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Policy Brief

A single competency-based education and training and competency-based career framework for the Australian health workforce: discussing the potential value add

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Abstract

This brief discusses the policy implications of a research study commissioned by Health Workforce Australia (HWA) within its health workforce innovation and reform work program. The project explored conceptually complex and operationally problematic concepts related to developing a whole-of-workforce competency-based education and training and competency-based career framework for the Australian health workforce and culminated with the production of three reports published by HWA. The project raised important queries as to whether such a concept is desirable, feasible or implementable – in short what is the potential value add and is it achievable? In setting the scene for discussion, the foundation of the project's genesis and focus of the study are highlighted. A summary of key definitions related to competency-based education and training frameworks and competency-based career frameworks are provided to further readers' commonality of understanding. The nature of the problem to be solved is explored and the potential value-add for the Australian health workforce and its key constituents proposed. The paper concludes by discussing relevance and feasibility issues within Australia's current and changing healthcare context along with the essential steps and implementation realities that would need to be considered and actioned if whole-of-workforce frameworks were to be developed and implemented.

Keywords: Competency-Based Education, Career Ladders, Health Workforce, Career Mobility, Innovation, Healthcare Reform, Public Policy Implementation

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Key Questions

- **What is known about the topic?** While a great deal is known about the topic of competency-based education and competency-based educational frameworks; and these abound in multitude across all levels and professions of the health workforce; there is an absence of literature pertaining to whole-of-workforce developments covering all groups within the health workforce. Considerably less is known or understood about competency-based career frameworks and the implications for the health workforce. No published literature could be found exploring this concept from a whole-of-workforce perspective.
- **What does this paper add?** The discussion opens with a summary of definitions and insights into the conceptually complex concepts of whole-of-workforce competency-based education and competency-based career frameworks within the context of the Australian health workforce. The desirability and feasibility of this unique whole-of-workforce concept is discussed. The paper adds new insights into the possibilities, benefits, options, feasibility and implementation realities to be considered if embarking upon developments of this nature.
- **What are the implications for practitioners?** This brief highlights a broad range of development and implementation issues for the consideration of policy-makers and their stakeholder communities involved in whole-of-workforce considerations that aim to enhance service coordination and increase workforce flexibility. Factors for consideration include enablers and barriers for development along with leadership, sign-off and resourcing issues to name a few. The brief provides commentary and suggestions in each of these areas along with discussion regarding the potential value add or otherwise for such a venture. The researchers raise questions regarding the feasibility of whole-of-workforce frameworks including whether or not such a concept is implementable.
- **What are the implications for the public?** Whole-of-workforce developments offer the promise of less service fragmentation with a greater focus on integrated collaborative practice and patient centred care. Espoused benefits also include the promise of increased openness and transparency regarding the roles and responsibilities of those providing the care although the achievement of these aspirations via 'whole-of-workforce' developments is as yet untested.

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Introduction

This article reports on a project which was commissioned to examine a previously unexplored 'whole-of-workforce' option for enhancing health professional educational preparation and workforce flexibility in the Australian workforce. The project considered the notion of a single 'whole-of-workforce' competency-based education and training framework and competency-based career framework by which every Australian health profession grouping and health workforce participant would agree to support and align. The researchers concluded that whilst the proposed development is conceptually possible, associated implementation and change management requirements raise significant questions about the feasibility of the development.

Project genesis and methodology

The research study informing the discussion in this brief was part of a substantial three-year program of national health workforce planning and research projects undertaken by the National Health Workforce Planning and Research Collaboration (NHWPRC), a consortium comprising Health Workforce Australia (HWA), the Australian Health Workforce Institute (AHWI) and Price Waterhouse Coopers Australia. The AHWI is a consortium of the University of Melbourne and the University of Queensland with established links to the Australian National University, the University of Adelaide and Monash University.

Two distinct but inter-related workforce projects were commissioned with the view that single frameworks covering the entire health workforce were desirable and achievable. The initial remit required research to engage in:

1. Mapping health workforce competencies, with a view to developing a whole-of-workforce framework for competency-based standards in health
2. Exploring evidence-based options for competency-based career frameworks in Australia.

However, as the projects progressed, three key themes emerged. First, the degree of synergy and overlap became increasingly obvious, so the contracting organisation (HWA) requested that the two streams of work be integrated into a combined project. Second, the commissioned task of locating and mapping all existing competencies to a single framework was methodologically problematic. Hundreds of frameworks relating to single professions or professional sub-groupings were identified and were a 'moving feast' of frameworks being birthed, retired, updated, merged and expanded. Third, searches did not identify any existing 'whole-of-workforce' frameworks from which comparisons could be made. Subsequently the funder revised the project brief abandoning the notion of mapping all existing frameworks and adding an additional requirement to seek the views of a small sample of health service stakeholders. Published in 2012, the research study resulted in three substantive reports which are freely downloadable from the open web and titled as follows:

1. Competency-based Education and Competency-based Career Frameworks: Informing Australian health workforce development (1)
2. Exploring the Literature: Competency-Based Education and Training and Competency-Based Career Frameworks (2)
3. Listening to our Stakeholders: Analysis of interviews regarding competency-based education and training and competency-based career frameworks (3)

The research study and resultant reports are unique in their whole-of-workforce focus.

Method

The project was informed by several sources; a review of the published and grey literature and by formal semi-structured interviews and informal consultations with key informants across the health sector. Grey literature was sourced during discussions with key informants with permission to released unpublished information from their organizations. Informants included education and training providers; health professions; health service users; accreditation and regulatory authorities; and health service employers (1). The list of stakeholders for interview were identified by the funding agency and connected to the researchers via formal letters of introduction. Detailed description of the project methodology is included in the initial project report *'Competency-based Education and Competency-based Career Frameworks: Informing Australian health workforce development'* (1). Detailed analysis of the literature is included in the second reported entitled *'Exploring the Literature'* (2) and detailed qualitative analysis of the stakeholders interviews is contained within the third report entitled *'Listening to our Stakeholders'* (3).

Limitations

The study explores competency-based concepts from a 'whole-of-workforce' basis but no clear definition exists with respect to the totality of the health workforce, particularly recently emerging new health workforce participants and roles. The project researchers subsequently proposed a model to better define the health workforce as highlighted in Figure 1. However, as international consensus does not currently exists in respect to health workforce definitions, inclusions or exclusions, more research is recommended to document and guide further health workforce definition and development.

The study was enriched by stakeholder views of competency-based education and competency-based career frameworks gleaned from 59 interviews with groups and individuals within the Australian health sector community. Data gathered during the semi-structured interviews provided exceptionally useful insights into the topics under consideration. Given the numbers and scale of groups within the HWA community this study is limited by the relatively small interview cohort size compared to the size of the overall health workforce. Views canvassed in the interview sample may not represent views within the wider health stakeholder community.

Definitions

Given the complexity of concepts involved in the project and the uniqueness of the whole-of-workforce approach, the initial challenge for the research team was to reach a common

understanding of definitions and the scope of the Australian health workforce.

To ensure a shared understanding among readers, the research team undertook a literature review to develop a glossary of terms—a sample of which are included to frame the discussion in this brief.

- Competence: A generic term referring to a person's overall capacity to perform a given role, including not only performance but capability. It involves both observable and unobservable attributes such as attitudes, values, and judgemental ability (4);
- Competency: The ability to consistently perform work activities to agreed standards over a range of contexts and conditions (5,6);
- Competency in the clinical setting: The ability to handle a complex professional task by integrating the relevant cognitive, psychomotor and affective skills (7).

No specific definitions were found to describe the concepts of competency-based education and training frameworks or competency-based career frameworks. Subsequently the research team drew from the aforementioned concepts and the discussions with key stakeholders to suggest the following definitions of these concepts.

- Competency-based education and training frameworks: Frameworks which are constructed to specify competencies relevant for registration, assessment of practice and curriculum design, and education and training (1);
- Competency-based career frameworks: Group competencies under 'domains' (headings for classifying related competencies) in order to enable practitioners or workers to be assessed, to move up a career pathway, or to have their skills and learning recognised for lateral movement. They may or may not be aligned with remuneration (1).

Project recommendations highlight the opportunity for HWA to take the lead and develop a set of shared definitions with common agreement across the health workforce (1).

Defining the Australian health workforce

Understanding and defining the scope and breadth of the Australian health workforce is an essential precursor to any 'whole-of-workforce' considerations, and little if any literature exists to comprehensively describe the entire workforce. However, demographic health data has been reviewed by Australian government and health professional organisations, non-government entities such as Carers Australia, and research groups exploring health workforce issues (8–11). Review of this data led the research team to the conclusion that any 'whole-of-workforce' considerations should be comprehensive in nature. Subsequently, whole-of-workforce descriptors in this project include the specialist workforce of medical and dental specialists; the regulated health workforce involving all health professionals with legislated licensing requirements; the unregulated workforce (e.g. social workers, paramedics and indigenous health workers); the support workforce including nursing and allied health assistants; the emerging workforce (e.g. physician assistants and nurse practitioners); and the voluntary unpaid and carer workforce as illustrated in Figure 1.

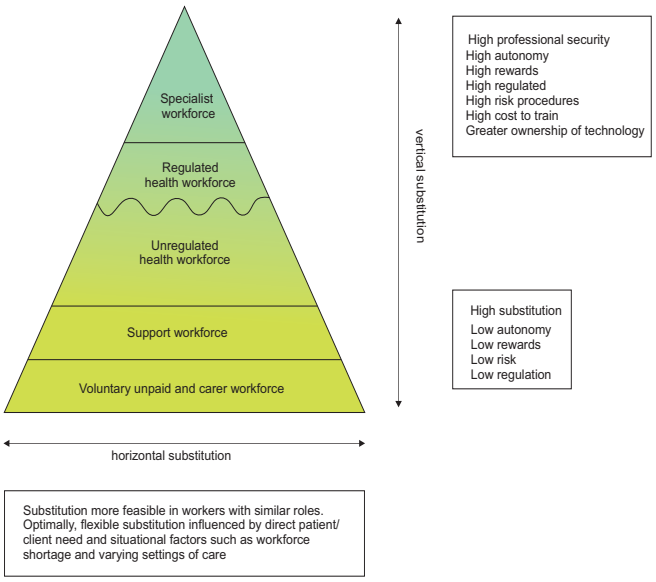

Figure 1. Groupings within the Australian Health Workforce [adapted from Nancarrow and Borthwick (8)]

Several emergent health worker groups do not fit easily within current workforce categories. For example, graduate physician assistants currently lack formal national recognition within the health workforce. Subsequently these cohorts of new graduates are challenged by unclear employment options. Delegated roles versus autonomous roles are also evident within the emerging workforce. Delegated roles include physician assistants and anaesthetic assistants. In contrast, autonomous roles include nurse practitioners. No clear model is apparent in respect to the emergence of new workforce roles. More research is recommended to document and guide further health workforce development.

What are the problems to be solved?

Significant health workforce problems exist that are common across westernised countries and are increasingly being tackled by movement towards large scale cross professional, interprofessional and cross-sectoral competency policy developments and competency related initiatives. Global examples of larger scale projects include the CanMEDS framework and the European Tuning Project (12,13). Current issues within the Australian context include the problem that all professional groups and many health service employer organizations and/or educational providers are developing frameworks with increasing disparity and little if any alignment. Additionally, frameworks are often not aligned with the recently revised Australian Qualifications Framework (11). This exacerbates problems related to variable standards/levels of competency within health qualifications and professions including; difficult transition or lack of clear articulation between the Vocational Education and Training (VET) and higher education sectors; difficulties in recognition of prior learning for health workers wishing to build on their careers, change careers or migrate

into Australia; increasing professional demarcation and protection of professionally siloed roles; and, difficulties for health employers wishing to increase workforce flexibility. Problematically, disparate development of frameworks moves the Australian sector further away from the aspiration of effectively-coordinated care as outlined in the report of the UK Independent Commission on Whole Person Care which visions the concept of '*One Person supported by people acting as One Team from an organization behaving as One System*' (14). Equally, rigidness within profession specific frameworks, education and/or career frameworks inhibits workforce flexibility leading to policy recommendations for the need to '*Unlock*' skills within hospitals (15).

Feasibility of whole-of-workforce developments

The array of globally available competency-based frameworks for education and training are somewhat daunting when the extent and diversity of domains, levels and descriptors are analysed. Hundreds of examples exist across health and related sectors and a detailed list of examples is provided as an annex to the first project report (1) with other significant examples emerging since completion of the project (16). Locating all frameworks and aligning these to propose a national whole-of-workforce framework for the Australian health workforce is simply not feasible – in short, it is an impossible task to attempt to map a moving feast of multiplying frameworks all of which were at significant stages of development such as being updated, refreshed, birthed, retired, merged or expanded. Equally, it was an endeavour that was dependent upon such large-scale consultation and consensus that was probably unable to be resourced, agreed or implemented.

In contrast, discussion with the funder recommended that a case-based approach enabled identification of Australian-based and global examples of existing larger-scale whole-of-workforce or multi-professional developments from which learnings could be gleaned and the project was adjusted accordingly. No whole-of-workforce models were identified but several relevant large scale multi-professional or multi-speciality models were identified (1,2).

Examples of multi-professional competency-based initiatives

The multi-professional and multi-speciality examples illustrate successful developments from which a range of valuable development lessons can be gleaned.

CanMEDS: An example of a competency-based education and training framework

The CanMEDS physician competency framework is a roles based framework developed by the Royal College of Physicians and Surgeons of Canada (12,13,17). The CanMEDS initiative commenced in the early 1990's as part of a desire to reform medical education and increase alignment between more than sixty medical specialities and sub-specialities overseen by the College. The framework is organised around seven key roles: Medical Expert (central role), Communicator, Collaborator, Manager, Health Advocate, Scholar and Professional illustrated in Figure 2.

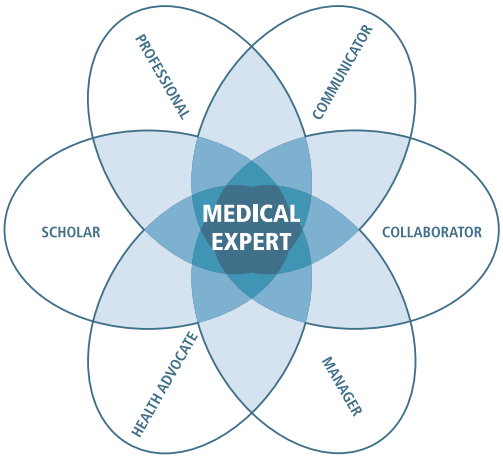

Figure 2. CanMEDS competency-based framework. "Copyright © 2005 The Royal College of Physicians and Surgeons of Canada. http://rcpsc.medical.org/canmeds. Reproduced with permission".

The success and credibility of the framework is now underpinned by a development history of more than twenty years. Current moves to more openly define it as a 'competency' rather than 'roles' framework highlights the increasing professional understanding and acceptance of competency-based frameworks.

UK Skills Escalator: an example of a competency-based career framework

Much less was found about competency-based career frameworks, therefore access to grey literature and interview data are required to expand insights in this area. The primary information available in the published literature pertains to the example of the UK Skills Escalator (18). The United Kingdom has progressively adopted a suite of related measures as part of its health workforce modernisation strategies within the National Health Service (NHS). The original NHS intent was to develop a Skills Escalator which could facilitate vertical escalation and horizontal integration across the whole health workforce. The concept was envisaged to produce a win-win for both employers and clinical workforce planners in better matching the deployment of skills to health workforce need. However, initial buy-in of the concept was not achieved by all professions (particularly doctors and nurses) and so the project proceeded with a narrower range of health professionals than original intended.

A key concern of health professionals was the extent to which the development may be used as an 'industrial' instrument versus an enabling career framework. Skills for Health (18) is now released as a non-prescriptive Career Framework Tool which allows individual employers to build on a range of measures within their specific workplace. The workforce tools within the UK Skills for Health are linked to the UK National Qualification Framework as illustrated in Figure 3.

Australian developments

Concurrent and subsequent to the project informing this brief, a number of large scale Australian-based developments evolved and have continued to progress. Two

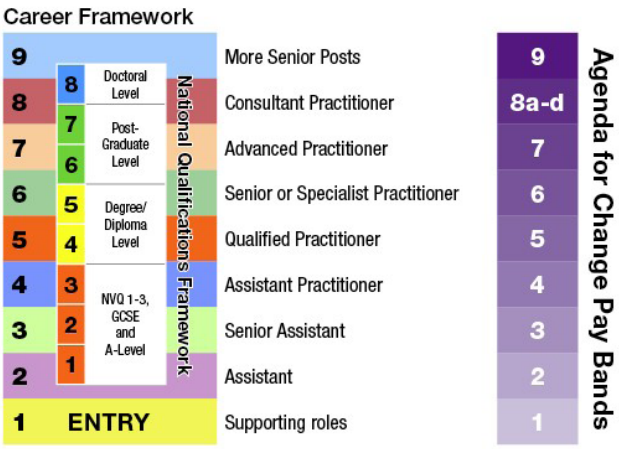

Figure 3. The Skills Escalator

examples are worthy of note, specifically, the Threshold Standards Projects of the Australian Office of Learning and Teaching (http://www.olt.gov.au/) and the Australian Learning and Teaching Council Project for Curriculum Renewal of Interprofessional Education in Health (http://www.ipehealth.edu.au/portal/) for which an increasing number of publications are emerging (19–21). While these developments provide examples of progressive and effective multi-professional and cross-sector collaboration they do not involve a whole-of-workforce approach. A possible risk is that the projects may develop with non-aligned frameworks and another series of disconnects and misalignments may become embedded between sectors such as the workforce. Continuing progression towards whole-of-workforce developments are desirable and beneficial – a view reinforced by the previously cited UK Independent Commission on Whole Person Care which advocates resolving the issue of fragmented care through an increased emphasis on team and whole-system synchronization (14). Successful development and implement requires significant resourcing and leadership (2,22).

Potential value adds: The benefits of whole-of-workforce developments?

Highlights from the literature point to the fact that provision of common platforms for learning along with clear articulation pathways for those seeking recognition of prior learning is of particular benefit in supporting health workforce developments (9,15,23). Utilising the health workforce and clearer expectations regarding maintenance of skills and competencies are possible benefits of the espoused models. Opportunity also exists for less service fragmentation with a greater focus on integrated collaborative practice and patient centred care with the benefit of increased openness and transparency regarding the roles and responsibilities of those providing the care.

Health professions and health workforce

Benefits of whole-of-workforce developments can be highlighted for both the developing and the existing workforce. These include an enhanced understanding among students of their own professional grouping plus the contributions and knowledge base provided by other groups within the health workforce. Further benefits include clearer career pathways and opportunities for the health workforce; greater clarity and transparency regarding workforce roles and accountabilities; simplification of complex employment arrangements and control of burgeoning new worker categories; and, increased career flexibility along with clearer processes for recognition of prior learning, maintenance of practice, maintenance of registration and articulated learning pathways to name a few.

Health planners and employers

Advantages for planners and employers hold the potential for greater flexibility in workforce utilisation and deployment; better alignment between education and health sectors; greater confidence in and certainty regarding the comparability of standards; and clearer definitions of health workforce roles and accountabilities against which health service planning can be undertaken.

Education and training providers

The possibility of more seamless articulation and recognition of prior learning not just between VET and higher education, but also within higher education and postgraduate specialty programs is an attractive option for education and training providers. Equally, the opportunity to work in closer partnership with health sector partners to gain clearer definition of health workforce roles and accountabilities can provide a clearer input to curriculum developments.

Accreditation and regulatory authorities

Whole-of-workforce models increase the potential for skills migration within the existing workforce, and allow for better preparation in meeting new and emergent demands within the health system.

Implementation and change management requirements

While the policy imperatives are clear and there is widespread support for whole-of-workforce developments such as the utilisation and improved integration of competency-based frameworks, significant tensions exist in respect to their development and implementation (1,23). Tensions include sceptical views among some stakeholders groups regarding the use of competency-based education; professional demarcations regarding roles and responsibilities for patient care; lack of agreement regarding the benefit and purpose of increased alignment; concerns about what can be measured and what cannot; and, lack of consensus as to who is responsible for or should lead whole-of-workforce developments if at all (23,24).

It is important that work going forward adopts a balanced perspective seeking to maximise benefits whilst acknowledging areas such as potential reductionist attributes that can be associated with overly prescriptive models. Equally important is the requirement to pay full attention to the multiple requirements involved in implementing large-scale competency-based initiatives. Taber *et al.* (24) detail a broad range of considerations which require attention in the

Table 1. Considerations in implementing competency-based approaches in health professional education and career development

Implementation Requirements
Flexibility in planning in clinical placement rotations
Ongoing development on valid and reliable competency standards More work needed to define competencies with consistent links between program and accreditation
Greater involvement from faculty Faculty development requirements Students required to demonstrate actual competence rather than knowledge only
Development of new clinical assessment and examination tools
Ongoing work in respect to challenges of competency concepts including: • Balance between individual competences and overall competence • Avoiding reductionism through over focus on individual competences
New roles and responsibilities • Revised role descriptions • Reviewed scopes of practice

Adapted from Taber *et al*. (24)

implementation of competency-based initiatives (Table 1). Considerable resourcing and complexity is involved to progress these requirements. Importantly some requirements require integrated implementation approaches and others should be progressed quite separately (25). For example, the political processes involved in negotiating educational and/or career objectives is quite different from the scientific activities involved in establishing measurable and coherent competencies and behaviours (26).

Successful progression requires large-scale government organizational change and how best can and should this be managed across the Australian health and education sectors? Effective implementation requirements are relatively easy to articulate but they have proved devilishly difficulty to fulfil. Implementation research highlights how policy-makers, educators, clinicians and managers alike are 'be-devilled' by the problems of implementing sustainable change initiatives (27).

Managing successful organizational change in the public sector requires, among other things, confirmation of the benefits and need for the change; comprehensive pre-planning; attention to building support and overcoming areas of resistance; ensuring top level political and managerial commitment; adequate resourcing; and pursuit of a comprehensive and integrated approach (25,27).

Conclusion

The concept of a single unanimously agreed and seamlessly implemented whole-of-workforce competency-based education and training or competency-based career framework has considerable benefits but the implementation reality poses some significant issues in respect to feasibility and achievability. Albeit the improbability of being able to develop and implement a single competency-based framework to which all professions and groupings within health sector would contribute and abide; effective leadership at government agency level and collaborative partnership with key stakeholders across the sector can do much to achieve pragmatic and incremental improvements in the alignment of health professional education and workforce flexibility.

Opportunity exists for Australian State and Federal Government Health entities to continue to take a leadership and collaborative partnership role in the ongoing coordination of whole-of-workforce developments that will better align health professional education, improve coordination of services to health users and increase health workforce quality and flexibility. Ongoing engagement with health service users and members of every aspect of the health workforce is an essential element in capitalising on the potential benefits such developments can deliver.

Ethical issues

Ethics approval was granted by the Behavioural and Health Sciences Ethical Review Committee of the University of Queensland, Queensland, Australia.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

SMB and JT contributed equally to the design, literature review, data analysis and write-up associated with this policy brief. Similarly, both authors contributed to final editorial responses and revision.

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