

Interprofessional learning through simulation

Reflective practice: a tool to enhance professional practice



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Foreword

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Australia's health workforce is facing unprecedented challenges. Supply won't meet demand, and the safety and quality of care remain key issues. The national health workforce agency, Health Workforce Australia (HWA), an initiative of the Council of Australian Governments (COAG), has been established to address the challenges of providing a workforce that meets the needs of our community – now and in the future.

Accordingly, ECU has set a priority on meeting these challenges, with a focus on the national health workforce reform agenda set out in the 2008 National Partnership Agreement (NPA) on Hospital and Health Workforce Reform.

In June 2010, ECU was awarded \$4.6M from the Australian Government through a nationally competitive process under the ICTC Program, an initiative which aims to develop interprofessional learning and practice capabilities in the Australian health workforce.

The IpAC Program aims to complement traditional clinical placement activities with high quality interprofessional learning competency development and assessment, so that at the earliest point students gain exposure to best work practices within multidisciplinary teams that have the patient's individual needs as the focus.

Additionally, the IpAC Program has developed interprofessional learning resources and interprofessional health simulation challenges in collaboration with the ECU Health Simulation Centre. The ECU Health Simulation Centre is recognised internationally as a

specialist centre in providing human factors based sequential simulation programs using professional actors. Most simulated learning interactions revolve around a single moment, such as a patient's admission to the emergency department. What we provide at the ECU Health Simulation Centre is a sequential simulated learning event that follows the patient and carer's journey through the healthcare system, for example, from the accident site following a motor vehicle accident, to the emergency department, to a hospital ward, to their home and into the community for GP and allied health follow-up.

Human factors in health care are the non-technical factors that impact on patient care, including communication, teamwork and leadership. Awareness of and attention to the negative aspects of clinical human factors improves patient care.

ECU's involvement in national health workforce reform is all about playing a role that enables the health workforce to better respond to the evolving care needs of the Australian community in accordance with the NPA's agenda. The IpAC Program is an example of how we can work across sectors, nationally and internationally, to determine better ways of addressing the pressing issue of how best to prepare students for the workplace and thus assuring that health systems have safe, high quality health services.

Interprofessional Ambulatory Care Program

ECU's IpAC Program was established with support from the Australian Federal Government through funding from the ICTC Program. The IpAC Program aims to deliver a world-class interprofessional learning environment and community clinic that develops collaborative practice among health professionals and optimises chronic disease self-management for clients.

This is achieved through the provision of clinical placements within the multidisciplinary team at the IpAC Unit, a community clinic that develops communication and collaboration among health professionals and optimises chronic disease self-management for clients.

Additionally, a range of clinical placements are offered at existing health facilities, where trained IpAC Program clinical supervisors provide clinical support and ensure the integration of interprofessional learning into each clinical placement.

The IpAC Unit, in collaboration with the ECU Health Simulation Centre, has developed a range of interprofessional learning through simulation resources. These learning resources are packages consisting of an audiovisual resource and a facilitator's manual, and aim to facilitate interprofessional learning and to support the participants in the development of interprofessional skills.

The interprofessional learning through simulation resources developed by the IpAC Program aim to provide health students and health professionals with the opportunity to learn with, from and about one another by engaging them in interactive live simulation events. These simulations encourage students and professionals to challenge themselves and each other in a safe learning environment.

ECU Health Simulation Centre

ECU houses the only fully functioning Health Simulation Centre of its kind in Western Australia, specifically designed and equipped to address the interprofessional learning needs of the health workforce and implementation of both state and national safety and quality frameworks.

The ECU Health Simulation Centre offers health workforce training and development specialising in clinical skills, human factors, and patient safety training for multidisciplinary health teams. Using a variety of educational techniques, including a broad range of simulation mannequins, professional actors and task trainers, ECU specialises in immersive simulation and observational learning. Supporting the ECU Health Simulation Centre are nursing, medical, paramedic and psychology academic and technical staff whose aim is to cultivate the development of competent and confident health professionals centred on enhancing patient safety.

Interprofessional learning

Interprofessional education occurs when two or more professions learn with, from and about each other in order to improve collaboration and quality of care (Centre for the Advancement of Interprofessional Education, 2002).

Interprofessional learning is the learning arising from interaction between students or members of two or more professions. This may be a product of interprofessional education or happen spontaneously in the workplace or in education settings (Freeth, Hammick, Reeves, Barr, & Koppel, 2005). It has been found that interprofessional education can improve collaborative practice, enhance delivery of services and have a positive impact on patient care (Canadian Interprofessional Health Collaborative, 2008).

The World Health Organization (WHO) has recognised the importance of interprofessional education and collaborative practice in developing a health workforce that is able to meet the complex health challenges facing the world and assist in the achievement of the health-related Millennium Development Goals (World Health Organization, 2010). In developing its framework for action, the WHO have recognised that models of interprofessional collaboration are most effective when they consider the regional issues and priority areas (including areas of unmet need) in the local population (World Health Organization, 2010). In doing so, interprofessional education and collaborative practice can best maximise local health resources, reduce service duplication, advance coordinated and integrated patient care, ensure patient safety and increase health professional's job satisfaction (World Health Organization, 2010).

The end goal of interprofessional education is to create a health workforce with improved levels of teamwork, collaboration, knowledge-sharing and problem-solving, eventually leading to better patient and client outcomes in health settings (Braithwaite et al., 2007).

Interprofessional learning through simulation

Simulation in education refers to the re-creation of an event that is as closely linked to reality as possible. Gaba (2004) defined simulation as a technique, rather than a technology, to replace or amplify real life experiences with guided experiences often immersive in nature to evoke or replicate aspects of the real world, in a fully interactive pattern. Simulation provides a safe learning environment for students to practice, where they are free to make mistakes, correct them and improve the processes of care (Kenaszchuk, MacMillan, van Soeren, & Reeves, 2011). Simulation is the bridge between classroom learning and the real life clinical experience, allowing students to put theory into practice.

Interprofessional learning through simulation combines the principles of interprofessional learning and the use of simulation as an educational methodology. Interprofessional learning through simulation provides students with the opportunity to practice working with other health professionals and allows participants to explore collaborative ways of improving communication aspects of clinical care (Kenaszchuk, et al., 2011).

Many of the interdisciplinary team core competencies, such as problem solving, respect, communication, shared knowledge and skills, patient-centred practice, and the ability to work collaboratively (Canadian Interprofessional Health Collaborative, 2010) can all be developed by interprofessional learning through simulation.

Teamwork and interprofessional practice and learning are being recognised as central to improving client care and outcomes and enhancing client safety (Sargent, 2008). Promoting patient safety through team efforts is one of the five core competencies identified by the Institute of Medicine (2003).

In today's healthcare setting, no one health professional can meet all of the client's needs and therefore a healthcare team approach is required. Interprofessional learning through simulation provides learning opportunities to prepare future healthcare professionals for the collaborative models of healthcare being developed internationally (Baker et al., 2008).

How to use this resource package

This interprofessional learning through simulation resource package has been designed to support the facilitation of interprofessional learning among students and practitioners with an interest in developing their skills and knowledge of interprofessional practice.

The package consists of two components: an audiovisual resource and a supporting manual. In order to optimise the learning opportunities from this package it is recommended that participants are firstly introduced to the concepts of interprofessional learning and human factors in health care.

The audiovisual resource consists of two scenarios, the first demonstrating sub-optimal performance of the healthcare team, with the second demonstrating more effective performance, improving the patient experience. The package has been created in a format

to enable flexibility in its application depending of the educational setting. We recommend the following format:

1. Facilitator guided discussion around the concepts of interprofessional learning and human factors in health care
2. View scenario 1 of the audiovisual resource
3. Facilitator guided discussion around the scenario specific learning competency areas (samples given within manual)
4. View scenario 2 of audiovisual resource
5. Facilitator guided discussion, identifying and discussing the changes witnessed and how this resulted in an alternative outcome. In particular discussion relating the causes of these changes to personal (future) practice is essential in improving interprofessional practice.

Opportunities for further reading and exploration of the scenario are provided in the *Further Information* and *References* sections of this resource manual.

Scenario brief

Lorenzo is an 8-year-old boy who has just been diagnosed with Juvenile Diabetes. His mother is shocked, as her two sons rarely eat sugar and have been well apart from colds and infections. Though overwhelmed, she is trying to remain calm.

Meanwhile, the semi-rural hospital is understaffed as one nurse had to leave due to illness, and the Ward Manager is unable to cover the shift. One of the Registered Nurses, Nicole, is an hour and a half late as her car broke down. She is 10 weeks pregnant, stressed as she now has no way of getting home and wary that her colleague will be very irritable. The other Registered Nurse on her team is an older woman called Mary who has been a nurse for 30 years. She is tired and now very annoyed, as in Nicole's absence she has had to work twice as hard.

When Nicole arrives Mary conducts a handover. Nicole has a lot of work ahead of her as there is a backload of work, drugs have not been administered, and patients and their families are becoming distressed and annoyed.

List of characters

- Mother
- Patient
- Registered Nurse – older woman
- Registered Nurse – younger woman

Key learning competencies

The key learning competencies for this scenario are based on the IpAC Program learning objectives as well as the Canadian Interprofessional Health Collaborative (CIHC) Competency Framework (Canadian Interprofessional Health Collaborative, 2010). The specific competency areas for this scenario are:

- Reflective practice
- Interprofessional and client centred communication
- Team functioning

Reflective practice

Reflective practice is crucial in continuous development and re-assessment of skills when working in health care. A reflective practitioner:

- Reflects on feedback and integrates changes into practice.
- Reflects on how own perceptions, attitudes and beliefs impact on practice.
- Identifies knowledge deficits and seeks clarification.
- Ensures procedures for safety and quality assurance are implemented.

Interprofessional and client centred communication

The health care team consists of health professionals, the client and the family. The interaction within the health care team demonstrates:

- Communication is authentic, consistent and demonstrates trust
- Team members demonstrate active listening skills.
- Communication ensures a common understanding of decisions made.
- Trusting relationships with clients /families and other team members.
- Other disciplines' roles are promoted and supported to client/family.

Team functioning

Professionals support a team approach by:

- Establishing and maintaining effective and healthy working relationships and team interactions.
- Respect team ethics and demonstrate trust and mutual respect for members of the team.
- Be an active participant in collaborative decision making.
- Be an effective and engaged participant in discussions and interactions among team members demonstrating open communication and attentive listening.
- Demonstrates respect for the knowledge and skills of the each team member.

Key discussion points

Scenario 1

The following discussion points are useful in considering scenario 1 of this resource package:

Perceptions and attitudes influencing practice

- What perceptions and attitudes do you think the different health professionals have brought to this scenario? How have these perceptions and attitudes affected their behaviour?
- How do you think the health professionals could make sure their attitudes towards their colleagues, patient and family does not affect the care provided?
- How do you think the health professionals could make sure what happens in their personal life does not negatively affect the care provided?
- What procedures are in place to prevent these negative events from occurring?
- Whose responsibility is it to ensure the safe administration of medication? The patient, their family, the administering nurse, the nurse colleague, the prescribing doctor, or the pharmacist?

Interprofessional and client centred communication

- How would the use of active listening skills have helped improve the situation?
- Is there a trusting relationship between the two nurses? Why do you think the situation is as it is?
- Is there a trusting relationship between the nurse and her patients? Why, and what can be done to improve this relationship?

Team functioning

- How is the team of nurses functioning?
- What can be done to improve this?
- Who is responsible for making those changes?

Key discussion points

Scenario 2

- What did you notice had changed from scenario 1? How did these changes impact on the final outcome?
- How do you think the two nurses operated in the revised scenario? What were some of the specific changes that occurred, and how did this affect the dynamics and the outcome in the revised scenario?

- How do you think the patient, the mother and each of the nurses felt in the revised scenario? What caused the difference? What consequences did this have?
- What were some of the specific improvements made in regards to communication – with the patient, within the team?
- Has your opinion of the nurses changed since the first scenario? Why?

Encourage participants to reflect on their own practice:

- How can you ensure the interprofessional learning objectives are addressed in your interprofessional and client-centred practice?

Literature review

In 2007, the World Health Organization (WHO) found that tens of millions of people every year suffer lasting injury or even death as a result of preventable medical errors (World Health Organization, 2007). In 1999, the Institute of Medicine (IOM) released its report "To Err is Human" estimating that at least 44,000 and possibly as many as 98,000 patients die each year in the United States as a result of preventable clinical errors (Healey & McGowan, 2011; Kohn, Corrigan, & Donaldson, 1999). Alarming, the IOM findings indicated that more people die from medical errors than from breast cancer, road accidents or AIDS (Healey & McGowan, 2011; Kohn, et al., 1999). The 2008 National Healthcare Quality Report noted that since the IOM report, patient safety had actually gotten worse instead of better: one in seven hospitalised Medicare patients experienced one or more adverse events (Clancy, 2008). In Australia the findings are of equal concern with as many as 4,500 people dying each year in hospitals as a result of clinical errors (Armstrong, 2004), at a cost of approximately \$2 billion dollars per annum (Ryan, 2008).

A considerable issue adding further to these statistics is that of under-reporting. Despite the frameworks which have been developed to prevent under-reporting, there is often a failure to measure the true extent of errors resulting in patient harm. This would suggest that the above statistics are probably much higher than reported (Wakefield & Jorm, 2009).

Reflection

According to Stein (2003), medical errors can be partly attributed to the failure of many health practitioners to reflect on their professional practice. Bengtsson, cited in Kinsella (2009), states that though reflection is the "buzz word" of today, there is a lack of consensus among educators, researchers and practitioners as to what reflective practice actually entails (Kinsella, 2009). Although there is little hard scientific evidence to support the fact that critical reflection reduces medical errors, "*...there are theoretical bases to reasonably expect that reflective practice can reduce likelihood of failures in clinical reasoning for solving complex cases*" (Mamede, Schmidt, & Rikers, 2006, p. 144).

With technology becoming more sophisticated along with an increase in patient acuity due largely to the aging population, there is a greater need for the practitioner to be able to think critically and independently (Sewchuk, 2005). According to Mamede et al. (2006), the ability to critically reflect on one's practice is fundamental to developing and maintaining expertise.

In 2008, the National Institute for Clinical Excellence (NICE) in the United Kingdom used national standards to develop aims, objectives and measurable outcomes for reflective practice groups in order to improve psychological awareness of staff, with the aim of creating beneficial changes not only to an individual's practice but also to practice and procedures on the ward (NICE, 2009).

The idea of reflection as a learning tool was first put forward by John Dewey, an educational philosopher. Dewey's work in the early 1900's explored the distinction between reflective thinking and thinking itself (Musolino & Mostrom, 2005). He describes reflective thinking as thinking that is purposeful and working towards a conclusion. Dewey found that reflection begins with an unexpected difficulty, challenge or problem. This then impels the thinker to examine the sources of, and evidence supporting, a set of beliefs or expectations surrounding a situation, and to search and enquire in an effort to resolve doubt (Musolino & Mostrom, 2005).

Reflective practice

Donald Schon (1983) expanded on the theory of reflection and developed the concept of reflective practice. Since then reflection has been incorporated into higher education at the undergraduate and postgraduate level as well as in the professional development of a range of health disciplines and social care professions. It is seen as a means of improving clinical practice and consequently quality of care, through exploring and evaluating one's understanding of a problem rather than simply trying to solve it (Leung, Pluye, Grad, & Weston, 2010). The National Health Service (NHS) General Practice Nursing Toolkit suggests that engaging in reflection not only promotes autonomous, self directed practitioners, but also improves quality of care and helps close the gap between theory and practice (Working in Partnership Programme, 2006). To critically reflect empowers the practitioner "*to see things from a different perspective and then gain insight that makes it an effective learning experience*" (Ashby, 2006, p. 37). The benefits of reflective practice for practitioners include redefining their understanding of professional knowledge, expanding personal knowledge or self-awareness and evaluating the appropriateness of actions (Morgan, 2009). Morgan further states that it is a characteristic of professional practice and promotes the development of personal and professional growth and is also associated with improvement of quality of care (Morgan, 2009).

The Australian Physiotherapy Council (APC) defines reflective practice as “*an intentional and skilled activity in which a person analyses and describes his or her thoughts, actions, feelings, and behaviours and makes judgements about their effectiveness*” (Connaughton & Edgar, 2011, p. 89). Critical reflection need not only involve one person looking at him or herself independently but may incorporate another’s or a group’s perspective. Two or more people may witness the same event but view it quite differently. Stonehouse (2011) highlights the importance of the support of the act of reflection in the workplace, ensuring that the practitioner does not feel as if they are under scrutiny. Reflection ideally should be conducted in a safe environment encouraging self expression and an openness to share experiences among the participants (Castelli, 2011). Reflection should also be undertaken when something has gone well and not just be limited to a negative experience or an event that has had a less than successful outcome. This will enable the practitioner to recognise how such success can be repeated in the future (Stonehouse, 2011).

Reflection in action

When discussing reflection, much of the literature mentions ‘reflection in action’ and ‘reflection on action’. ‘Reflection in action’ is the act of making sense of each new situation as it occurs by applying personal knowledge and constructing a plan of action, testing that plan and modifying it as necessary (Kumar, 2011; Schon, 1983). It involves examining one’s own behaviour and that of others during a situation or event. Each situation must be assessed as new and complex while the practitioner is simultaneously aware of their own reasoning, influences, and assumptions which may affect that process. Similar prior experiences and/or the context in which each experience may have occurred, together with various social, cultural and psychological forces may have shaped an individual’s values and assumptions thereby affecting the way they may perceive and react to a situation (Mamede, et al., 2006). Schon states that “*reflection in action is the hallmark of an experienced practitioner*” (Somerville & Keeling, 2004, p. 43). Fisher-Yoshida states that “*if we are not familiar with our core values and why we think and act the way we do, then we are destined to be reactive rather than reflexive ...*” (Castelli, 2011, p. 18) . Ashby (2006) goes so far as to say that it is potentially dangerous for any practitioner to not critically reflect, as practice becomes task orientated, routine and ritualistic.

Reflection on action

‘Reflection on action’ is probably the most common form of reflection and consists of similar reasoning as involved in reflection in action, however it is retrospective. Reflection on action

occurs after an experience or event has taken place and involves going over that event in your mind and developing more effective ways of dealing with a similar situation in the future. This sort of reflection often focuses on the negative aspects of what has occurred. Alternatively Somerville & Keeling (2004) stress the importance of identifying and valuing strengths in order to be able to develop these and become better professionals.

Models of reflection

Reflection may be an informal private exercise, or alternatively be more formal and structured employing a model to provide a framework in which to examine and learn from an experience. The use of a model to structure a person's thoughts and feelings prevents that person from just describing an event without any further analytical thought (Hood cited in Stonehouse, 2011, p. 299). There are several models of reflection but the two which are most commonly used today are Kolb's Experiential Learning Cycle and Gibbs Reflective Cycle.

Kolb's Experiential Learning Cycle



Source: (Davies, 2011)

Kolb's Learning Cycle (Kolb, 1984) is described as an experiential model where the learner has a concrete experience that is transformed through reflective observation. The model consists of a learning cycle comprising four different stages which can be entered at any point. The learner will undergo an experience, and in the period of reflection following, the learner gains a general understanding of the concepts involved in the experience. Then, in the light of previous knowledge, the learner gains new insight and is able to utilise these concepts to develop an intelligent plan of action which can then be applied to or tested on new situations (Sewchuk, 2005).

Gibbs' Reflective Cycle



Adapted from: (Palmer, Burns, & Bulman, 1994)

Gibbs' Reflective Cycle was developed in 1988 (Gibbs, 1988) and is similar to Kolb's Learning Cycle but it expands on the principles. Each step in the cycle begins with a description of the event, and involves reviewing and reflecting on the experience then continuing on to formulate a plan to deal with any similar experience which may occur in the future. Gibbs' cycle consists of six steps where the practitioner is required to answer a series of questions each leading on to the next, encouraging a thorough examination of an event and provoking critical thought. New meanings are attained leading the learner to develop a positive plan of action (Forrest, 2008).

An event can be reviewed and learned from in a structured debriefing using Gibbs's reflective cycle:

Stage 1: Describe the event in detail, including who was there; what were you doing; what happened; in what context did it happen; what part did everyone involved play in the event.

Stage 2: Describe own feelings, thoughts and perceptions. Think about how the event made you feel; how do you think the others involved felt; how were you feeling prior to the event; how do you feel about the outcome.

Stage 3: Evaluate the situation. What was good or went well; what was bad or what didn't go well.

Stage 4: Analyse the situation. What sense can you make out of the experience; if things didn't go so well how did you or others contribute to this; why did things not turn out as perhaps they should have done; what questions have been raised from the encounter.

Stage 5: In this stage conclusions are drawn from the information that has already been analysed. It is here that self-awareness and insight into own and other's behaviour expands. Think about what you or others have done to contribute to the outcome of the event and what could have been done differently.

Stage 6: Develop a plan of action for the future should a similar situation occur again. Think about whether or not you would act differently.

Conclusion

Although there is insufficient empirical evidence to prove conclusively that reflection and reflective practice can help reduce clinical errors or improve clinical outcomes for patients, it is a logical conclusion to draw (Mamede, et al., 2006). Engaging in reflection promotes critical enquiry encouraging the practitioner to learn through analysis and evaluation of an experience thereby preventing practice from becoming habitual and task orientated (Stonehouse, 2011). Critical reflection helps practitioners focus on improving their knowledge, skills and behaviour ensuring they are able to constantly update their practice and meet the complex demands of patients in the health care setting (Somerville & Keeling, 2004).

Medical glossary and acronyms

Adverse event	An incident in which harm resulted to a person receiving health care.
Clinical error	An error in patient care which could have been prevented, and which may result in harm to the person receiving the care.
Clinical reasoning	All of the steps involved in processing a clinical problem, including collecting information, developing and implementing a plan, evaluating the outcomes and reflection of the practice.
Gibbs' Reflective Cycle	A model of reflection which expands on the processes used in Kolb's Experiential Learning Cycle by incorporating a series of "debriefs" (or steps) throughout the cycle. The individual stops to reflect on discussion questions such as "What happened?", "What was your reaction?", "What will you do differently next time?"
Health reform	Significant changes to or creation of health policies. Examples of aims of these policies include improving the quality of health care, reducing the cost of health care, or increasing access to health care providers.
Interdisciplinary teams	A team that is collaboration-oriented. The team meets regularly to discuss and collaboratively set treatment goals and carry out treatment plans. There is a high level of communication and cooperation among team members (Korner, 2008, p. 2).
IOM	Institute of Medicine An independent body that provides evidence-based health advice and guidance to the government, health professionals and the community in the United States.
Kolb's Experiential Learning Cycle	An experiential model of reflection, where a person reflects on and gains an understanding of an experience they have had,

and then applies this understanding when encountering new situations.

Multidisciplinary teams	A team that is discipline-oriented. Each professional works in parallel, with clear role definitions, specified asks and hierarchical lines of authority (Korner, 2008, p. 2).
NHS	National Health Service The publicly funded healthcare system in the United Kingdom.
NICE	National Institute for Clinical Excellence Provides guidance on, recommendations for and sets the standards for quality health care in the United Kingdom.
Patient acuity	The measurement of the intensity of care required for a patient, ranging from minimal care to intensive care.
Reflective practice	An approach where a person deliberately reflects on their thoughts and actions in a situation, and then evaluates the effectiveness. It is a method of self-learning with the intention of developing a person's critical thinking and understanding.
Reflective thinking	A critical thinking process, creating and clarifying the meaning of experience (past or present) in relation to self and self in relation to the world (Boyd & Fales, 1983).
Reflection in action	Reflection that occurs while the problem is being addressed.
Reflection on action	Retrospective reflection on a situation or problem. It occurs after an event has taken place and involves developing more effective ways of dealing with a similar situation in the future.
WHO	World Health Organization A specialised agency of the United Nations that acts as a coordinating authority on international public health.

Further information

Australasian Association for Quality in Health Care

<http://www.aaqhc.org.au/>

or (07) 5575 7054

An association of representatives from Australia and New Zealand which provides opportunities and support for its members to assist in developing the quality of health care for consumers. The organisation facilitates education and development, builds alliances with related organisations, and acts as a voice for health care quality and safety in Australia and New Zealand.

Australian Commission on Safety and Quality in Health

<http://www.safetyandquality.gov.au/>

or (02) 9126 3600

An organisation which advocates and co-ordinates improvements in safety and quality in health care. Their role includes reporting to the Australian Government on safety and standards, advising the government on 'best practice thinking' to drive the development and implementation of strategies and quality improvement, as well as recommending nationally agreed standards for safety and quality improvement.

Australian Council on Healthcare Standards

<http://www.achs.org.au>

or (02) 9281 9955

A not-for-profit authority which conducts performance reviews, assessment and accreditation of health care professionals, working towards the improvement of the quality of health care in Australia.

Australian Institute of Health and Welfare

<http://www.aihw.gov.au/>

or (02) 6244 1000

An independent statutory body which aims to improve the health of Australians through the provision of reliable information and statistics about Australia's health and welfare.

Australian Nursing Federation

<http://www.anf.org.au/>

or (02) 6232 6533

National union for nurses, midwives, assistants in nursing and students. The Australian Nursing Federation (ANF) provides professional and industrial leadership for the nursing industry and the broader health sector.

Australian Safety and Quality Framework for Health Care

<http://www.health.gov.au/internet/safety/publishing.nsf/Content/NSQF>

or (02) 9126 3638

A national safety framework developed by the health care sector in collaboration with other health care groups and consumer advocates. The framework acts as a guideline for achieving safe and high quality health care for all Australians.

Care Quality Commission (UK)

<http://www.cqc.org.uk/>

or 03000 616161

A regulatory authority of health and adult social care, which began operating in 2009. Their aim is to ensure that care provided by hospitals, dentists, ambulances, care homes and home care services are meeting government standards of quality and safety.

Centre for Health Economics (Monash University)

<http://www.buseco.monash.edu.au/centres/che>

or (03) 9905 0733

A research and teaching unit at the forefront of health economics, with both a national and international focus.

Centre for Transforming Healthcare (USA)

<http://www.centerfortransforminghealthcare.org>

The Commission was established in 2009 in order to discover and analyse critical safety and quality problems within the United States health care system.

Institute of Medicine (USA)

<http://www.iom.edu>

A non-government, not-for-profit organisation that provides authoritative health advice to the international public and decision makers.

National Institute for Clinical Excellence (UK)

<http://www.nice.org.uk>

An agency of the National Health Service that promotes clinical excellence by providing guidance and recommendations to NHS providers within the United Kingdom.

Nursing and Midwifery Board of Australia

<http://www.nursingmidwiferyboard.gov.au>

Sets policy and professional standards for nursing and midwifery practitioners and students, registers practitioners, assessment of overseas trained practitioners approving accreditation standards and accredited courses of study, handles notifications, complaints, investigations and disciplinary hearings

Royal College of Nursing Australia

<http://www.rcna.org.au>

or 1800 061 660

Australia's peak professional nursing organisation.

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