

# Exploring future health workforce educational needs: a qualitative investigation

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**Objective:** Given the predicted changes ahead for both healthcare and educational systems, this study was designed to explore perspectives of senior health clinicians and academics about the educational needs of the future health workforce. Participants were asked about how universities could best provide post-qualification education to enable current and future health professionals to meet changing workplace demands and expectations.

**Methods:** An exploratory study was conducted across academic and clinical settings in Queensland. A convenience sample of 12 senior academic and clinical managers participated in semi-structured, discursive interviews. Data were coded and categorised into emergent themes with verification by the first two authors.

**Results:** Participants described and critiqued current patterns of learning by health professionals, including completion of traditional postgraduate degrees and professional development courses. They suggested innovative approaches for future education, proposing that learning should be aligned with practice needs and made available through flexible and connected learning opportunities. Further, they were of the view that workplace learning should be recognised academically through arrangements such as credit for prior learning.

**Conclusions:** Participants concluded that universities have an important role, in partnership with key stakeholders, to educate health professionals to be able to meet the needs of changing workplace demands and expectations.

**Keywords:** professional development, postgraduate education, lifelong learning

## Introduction

Current and future health professionals need to respond to changing population profiles and increasing technology capabilities. Adults living longer have chronic diseases, multiple morbidities, and complex care needs. There will be greater demands for advanced and diagnostic technologies, and individuals and their families will seek to self-manage their health.<sup>1</sup> Current health systems will struggle to manage competing demands amidst new environmental, infectious and behavioural risks.<sup>2</sup>

Similar changes are occurring in education where large volumes of information are easily accessible where individuals live and work. However, current and future health professionals need to discriminate appropriate quality information, extract and synthesise knowledge for use.<sup>2</sup> There is significant diversity in the educational preparation of health professionals for clinical practice. Formal entry level capabilities will need to be complemented by clinical reflection and further developed through lifelong learning programs.<sup>1</sup> Consequently, health professionals are already recognising their need to develop transferable and technical skills throughout their

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careers.<sup>3</sup> Further, it is recognised that when education is applied well, individuals can be more productive in the workplace.<sup>4</sup>

Postgraduate education appears promising for individual development but there is inconclusive evidence of broader impact. Scottish nursing graduates reported enhanced critical thinking skills, which enabled them to be more confident administrators and effective leaders.<sup>5</sup> Norwegian nurse graduates reported enhanced communication and problem solving skills and described achieving greater clinical autonomy, professional confidence and job satisfaction.<sup>6</sup> However, the extent to which formal postgraduate programs enable individuals to translate their knowledge into clinical practice improvement is still uncertain. A recent systematic review concluded that there was limited evidence of impact of Masters' degree programs in health service organisations and improved service delivery.<sup>7</sup> In some cases, the responsibility for achieving outcomes and impact in the workplace was considered outside the responsibility of the educational institutions. Some graduates encountered resistance to change in their workplace, which limited their ability to apply what they had learned. Further, recent graduates recognised the need for a broad range of contextually transferable academic and professional skills to deal with the changing demands of healthcare systems.<sup>5</sup>

A global independent Commission has argued to redesign professional health education, so that health professionals can directly mobilise their knowledge, engage in critical reasoning and ethical conduct, and ultimately improve individual and population health.<sup>2</sup> There is increasing evidence which suggests that after familiarisation with their discipline, health professionals benefit from learning about management, leadership and communication skills to work within complex and demanding healthcare systems.<sup>8</sup> This has also been reflected in the transition for doctors towards multidisciplinary and practice-based continuing professional development programs.<sup>9</sup>

Lifelong learning is well recognised within health professional curricula and embodied in continuing professional development.<sup>3</sup> Health professionals are required to maintain their professional education by professional standards and registration requirements, to ensure high quality practice.<sup>10</sup> Currently, a broad range of professional development learning options exist; from everyday learning at work, to formal professional development programs, with varying content and educational quality. Specialist professional groups have developed advanced curricula that can

be delivered flexibly across different countries and cultures.<sup>1,11</sup> Most commonly, structured courses are designed and delivered by independent organisations, within specific professional disciplines. However, this contrasts with healthcare environments where care is required by a range of professionals across a continuum of services and care providers.

Universities have tended to prioritise postgraduate learning through degrees rather than developing smaller professional development courses.<sup>12</sup> However, over the last decade, there has been little proportionate change in higher education enrolment across Australia and there is limited knowledge of contemporary attitudes, needs and preferences for lifelong learning from current Australian workers.<sup>3</sup>

## Research aim

This exploratory study was designed to investigate the perspectives of senior health clinicians and academics about the future educational needs of the qualified health workforce. Participants were specifically asked about whether and how universities could provide post-qualification, professional development education to better enable health professionals to meet the needs of changing workplace demands and expectations.

## Methods

This qualitative study was conducted across neighbouring regional academic and clinical settings in Queensland: Griffith University and Queensland Health. A convenience sampling strategy was used to obtain a sample of senior academic and clinical staff from a breadth of health professions. Senior academic staff who had administrative responsibility for teaching and learning across allied health, medical and nursing disciplines were invited to participate. Professional directors, policy leaders and workforce development officers were invited from all allied health professions in the one health service.

Participants were contacted by the researchers to arrange a suitable time and location for the interview. An interview template was designed to prompt conversation around key topics of career pathways, learning opportunities, and continuing education practice for professional development. Face-to-face semi-structured interviews facilitated conversation and critical discussion on suggestions that participants considered important.<sup>13</sup> Interviews were independently transcribed, and participants reviewed their transcripts. Thematic analysis was conducted in three stages.<sup>14</sup> First-level coding

involved categorising descriptive verbal responses to the same questions for all participants. Second-level coding grouped similar responses within each of the key topic areas. Finally, overarching themes emerged across key topic areas. Both researchers verified each stage of thematic analysis.<sup>15</sup> Ethical approval was gained from Griffith University (GU RefNo: 2017/498). All participants provided written consent prior to commencing the study.

## Results

Twelve health professionals participated in discursive interviews; including allied health (11) and medical (1) professionals; working in academic (7) and clinical (5) positions. All participants described current educational patterns of health professionals and proposed innovative approaches for future education initiatives.

### Current patterns of health professional education

All participants recognised the benefits of postgraduate degrees for health professionals and acknowledged that experienced health professionals who chose to do a postgraduate degree generally had a clear goal in mind. This was often driven by the workplace, or the desire for promotion opportunities: the ones who enrol in our program already have a career pathway in mind, many of them are working towards specialisation, but [others] are working towards a [specific] job which ... requires this particular degree (Academic 5).

However, academic participants described practical difficulties: “it’s difficult to put in place a cost-effective program in a tertiary institution that’s going to get enough fee-paying students to be able to offer it” (Academic 1). Health professionals observed that allied health clinicians and nurses often work part-time and therefore have insufficient income or time to support postgraduate study. They also queried whether specialist postgraduate degrees were sufficient preparation for career advancement.

Participants described a broad range of current professional development courses, which were offered through professional associations, not-for profit organisations, hospitals, private training organisations and pharmaceutical companies. Participants acknowledged that medical colleges and some professions provided clear pathways towards specialisation; however, for other disciplines, there were limited formal vocational programs for mid-career clinicians: “there seems to be a big gap between

graduates and experienced [clinicians], and around the support that’s given to get mid-career people to the next level” (Clinician 2).

Clinician participants described variable quality and timing of professional development: “they are really random and haphazard and not available frequently” (Clinician 3). They reported that it was confusing and complicated to plan professional development:

I don’t think there’s enough information sharing around opportunities or advice on what sort of courses you could attend in your professional development that would help achieve that [specific] goal in five years’ time. (Academic 3)

While health professionals are expected to document regular professional development, they were reported to be randomly monitored: “you need to do 30 hrs of continuous professional development and it’s pretty loose as to what they describe that as” (Clinician 4). Monitoring mechanisms used by employers were also reported to be inconsistently used.

### Innovative approaches for future education of health professionals

Participants proposed innovative approaches to the continuing professional development of health professionals, to enable them to meet the needs of the changing workplace. Three key themes emerged to summarise critical success factors for future education; in that learning should be aligned with practice needs, learning opportunities should be flexible and connected, and professional development should be recognised academically.

Participants emphasised that learning should be aligned with clinical practice and be integrated to address complex practice challenges: “you just want everything to be seamless, integrated, and much less siloed” (Academic 7). Clinician participants reported that health professionals want to learn from the best in class at the time that they need the information, and when the workplace required the application of learning. Clinicians were reported to be keen to learn to achieve higher level jobs; “they’re very keen to increase their knowledge and be able to move ahead with their careers and specialise in particular areas” (Clinician 2).

Academic participants recognised the opportunity to reinforce theory while supervising and accrediting technical skills required in the workplace: “*show them, supervise them, and let them go, and credit them for the [technical*

*skill]*” (Academic 3). They described aligning the design and delivery of professional development curriculums: “[practitioners] come in and do guest lectures, [and] they are involved collaboratively in working up that curriculum” (Academic 4). Further, when health professionals applied their learning through completing work-based projects, benefits to the workplace were explicit and often reinforced management support for learning.

The second emergent critical success factor was described as flexible and connected learning. Participants described a range of different professional development learning opportunities that supported workplace needs. Clinical specialisation courses were perceived as important because of the complexity and depth of information required to manage patients with complex or severe conditions: “we have a lot of clinical areas that require staff to do postgraduate training” (Clinician 3). Participants identified that communication skills were crucial for working in complex situations and in building resilience for dealing with complexity: “I think that’s probably the single most important thing we can do to ... is to focus on the development of the ability to interact with humans in progressively more difficult situations” (Academic 5). Learning together with other disciplines about broad management topics was seen as beneficial for teamwork, communication, and collaboration: “what’s really needed is an inter-professional program where people from different health disciplines can do a qualification” (Clinician 4). Clinician participants also reinforced the need for learning in expanded topics: “I don’t believe you can be an effective clinician unless you understand research” (Clinician 1).

Professional development pathways also needed to be incremental and connected: “No one’s going to want to come back and do large courses ... so it’s got to be a micro learning kind of approach that meets their professional requirements” (Clinician 2). Further, professional development needed to be flexible in time and place, to allow health professionals to fit study in with other work and life demands: “complete an hour of two of an online course now ... [and] in six months’ time [and] over the course of 18 months, it is completed” (Clinician 1). Participants also reported that clinicians are prepared to pay for what they need: “you pay a fee to attend two subjects that would support your professional development rather than having to do the whole course” (Academic 2).

The third emergent critical success factor was described as academically recognised learning. Participants suggested

that academic recognition for professional development could be an important incentive: “if you demonstrate your learning and you get rewarded people are more motivated” (Clinician 5). Ideally, skills learnt in the workplace should be recognised, in either a formal verification task or supervised clinical practice to meet the relevant learning outcomes: “they start doing supervised clinical practice, and we gradually have a tick-off system” (Academic 2). Further, if a clinician was required to manage a project, the required project plan or report could be assessed: “you put the project plan in as your assessment and present it, and you get credit points” (Academic 3).

Participants proposed that health professionals should be able to accumulate academic merit incrementally and flexibly without being restricted to specific academic courses and study time limits: “it’s about accumulating points, ... being incremental, flexible with your timetables, [and] ... then rolling over into certificates or diplomas” (Clinician 2). They recommended individuals design their own professional development pathways of learning to be relevant and beneficial to their career path, workplace requirements, and personal interests: “it could be a few areas so that if you do enough of them then that comes together to be like a graduate certificate, that could be really attractive” (Clinician 4).

## Contribution of universities to future education of health professionals

Participants concluded that universities have an important role, in partnership with key stakeholders to educate future health professionals. Some described working in partnerships with employers to design specific postgraduate programs; “she wanted her staff to actually have a qualification” (Academic 7). Participants also suggested that professional associations would need to be involved: “with our state-wide and national colleagues I think any new course would have to have some kind of endorsement or buy-in by them as well” (Academic 4).

Clinician participants described the skills that clinicians need to develop, but recognised they were not skilled in assessment: “we [the clinicians] should develop content and then the university design the assessment and package it so that [clinicians] can get some recognition for it” (Clinician 5). They suggested that if universities provided professional development, it was likely to be higher quality and more consistent. This may motivate alumni and health professionals to engage in ongoing learning. Academic participants also recognised the potential for collaborating across different

universities: “we could put together a Masters [program] and use my ... course here and a really good post graduate course from another university” (Academic 6).

## Discussion

Senior health academics and clinicians proposed three innovative suggestions for professional development of health professionals; learning should be aligned with practice needs, be flexible, and recognised academically. A range of interdependent, just-in-time learning options was proposed, for health professionals to design professional development pathways at convenient times and in suitable formats when they most need it, to meet immediate workplace and longer-term career development needs. Participants emphasised combining clinical specialisation and interprofessional learning to promote collaborative practice. They reported employers also require management, leadership and/or research skills, and their meaningful application to improve clinical practice. It was recommended that these learning pathways should articulate into existing or new postgraduate programs, so that health professionals can better manage the changing demands of patients, families and health systems.

These perspectives are consistent with the international Commission’s call for redesigned professional health education, so that health professionals can continue to learn as they work.<sup>2</sup> They are also consistent with a recent Australian survey, in that study interested workers wanted flexible and bite-size learning that was related to job requirements and their professional development.<sup>3</sup> A range of blended and online learning opportunities were requested and have been demonstrated to improve the acquisition of clinical competencies.<sup>16</sup> Interprofessional education is recognised as important to enhance the quality of teamwork and as a basis for future collaborative practice.<sup>17</sup>

The proposal that universities develop and provide redesigned professional development education to meet the changing needs of healthcare systems also fits in with their mandate to engage and assist health professionals to meet their goals concerning lifelong learning.<sup>4</sup> The challenge for academic systems is to work in partnership with healthcare employers and professional associations to provide flexible and balanced educational pathways for health professionals to better understand, manage and transform the health systems in which they work.<sup>2</sup>

This study is limited by the small convenience sample of participants, who may be positively biased and may not

represent all health professionals or regions. While there was broad saturation across emergent themes, certain areas require detailed investigation, including financial and administration systems. Collaborative development of core curriculums within flexible learning pathways will need careful design and delivery. It will be important to evaluate outcomes and impact on clinical practice of any new educational opportunities.

## Conclusion

Senior health clinicians and academics both supported and critiqued the use of postgraduate education and continuing professional development by health professionals to promote lifelong learning. Three critical success factors were proposed as innovative approaches for future professional development of health professionals. Professional development learning opportunities should be aligned with practice needs and individual goals to engender sustained management support. Clinicians require timely and flexible learning opportunities to meet their clinical specialisation and organisational goals. Clinicians wanted academic recognition for their professional development and alignment with postgraduate programs. It was proposed that universities design and deliver professional development courses in partnership with employers and professional associations, to facilitate health professionals to meet the demands of changing healthcare workplaces and systems.

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## Disclosure

The authors declare no conflicts of interest in this work.

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