot be established from the literature alone. It is anticipated these aspects of the framework will be strongly influenced by the consultation process that is planned for this project and through evaluation of the SPPP framework once it is developed.

The literature regarding performance appraisal in the workplace and for regulatory purposes is more extensive. Studies demonstrate that when conducted in an evidence-based manner, performance appraisal contributes to quality improvement for the individual medical practitioner. Evidence-based performance appraisal is therefore important to assist the performance development of physicians within a SPPP framework that is nationally progressive and responsive to the changing regulatory environment within which physicians practice.

Purpose and scope of this review

The Royal Australasian College of Physicians (RACP) is a diverse and energetic organisation responsible for training, educating and representing over 10,500 physicians and 4,000 trainees across more than 25 medical specialties.[1] The College includes members from the Divisions of Adult Medicine and Paediatrics & Child Health; the Faculties of Public Health Medicine, Rehabilitation Medicine and Occupational & Environmental Medicine; and the Chapters of Community Child Health, Palliative Medicine, Addiction Medicine and Sexual Health Medicine.

Across its Divisions, Faculties and Chapters, the RACP is committed to ensuring the highest quality of care for patients by supporting its members to improve continually and to develop their skills throughout their careers. In order to facilitate the achievement of this goal, the RACP is developing a performance framework—Supporting Physicians' Professionalism and Performance (SPPP) project—for the College and all of its members.

It is proposed the framework will be for the use of all College members, across Divisions, Faculties and Chapters, to support their development of, and involvement with, clinical performance tools, with the end goal of improved performance across physician practice.

The framework will assist fellows:

- through provision of guidance on use of tools and other clinical activities to understand clinical practice

- in their efforts to demonstrate their professionalism

- through provision of opportunities to value add to their Continuing Professional Development (CPD) processes

- in their efforts to engage at organisation and system level.

The framework will therefore be designed to support fellows in their day to day work across the broad range of clinical, management, research, teaching, policy and related roles that fellows engage in currently.

the RACP has contracted DLA Phillips Fox by to conduct a targeted review of the peer review and 'grey' literature in order to support the development of the SPPP framework.

It is noted that according to the Medical Board of Australia (MBA) standard, the specialist title of 'physician' is not applied to all fellows or members of the RACP Divisions, Faculties and Chapters.[2] For the purposes of this literature review, the definition of 'physician' is deliberately broad and encompasses all fellows or members of the RACP, regardless of their specific skill set.

---

[1] http://www.racp.edu.au/page/about-racp

[2] http://www.medicalboard.gov.au/Medical-Registration/Specialist-Registration/Medical-Specialties-and-Specialty-Fields.aspx

This literature review is not exhaustive. Rather, it describes a range of approaches currently used by health-care organisations and professional bodies nationally and internationally to support medical performance and professionalism. Key frameworks that underpin performance systems and various approaches to performance management and appraisal are described. The relationship between professionalism and performance is also discussed.

This literature review complements the DLA Phillips Fox review *Senior medical staff performance appraisal and support—literature review* that was performed to support the development of *Partnering for Performance*, the Victorian performance framework for public hospital senior medical staff.[3]

Literature review methods

A narrative review of the health-care and management literature was performed for the purposes of this review. Publications describing approaches to supporting physician performance and professionalism were sought. In the health-care literature, MeSH terms and subheadings were used to cover the various terms used in the literature to describe physician performance and professionalism. Searches were conducted in the international databases Medline, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Social Sciences Citation Index (SSCI), ProQuest, and the Education Resources Information Centre (ERIC) database.

The 'grey literature' was also searched using common keywords and acronyms that describe physician performance and professionalism. 'Google' and 'Google Scholar' were interrogated to identify materials of broad relevance. Guidelines, policy documents, published reviews, practice standards and codes of clinical practice, in particular, were sought.

Searches were supplemented with review of the extensive collection of materials already compiled by the RACP to support development of the framework.

Introduction

Patients and clients accessing health-care have a legitimate expectation that their treating medical practitioner's performance is at or above a minimum standard, and that this performance is assessed and monitored on an ongoing basis. There is also an expectation that the care provided by medical practitioners is of the highest quality.[4]

For decades, initial registration was considered sufficient to guarantee that a medical practitioner possessed the skills and knowledge required for the duration of their professional career. However, as medicine changes quickly, knowledge becomes outdated and community expectations change; the consensus now is that medical practitioners need to maintain and develop their knowledge and skills continuously.[5]

---

[3] http://www.health.vic.gov.au/clinicalengagement/downloads/ pasp/dla_phillips_fox_literature_review.pdf

[4] Australian Commission on Safety and Quality in Healthcare. Australian Charter of Healthcare Rights. Available at: http://www.health.gov.au/internet/safety/publishing.nsf/Content/PriorityProgram-01

[5] Steinbrook R. Renewing board certification. New England Journal of Medicine. 2005;142:260-73.

The required standard of care expected of the medical profession in Australia is detailed in a number of key guidance documents, including:

- the New Zealand Code of Health and Disability Services Consumers' Rights[6]

- the New Zealand Medical Association (NZMA) Code of Ethics[7]

- the Australian Medical Association (AMA) Code of Ethics[8]

- the guidance of the Australian Medical Council (AMC)[9]

- the Medical Council of New Zealand's *Good Medical Practice: A Guide for Doctors*[10]

- the Australian Medical Council's *Good Medical Practice: A Code of Conduct for Doctors in Australia*[11]

- professional guidance promulgated by a number of specialist colleges.

Guidance documents detail what is expected of medical practitioners across both technical and non-technical aspects of their medical practice.

In addition, Australasian medical practitioners are also subject to additional significant clinical governance processes to various degrees. These include:

- professional registration with the MBA / Medical Council of New Zealand[12] [13]

- compliance with the CPD / Maintenance of Professional Standards (MOPS) requirements of Specialist Colleges[14]

- employment-based systems, including credentialling, definition of scope of practice, clinical audit, quality assurance activities, and employment contracts.[15] [16]

---

[6] New Zealand Health and Disability Commissioner. HDC Code of Health and Disability Services Consumers' Rights Regulation, 1996

[7] New Zealand Medical Association. NZMA Code of Ethics. May 2008. Available at: http://www.nzma.org.nz/about/ethics.html

[8] Australian Medical Association. Code of Ethics. 2004; revised 2006. Available at: http://www.ama.com.au/codeofethics

[9] Australian Medical Council. Code of Professional Conduct Working Group. Report of Consultation. March 2009. Available at: http://goodmedicalpractice.org.au

[10] Medical Council of New Zealand. Good Medical Practice: A Guide for Doctors. June 2008.

[11] Medical Board of Australia. Good Medical Practice: A Code of Conduct for Doctors in Australia. 2010. Available at: http://www.medicalboard.gov.au/Codes-and-Guidelines.aspx

[12] Medical Board of Australia. Medical Registration. http://www.medicalboard.gov.au/Medical-Registration.aspx

[13] Medical Council of New Zealand. Medical Registration. http://www.mcnz.org.nz/Registration/tabid/56/Default.aspx

[14] Medical Board of Australia. Continuing professional development registration standard. 2010.

Existing clinical governance arrangements for the assurance of a medical practitioner's performance and professionalism are therefore a mix of voluntary and mandatory elements that focus on competence, or a defined minimum standard, in some instances, and on improved performance in others.

The distinction between competence and performance is important. Competence can be defined as 'what the doctor has been trained to do'. It involves acquiring and maintaining the requisite knowledge, skills and behaviours to perform at or above the minimum standard. Performance can be defined as 'what the doctor actually does from day to day'. Performance is amenable to ongoing improvement through the development of both technical and non-technical knowledge, skills and behaviours of the medical practitioner over the course of their professional career.[17] [18]

The majority of medical practitioners are competent. It is estimated that each year approximately 1% of medical practitioners will have serious concerns raised regarding their competence. Many of these cases will not be substantiated.[19] [20] As 99% will not have such issues even raised, there is a need to ensure performance support does not focus solely on competence to the detriment of assisting the majority of medical professionals to maintain and further develop their high standards of practice.[21]

Nevertheless, in recent years, as a consequence of clinical governance failures nationally and internationally, there has been increasing pressure placed on the profession by government and consumer groups to increase regulation and oversight of medical practitioners.[22] Medical practitioners, registration authorities, specialist colleges, health services and insurers in Australasia and overseas are increasingly called upon to demonstrate to the public and to government that medical practitioners are competent and are safe to provide care to their communities.[23] [24]

---

[15] DLA Phillips Fox. Senior medical staff performance appraisal and support—Literature Review. Available at: http://www.health.vic.gov.au/clinicalengagement/pasp/policy.htm

[16] Medical Council of New Zealand / District Health Boards. HPCAA and the Employment of Doctors Memorandum of Understanding. 2009.

[17] Rethans J, Norcini J, Baron-Maldonado M et al. The relationship between competence and performance. Medical Education 2002; 36:901-9.

[18] Royal Australasian College of Surgeons. Surgical Competence and Performance. RACS, 2008.

[19] Donaldson L. Doctors with problems in an NHS workforce. BMJ 1994; 308:1277-82.

[20] Queensland Health. Safe Doctors—Fair System. February, 2007.

[21] Ibid

[22] Maynard A, Bloor K. Trust and performance management in the medical marketplace. Journal of the Royal Society of Medicine 2003; 96: 532-9.

[23] DLA Phillips Fox. Senior medical staff performance appraisal and support—Literature Review. Available at: http://www.health.vic.gov.au/clinicalengagement/pasp/policy.htm

[24] Health Practitioners Competence Assurance Act (HPCAA) 2003. Available at: www.moh.govt.nz/hpca

Elements of performance

The elements of performance and professionalism that influence competence and performance and that are expected of medical practitioners can be described in a variety of ways, including within practice standards, professional codes (codes of conduct, codes of practice, codes of ethics), and guidance documents.

Across published studies, elements of performance described across domains of professional practice include[25]:

- medical expertise
    - knowledge
    - skills
- communication
    - patient education
    - record keeping
    - accuracy of reporting significant events / sentinel events
- management
    - resource utilization
    - administrative skills
- scholarship
    - participation and performance in CPD
    - compliance with practice guidelines
    - performance in research and / or teaching duties;
- professionalism
    - relationships with colleagues
    - relationships with patients
    - ethical behaviour
    - teamwork.

---

[25] Peer Review of Health Care Professionals: A Systematic Review of the Literature. Available at: http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs_cred-con/$File/25738-LitReview.pdf

Cultural competence and elements of performance

Cultural competence is an important element of performance that extends across the domains of professional practice, particularly medical expertise, communication and professionalism. Cultural competence is embedded within requirements for professional practice of the Australian and New Zealand Medical Boards / Councils respectively.[26][27] Medical practitioners are required to possess the necessary knowledge and skills to function effectively and respectfully when working with and treating people of all cultural backgrounds. They also require knowledge and skills regarding the interaction between the doctor's culture and belief systems and their interactions with patients, and a positive patient outcome is achieved when a doctor and patient have mutual respect and understanding.

Culturally competent performance involves genuine efforts to understand the cultural needs and contexts of different patients in order to obtain good health outcomes. This includes:

- having knowledge of, respect for, and sensitivity towards the cultural needs of the community the medical practitioner serves

- acknowledging the social, economic, cultural and behavioural factors influencing health, both at individual and population levels

- understanding the influence of the culture and beliefs of the medical practitioner on interactions with patients

- adapting practice to improve patient engagement and health-care outcomes.

Medical practitioners are also required to make sure that arrangements are made to meet patients' specific language, cultural and communication needs, and of being aware of how these needs affect understanding.

Performance frameworks

Elements of performance can be combined in a performance framework, which describes the core elements and inter-relationships between domains of practice that are required to achieve high quality professional practice. The intention of the RACP's SPPP project is to develop such a performance framework. This is consistent with performance development approaches of other professional bodies and learned Colleges, both nationally and internationally. Examples of key performance frameworks are described below.

International performance frameworks

Internationally, a number of performance frameworks describe the elements of professional practice of medical practitioners. The scope and application of these frameworks vary between countries, reflecting differences in international legislative, regulatory and policy environments. In some countries, compliance with performance frameworks is linked to the right to

---

[26] Medical Council of New Zealand. Good Medical Practice: A guide for doctors. June 2008.

[27] Medical Board of Australia..Good Medical Practice: A Code of Conduct for Doctors in Australia. 2010. Available at: http://www.medicalboard.giv.au/Codes-and-Guidelines.aspx

professional practice. In others, performance frameworks are voluntarily adhered to by professionals.[28] [29]

Across performance frameworks internationally—*CanMEDS* in Canada, *Good Medical Practice* in the UK, and US frameworks—a number of common domains of practice emerge. These include:

- medical expertise

- professionalism

- scholarship.

However, there are also significant differences between frameworks in relation to the emphases and approaches captured within domains of practice.

Canada

The *CanMEDS* roles framework captures the 'competencies'—important observable knowledge, skills and attitudes—that need to be developed in medical practitioners in order to provide the highest quality care. The framework was developed to guide medical education reform and has been adopted for setting learning objectives, developing instructional materials, and guiding evaluation across undergraduate, postgraduate and continuing medical education. The competencies are described against the following seven key roles of a specialist medical practitioner[30]:

- medical expert (as medical experts, medical practitioners integrate all of the *CanMEDS* roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centred care)

- communicator (medical practitioners effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during and after the medical encounter)

- collaborator (medical practitioners effectively work within a health-care team to achieve optimal patient care)

- manager (medical practitioners are integral participants in health-care organisations, organising sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the healthcare system);

- health advocate (medical practitioners use their expertise and influence responsibly to advance the health and well-being of individual patients, communities and populations)

---

[28] Merkur S, Mladovsky P, Mossialos E et al. Do lifelong learning and revalidation ensure that physicians are fit to practise? WHO, 2008.

[29] Klass D. A performance-based conception of competence is changing the regulation of physicians' professional behaviour. Academic Medicine 2007; 82:529-35.

[30] http://rcpsc.medical.org/canmeds/CanMEDS2005/index.php

- scholar (medical practitioners demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge)

- professional (medical practitioners are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour).

United Kingdom

Good Medical Practice in the UK sets out the standards of competence, care and conduct expected of medical practitioners, under the following main headings[31]:

- good clinical care (medical practitioners must provide good standards of clinical care, must practise within the limits of their competence, and must ensure that patients are not put at unnecessary risk)

- maintaining good medical practice (medical practitioners must keep up-to-date with developments in their field, maintain their skills and audit their performance)

- relationships with patients (medical practitioners must develop and maintain successful relationships with their patients, by respecting patients' autonomy and other rights)

- working with colleagues (medical practitioners must work effectively with their colleagues)

- teaching and training (where medical practitioners have teaching responsibilities they must develop the skills, attitudes and practices of a competent teacher)

- probity (medical practitioners must be honest and trustworthy)

- health (medical practitioners must not allow their own health condition to endanger patients).

The UK General Medical Council (GMC) intends to supplement these standards with standards medical practitioners will need to meet for revalidation, i.e. the formal process by which licensed medical practitioners will demonstrate to the GMC that they remain up-to-date and fit to practise. In the UK, revalidation every five years will become a formal requirement for medical practitioners to keep their licence to practise.[32] The four domains of practice and 12 professional attributes against which standards for appraisal and assessment of medical practitioners are being developed include:

- knowledge, skills and performance

---

[31] http://www.gmc-uk.org/the_meaning_of_fitness_to_practise.pdf_25416562.pdf

[32] Youngson G, Knight P, Hamilton L et al. The UK proposals for revalidation of physicians. Archives of Surgery 2010; 145: 92-5.

- o   maintain your professional performance

- o   apply knowledge and experience to practice

- o   keep clear, accurate and legible records

- safety and quality

  - o   put into effect systems to protect patients and improve care

  - o   respond to risks to safety

  - o   protect patients and colleagues from any risk posed by your health

- communication, partnership and teamwork

  - o   communicate effectively

  - o   work constructively with colleagues and delegate effectively

  - o   establish and maintain partnerships with patients

- maintaining trust

  - o   show respect for patients

  - o   treat patients and colleagues fairly and without discrimination

  - o   act with honesty and integrity.

Each Royal College and Faculty has developed specialty-specific draft frameworks for revalidation, based on the four domains and 12 attributes described above. The frameworks describe generic standards against each attribute, and possible sources of evidence to demonstrate compliance with all 12 attributes. Clinical and non-clinical medical practitioners will be expected to provide sufficient evidence against each attribute for revalidation.[33]

United States

In the US, the American Board of Medical Specialties (ABMS) assists specialty boards with the development and use of standards for the certification and ongoing evaluation of medical practitioners. The ABMS considers board certification as demonstrating a medical practitioner's 'exceptional expertise in a particular specialty and/or subspecialty of medical practice'.[34] Maintenance of certification requires ongoing measurement of six core competencies using a four-part process. The process components are:

- professional standing;

---

[33] http://www.gmc-uk.org/doctors/revalidation/5876.asp

[34] American Board of Medical Specialties (ABMS). What Board Certification Means. ABMS; 2008. Available at: http://www.abms.org/About_Board_Certification/means.aspx

- lifelong learning and self-assessment;

- assessment of cognitive expertise; and

- assessment of practice performance[35].

All boards have agreed to issue time-limited certificates that necessitate subsequent recertification, usually at 10 years or less, with a more continuous process of assessing competence in the interim period[36].

The Accreditation Council for Graduate Medical Education (ACGME) endorsed the concept of medical practitioners obtaining competencies in six general areas[37]. The six areas are:

- patient care;

- medical/clinical knowledge;

- practice-based learning and improvement;

- interpersonal and communication skills;

- professionalism; and

- systems-based practice.

These six competencies are also integrated into the Joint Commission's requirements and recommendations as pertaining to practitioner credentialing and performance evaluation[38].

Europe

According to a recent health systems policy analysis conducted by the World Health Organisation Regional Office in Europe, there are no plans to pursue development and standardisation of domains of practice for medical practitioners across European countries, as there is no clear consensus on which concrete actions should be developed in order to take forward issues such as professional standards, CPD, or to assure performance of medical practitioners.[39] However, some countries have established performance frameworks and have linked these to performance management processes. For example, the Netherlands has an established revalidation process.

---

[35] ABMS maintenance of certification. ABMS: 2008.

[36] Steinbrook R. Renewing board certification. NEJM 2005; 353: 1994-7.

[37] Accreditation Council for Graduate Medical Education (ACGME): *Outcome project: general competencies*. 1999.

[38] Accreditation Council for Graduate Medical Education (ACGME). Outcome project: Common program requirements: general competencies. ACGME; 2007

[39] Merkur S, Mladovsky P, Mossialos E et al. Do lifelong learning and revalidation ensure that physicians are fit to practise? WHO, 2008.

Australasian performance frameworks

Within Australia, the MBA has endorsed *Good Medical Practice: A Code of Conduct for Doctors in Australia*. *Good Medical Practice* in Australia sets out the principles that characterise good medical practice and makes explicit the standards of ethical and professional conduct expected of medical practitioners in each of the following practice domains[40]:

- providing good care

- working with patients

- working with other health care professionals

- working within the health care system

- minimising risk

- maintaining professional performance

- professional behaviour

- ensuring doctors' health

- teaching, supervising and assessing

- undertaking research.

That *National Patient Safety Education Framework*, developed by the former Australian Council on Safety and Quality in Health Care, is underpinned by principles of professional behaviour required for the delivery of safe, high-quality care, including[41]:

- communicating effectively

- identifying, preventing and managing adverse events

- using evidence and information

- working safely

- being ethical

- continued learning.

Although the principles of the framework are consistent with other national frameworks, the extent to which it has been implemented, and the uptake of this framework by health-care

---

[40]Medical Board of Australia. Good Medical Practice: A Code of Conduct for Doctors in Australia. 2010. Available at: http://www..medicalboard.gov.au/Codes-and-Guidelines.apsx

[41] Australian Council for Safety and Quality in Health Care. National Patient Safety Education Framework. July 2005.

organisations and professional bodies, is uncertain. However, the framework is referenced here, as the Australian Commission on Safety and Quality in Health Care (formerly the Council) is Australia's peak body for safety and quality of health care services; competent and highly performing medical practitioners are integral to achieving the Commission's goals.

In New Zealand, *Good Medical Practice (NZ)* describes the following domains of competence that the public and the profession expect of doctors. These are embedded within CPD, recertification processes and performance appraisal of medical practitioners[42]:

- medical care—diagnostic and management skills including those specific to each branch of practice and those common to several branches

- communication—with patients, families and colleagues; medical record-keeping

- collaboration—teamwork

- management—personal management (including insight and recognising limits); management within systems; use of time and resources

- scholarship—lifelong learning; teaching; research; critical appraisal

- professionalism – honesty; integrity; probity; respect for patients (including cultural competence with respect to gender, race, boundaries and New Zealand's biculturalism); moral reasoning and ethical practice; respect for colleagues; advocacy for patients; commitment to continuous improvement in the healthcare system; collaboration with other healthcare stakeholders.

The New Zealand Health and Disability Commissioner's *Code of Rights* grants a number of rights to all consumers of health and disability services in New Zealand, and places corresponding obligations on providers of those services.[43] The onus is therefore on providers to deliver services that maintain the following rights of the consumer and influence the nature of advocacy and professionalism domains of competence for providers:

- Right 1—the right to be treated with respect

- Right 2—the right to freedom from discrimination, coercion, harassment, and exploitation

- Right 3—the right to dignity and independence

- Right 4—the right to services of an appropriate standard

- Right 5—the right to effective communication

- Right 6—the right to be fully informed

---

[42] Medical Council of New Zealand. Good Medical Practice: A guide for doctors. June 2008.

[43] New Zealand Health and Disability Commissioner. HDC Code of Health and Disability Services Consumers' Rights Regulation, 1996

- Right 7— the right to make an informed choice and give informed consent

- Right 8—the right to support

- Right 9—rights in respect of teaching or research

- Right 10—the right to complain.

The Royal Australasian College of Surgeons (RACS) has a comprehensive surgical performance framework[44]. The framework defines nine core competencies that are required by a surgeon, including:

- medical expertise

- judgement and decision-making

- technical expertise

- professionalism

- health advocacy

- communication

- collaboration and teamwork

- management and leadership

- scholarship and teaching.

---

[44] RACS. Surgical Competence and Performance. Royal Australasian College of Surgeons, Melbourne, 2008.

RACS Surgical Competence and Performance Framework
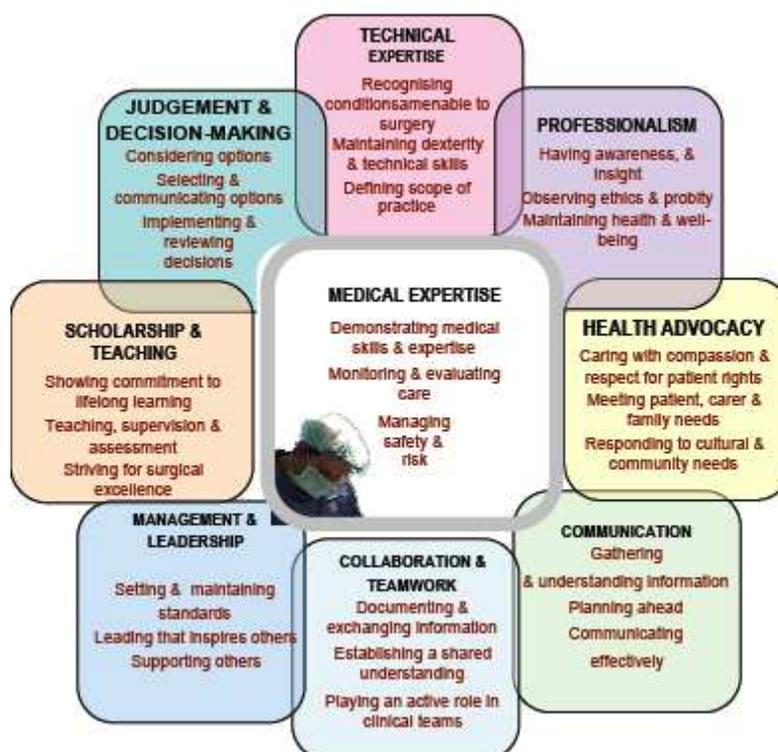
Data from the surgical and psychological literature support the domains of competence identified in the RACS framework.[45]

During education and training, acquisition of these competencies is progressively assessed. On award of their Fellowship, surgeons continue to maintain and improve their practice across the competencies. Each of the competencies is supported by 'behavioural markers', which describe examples of 'good' and 'poor' performance against the competency. A range of options for measuring performance in each competency area has been introduced, and a number of resources have been made available to assist surgeons with improvement in their performance across competency areas.[46]

The majority of other Australasian Colleges integrate performance frameworks into their CPD/ MOPS programs. The aims of these CPD programs are to stimulate the involvement of fellows in activities that develop and enhance their performance and to demonstrate to external agencies that fellows can demonstrate involvement in a program that assists in their maintenance of competence. These external agencies include but are not limited to health-care organisations, governments, the MBA and communities. Programs generally include activities in both the technical and non-technical aspects of professional practice. Where assessment processes are used to support CPD/MOPS processes, these are usually formative rather than summative in nature. Examples of College programs across various clinical and non-clinical

---

[45] Yule S, Flin R, Paterson-Brown S et al. Non-technical skills for surgeons in the operating room: a review of the literature. Surgery 2006; 139: 140-9.

[46] Dickinson I, Watters D, Graham I et al. Guide to the assessment of competence and performance in practicing surgeons. Australian and New Zealand Journal of Surgery 2009; 79:198-204.

types of medical practice are provided below. This table is not meant to be an exhaustive account of the CPD/MOPS activities of all Colleges. Rather, it illustrates the diverse approaches to CPD across professional Colleges. In particular, it should be noted that some professional Colleges base program areas on competencies, others on types of activities that should be undertaken to fulfil CPD requirements:

Examples of College CPD programs

College	Program	Program areas
Royal Australasian College of Physicians	CPD	Educational development, teaching and research Group learning activities Self-assessment programs Structured learning projects Practice review and appraisal Other learning activities
Australasian Faculty of Public Health Medicine	CPD	General professional practice Cultural competencies Information, research, evaluation and policy Health promotion and disease prevention and control Health sector development and organisational management
Australasian Faculty of Rehabilitation Medicine	CPD	Presentations at conferences Publications/research Teaching/lectures Conferences/congresses/ASMs Practice related CME activities Other professional development activities Quality assurance
Australasian College for Emergency Medicine	MOPS	Knowledge level and acquisition Skills level and acquisition Attitude for professional conduct

		Clinical judgement, organisation and communication
Royal Australian and New Zealand College of Ophthalmologists	CPD	CanMEDS capabilities and clinical decision maker
Royal Australian and New Zealand College of Radiologists	CPD	CanMEDS capabilities
Royal Australasian College of Medical Administrators	CPD	CanMEDS capabilities
Royal Australian College of General Practitioners[47] [48] [49]	CPD	Category 1: (active learning module, clinical audit, evidence-based medicine journal club, GP research, learning plan, 'Plan Do Study Act' cycle activities, small group learning, supervised clinical attachment) Category 2: endorsed or accredited provider activities Unaccredited activities: self-recorded activities
Royal New Zealand College of General Practitioners	MOPS	All Fellows must complete an annual Professional Development Plan. In addition, credits are obtained from different categories of activity: Continuous quality improvement Continuing medical education Peer review activities Additional professional development activities
Royal Australian and New Zealand College of Obstetricians and Gynaecologists	CPD	Practice review & clinical risk management (minimum 25 points; no maximum) Educator activities (maximum 75 points) Meeting attendances (maximum 75 points)

---

[47] The Royal Australian College of General Practitioners supplements their CPD program with a quality framework that embeds practitioner performance within domains of quality more widely. Clinical indicators can be used to support the delivery of high quality care by measuring relevant aspects of performance. These can be applied at the general practice level, RACGP level and health system level, rather than the individual practitioner level per se.

[48] RACGP. A quality framework for Australian general practice. RACGP, 2005.

[49] RACGP. Clinical indicators and the RACGP. RACGP, 2009.

		Self-education activities (maximum 75 points)
		(Subspecialists: As above but 100 of 150 points must be within subspecialty area)

MOPS/CPD programs described in the literature are learning systems based on a continuous quality improvement (CQI) concept.[50]

Although not a performance framework, the RACP's Professional Qualities Curriculum (PQC) is an educational framework that outlines the range of concepts and specific learning objectives required and used by all physicians and paediatricians, regardless of their specialty or area of expertise.[51] Many elements of the education framework align with performance domains of other frameworks. All aspects of the curriculum are taught, learnt and assessed within the context of everyday clinical practice and, where appropriate, will be given a subspecialty specific focus during advanced training.

Nine key domains are detailed within the curriculum:

- communication

- quality and safety

- teaching and learning (scholar)

- cultural competency

- ethics

- clinical decision making

- leadership and management

- health advocacy

- the broader context of health.

Within Australia, some State governments have also developed performance frameworks to support medical practitioners' performance and professionalism. For example, Queensland Health's *Safe Doctors – Fair System* project describes a clinical performance framework for the management of medical practitioners.[52] Key components of the framework include:

- professional development, including recruitment and ongoing feedback

- the existing investigatory pathway (based on legislative provisions)

---

[50] St George I, Kaigas T, McAvoy P. Assessing the competence of practicing physicians in New Zealand, Canada and the United Kingdom. Family Medicine 2004; 36:172-7.

[51] http://www.racp.edu.au/index.cfm?objectid=D7FAA740-02AF-CE23-21178A9E575DDE99

[52] Queensland Health. 'Safe Doctors – Fair System' Guidelines, 2007.

- an assessment and remediation pathway as an alternative to formal investigation.

The framework is primarily oriented towards managing 'concerns about professional performance'. Systems and processes are described to address issues of competence in the minority of medical practitioners where these are required. However, the framework also aims to assure the safety and quality of practice of all health professionals. The Queensland Government has also developed a *Performance Appraisal and Development* (PAD) policy (2008). The purpose of the policy is to enhance work performance and career development by:

- clarifying performance expectations of employees

- ensuring feedback and guidance on performance

- collaboratively identifying learning and development needs and activities.

Employees and managers are required to:

- participate in the PAD process twice a year for existing employees and within three months of commencement for new employees

- develop a PAD plan or formally document a discussion about performance goals, corporate values, learning strategies and actions required to obtain new skills or develop existing skills for the current position

- conduct a performance appraisal meeting to assess previous performance and clarify the employees role. This involves self-assessment and objective measures of performance across relevant domains of practice

- participate in ongoing management of workplace performance including work allocation, coaching and regular feedback.

In contrast, the Victorian Department's *Partnering for Performance* is a performance development and support framework that has been primarily developed for senior medical staff.[53] The framework embeds performance development, management and appraisal within credentialing processes. The framework is oriented towards the medical practitioner monitoring and continually improving their performance and to enable feedback to organisations about care delivery. A suite of processes and tools support clinical practice and review across four domains:

- work achievement (including but not limited to clinical practice)

- professional behaviours

- learning and development

- career progression.

---

[53] Department of Health. Partnering for performance —a performance development and support process for senior medical staff. DoH Victoria. 2010.

The seven CanMEDS roles have been adapted for the Victorian system and incorporated into the four *Partnering for Performance* domains:

CanMEDS and Partnering for Performance roles and domains

CanMEDS roles	Partnering for Performance domains	Partnering for Performance roles
Medical expert	Work achievement	Clinical expertise
Manager		Goal setting, leadership, review, planning and evaluation
Communicator	Professional behaviours / career progression	Supportive environment
Collaborator		Motivation and engagement
Professional		Professionalism
Health advocate		Health advocacy
Scholar	Learning and development	Scholarship

New South Wales Health has in place a policy directive (PD2005_498) that establishes a policy for the implementation of performance review for visiting medical officers. The policy, *Performance review of visiting practitioners,* outlines the components of the performance review system, including (but not limited to) the following objectives to:

- enhance professional development by providing regular feedback about performance and identifying appropriate developmental opportunities

- provide an opportunity for candid two-way feedback where all aspects of performance are assessed

- review quality assurance, quality improvement and clinical risk management activities and ensure that relevant activities for the following year are established

- where appropriate, update targets and performance criteria.

Western Australia has a system of clinical governance that brings together activities that promote, review, measure and monitor the quality of patient care. The Clinical Governance Framework for WA Health has been developed on four key components:

- consumer value

- clinical performance and evaluation

- clinical risk

- professional development and management.

Overall, the above national and international frameworks provide a description of the elements and inter-relationships between domains of performance of medical practitioners. The application of these frameworks to performance improvement requires that they be embedded within systems that facilitate their use. A range of performance management processes are currently in operation in various jurisdictions that may be enhanced by performance frameworks. These are described below.

Performance management

Performance management is a commonly used process to support medical practitioners in their performance and professionalism. Performance management is 'a process which contributes to the effective management of individuals and teams in order to achieve high levels of organisational performance'. It requires establishing an understanding about what is to be achieved and an approach to leading and developing people which will ensure that it is achieved.[54]

Performance management may involve a range of elements, including:

- clarification of performance objectives and expectations

- formal periodic performance appraisal against set goals

- informal appraisal on an ongoing basis

- recognition and / or reward for performance

- capacity building

- action to deal with developmental areas.

Effective performance management requires goal setting and formal performance appraisal as well as ongoing informal feedback throughout the performance cycle.[55]

Performance management has been demonstrated to be associated with improved patient outcomes, greater patient satisfaction, increased staff productivity and greater efficiency in hospital settings.[56] [57]

A range of approaches to performance management are described below.

---

[54] Armstrong M and Baron A. Managing performance: performance management in action. London: Chartered Institute of Personnel and Devleopment. 2004

[55] Vigoda-Gadot E and Angert L. Goal setting theory, job feedback and OCB. Basic and Applied Social Psychology 2007; 29: 119-28.

[56] Castro P, Dorgan S, Richardson B. A healthier health care system for the United Kingdom. The McKinsey Quarterly 2008; February.

[57] West M, Borrill C Dawson J et al. The link between the management of employees and patient mortality in acute hospitals. International Journal of Human Resource Management 2002; 13: 1299-310.

Revalidation and performance management

In some countries licensing bodies, employers and/or national assessment organisations require practitioners to demonstrate that their knowledge and activities reflect current practice standards. This may occur through a formal process of revalidation, where medical practitioners demonstrate to the relevant authority that they remain up-to-date and fit to practise. Although terminology varies between countries, processes for revalidation of medical practitioners are established in NZ, the US and the Netherlands, and are being introduced in the UK.[58] [59]

In the UK the proposed revalidation process is mandatory. In contrast, revalidation in the US (recertification) is voluntary and centres around national assessment organisations rather than licensing bodies. The rationale is that national assessment bodies are the established undergraduate and postgraduate assessment providers who have established processes, in-house expertise and measurement standards in assessment.[60] Although voluntary, many employers will not credential medical practitioners without evidence of revalidation therefore compliance with revalidation requirements among medical practitioners is high.[61]

Doctors who wish to practise medicine in New Zealand must also participate in mandatory recertification.[62] In order for the doctor to be registered with the MCNZ, they must hold an Annual Practising Certificate (APC). Participation in CPD is a requirement for an APC to be issued. CPD should cover the domains of practice outlined in the MCNZ's *Good Medical Practice.*[63]

A systematic review of studies published between 1966 and 1999 found that over 50% of published studies investigating the association between revalidation and patient outcomes showed positive and statistically significant associations.[64] [65] Further well conducted studies published since 1999 have also concluded that revalidation processes are associated with provision of higher quality of care across a range of specialties.[66] [67]

---

[58] Merkur S, Mladovsky P, Mossialos E et al. Do lifelong learning and revalidation ensure that physicians are fit to practise? WHO, 2008.

[59] Klass D. A performance-based conception of competence is changing the regulation of physicians' professional behaviour. Academic Medicine 2007; 82:529-35.

[60] Dauphinee W. Self regulation must be made to work. BMJ 2005; 330:1385-7.

[61] http://www.certifacts.org/faq.html

[62] Medical Council of New Zealand. What you need to know about medical registration in New Zealand. 2010. Available at: http://www.mcnz.org.nz/portals/0/publications/Registration_Workbook_2010.pdf

[63] Medical Council of New Zealand. Good Medical Practice: A guide for doctors. June 2008.

[64] Peck C, McCall M, McLaren B et al. Continuing medical education and continuing professional development. BMJ 2000; 320: 432-5.

[65] Sharp L, Bashook P, Lipsky M et al. Specialty board certification and clinical outcomes. Academic Medicine 2002; 77: 534-42.

[66] Chen J, Rathore S, Wang Y et al. Physician Board Certification and the Care and Outcomes of Elderly Patients with Acute Myocardial Infarction. Journal of General and Internal Medicine 2006; 21(3):238-44.

[67] Sutherland K, Leatherman S. Does certification improve medical standards? BMJ 2006; 333:439-41.

Credentialing and performance management

Credentialing can be defined as 'the formal process used to verify the qualifications, experience, professional standing and other relevant professional attributes of medical practitioners for the purpose of forming a view about their competence, performance and professional suitability to provide safe, high quality health care services within specific organisational environments'[68].

Credentialing may assist in performance appraisal and management for the medical practitioner. However, the primary function of credentialing is to identify an appropriate scope of practice for the practitioner within the organisation and to ensure ongoing competence, rather than to assist in performance improvement per se. Similarly, although the processes of re-credentialing and revalidation share some similarities, re-credentialing is usually specific to a particular workplace or organisation and is conducted by that workplace whereas revalidation generally relates to a license to practice and is usually conducted by an organisation other than the workplace within which the medical practitioner works[69].

In 2004 the former Australian Council for Safety and Quality in Health Care released the *Standard for Credentialing and Defining the Scope of Clinical Practice: a national standard for credentialing and defining the scope of clinical practice of medical practitioners, for use in public and private hospitals* (the Credentialing and Scope of Clinical Practice Standard). Implementation is proceeding in the public and private sectors in all Australian jurisdictions[70]. Numerous State and Territory Credentialing standards have also been developed to facilitate implementation of the Council standards[71] [72] [73] [74].

The Credentialing and Scope of Clinical Practice Standard recognises the importance of credentialing in the performance management of medical practitioners. Medical practitioners are regularly appraised as part of the credentialing process. Various sources of information are used to verify the medical practitioner's performance, particularly appraisal by peers and assessment of performance based on objective information sources. The nature of the medical practitioner's clinical practice determines which information sources are most appropriate to inform this assessment[75].

---

[68] www.safetyandquality.gov.au

[69] Ministry of Health, New Zealand. Towards Clinical Excellence—A framework for the Credentialing of Senior Medical Officers in New Zealand. 2001. www.moh.gov.nz

[70] http://www.health.gov.au/internet/safety/publishing.nsf/Content/ A0E19BFE6489F6E1CA2571C70008A86A/$File/credentl.pdf

[71] Medical Council of Western Australia. Credentialing and Clinical Privileges for Medical Practitioners

[72] Queensland Health. Credentialing and Defining the Scope of Clinical Practice for Medical Practitioners in Queensland: A policy and resource handbook. Brisbane: State Government of Queensland, 2009.

[73] Department of Health, Victoria. Credentialing and defining the scope of clinical practice for medical practitioners in Victorian health services: a policy analysis.

[74] NSW Health. Delineation of clinical privileges for visiting practitioners and staff specialists.

[75] Ibid

NZ's Ministry of Health released a Credentialing Framework for New Zealand Health Professionals in July 2010.[76] The Framework recommends the credentialing of all medical practitioners in all practice situations. The formal credentialing review is seen as a 'stock take' in an organisation's ongoing clinical quality management program, and is completed at least five-yearly. The following aspects are formally reviewed:

- current clinical responsibilities

- clinical activity since the last review, including volumes and outcomes recommended for maintaining competence

- training and experience gained since the last review, especially as compared to what is required by colleges or specialist societies

- future education or training possibilities and future professional aspirations

- other relevant information, such as complaints, patient satisfaction, accrued leave

- registration status, including any conditions placed on registration status or annual practising certificate

- health status

- any adverse professional or criminal record.

The credentialing process is underpinned by the following principles:

- credentialing is a process used by all health and disability service providers to promote the provision of quality health care

- the focus of credentialing is on the competence of health practitioners to perform specific clinical responsibilities within a designated service environment

- professional bodies, employers and individual health practitioners have essential roles in credentialing that are distinct and complementary

- consumer input is a requirement of the credentialing process

- credentialing is a regular, ongoing, responsive process that commences on appointment and continues for the period of employment

- credentialing processes must be fair, transparent and robust

- credentialing processes accommodate a variety of practice settings and practitioner working arrangements.

The Framework outlines an important role for the consumer. Consumers supply information that helps providers make the right decision by providing a service user's viewpoint on aspects of

---

[76] New Zealand Ministry of Health. Credentialing Framework for New Zealand Health Professionals. 2010.

clinical care to complement the perspective of a health professional, which is often more focused on the technical aspects of clinical practice; and predicting how other consumers will react, so that decisions made by the credentialing committee will stand up to public scrutiny.

Not all medical practitioners in Australia are required to participate in credentialing processes. Credentialing is a key component of performance management of medical practitioners in hospital settings.[77] Implementation of credentialing processes in non-hospital settings is less advanced, and the use of credentialing in the performance management of medical practitioners not in clinical practice is uncommon but increasing over time.[78]

Guidance documents (including guidelines and standards) for organisations for credentialing of medical practitioners have been published by some Australasian professional Colleges. In general, these guidance documents promote active participation in College CPD programs for their fellows, and support appraisal of the fellow's attainment of College CPD requirements as an integral part of the credentialing process. Further, where the performance of a fellow is under review, guidance documents recommend the inclusion of a representative of the College to assist in the valid peer review of the fellow.[79] [80]

Continuing professional development and performance management

CPD is the means by which members of the profession maintain, improve and broaden their knowledge, expertise and competence, and develop the personal qualities required in their professional lives. It is the process by which health professionals keep updated to meet the needs of patients, the health service, and their own professional development and includes the continuous acquisition of new knowledge, skills, and attitudes to enable competent practice.[81] [82]

Although there are wide variations across systems for professional development in different countries and health-care systems, there are some common features[83]:

- a points-based credit system is commonly used to measure attainment of the provider's CPD requirement

- educational activities tend to be divided into three categories

    o   'live' or external activities (e.g. courses, meetings, conferences);

    o   internal activities (e.g. case conferences, teaching);

---

[77] http://www.health.gov.au/internet/otd/publishing.nsf/Content/work-credentialling

[78] Gebbie K, Turnock B. The public health workforce, 2006. Health Affairs 2006; 25: 923-33.

[79] Royal College of Pathologists of Australasia. Guidelines for organisations for credentialing of pathologists. 2007.

[80] Australian and New Zealand College of Anaesthetists. Statement on credentialing and defining the scope of clinical practice in anaesthesia. 2006.

[81] Medical Board of Australia. Continuing professional development registration standard. 2010.

[82] Norman G, Shannon S, Marrin M. The need for needs assessment in continuing medical education. British Medical Journal. 2004;328:999-1001.

[83] Peck C, McCall M, McLaren B et al. Continuing medical education and continuing professional development. BMJ 2000; 320:432-5.

- o   'enduring' materials (print, web-based materials)

- when there is mandatory recertification or revalidation, showing ongoing commitment to CPD is a major component of the process.

Under the New Zealand HPCAA (2003), doctors who wish to practise medicine in New Zealand require a current APC issued under the Act. The MCNZ requires that doctors demonstrate their participation in CPD before issuing their APC. CPD should cover the domains of practice outlined in *Good Medical Practice (NZ)*. The MCNZ requires most doctors to complete 50 hours of CPD each year. CPD must include clinical audit, peer review and continuing medical education.[84]

Similarly, according to the Continuing Professional Development Registration Standards (pursuant to the Health Practitioner Regulation National Law (2009)) Australian medical practitioners who are engaged in any form of medical practice are required to participate regularly in CPD. CPD should be relevant to their scope of practice in order to maintain, develop, update and enhance their knowledge, skills and performance to ensure that they deliver appropriate and safe care. CPD must include a range of activities to meet individual learning needs, including practice-based reflective elements, such as clinical audit, peer-review or performance appraisal, as well as participation in activities to enhance knowledge, such as courses, conferences and online learning.[85]

From 1 July 2010, all Australian medical practitioners are asked to declare annually on renewal of registration that they have met the CPD standard set by the Board. CPD attainment will be required for each of the medical practitioner's registered areas of practice. Compliance with CPD requirements will be subject to audit. Failure to comply is a breach of the legal requirements for registration. CPD programs of medical colleges accredited by the AMC meet these requirements.[86]

Systematic reviews of the effectiveness of methods of continuing medical education demonstrate that interactive techniques (audit, feedback, academic detailing, outreach and reminders) are the most effective at simultaneously changing medical practitioner care and patient outcomes, clinical practice guidelines and opinion leaders are less effective, and didactic presentations and printed information have little or no beneficial effect in changing medical practitioner practice.[87] Although educational meetings alone are unlikely to influence complex clinician behaviours, when combined with other interventions, or when targeted at simple behaviours, they can improve performance. However, their effect is likely to be small.[88]

---

[84] Medical Council of New Zealand. Continuing Professional Development and Recertification. May 2008. Available at: http://www.mcnz.org.nz

[85] Medical Board of Australia. Continuing professional development registration standard. 2010.

[86] Medical Board of Australia. Continuing professional development registration standard. 2010.

[87] Bloom B. Effects of continuing medical education on improving physician clinical care and patient health. International Journal of Technology Assessment in Health Care 2005; 21:380-5.

[88] Forsetlund L, Bjorndal A, Rashidian A et al. Continuing education meetings and workshops. Cochrane Database of Systematic Reviews 2009; Issue 2. Art. No.: CD003030.

A range of factors influence the efficacy of CPD programs in supporting medical practitioners' performance, including the following:

- medical practitioners, as with other professionals, tend to pursue education around topics they are already good at while avoiding areas in which they are deficient and where there may be room for improvement[89 90 91 92]

- CPD in isolation is insufficient to ensure medical practitioners perform optimally in all aspects of their practice. More comprehensive performance management systems, of which CPD forms a component, are required to assure and improve medical practitioner performance.[93]

Further, maintenance of CPD requirements does not identify the poorly performing physician; systems for appraisal of clinical performance and the identification of poor performance are necessary for that.[94 95 96 97]

Managing the performance of the non-clinical component of practice

Performance management is an important process to support medical practitioners in their performance and professionalism, regardless of whether or not they care for patients. Medical practitioners may work in a range of non-clinical professional areas, including management, administration, policy, teaching and research. Each of these non-clinical areas may also be

---

[89] Sibley J, Sackett D, Neufeld V et al. A randomized trial of continuing medical education. New England Journal of Medicine 1982; 306:511-5.

[90] Gordon M. A review of the validity and accuracy of self-assessments in health professions training. Academic Medicine 1991; 66:762-9.

[91] Dunning D, Heath C, Suls J. Flawed self-assessment. Psychological Science in the Public Interest 2004; 5: 69-106.

[92] Falchikov N, Boud D. Student Self-Assessment in Higher Education. Reviews of Educational Research 1989; 59(4):395-430.

[93] Thomson O'Brien M, Freemantle N, Oxman A et al. Continuing education meetings and workshops: effects on professional practice and health are outcomes. Cochrane Database of Systematic Reviews. 2001;2:CD003030.

[94] St George I, Kaigas T, McAvoy P. Assessing the competence of practicing physicians. Family Medicine 2004; 36:172-7.

[95] In an analysis of the first 50 assessments made by the UK National Clinical Assessment Service, of the most serious cases referred to them, 80% had issues with aspects of clinical care, with the top 6 being diagnoses; medical record keeping; adherence to agreed clinical policies; keeping up-to-date; history taking, consultation and examination skills; and prescribing. Behavioural issues were the next most frequent issues with 'communication with colleagues' appearing in 74%, followed by 'managing and organising' (56%), 'general behaviour', 'communication with patients' and 'leadership'. Significantly, in 80% of cases, there were 5 or more areas of concern, demonstrating the multiple and complex nature of the difficulties typifying a poorly performing medical practitioner.

[96] Griffiths P. Measuring Doctors Performance. United Kingdom. In: 5th International Medical Workforce Conference, Sydney 2000.

[97] NHS National Patient Safety Agency. National Clinical Assessment Service – Medical Director's Report: NHS; 2005-2006.

areas of employment for medical practitioners who do work in clinical practice, and form part of their overall professional role.[98]

In New Zealand, arrangements have been in place for a number of years to tailor recertification requirements to the professional needs of doctors not in clinical practice. The MCNZ has provisions for doctors who are not in non-clinical practice to recertify via a collegial relationship with another doctor to ensure the doctor is maintaining competence and taking part in CPD, or by forming a relationship with an educational supervisor within an organisational appraisal system that includes requirements for CPD.[99]

If a doctor working in non-clinical practice in New Zealand can satisfy Council that their work has no risk to public health and safety, they may apply to be exempt from recertification. Such exemptions are considered individually by Council and only granted when it is clear public safety is not at risk.[100]

The MBA's *Limited registration for teaching or research standard* (2010) sets out the requirements that an applicant for registration must meet in order to be granted limited registration for teaching or research purposes.[101] These practitioners may also undertake some supervised clinical practice that is relevant to the teaching or research activities for which they have been registered, hence the standard is not truly 'non-clinical' in scope. Medical practitioners granted limited registration must comply with the following requirements:

- compliance with a supervision plan if undertaking any clinical practice

- compliance with a professional development plan

- authorising and facilitating the provision of regular reports from their supervisors to the Board regarding their safety and competence to practise

- satisfactory performance in the teaching or research position and in any clinical practice undertaken.

Medical practitioners employed in non-clinical professional areas other than teaching or research, and who wish to maintain professional registration, must comply with the requirements specified for medical practitioners in clinical practice, including mandatory participation in CPD[102].

The peer-reviewed literature examining the efficacy performance development / performance management approaches in medical practitioners in non-clinical practice is less extensive than for medical practitioners in clinical practice. Available evidence supports the use of performance

---

[98] Klingner D, Nalbandian J. Public Personnel Management. Prentice Hall, New Jersey, 2003.

[99] Medical Council of New Zealand. Definition of clinical practice and non-clinical practice. August 2004. Available at: http://www.mcnz.org.nz/Publications/Guidanceresources/Definitionofclinicalpracticeandnonclinicalp /tabid/187/Default.aspx

[100] Medical Council of New Zealand. Medical registration in New Zealand. October 2007.

[101] Medical Board of Australia. Limited registration for teaching or research purposes. 2010.

[102] Medical Board of Australia. Continuing professional development registration standard. 2010.

frameworks across domains of practice that are consistent with frameworks such as *CanMEDS* and *Good Medical Practice (UK).*[103] However, standards that are expected of medical practitioners not in clinical practice are usually modified by professional bodies in order to align with the professional requirements of the framework relevant to the medical practitioner's role.[104]

Performance management in non-health related industries

A number of high reliability organisations (e.g. air traffic control, car manufacturing, nuclear technology) have been studied by the health sector because of the characteristics they have that are relevant to health. Achieving high performance standards across these sectors has focussed on loci of control within each industry. Actions across loci of control include[105] [106]:

- performance management of the individual in order to achieve high quality within the industry context

- understanding the influence of the context within which the business operates on quality and taking a system-wide approach to continuous quality improvement

- developing and maintaining systems to achieve safe, high quality delivery of services, particularly systems of quality measurement and reporting

- adopting proven processes to identify and address areas where quality issues exist and can be improved.

Industry experience demonstrates that performance management of the individual is most effective when it occurs in the broader context of organisational performance improvement.[107]

Safety has been a particular focus of industries such as aviation—the National Aeronautics and Space Administration (NASA), in their investigation of aviation accidents, found that 70% involve human error. In response, NASA developed error management systems based on understanding the nature and extent of error, changing the conditions that induce error, determining behaviours that prevent or mitigate error, and training personnel in their use.[108]

---

[103] Lichtveld M, Cioffi J. Public health workforce development: Progress, challenges and opportunities. Public Health Management and Practice 2003; 9(6): 443-50.

[104] Yedidia M, Gillespie C, Moore G. Specific clinical competencies for managing care: views of residency directors and managed care medical directors. JAMA 2000: 284:1093-8.

[105] Reason J. Human error: models and management. BMJ 2000; 320:768-70.

[106] Sexton J, Thomas E, Helmreich R. Error, stress and teamwork in medicine and aviation. BMJ 2000; 320:745-9.

[107] Reason J. Human error: models and management. BMJ 2000; 320:768-70.

[108] Helmreich R. On error management. BMJ 2000; 320:781-5.

Many actions required to achieve high performance standards in the health sector are equivalent.[109] [110] However, although error management in health follows many of the same principles as aviation, the validity of comparisons between safety in health and aviation has been questioned, as making safety a top priority for the health-care sector has proved problematic and is a significant challenge in health care where system complexity is greater and the degree to which error can be controlled may be lower.[111] [112]

The role of standards in performance management

Many performance frameworks incorporate standards as a core element.[113] A standard can be defined as 'a published document which sets out specifications and procedures to ensure that a material, product, method or service is fit for purpose and consistently performs the way it was intended'.[114]

Standards can be rules based or principles based in intent. Rules-based standards are oriented towards compliance, and audit processes are commonly applied to ensure standards have been met. Areas of health where rules-based standards predominate are usually where decision-making is supported by the presence of objective outcome measures that have a high degree of reliability and reproducibility. However, rules can increase the complexity of a standard, reduce the applicability of the standard across health-care settings, and, if overly rigid, may require detailed implementation guidance to be provided with the standard.[115]

Principles-based standards are generally less rigid. They have some advantages in improving the quality of health care[116]:

- they are more flexible than rules-based approaches, enabling their implementation across a wider range of settings

- they are usually systemic in approach and are based on a set of underlying principles

- they are generally focused on continuous improvement and on change management rather than on compliance per se

- the amount of improvement and change that might be sought through the application of principles-based standards is open-ended.

---

[109] Pronovost P. Learning accountability for patient outcomes. JAMA 2010; 304(2): 204-5.

[110] Desroches C, Sowmya R, Fromson J et al.Physicians' Perceptions, Preparedness for Reporting and Experiences Related to Impaired and Incompetent Colleagues. JAMA 2010; 304(2):187-93.

[111] Livingston E. Solutions for improving patient safety. JAMA 2010; 303:159-61.

[112] Shaw J, Calder K. Aviation is not the only industry: healthcare could look wider for lessons on patient safety. Quality and Safety in Health Care 2008; 17(5):314.

[113] Southgate L, Hays R, Norcini J et al. Setting performance standards for medical practice. Medical Education 2001; 35:474-81.

[114] Productivity Commission, Improving Standard Setting and Laboratory Accreditation

[115] European Foundation for Quality Management [website].

[116] Baldrige National Quality Program, National Institute of Standards and Technology [website].

Principles-based standards predominate in health care across areas where continuous improvement is sought and where greater flexibility is required to accommodate the needs of diverse provider groups.[117] However, they are often viewed as less robust in terms of ensuring an acceptable minimum level of performance.

The wider 'quality community' has, at times, been sharply divided over the merits of the two approaches. In reality, both offer potential benefits and a combination of rules-based and principles-based standards may produce the greatest gains in quality where appropriate[118] [119].

International performance frameworks incorporate both types of standards, often within the same framework. Published standards also differ according to the following[120]:

- standards that define expectations versus those that define aspirations;

- standards that can be generalised to all medical practitioners versus those that are specific to medical practitioners working in a narrow field of practice;

- standards that are vague and non-specific versus those that are tightly defined;

- the extent to which members of the public are involved in the determination of standards;

- the extent to which standards are operationalised by means of criteria against which assessment can be made and thresholds of success or failure; and

- the linkage of standards with licensure to practice.

Performance appraisal based on the 'real world' of medical practice is now widely accepted as a requirement for performance assessment processes that are valid[121]. Although standards can provide a basis for performance assessment, the development of standards for this purpose is not as straightforward as in competency-based performance assessment, where assessment tasks and simulations can more readily reflect narrower issues of knowledge and skills. The validity and measurability of complex, contextually-based performance standards have not been assessed extensively in published studies[122]. As a result, the extent to which performance standards reflect evidence-based practice is unknown.

---

[117] General Practice Education and Training. GPET quality framework. Overview.

[118] Brand C, Ibrahim J, Cameron P et al. Standards for health care: a necessary but unknown quantity. MJS 2008; 189: 257 - 60

[119] Heywood L. Principles-based accreditation: the way forward? MJA 2007: 186(7): s31-232.

[120] Department of Health. Good doctors, safer patients. NHS.

[121] Southgate L, Hays R, Norcini J et al. Setting performance standards for medical practice: a theoretical framework. Medical Education 2001; 35: 474-81.

[122] Ibid

Performance appraisal

Performance appraisal can be defined as 'a positive process to give someone feedback on their performance, to chart their continuing progress, and to identify developmental needs. It is a forward-looking process essential for the developmental and educational planning needs of an individual'.[123]

In both the general and medical management literature, appraisal is presented as a positive, self-reflective, non-punitive process. When appraisal is formative and educational it can become a powerful tool in personal development. However, it can also be used for management-authorised summative assessment, the purpose of which relates to efficiency and resource use.[124] [125]

Well-conducted performance appraisal motivates professionals to learn, provides feedback to the professional regarding how much they have learned and whether they have reached a required standard, and enables the professional to make decisions about future learning needs.[126]

A survey of three years of appraisal experience of Scottish general practitioners found that 47% of respondents had altered their educational activity, 33% had undertaken additional education as a result of the appraisal and 13% felt it had impacted on their career development.[127]

The following features of successful performance appraisal processes have been identified[128] [129] [130]:

- be relevant to the career needs and plans of the individual

- focus on performance strengths

- provide specific suggestions for improvement

- provide feedback from different sources

- provide clear guidance regarding expected performance standards

---

[123] National Health Service. Appraisal for doctors in hospital practice. 2006. www.ncas.npsa.nhs.uk

[124] Conlon M. Appraisal: the catalyst of personal development. BMJ 2003; 327: 389-91.

[125] Lakhani M. GMC and the future of revalidation: a way forward. BMJ 2005; 330:1326-8.

[126] Brown N, Doshi M. Assessing professional and clinical competence: the way forward. Advances in Psychiatric Treatment. 2006;12:81-91.

[127] Colthart I, Cameron N, McKinstry B et al. What do doctors really think about the relevance and impact of GP appraisal 3 years on? British Journal of General Practice 2008; 58(547): 82-7.

[128] Corporate Leadership Council. Building the high performance workforce. Corporate Leadership Council Publications, 2002.

[129] Conlon M. Appraisal: the catalyst of personal development. BMJ 2003; 327: 389-91.

[130] Corporate Leadership Council. Performance management guidelines for managers and executives. Corporate Leadership Council Publications. 2004.

- ensure sufficient levels of accountability and responsibility in achieving standards.

Performance assessment

Performance assessment is a core component of the performance appraisal process. The assessment of the professional performance of health-care professionals has been the subject of increasing research and policy interest. As a result, continuous assessment is now considered to be required for lifelong learning and for quality of care.[131] [132]

Although there is a need for regular performance assessment of individual health-care professionals, the best way to conduct regular performance assessment is not clear and not all aspects of care are subject to performance assessment processes.[133] The practice of performance assessment is confounded by the fact that medical practitioners perform differently in controlled examination situations compared with real life.[134] As a result, different methods for assessment of the health-care provider's performance in real practice have been developed and described in the literature.[135]

A range of performance appraisal methods are available to assist medical practitioners to improve their performance. The individual medical practitioner may perform self-assessment to gauge performance, or external methods of assessment may be used.[136]

Self-assessment

Self-assessment can be defined as 'a performance appraisal activity that relies on the medical practitioner using self-rating or self-auditing to assess one or more aspects of their practice'[137]. Self-assessment is a commonly used performance assessment method and has been used by medical practitioners to identify learning needs for many years.[138]

Studies assessing the effectiveness of self-assessment in guiding performance improvement activities have demonstrated the dependence of the process on the ability of medical practitioners to determine their own learning needs and to find resources to meet them.[139]

---

[131] Overeem K, Faber, M, Arah O et al. Doctor performance assessment in daily practice: does it help doctors or not? Medical Education. 2007;41:1039-49.

[132] Casey D. Performance measurement 2.0: Time to Raise the Bar. American Journal of Medical Quality 2010; 25(4):246-8.

[133] Welner S, Schwartz A, Weaver F et al. Contextual Errors and Failures in Individualising Patient Care. Annals of Internal Medicine 2010; 153(2): 69-75.

[134] Rethans J, Sturmans F, Drop R et al. Does competence of general practitioners predict their performance? Comparison between examination setting and actual practice. British Medical Journal. 1991;303:1377-80.

[135] Casey D. Performance measurement 2.0. American Journal of Medical Quality 2010; 25(4):246-8.

[136] National Health Service. Appraisal for doctors in hospital practice. 2006. Available at: www.ncas.npsa.nhs.uk/EasySiteWeb/GatewayLink.aspx?alId=9448

[137] Davis D, Mazmanian P, Fordis M et al. Accuracy of physician self-assessment compared with observed measures of competence. JAMA 2006; 1094-1102.

[138] Westberg J, Jason H. Fostering learners' reflection and self-assessment. Family Medicine 1994; 26:278-82.

[139] Eva K, Regehr G. Self-assessment in the health professions: a reformulation and research agenda. Academic Medicine 2005; 80:s46-54.

A systematic review of the accuracy of self-assessment in identifying areas where performance development is most required found that medical practitioners have a limited ability to self-assess. Inaccuracy of self-assessment increases as skills and knowledge decrease, and medical practitioners who are the most confident but least skilled are least likely to accurately self-assess.[140]

As a result, performance assessment systems that rely on self-assessment by the medical practitioner are unlikely to assist significantly the medical practitioner in their maintenance of professional competence.[141]

In spite of these limitations, self-assessment is an important performance assessment activity that can be useful to assist the medical practitioner to identify specific learning needs and to select educational activities that address these needs, particularly when combined with other performance assessment methods.[142]

Performance assessment involving peers

Many forms of performance assessment involve evaluation of one or more aspects of the medical practitioner's work by their peers. These performance assessment methods may also be referred to as peer review.

Peer review can be defined as 'the evaluation of the creative work or performance of an individual by other people in the same field'.[143] The aims of peer review are to assist in the formulation of informed judgments on the professional performance of health-care professionals, with the ultimate goal of identifying ways to improve and maintain quality of care for patients.[144] Peer review may occur formally, e.g. through credentialing committees and clinical audit, or informally, e.g. with feedback received from a peer or direct observation of one or more aspects of practice by a peer.

The major reasons for conducting peer review described in the literature are[145]:

- assessment of the clinician's domains of professional practice

- assessment of delivery of care in accordance with clinical guidelines

---

[140] Davis D, Mazmanian P, Fordis M et al. Accuracy of physician self-assessment compared with observed measures of competence. JAMA 2006; 1094-1102.

[141] Norman G, Shannon S, Marrin M. The need for needs assessment in continuing medical education. British Medical Journal. 2004;328:999-1001.

[142] Davis D, Mazmanian P, Fordis M et al. Accuracy of physician self-assessment compared with observed measures of competence. JAMA 2006; 1094-1102.

[143] Evans R, Elwyn G, Edwards A. Review of instruments for peer assessment of physicians. British Medical Journal. 2004;328:1240-5.

[144] Bowie P, McKay J, Murray L, Lough M. Judging the quality of clinical audit by general practitioners: a pilot study comparing the assessments of medical peers and NHS audit specialists. Journal of Evaluation in Clinical Practice. 2008;14(6):1038-43.

[145] http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs_cred-con/$File/25738-LitReview.pdf

- assessment of organizational quality of care

- peer review as a requirement for CPD

- assessment of significant adverse events

- quality assurance against practice standards

- peer review for the purposes of credentialing health-care providers

- assessment of suspected under-performance of the health-care provider.

Sources of information used in peer review activities that are cited in the literature include[146]:

- chart audit as a source of data for the peer review process

- peer assessment of routinely collected information sources

  o incident reports, reports of significant event analyses or mortality reports (e.g. maternal mortality report)

  o registry data sources (e.g. routinely collected trauma registry data)

  o survey-based audit information (e.g. routinely collected information regarding indications for some types of operations)

- questionnaires provided to key informants as a source of data for the peer review process

  o multi-source feedback (360 degree evaluation) questionnaire methods

- information collected at interview with the health care professional undergoing peer review

- information collected during a site visit at the health-care professional's place of work

- information contained within ICD coded datasets (e.g. hospitalisation statistics, coded complication rates)

- autopsy data

- a portfolio or a resume required by the health care professional to develop for the peer review process.

In many circumstances, peer review is the only mechanism to judge the professional practice of others working in the same field and in similar settings, because the peer regularly performs similar work and possesses the relevant expertise to evaluate it.[147] [148]

---

[146] http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs_cred-con/$File/25738-LitReview.pdf

The potential for peer review to stimulate effective clinician-led quality improvement strategies generally is accepted, although there are many factors to consider in the design and conduct of effective peer review, including who participates, the information on which conclusions are based, and whether formal or informal processes are required.[149] [150]

Results of recent systematic reviews of published studies demonstrate that although there is a large and growing body of literature regarding the performance assessment of health-care professionals using peer review, most research in the area lacks methodologically rigorous appraisal of the peer review activity studied.[151] [152] In short, no peer review method studied can be said to be valid and reliable from every perspective, or for all intents and purposes.

The use of peer review in both formative and summative assessments of health-care professionals is supported by the findings of the systematic review[153]. Key principles that emerge regarding the application of peer review activities to the performance assessment of health-care professionals include:

1. peer review across domains of performance

2. peer review by multiple reviewers

3. peer review using structured processes

4. provision of training for assessors.

1. Peer review across domains of performance

Peer review across multiple domains of clinical performance have been described and assessed across studies. These include clinical expertise (skills and knowledge), communication (with patients, families, colleagues and in record-keeping), management (of time, resources, within systems and personally), scholarship (including life-long learning, teaching and research) and professionalism (including collaboration, teamwork, honesty, integrity, probity, respect for patients and ethical practice).[154]

No single method can assess all domains of performance and although multiple methods do not completely capture performance, judgments about performance can be improved through the

---

[147] Evans R, Elwyn G, Edwards A. Review of instruments for peer assessment of physicians. British Medical Journal. 2004;328:1240-5.

[148] Leape L and Fromson J. Problem doctors: is there a system-level solution? Annals of Internal Medicine. 2006;144:107-15.

[149] http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs_cred-con/$File/25738-LitReview.pdf

[150] ibid

[151] ibid

[152] ibid

[153] ibid

[154] McAvoy P, McCrorie P, Jolly B et al. Training the assessors for the General Medical Council's Performance Procedures. Medical Education. 2001;35(s1):29-35.

use of multiple methods. Multiple peer review methods are therefore recommended for a more holistic assessment of the health professional.

2. Peer review by multiple reviewers

Peer review can be undertaken by an individual peer or by multiple peers. Although it is not possible to nominate the exact number of reviewers required for performing peer review of a health- care provider, studies overall demonstrated that multiple reviewers are preferable to reliance on an individual for peer review of one's performance.

The number of peer reviewers required to achieve sufficient reliability and/or validity of the process varies widely across studies. This is because the appropriate number depends on the purpose of the peer review, the method being applied for the assessment of the health care provider, the properties of the peer review instrument (where one is used) and the domains of clinical performance being assessed.[155]

3. Peer review using structured processes

Structured processes for peer review have been the subject of a number of published studies. Structured processes enable reviewers to be guided more closely in the review process, and enable the assessment of specific domains of competence to be more targeted.[156] The addition of structured assessment tools, such as surveys and checklists, increase the reliability of peer review between assessors.

- Multi-source feedback (MSF—360 degree review) is a structured evaluation of performance through review by peers, other members of the health team, and patients. MSF is most effective when it includes narrative comments as well as objective data, and when the sources of feedback are recognised as credible, and where feedback is presented constructively.[157] [158]

- Practice and work assessment is the quantitative assessment of performance based on rates at which patients of medical practitioners experience certain outcomes of care and/or the rates at which medical practitioners adhere to evidence-based processes of care during practice. This form of assessment is limited by issues associated with the assessment of outcomes, including attribution of effects solely to the medical practitioner's actions, heterogeneity between patients with the same conditions, absence of data sets with sufficient reliability and validity, inability to apply the method reliably to assessment of the management of less common conditions, and a lack of a technical

---

[155] Lockyer J, Violato C, Fidler H. Assessment of radiology physicians by a regulatory authority. Radiology. 2008;247(3):771-8.

[156] Evans R, Elwyn G, Edwards A. Review of instruments for peer assessment of physicians. British Medical Journal. 2004;328:1240-5.

[157] Sargeant J, Mann K, Ferrier S. Exploring family physicians' reaction to MSF performance assessment: Perceptions of credibility and usefulness. Medical Educator 2005; 39:497-504.

[158] Violato C, Lockyer J,Fidler H. Multisource feedback: a method of assessing surgical practice. BMJ 2003; 326:546-8.

'benchmark' standard for many clinical conditions, against which medical practitioners should be assessed.[159]

4. Provision of training for assessors

The exact relationship between quality of peer review and training requirements of peer reviewers in health care remains to be defined. Research from business applications of peer review demonstrates that training improves the application of peer review methods to performance assessment and improves reliability and validity of the process.[160 161]

In some clinical systems, learning from business research has been applied. For example, in the UK GMC's performance procedures, potential clinical assessors are short-listed and interviewed against specific criteria relating to their specialist experience, their experience of assessment, evaluation and management, and their community and public service commitment and activity.[162]

Training is dependent on the peer review method to be applied by the reviewer and is relevant across a number of peer review performance domains. These include but are not limited to training in the use of the formal assessment instruments to be applied, interview techniques, clinical governance, communication, and observational skills training.[163]

Where the peer review methods to be applied require the use of new skills by the subject of the peer review process (for example, the development of a portfolio by the participant), training of participants may also be required.

To be successful, peer review must be credible to participating medical practitioners. Poorly-designed and/or conducted peer review is unlikely to gain the commitment of those whose participation is critical to its success.[164]

Peer review processes are often individualised. This improves their effectiveness but makes them difficult to implement on a scale needed to ensure adequate monitoring on a larger scale. Further, standardised peer review audits are generally applied to relatively common conditions, yet much of clinical practice is devoted to diagnosis of less common, but clinically important conditions.[165]

---

[159] Norcini J. Current perspectives in assessment. Medical Educator 2005; 39:880-9.

[160] Brett J, Atwater L. 360 degree feedback: accuracy, reactions, and perceptions of usefulness. Journal of Applied Psychology. 2001;86:930-42.

[161] Overeem K, Faber, M, Arah O et al. Doctor performance assessment in daily practice: does it help doctors or not? A systematic review. Medical Education. 2007;41(11):1039-49.

[162] McAvoy P, McCrorie P, Jolly B et al. Training the assessors for the General Medical Council's Performance Procedures. Medical Education. 2001;35(s1):29-35.

[163] Ibid

[164] Ibid

[165] Norcini J. Recertification in the United States. British Medical Journal. 1999;319:1183-5.

Once information is collected by peer review methods, feedback may then be provided to the health-care professional[166]. Evidence demonstrates that feedback can change medical practitioners' clinical performance when provided systematically over multiple years by an authoritative, credible source.[167] There is also strong evidence that feedback on an individual's performance is associated with improvements in performance and a reduction in errors.[168]

A recent systematic review of 41 studies on feedback on medical practitioner performance as a stand-alone intervention found 32 (74%) demonstrated a positive impact of feedback. Analysis of another 132 studies that examined the effect of feedback combined with other interventions such as educational programs, practice guidelines and reminders found 106 (77%) demonstrated a positive impact. The effects of formal assessment and feedback on medical practitioner performance are influenced by the source and duration of feedback. Other factors, such as the medical practitioner's active involvement in the process, the amount of information reported, the timing and amount of feedback, and other concurrent interventions, such as education, guidelines, reminder systems and incentives, also appear to be important. However, the independent contributions of these interventions have not been well documented in controlled studies.[169]

Another systematic review of 118 studies demonstrated that feedback can be effective in improving clinical practise; however, the effect size is generally small to moderate. The relative effect of feedback is greatest when baseline performance is low and when feedback is delivered more intensively.[170]

Performance assessment involving patients / recipients of services

The published literature regarding patient assessment of medical practitioners is less extensive compared with peer review-based assessment. Available evidence demonstrates that the patient can be an important source of information and feedback and can provide medical practitioners with valuable appraisal of their performance.[171]

---

[166] Overeem K, Driessen E, Arah O et al. Peer mentoring in doctor performance assessment: strategies, obstacles and benefits. Medical Education 2010; 44(2): 140-7.

[167] Veloski J, Boex J, Grasberger M et al. Systematic review of the literature on assessment, feedback and physicians' clinical performance: BEME Guide No. 7. Medical Teaching 2006; 28:117-28.

[168] Ilgen D, Fisher C, Taylor M. Consequences of individual feedback on behaviour in organizations. Journal of Applied Psychology 1981; 64:394-71.

[169] BEME Guide: *Systematic Review of the Literature on Assessment, Feedback, and Physicians' Clinical Performance: BEME Guide No. 7*. Veloski *et al*. Dundee, Association for Medical Education in Europe (2006). ISBN 1-903934-32-X. (http://www.amee.org)

[170] Jamtveldt G, Young J, Kristoffersen D et al. Does telling people what they have been doing change what they do? A systematic review of the effects of audit and feedback. Cochrane Database of Systematic Reviews 2006; 19(2): CD000259.

[171] Hall W, Violato C, Lewkonia R et al. Assessment of physician performance in Alberta. Canadian Medical Association Journal 1999; 16(1): 52-7.

Sources of information derived from patients can be incorporated into overall performance assessment processes. Common modalities used include patient satisfaction surveys and data derived from complaints processes, including multisource feedback involving patients.[172][173]

Non-technical aspects of performance are more amenable to performance assessment by patients, particularly communication and elements of professionalism.[174][175]

Objective assessment

Objective assessment is a common technique for assessing performance among students and trainees, but is less commonly applied to the continuous assessment of performance of medical specialists who have obtained their professional qualifications. Methods commonly used in undergraduate and graduate settings include written examinations and simulations or directly observed assessments (e.g. objective structured clinical examinations (OSCEs). In medical specialist settings, objective assessment methods that are more commonly used include clinical audit activities, such as those using aggregate measures (e.g. patient immunisation rates), and benchmarking.[176]

Empirical measurement of medical practitioner performance using administrative data is increasingly used as a basis for quality initiatives, particularly in US health-care organisations and increasingly in the UK.[177] Some organisations are extending the use of empirical measurement to perform benchmarking of medical practitioner performance i.e. 'measuring performance against established indicators of best practice'.[178]

Empirical performance measurement has been criticised for assessing 'what's measurable' rather than 'what's clinically important'; and administrative data and clinical performance may not be closely linked. A small component of clinical practice is able to be measured reliably and validly.[179] Good performance measures usually exist only when the condition is widespread,

[172] Campbell J, Richards S, Dickens A et al. Assessing the professional performance of UK doctors: an evaluation of the utility of the General Medical Council patient and colleague questionnaires. Quality and Safety in Health Care 2008; 17: 187-93.

[173] Violato C, Lockyer J, Fidler H. Changes in performance: a 5-year longitudinal study of participants in a multi-source feedback programme. Medical Education 2008; 42: 1007-13.

[174] Hall W, Violato C, Lewkonia R et al. Assessment of physician performance in Alberta: the Physician Achievement Review. Canadian Medical Association Journal 1999; 161(1): 52-7.

[175] Violato C, Lockyer J, Fidler H. Changes in performance: a 5-year longitudinal study of participants in a multi-source feedback programme. Medical Education 2008; 42(1): 1007-13.

[176] Rethans J, Norcini J, Baron-Maldonado M et al. The relationship between competence and performance: implications for assessing practice performance. Medical Education 2002; 36:901-9.

[177] Davies H, Shields A. Public trust and accountability for clinical performance: lessons from the national press reportage of the Bristol hearing. Journal of Evaluation in Clinical Practice 1999; 5:335-42.

[178] National library of medicine: *Medical subject heading.* 1998.

[179] Hudson S, Roski J, Adams J et al. Benchmarking Physician Performance: Reliability of Individual and Composite Measures. American Journal of Managed Care 2008; 14:833-8.

events related to the condition are common, and there is an established evidence base against which practice can be assessed.[180]

Efforts to measure medical practitioner performance face a number of challenges, including the need for sufficient sample size to support reliable measurement and the lack of consensus on methods for attributing individual patient measures to a particular clinician.[181] Even evaluating the large health plans in the US and using less stringent approaches to measure attribution, few medical practitioners have sufficient quality events available to characterise their performance on key quality measures.[182] Further, measurement of the performance of non-clinical practitioners using administrative data has not been the subject of extensive research.[183]

A prerequisite to successful benchmarking is defining quality health care on a measurable level. Currently there is no widely accepted, comprehensive set of validated evidence-based metrics upon which to base such a program for the individual performance assessment of clinicians.[184]

Clinical audit is a performance assessment method that can be used as an alternative to, or in conjunction with, benchmarking approaches. Clinical audit is 'the systematic critical analysis of the quality of care involving assessment of the procedures and processes used for diagnosis, intervention and treatment, the use of resources and the resulting outcome and quality of life as assessed by both professionals and patients'.[185] The key features of effective clinical audits are[186]:

- tools to examine systematically the quality of clinical service provision against evidence-based criteria and agreed standards

- professionally led and performed process of participative and reflective activity

- consideration of interdisciplinary and cross-sectoral provision of health care

- identification of clinical standards achieved and those which are not

- enables beneficial change and evaluation of those changes

- topic selection involves external input

[180] Werner R, Asch D. Clinical concerns about clinical performance measurement. Annals of Family Medicine 2007; 5:159-63.

[181] Landon B, Normand S, Blumenthal D et al. Physician clinical performance assessment. New England Journal of Medicine 2004; 350(23): 2409-12.

[182] Hudson S, Roski J, Dunn D et al. Availability of data for measuring physician quality performance. American Journal of Managed Care 2009; 15: 67-72.

[183] Hudson S, Roski J, Adams J et al. Benchmarking physician performance. American Journal of Managed Care 2008; 14:833-8.

[184] Baker W. Evaluation of physician competency and clinical performance in emergency medicine. Emergency Medicine Clinics of North America 2009; 27(4): 615-26.

[185] National Health Services. Working for Patients. White Paper, 1989.

[186] Burnett A, Winyard G. Clinical audit at the heart of clinical effectiveness. Journal of Quality in Clinical Practice 1998; 18:3-19.

- de-identified outcomes shared with key stakeholders.

A systematic review of audit and feedback on professional practice and health-care outcomes demonstrated their effectiveness in improving professional practice. When it is effective, the effects are generally small to moderate. The relative effectiveness of audit and feedback is likely to be greater when baseline adherence to recommended practice is low and when feedback is delivered more intensively.[187]

Finally, reforms in performance appraisal in the UK intend to include regular summative assessment of the medical practitioner every 5 years as a core component of the revalidation process. Consultation with the profession demonstrates a great deal of 'in principle' support for regular, robust testing of fitness to practise. However, there is limited published evidence regarding the efficacy of assessment in assuring the competence and in improving performance of medical practitioners, and what (if any) benefits assessment would accrue overall to the profession, to patients and to the public.[188] As a result, the impact of proposed summative assessment on quality of health service delivery is unknown.

Performance assessment in practice

Finucane et al. reviewed the international literature and identified three levels of performance assessment used in performance appraisal. The first involves screening a population of doctors, the second the selective assessment of those medical practitioners thought to be at risk of poor performance and the third the targeted assessment of underperforming doctors.[189]

The configuration and extent of implementation of these levels of performance assessment varies across settings. In some organisations, all three levels of performance assessment are integrated within the organisational systems. In others, some elements of performance assessment are conducted by the organisation, while others are conducted by external bodies. Further, the degree to which levels of performance assessment are formalised varies between systems, as does the mandatory versus voluntary participation of medical practitioners across levels of performance assessment and the types of medical specialties that participate at each level.

At one end of the spectrum is the UK's centralised, formalised and regulated system of performance assessment (currently under development). Performance assessment will be required for medical practitioners regardless of specialty type or practice setting.[190] Mechanisms for assessing at the three levels described by Finucane include appraisals, local trust-led performance procedures and referral to the National Clinical Assessment Service or

---

[187] Jamtvedt G, Young J, Kristoffersen D et al. Audit and feedback: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews 2006; Issue 2. Art. No.: CD000259.

[188] Levenson R, Dewar S, Shepherd S. Understanding doctors: harnessing professionalism. Kings Fund / Royal College of Physicians, London. 2008.

[189] Finucane P, Bourgeois-Law G, Ineson S et al. A comparison of performance assessment programs for medical practitioners in Canada, Australia, New Zealand and the United Kingdom. Academic Medicine 2003; 78: 837-43.

[190] Royal College of Physicians. Future physician: Changing doctors in changing times. May, 2010.

GMC respectively.[191] Necessarily, the nature of the performance assessment tasks will vary according to clinical specialty.[192] [193] In other countries, systems of performance assessment are well developed for hospital-based medical practitioners, particularly those in procedural practice. However, performance assessment for medical practitioners in community-based practice settings and in non-clinical roles is less rigorous.

Within Australasia, considerable variation also exists in the configuration and degree to which various performance assessment approaches are used to assure quality service delivery by medical practitioners. For example, the RACS Surgical Competence and Performance Framework describes a comprehensive approach to performance assessment that includes self-assessment, peer assessment and the use of objective data across domains of surgical performance.[194] Performance assessment methods include:

- surgical audit and peer review

- multisource feedback

- simulation exercises

- video or independent observation

- surveys (patient, peer)

- reviews of records

- log books of learning activities

- CPD participation.

Appraisal of available information suggests that the performance systems of many other Australasian Colleges have not yet been developed and specifically tailored to assessing and developing the competence and performance of their fellows to the same extent as RACS.

In New Zealand, the Ministry of Health's *Towards Clinical Excellence* describes quality tools and processes that can be used by medical practitioners for the purposes of performance assessment. These are flexibly applied by the medical practitioner in order to develop their skills and to achieve ongoing improvement of clinical care.[195]

The MCNZ may conduct competence-based performance assessment[196]. The purpose is to assess a doctor's performance at any time, in response to a concern raised by, for example, a

[191] Cohen D, Rhydderch M. Measuring a doctor's performance: personality, health and well-being. Occupational Medicine 2006; 56(7): 438-40.

[192] Horowitz S, Miller S, Miles P. Board certification and physician quality. Medical Education 2004; 38(1):10-11.

[193] Sutherland K, Leatherman S. Does certification improve medical standards? BMJ 2006; 333:439-41.

[194] RACS. Surgical Competence and Performance. Royal Australasian College of Surgeons, Melbourne, 2008.

[195] Ministry of Health. Towards Clinical Excellence. MoH, 2002.

[196] Medical Council of New Zealand. What you can expect: the performance assessment. November 2005. Available at: http://www.mcnz.org.nz/portals/0/competence/what_you_can_expect_nov05.pdf

patient, a colleague or the Health and Disability Commissioner. The performance assessment aims to ensure a doctor is practising at the required standard across the following domains of competence:

- medical care

- communication

- collaboration

- management

- scholarship

- professionalism.

If a performance assessment is to be done, the MCNZ appoints a Performance Assessment Committee (PAC), which consists of two medical practitioners, usually from the same medical discipline, and one lay person. The PAC will usually visit the doctor's practice or, in exceptional circumstances, meet the doctor in a mutually agreed location. The performance assessment may cover patient management, practice systems, record-keeping, prescribing, audit and direct observations. The PAC uses standardised techniques based wherever possible on existing methods for assessing clinical performance.[197]

Australian State and Territory governments have also implemented systems for performance assessment of medical practitioners. In all States and Territories medical practitioners require registration with the MBA (mandating participation in College CPD programs); and all States and Territories have credentialing processes (which involve performance appraisal) for hospital medical practitioners. In addition to these processes, some States and Territories have additional systems for performance assessment. In some cases, these are designed primarily around the failing or underperforming doctor. In other States and Territories, the pathway for good performance is the subject of performance assessment, and continuous quality improvement methods are used to facilitate performance improvement.

For example, in Queensland, employees and managers are required to participate in performance appraisal meetings involving review of self-assessment and objective measures of performance across relevant domains of practice.[198] Queensland Health performance appraisal requirements are based on ongoing performance assessment across a broad range of inputs including[199]:

- consumer feedback

- litigation data

---

[197] Ibid

[198] Queensland Health. Performance Appraisal and Development (PAD) policy (2008).

[199] Queensland Health. 'Safe Doctors – Fair System' project. Consultation and Framework Discussion Paper, 2007.

- clinical audit data

- administrative data

- multisource feedback

- complaints

- other sources of peer review.

Similarly, the *Partnering for Performance* framework in Victoria draws on a broad range of information sources to inform understanding of an individual medical practitioner's practice, as outlined below:

Partnering for Performance: Utility of performance assessment information sources[200]

Tool	Utility of tool to assist in understanding clinical practice	Weighting
Formal peer review	Strong evidence when organisations are using a properly designed and managed process Major role in understanding possible underperformance and for re-credentialing	Strongly supported when structured and performed appropriately
Adverse occurrence screening/targeted case note review	Good evidence when organisations are using a properly designed and managed ongoing process	Supported when structured and performed appropriately
Mortality and morbidity reviews	Good evidence when organisations are using a properly designed and managed process	Supported when structured and performed appropriately
Clinical audit	Good evidence when organisations are using a properly designed and managed process	Supported when structured and performed appropriately
Clinical indicators	Limited ability to understand an individual medical practitioner's practice	Should not be used in isolation to understand an individual medical practitioner's practice

[200] This table represents an evidence summary drawn from a series of literature reviews undertaken by the Centre for Clinical Governance Research, University of New South Wales. According to the results of the literature reviews, root cause analyses or incident reports should not be used in isolation to understand an individual doctor's practice.

Patient satisfaction and complaints	Limited ability to understand an individual medical practitioner's practice	Should not be used in isolation to understand an individual medical practitioner's practice
	Repeated complaints or dissatisfaction that appear directly attributable to an individual senior medical practitioner may imply underperformance and should initially be reviewed by the medical practitioner's medical lead	

Overall, medical practitioners are currently subject to performance assessment using a variety of different methods. Performance assessment requirements vary according to the jurisdiction within which the doctor practises, the settings within which they practise, and their clinical specialty. A range of methods are available that are evidence-based and can contribute to performance improvement for the individual medical practitioner.

Professionalism

The relationship between the medical profession and the community is generally characterised by society granting professions a monopoly over the use of a body of knowledge and skills, and allows autonomy through the privilege of self-regulation. In return, the profession provides high standards of care.[201] [202] Professionalism is the moral understanding among professionals that gives concrete reality to this social contract.[203] [204]

Defining professionalism

Various definitions of medical professionalism are used by professional organisations and learned colleges.

According to *Good Medical Practice: A Code of Conduct for Doctors in Australia*, 'professionalism embodies all the qualities described in (the Code), and includes self-awareness and self-reflection. Medical practitioners are expected to reflect regularly on whether they are practising effectively, on what is happening in their relationships with patients and colleagues, and on their own health and wellbeing. They have a duty to keep their skills and knowledge up to date, refine and develop their clinical judgement as they gain experience, and contribute to their profession'.[205]

The MCNZ's *Good Medical Practice* defines professionalism according to the following characteristics: honesty, integrity, probity, respect for patients (including cultural competence with respect to gender, race, boundaries, and New Zealand's biculturalism), respect for

[201] Cruess S, Johnston S, Cruess R. Professionalism for medicine. MJA 2002; 177:208-11.

[202] Wynia M. The Role of Professionalism and Self-regulation in Detecting Impaired or Incompetent Physicians. JAMA 2010; 304(2): 210-12.

[203] Canadian Medical Association. Professionalism in Medicine. CMA, 2001.

[204] Wynia M, Latham S, Kao A et al. Medical professionalism in society. New England Journal of Medicine 1999; 341(21):1612-6.

[205] Medical Board of Australia. Good Medical Practice: A code of conduct for doctors in Australia. 2009.

colleagues, moral reasoning and ethical practice and advocacy for a patients commitment to continuous improvement in the health-care system collaboration with other health-care stakeholders.[206]

According to the Royal College of Physicians (UK), medical professionalism is: 'A set of values, behaviours, and relationships that underpins the trust the public has in doctors'. In their day-to-day practice, doctors are committed to:

- integrity

- compassion

- altruism

- continuous improvement

- excellence

- working in partnership with members of the wider healthcare team.

These values, which underpin the science and practice of medicine, form the basis for a moral contract between the medical profession and society. Each party has a duty to work to strengthen the system of healthcare on which our collective human dignity depends.'[207]

In *Good Medical Practice (UK)*, the GMC presents a slightly different view of how medical professionalism should be defined. *Good Medical Practice (UK)* sets out the principles and values on which good practice is founded (described above); the GMC sees these principles as describing 'medical professionalism in action'.[208]

The Royal College of Physicians and Surgeons of Canada defines professionalism as 'those skills, attitudes and behaviours which we have come to expect from individuals during the practice of their profession and includes concepts such as maintenance of competence, ethical behaviour, integrity, honesty, altruism, service to others, adherence to professional codes, justice, respect for others and self-regulation'.[209] In Canada the following values are identified with the medical profession:

- collective autonomy

- leadership

- competence

---

[206] Medical Council of New Zealand. Good Medical Practice: A guide for doctors. June 2008.

[207] Royal College of Physicians. Doctors in Society. Report of a Working Party of the Royal College of Physicians of London. London, RCP: 2005.

[208] General Medical Council. Good Medical Practice. 2006. Available at: www.gmc-uk.org/guidance/good_medical_practice/index.asp

[209] CanMEDS 2000: professional role document. Ottawa: Royal College of Physicians and surgeons of Canada; 2000.

- dedication

- recognition or appreciation.

The American Board of Internal Medicine Foundation, American College of Physicians and European Foundation of Internal Medicine definition of professionalism is 'to demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population[210]. It incorporates the following professional responsibilities:

- competence

- honesty

- patient confidentiality

- appropriate relations with patients

- improving quality of care

- improving access to care

- just distribution of finite resources

- commitment to scientific knowledge

- maintaining trust by managing conflicts of interest

- commitment to professional responsibilities.

In contrast to the above definitions, the Learning, Education and Professionalism (LEAP) Framework for Continuing Professional Development for Medical Practitioners (the LEAP framework) definition is much broader, and incorporates domains of practice that other frameworks include in performance domains, but separate from domains of professionalism. The LEAP framework was developed for medical practitioners who are fellows of Australasian specialist Colleges. The framework uses a definition of medical professionalism that consists of three areas of professionalism, described according to 10 domains of practice:

- clinical expertise

  - o medical expertise

  - o clinical judgement

  - o medical informatics (clinical)

- risk management

---

[210] American Board of Internal Medicine Foundation, American College of Physicians, European Foundation of Internal Medicine. Medical professionalism in the new millennium. Annals of Internal Medicine 2002; 136:243-6.

- o   communication

- o   practice management

- o   medical informatics (practice)

- o   personal management and insight

- professional values and responsibilities

  - o   relationships and accountability

  - o   advocacy and equity

  - o   education.

The degree to which the LEAP framework has been adopted by professional Colleges is uncertain. However, definitions of professionalism currently used by Australasian professional bodies and Colleges are more closely aligned with the domains of practice described across international frameworks, rather than the LEAP framework definition.

Overall, core elements of professionalism identified across definitions used by professional organisations and learned colleges include a strong commitment of the medical practitioner to the well-being of others, high moral standards, mastery of a body of knowledge and skills, and a high degree of autonomy. However, research involving doctors themselves demonstrates that medical practitioners disagree about other values that may be associated with the medical profession, particularly[211][212]:

- justice – not all medical practitioners agree that they have a collective responsibility for providing access to high quality medical care for all people. This creates a tension between participation in rationing of health care and advocating for their own patients, regardless of the needs of others

- the extent to which professionalism is compatible with other roles that individual medical practitioners assume, such as entrepreneur, manager and employee.

Empirical evidence from published studies supports the use of the domains of professionalism described by professional organisations and learned colleges. Across definitions of professionalism in published studies, core elements include[213]:

- adherence to ethical practice principles

- effective interactions with patients and with people who are important to those patients

---

[211] Canadian Medical Association. Professionalism in Medicine. CMA, 2001.

[212] Williams J, Beresford E. Physicians, ethics and the allocation of health care resources. Annals of the Royal College of Physicians and Surgeons of Canada 1991; 24:305-9.

[213] Wilkinson T, Wade W, Knock L. A blueprint to assess professionalism. Academic Medicine 2009; 84(5):551-8.

- effective interactions with people working within the health system

- reliability

- commitment to autonomous maintenance / improvement of competence in oneself, others and systems.

Improving professionalism

There are a broad range of approaches available for teaching professionalism. These include the use of self-reflection exercises, simulations, group discussions or seminars, leadership training, teaching in specific aspects such as cultural sensitivity or ethics, and independent learning activities.[214] [215] [216] Comparative analyses of the relative effectiveness of different approaches to teaching professionalism to medical specialists have not been performed.

Limited evidence from studies conducted with medical students suggests interviews with mentors may be more effective than written self-reflection in eliciting reflection on professionalism[217]. Studies with residents suggest peer review is an effective strategy for increasing knowledge, attitudes and perceptions of professionalism.[218]

Assessing professionalism

Professionalism is a domain of professional practice that is amenable to performance assessment. Assessment can assist the medical practitioner to gauge their abilities and identify gaps in performance that can be addressed. Types of assessment tools that can be used and have been appraised in published studies include[219] [220] [221] [222] [223] [224] [225]:

---

[214] American College of Graduate Medical Education. Advancing education in medical professionalism. ACGME Outcome Project, 2004.

[215] Markakis K, Beckman H, Suchman A et al. The path to professionalism. Academic Medicine 2000; 75:141-50.

[216] Kuczewski K, Bading E, Langbein M et al. Fostering professionalism: the Loyola model. Cambridge Quarterly in Health Ethics 2003; 12:161-6.

[217] Baernstein A, Fryer-Edwards K. Promoting reflection on professionalism. Academic Medicine 2003; 78:742-7.

[218] Bonder J, Elwood D, Heckman J et al. Implementation of peer review into a physical medicine and rehabilitation program and its effect on professionalism. Physical Medicine and Rehabilitation 2010; 2(2):117-24.

[219] American College of Graduate Medical Education. Advancing education in medical professionalism. ACGME Outcome Project, 2004.

[220] Wilkinson T, Wade W, Knock L. A Blueprint to Assess Professionalism: Results of a Systematic Review. Academic Medicine 2009; 84(5):551-8.

[221] Veloski J, Fields S, Boex J et al. Measuring professionalism: a review of studies with instruments reported in the literature between 1982 and 2002. Academic Medicine 2005; 80:366-70.

[222] Campbell J, Richards S, Dickens A et al. Assessing the professional performance of UK doctors. Quality and Safety in Health Care 2008; 17:187-93.

[223] Dreyer J. Assessing professionalism in surgeons. Surgeon 2010; 8:20-7.

- observed clinical encounters

- collated views of co-workers

- records of incidents of unprofessionalism

- critical incident reports

- simulations

- paper-based tests (including cognitive testing, 360 degree feedback, purpose designed assessment instruments)

- patients' opinions

- global views of supervisors

- self-administered rating scales.

Attributes of professionalism that are more amenable to assessment include the interactions between the medical practitioner and others, and commitment to maintenance and improvement in performance. The adherence of the provider to ethical principles of practice, particularly advocacy, trustworthiness, compassion and altruism, are more difficult to assess.[226] Further, although there is a range of measures that can be used to assess professionalism of the medical practitioner, the predictive value of these measures is uncertain, and the application of measures to assessing the degree of professionalism of the medical practitioner is unknown.[227] [228] [229]

Embedding professionalism into the practice of medicine

Many Australasian Colleges and professional bodies have published guidance regarding professionalism. This guidance may be presented in practice standards, codes of ethics, or codes of conduct / practice. For example:

- The Australian and New Zealand College of Anaesthetists *Statement on the Standards of Practice of a Specialist Anaesthetist* (2008) and *Code of Professional Conduct* define the

[224] Brinkman W, Geraghty S, Lamphear B et al. Effect of multisource feedback on resident communication skills and professionalism. Archives of Pediatrics and Adolescent Medicine 2007; 161(1): 44-9.

[225] Medical Council of New Zealand. What you can expect: the performance assessment. November 2005. Available at: http://www.mcnz.org.nz/portals/0/competence/what_you_can_expect_nov05.pdf

[226] Lynch D, Surdyk P, Eiser A. Assessing professionalism: a review of the literature. Medical Teaching 2004; 26:366-73.

[227] Stern D, Frohna A, Gruppen L. The predication of professional behaviour. Medical Education 2005; 39:75-82.

[228] Jha V, Bekker H, Duffy S et al. A systematic review of studies assessing and facilitating attitudes towards professionalism in medicine. Medical Education 2007; 41:822-9.

[229] Veloski J, Fields S, Boex J et al. Measuring professionalism: a review of studies with instruments reported in the literature between 1982 and 2002. Academic Medicine 2005; 80:366-70.

attributes necessary for high standards of practice in anaesthesia. These include the importance of CPD, and the need to maintain the medical practitioner's own health and well-being.

- The Royal Australian and New Zealand College of Psychiatrists *Code of Ethics* (2010) outlines principles for ethical psychiatric practice, including the importance of participation in CPD, and ethical practice principles.

- The Australasian College of Dermatology *Code of Conduct* (2006) sets out general principles in relation to the practice of dermatology. The code describes general principles of expected practice in relation to patients, professional colleagues, and in relation to teaching and research.

Similarly, the MBA has a *Code of Conduct for Doctors in Australia* (2009), the AMA has published a *Code of Ethics* (2004, revised 2006) with an accompanying *Position Statement on Medical Professionalism* (2010) and the NZMA has published a *Code of Ethics* (2008).

The MBA's Code describes standards for professional behaviour in relation to professional boundaries, reporting obligations, medical records, insurance, advertising, medico-legal / insurance / other assessments, medical reports / certificates / giving evidence, curriculum vitae, investigations, conflicts of interest and financial / commercial dealings.

The AMA's Code calls on medical practitioners to (abridged)[230]:

- improve and maintain the health of their patients

- safeguard clinical independence and professional integrity

- improve the standard, and quality of, and access to services

- accept a share of the profession's responsibility to society in matters relating to the health and safety of the public, health education and legislation affecting the health of the community.

The AMA Position Statement outlines the values and skills that the profession and society expects of medical practitioners. These include[231]:

- upholding core values, including respect, trust, compassion, altruism, integrity, justice, accountability, protection of confidentiality, leadership and collegiality

- upholding a commitment to teaching and mentoring, participating in and promoting medical research, collaborating with colleagues and other health professionals, and advocating for social justice and public health

---

[230] Australian Medical Association. Code of Ethics. 2004, Editorially Revised 2006.

[231] Australian Medical Association. Position Statement on Medical Professionalism. 2010.

- committing to continuing self-appraisal, ongoing professional development, taking responsibility for one's own health and well-being, supporting impaired colleagues, and protecting patient safety.

The NZMA Code describes the following principles of ethical behaviour required of the medical professional[232]:

- consider the health and wellbeing of the patient to be your first priority

- respect the rights, autonomy and freedom of choice of the patient

- avoid exploiting the patient in any manner

- practise the science and art of medicine to the best of your ability with moral integrity, compassion and respect for human dignity

- protect the patient's private information throughout his/her lifetime and following death, unless there are overriding considerations in terms of public interest or patient safety;

- strive to improve your knowledge and skills so that the best possible advice and treatment can be offered to the patient

- adhere to the scientific basis for medical practice while acknowledging the limits of current knowledge

- honour the profession, including its traditions, values, and its principles, in the ways that best serve the interests of the patient

- recognise your own limitations and the special skills of others in the diagnosis, prevention and treatment of disease

- accept a responsibility to assist in the protection and improvement of the health of the community

- accept a responsibility to advocate for adequate resourcing of medical services and assist in maximising equitable access to them across the community

- accept a responsibility for maintaining the standards of the profession.

The professional colleges also provide descriptions of competencies associated with professionalism. For example, the Royal Australasian College of Medical Administrators' (RACMA) Competency Self-Assessment Chart incorporates self-assessment of the Fellow's knowledge, skills and behaviour across the domain of professionalism. Fellows rate their level of competence on a 5-point Likert scale and are able to use their self-assessment to guide selection of CPD activities in order to address gaps. Competencies include[233]:

---

[232] New Zealand Medical Association. NZMA Code of Ethics. May 2008. Available at: http://www.nzma.org.nz/about/ethics.html

[233] Royal Australasian College of Medical Administrators Competency Self-Assessment Chart.

- knowledge of

  - emotionally intelligent decision-making

  - professional roles, responsibility and accountability

  - patient-first behaviour

  - professional standards and codes of ethics

- skills

  - conduct reflective self-assessments

  - identify personal strengths and weaknesses

  - adopt and adhere to a values framework for behaviour

  - tease out patient issues in a scenario

  - acquire and stay current with the professional body of knowledge

  - advocate for patients, families and communities

  - implement ethical business decisions

- behaviour

  - adapt to feedback

  - positivity towards others

  - serve as the ethical guide for the organisation

  - uphold and act upon ethical and professional standards.

Summary

There has been a trend internationally towards greater regulation and oversight of the medical profession. In many cases this has been in response to widely publicised failures of individual practitioners to maintain acceptable standards of performance and professionalism. Countries have responded differently to the challenge of reassuring government and consumers that medical practitioners are competent and providing care that is of high quality. In some cases, systems of regulation that are highly structured and require mandatory compliance have been introduced, with strong external regulatory components. In others, more flexible approaches have been used to assure competence and performance.

A risk associated with highly structured and externally regulated performance systems is that they focus on the competence of the medical practitioner, sometimes at the expense of supporting continuous quality improvement for the individual. Further, there is no evidence that highly structured and externally regulated performance systems achieve their goal of assuring

the competence of individual practitioners and preventing the widely publicised failures that led to their implementation in the first place.

This is in part because the performance of a medical practitioner is influenced by a number of domains of practice. These interact to result in the standard of care delivered by the individual. Although knowledge and skills relevant to the professional's area of practice are necessary, they are not sufficient to guarantee performance. The non-technical areas of performance are important domains of practice that, when less developed, negatively influence the standard of practice of the individual and may result in under-performance of the medical practitioner.

Performance frameworks describe domains of professional practice and their interaction. A number of frameworks have been developed. Differences between frameworks are in part due to the different regulatory and governance environments within which they have been developed, and differences in the professional activities of various medical specialties. The C*anMEDS* framework has been adopted by professional bodies in a number of countries and by a range of clinical and non-clinical medical specialties. The framework is usually adapted to the specific needs of the medical specialty and the organisation within which the framework is required.

Performance frameworks may be embedded within performance management systems in order to increase their effectiveness. A range of performance management approaches are available, each with specific advantages and disadvantages. Most Australasian Colleges with performance frameworks embed them within existing CPD processes. Participation in CPD is already a requirement for registration in New Zealand. The recent change to national registration of Australian medical practitioners has made participation in CPD programs compulsory. As a result, CPD is likely to be a performance management process that has the greatest reach across hospital and community-based medical practitioners, both in clinical and non-clinical practice. Well-designed CPD should provide the individual medical practitioner with opportunities to improve their performance across the domains of practice.

Performance appraisal reassures the individual medical practitioner, health care organisations, governments and the community that the practice of medical practitioners is being monitored and that minimum standards of practice are being exceeded. Effective performance appraisal processes incorporate the results of performance assessment into feedback that is positive, focuses on the strengths of the individual, and assists the individual to identify future learning needs. It is a forward looking process. Performance standards may assist in improving performance appraisal. Both principles-based and compliance-based standards can be used.

Performance assessment facilitates effective performance appraisal. It is also an important clinical governance requirement of health-care organisations that assists in assuring the competence of medical practitioners. Assessment across the domains of practice provides a holistic view of the performance of the medical practitioner. Self-assessment, peer-based assessment, feedback from patients and/or recipients of services and objective assessment methods may all be used. Evidence-based methods of performance assessment exist across all domains of practice. The types and combination of performance assessment tools that are most effective and the frequency of assessment required are likely to be influenced by the type of medical specialist being assessed, settings within which the medical practitioner works, and specific duties of the medical practitioner. The resources available for performance assessment are also likely to influence the nature and frequency of performance assessment.

Professionalism is an important element of the RACP SPPP framework. Professionalism incorporates the skills, attitudes and behaviours that are expected of medical professionals. Professionalism is generally included as a domain of professional practice in the majority of performance frameworks. There is a broad range of approaches to improving professionalism in the medical practitioner. Professionalism can be assessed using a variety of assessment approaches. Professionalism can be embedded within performance management systems and incorporated into practice standards, codes of practice and codes of professional conduct.