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# Methodology for developing competency standards for dietitians in Australia

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# Methodology for developing competency standards for dietitians in Australia

## **Abstract**

Competency standards document the knowledge, skills, and attitudes required for competent performance. This study develops competency standards for dietitians in order to substantiate an approach to competency standard development. Focus groups explored the current and emerging purpose, role, and function of the profession, which were used to draft competency standards. Consensus was then sought using two rounds of a Delphi survey. Seven focus groups were conducted with 28 participants (15 employers/practitioners, 5 academics, 8 new graduates). Eighty-two of 110 invited experts participated in round one and 67 experts completed round two. Four major functions of dietitians were identified: being a professional, influencing the health of individuals, groups, communities, and populations through evidence-based nutrition practice, and working collaboratively in teams. Overall there was a high level of consensus on the standards: 93% achieved agreement by participants in round one and all revised standards achieved consensus on round 2. The methodology provides a framework for other professions wishing to embark on competency standard review or development.

## **Disciplines**

Medicine and Health Sciences | Social and Behavioral Sciences

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**Abstract**

Competency standards document the knowledge, skills and attitudes required for competent performance. This study aimed to develop competency standards for dietitians and substantiate an approach to competency standard development. Focus groups explored the current and emerging purpose, role and function of the profession which were used to draft competency standards. Consensus was then sought on the competency standards using two rounds of a Delphi survey. Seven focus groups were conducted with 28 participants (15 employers/practitioners; 5 academics, 8 new graduates). Eight-two of 110 invited experts participated in round one of the Delphi and 67 experts completed round two. Five major functions of dietitians were identified: being a professional, influencing the health of individuals, groups, communities and populations through evidence based nutrition practice and working collaboratively in teams. Overall there was a high level of consensus on the standards. Ninety-three percent achieved agreement by participants in round one. All revised standards achieved consensus on round 2. The methodology provides a framework for other professions wishing to embark on competency standard review or development.

**Key words:** Competence, Delphi, Dietitian, Functional analysis, Qualitative

## **INTRODUCTION**

There is unequivocal evidence of the relationship between a nutritious diet and good health (National Health and Medical Research Council, 2011). To maintain and improve the diets and therefore health of the population, it is vital to have an appropriately equipped nutrition and dietetics workforce. Dietitians are challenged to provide safe and effective care in the face of changing health and nutrition needs of the population and complex health care systems (Rouse, 2008). Adequately preparing practitioners to respond competently and confidently to these challenges is essential. Competency standards describe the knowledge, skills and attitudes required of a profession and are essential to assist and guide curriculum and assessment for the education and preparation of professionals.

### **Literature**

Competency standards for professionals provide the benchmark for competent performance. They are essential to guide the development of curricula and assessment strategies for preparation for the workforce. In Australia the competency standards for entry-level dietitians were originally published in 1993 (Ash *et al.*, 1992) and have been reviewed in 1998, 2005 and 2009 (Ash *et al.*, 2011). The United States (Accreditation Council for Education in Nutrition and Dietetics, 2012), Australia (Dietitians Association of Australia, 2009), Canada (The Partnership for Dietetic Education and Practice, 2012), New Zealand (New Zealand Dietitians Board, 2011), the United Kingdom (Health and Care Professions Council, 2013) and Europe (European Federation of the Associations of Dietitians (EFAD) and Thematic Network Dietitians Improving Education and Training Standards in Europe (DIETS), 2009) have each developed a set of standards that describe a dietitian's graduate capabilities.

While competency standards provide an essential framework to define a profession with a focus on outcome (Jolly, 2012 ), they have limitations. Describing professional practice as a discrete list of written measurable tasks, has been said to hinder the development of professional expertise (Fish & de Cossart, 2006) and not fully capture the complexity of professional practice (Gonczi & Hager, 2010). In addition they do not articulate the collective competence of interdisciplinary teams and historically have not given enough attention to many of the key professional qualities and attributes, such as emotional intelligence, required to be a safe and effective professional (Hodges & Lingard, 2012). Considering these limitations, it is acknowledged that competence is a process of continual development and is influenced by the complexity of the case and practice environment (Khan & Ramachandran, 2012). As an example, work in the nursing profession has described the historical evolution of the nursing profession through the change in the key roles and in the systems in which the professional operates (Ayala *et al.*, 2014). Similarly, due to this changing nature of health care provision and systems, there is a need to consistently review and refine entry-level competency standards to ensure dietitians are prepared for the contemporary and future client and service needs.

Little consistent evidence exists as to the most appropriate methods to guide development of competency standards for the health professionals. The methods for developing and reviewing competency standards for health professionals have primarily relied on qualitative techniques but used consensus development processes to refine and seek agreement on finalised standards (Gardner *et al.*, 2006; Hogan *et al.*, 2010; Young *et al.*, 2000). Mixed methods have been advocated for use in competency development for their ability to explore as well as confirm issues under investigation (Ash *et al.*, 2015). In dietetics often single methodologies have been used to develop standards

drawing only on the perspectives of the profession (Ash *et al.*, 2011; Brody *et al.*, 2012; Wildish & Evers, 2010). Limiting the understanding of professional attributes to those determined from a single method, and from dietitians only, may not provide the depth of knowledge required to fully understand the work roles and functions of the profession. Engaging the profession in the process of defining and confirming the roles and functions may be essential to supporting change to this key framework (Eccles *et al.*, 2005).

### **Study Aims**

This study aimed to review competency standards for dietitians at the cusp of independent practice, namely as placement students or new graduates in the workforce in Australia and substantiate a methodology for the development of competency standards appropriate for other health professions.

## **METHODS**

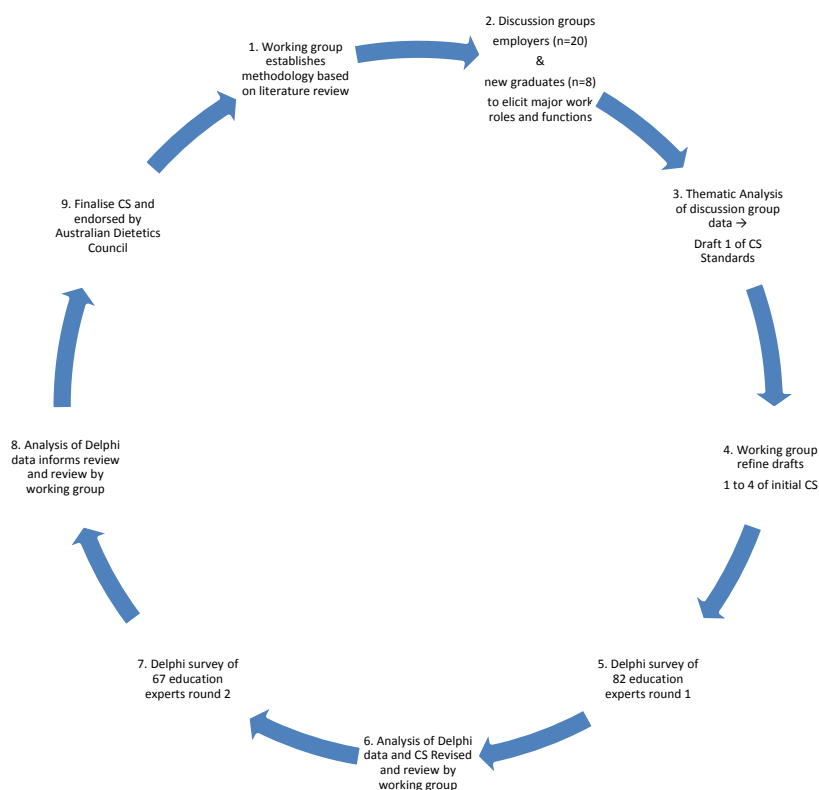
### **Design and Setting**

An iterative multiple methods approach was undertaken which was informed by a review of the literature on methodology used to develop competency standards for health professions. The authors acknowledged the complexity of competence as a concept (Hodges & Lingard, 2012) and sought to investigate multiple understandings of what constitutes competency for entry-level practice. Agreement was sought on these concepts while at the same time engaging key stakeholders in the process of change.

The design built on previous methods used to develop competency standards for dietitians in Australia (Ash *et al.*, 1992) (Ash *et al.*, 2011). In these approaches, a mix



of functional analysis and critical incident interviews with new graduates was used. In this study, the approach used multiple methods, focus groups (phase one) and a Delphi survey (phase two), to identify the major work roles, key tasks and observable actions of current and future dietitians from the perspectives of employers (both dietitian employers/practitioners and non-dietitians) and new graduates and then achieve consensus for the review of the standards (Figure 1). These methods aimed to explore the concept of dietetic practice and inform the development of competency standards by engaging and giving a voice to key stakeholders who were likely to be involved in the transition and change to new standards. An expert working group (the authors) was established to oversee the methodology, assist with data analysis and consensus development. The working group reported to a reference group formed from the Australian Dietetic Council of Dietitians Association Australia.



**Figure 1. Overview of multiple method approach used to develop competency standards.**

## **Phase one**

The first phase used facilitated focus groups to explore the current and emerging purpose, role and function of the profession of dietetics in Australia. Focus groups were chosen as the researchers were interested in the interaction between participants and their collective opinions as well as individual perspectives (Liamputtong, 2013). Using a mix of purposive and snowball sampling, 34 employers of new graduate dietitians, or practitioners with a close connection to new graduates or their preparation, across all areas of practice, together with academics and recent graduates, from across Australia were recruited to participate in one of seven, two-hour focus groups. Participants were recruited by email and invited to participate in the study. The employer group consisted of dietitian employers and senior practitioners and non-dietitian managers/employers. The sampling technique aimed to capture a mix of key practice areas of the profession, namely food service, food industry, private practice, public and private hospitals, residential aged care facilities, community and public health nutrition, dietetic education and research. In addition, representation from all Australian states and territories and rural, remote and urban areas was sought. This sampling technique particularly aimed to capture new and emerging areas of practice, including private practice, food industry and settings specific to aged care as well as engage key members of the profession, including new graduates, in the research process. Groups were constructed based on a homogenous sampling technique whereby participants were grouped based on their main practice experience or current work role into either (i) patient care (ii) food service management/aged care consultancy (iii) community and public health nutrition (iv) teaching and research (v) non-dietitian employers and (vi) new graduates (two groups). This sampling aimed to focus discussion during the time available. Participant's verbal consent was gained at the commencement of each focus group.

The focus groups were conducted via teleconference using a structured format. Participants were provided with the question guide prior to discussions to allow time for considered responses. The same experienced facilitator used a question guide to develop discussions. The questions were developed based on a preliminary review of the literature on competency standards development and used the functional analysis technique (Gonczi *et al.*, 1990). Functional analysis technique intends to situate the function of the profession within wider contexts by considering the key purpose and roles as well as intended outcomes of the profession (Gonczi *et al.*, 1990). The discussion explored the key purpose of the profession and the major work roles, and key tasks and activities as well as current and predicted future influences on the profession. This aimed to facilitate the development of the standards using the typical structure and terminology for competency standards, where major work roles were defined as ‘domains’ also referred to as ‘units’ in the literature, ‘element’ as key tasks or activities performed within the major work role and ‘performance indicator’ as the observable and/or measurable actions or statements of how the task would be evaluated. The focus groups also identified issues of concern or gaps in our current competency standards (Table 1). Data were collected until the researchers believed that all participants within each focus group had the same understanding of the roles of a dietitian now and into the future, as is typical of the functional analysis technique (Gonczi *et al.*, 1990). Researchers also probed the focus group discussions until there was data saturation (Liamputtong, 2013) of these concepts across the different focus groups.

**Table 1. Discussion group questions and line of inquiry.**

Question	Aim
The key purpose of the profession has been described as: <i>Dietitians are experts in food and nutrition. They help people understand the link between food and health and make appropriate dietary choices to achieve or maintain health, and prevent and treat illness and disease.</i> Do you agree with this key purpose?	Critically reflect on key purpose
What is changing or likely to change in the profession that might affect this purpose?	Future work roles and key tasks
What must happen for the key purpose to be achieved?	Identify key tasks of the profession
Why does the profession do this? What outcomes do they hope to achieve?	Define key purpose
What major things would you have to do to perform that role?	Identify major work roles
Do you have any other comments regarding review of the competency standards for entry-level dietitians in Australia?	Identify issues, concerns, gaps with current competency standards

All focus group data were analysed independently by the first author. A deductive thematic analysis approach was used whereby the researcher used simultaneously pre-existing knowledge and the framework of competency standards described above to compare and interpret the data and searching for patterns and explanations (Denzin & Lincoln, 2013). This analysis sought to identify the major work roles, key tasks and observable actions of the profession. Text was coded and then codes grouped into categories reflective of the framework. This process was then repeated by all members of the expert working group. Each member independently analysed a minimum of two focus groups so that each transcript was exposed to duplicate analysis to enhance rigor and credibility. All authors met face-to-face to discuss the analysis, critique each other interpretations, and agree on key themes and categories.

Key themes from the analysis were classified as the major work roles or domains. Existing standards statements (Dietitians Association of Australia, 2009) and Health Workforce Australia capability statements (Health Workforce Australia, 2013) were

used to transform codes and categories into competency standard statements which described the elements and performance criteria of entry-level professionals. Where an existing standard did not exist, new statements were developed drawing from the competency standards literature. All authors revised and modified four drafts of the standards until they were satisfied that they adequately reflected the focus group data and were written according to contemporary representation of competency standards (Royal College of Physicians and Surgeons Canada, 2005).

### **Phase two**

Phase two involved gaining agreement on (or validating) the revised draft competency standards using a reactive Delphi survey. The survey technique aimed to gain consensus of opinion across diverse geographical location (De Villiers *et al.*, 2005) and sought agreement on what constitutes entry-level practice based from the perspectives of a group of experts in dietetic education. A reactive Delphi survey is often used following other research methods (Ash *et al.*, 2015) and provides information to participants in the first round rather than openly exploring the issue initially without direction.

The Delphi survey participants were selected from a web-based search of accredited dietetics programs and teaching academics and practitioners listed as involved in teaching and learning. A purposive sample of one hundred and ten (n=110) 'expert' participants were selected and invited to participate via email. Consent was deemed to have been provided by the completion of the survey.

The survey was constructed electronically. Questions included demographic information and defining the key purpose of the profession while participants were asked to rate, on a five point Likert scale (strongly disagree, disagree, neutral, agree,

strongly agree), their level of agreement that each statement formed part of entry-level practice as either a major work role, key task or observable and/or measurable actions. Participants were also able to leave qualitative comments. The survey maintained anonymity of participants. It was predicted that two rounds of the data collection would achieve consensus based on previous work (Hughes *et al.*, 2013).

Round one of the survey was sent via email with a link to the electronic survey. Three weeks after the closure of round one, round two of the survey was sent via email to the participants who completed round one of the survey. Participants were sent two reminders to complete the survey over a two to three week period. Items that achieved consensus on the first round were removed from round two of the survey. The revised survey sent to participants provided group results from the previous round, to allow the participants to consider the initial group response before making their decision.

Data were analysed using descriptive statistics. A median score of 4 or above for each item was deemed to have reached consensus. To further interrogate the data frequency of responses to items were also calculated. Responses were grouped into three categories (i) disagree/strongly disagree, (ii) neutral and (iii) agree/strongly agree based on the premise that these scales aim to characterise attitude in one direction or another or classify responses as neutral (Portney & Watkins, 2000). Items where less than 70% of participants 'agreed/strongly agreed' were interrogated further and used in round two. Qualitative comments from respondents were used to gain insight into the rationale behind participant responses and to inform linguistic and textual changes to the statements.

## Ethics.

Ethics approval was granted from [removed for blind review] (approval number CF14/816 -2014000331).

## RESULTS

### Phase one

In phase one, five focus groups were conducted with 20 participants (n=15 employers/practitioners (2 non-dietitians and 13 dietitians); n=5 academics) and two focus groups were conducted with eight new graduates representing five different universities (36%) of those accredited at the time of the study (Table 2). Fourteen invited participants did not participate as the allocated time for the discussion did not suit their schedule. The demographics of the participants in the focus groups are reflective of the workforce more broadly being 95% female (Health Workforce Australia, 2014) (Table 2).

**Table 2. Demographics of discussion group and Delphi survey participants.**

	<b>Discussion groups Total n=20 employers</b>	<b>Discussion groups Total n=8 new graduates</b>	<b>Round 1 Delphi n=82</b>	<b>Round 2 Delphi n=67</b>
<b>Sex</b>	18 female ; 2 male	7 female ; 1 male	-	-
<b>Year of Practice mean±SD</b>	18.7 years (range 6 to 34)	0 years	19.4 ± 9.4 years (min 4, max 40)	20.7 ± 6.4 years (min 4, max 40)
<b>Area of current work</b>				
Academic (n, % total)	5 (25%)	n/a	45 (56%)	37 (56%)
Practitioner	15 (75%)		23 (28%)	21 (31%)
Mixed (Academic and Practitioner )	0		8 (9%)	2 (3%)

The qualitative investigation identified five major functions of dietitians including being a professional, influencing the nutrition and therefore health of individuals, groups, communities and populations through evidence based nutrition practice and working

collaboratively in teams - represented in Table 3 as themes with descriptors and illustrative quotes selected to aid interpretation.

Based on these findings, the lead author drafted the major domains (units of competency), elements and performance indicators. All authors reviewed the themes and descriptors and their translation into domains, elements and performance indicators. The first iteration of domains, elements and performance indicators identified five domains, 18 elements and 61 performance indicators. After four drafts were circulated between authors, a final version of the drafted revised standards contained four domains, 13 elements and 70 performance indicators. Five domains were reduced to four as all authors agreed that 'leading and influencing' needed to be reflected in all major work roles rather than standing alone and therefore was included at the element level.

**Table 3: Themes and descriptions of data identified from five discussion groups (n=20 participants) to inform domains of competency of an entry-level dietitian.**

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**Theme: Evidence based food and nutrition expert**

Dietitians use scientific evidence to inform their practice. Practice may involve assessment and analysis of data pertaining to nutritional status and health, application of food and cooking skills, changing food systems and influencing the socio-ecological environment, supporting behaviour change and tailoring nutrition and behavioural advice. In practice dietitians need to advocate for individuals nutritional status or to changes to food services or systems to improve the availability of and access to nutritious food.

*“what’s missing is working within a systems based approach and being able to see the bigger picture.....taking into consideration all the things that could impact on that issue, that person...and to be able to join the dots everywhere and then go, right, well we need to do this.” (group 3 employer)*

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**Theme: Leader/Influencer**

Dietitians critically review and use 'best available' and create their own evidence (appropriate and authoritative) to inform work practice using principles of research and evaluation. They identify and solve problems, applying critical thinking and clinical reasoning to make decisions and develop plans for their practice.

*“To be honest I think something needs to change. I feel like we’re getting left behind. Taking away the focus from clinical and acknowledging the fact that dietitians are working in other places.” (group 2 new graduates)*

*“We’ve got to be able to say, ‘This is the evidence. This is why you need a dietitian. This is what you can do and this is what we can do for you’.” (group 4 employers)*

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**Theme: Communicator**

Dietitians are effective communicators with multiple different people across multiple sectors (not just health). They interpret the science and explain the relationship between diet and disease and translate information about nutrition into food based dietary guidance for patients/clients, groups and communities/populations in a way they can understand. Through effective interviewing and counselling techniques they identify key issues

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and tailor information to clients, communities or food service system needs.

*“[they]focus on diabetes, not...the person....finding out where the person’s at....rather than just doing what the dietitian thinks.” (group 5 employers)*

*“there seems to be a lack of creativity...we’re not getting our message across...we’re not able to relate to people because ...we are so rigid in our beliefs and messages” (group 2 new graduates)*

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#### **Theme: Collaborator**

Dietitians develop and maintain effective working relationships with multiple stakeholders. They must work effectively with multiple different inter-professional teams across sectors. They also build the capacity of others to improve nutrition and use client centre and community development principles to change individual behaviour or address community nutrition needs.

*“...more of a role for dietitians in setting up those programs and equipping other people around them” (group 1 new graduates)*

*“It’s [the role] really about being influential... empowering a resident or client that we’re seeing or the food service staff to adjust to a new system.” (group 5 employers)*

*“I think the skills that underpin a lot of work is the real importance of being able to build relationships, or knowing who are important stakeholders and understanding the environment”. (group 2 employers)*

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#### **Theme: Professional**

Dietitians must work within ethical and regulatory rules for practice and be safe and effective in their delivery of nutrition care. On a personal level they need to be able to acknowledge their knowledge and skills limitations and boundaries and seek advice when necessary. They must be culturally safe, self-aware, have emotional intelligence and conflict resolution and negotiation skills, be flexible, adaptable and insightful and show initiative. They must apply reflective practice and be committed to lifelong learning. Effective time and workload management as well as business skills are essential for efficient and effective practice. The ability to use technology and adapt to different systems of administration across different settings and sectors part of the role. They need quality improvement and project management skills.

*“...a good clinician knows what they don’t know, as well as what they do know.” (group 1 employers)*

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## **Phase two**

Round one of the survey was completed by 82 of 110 invited participants (75% response rate) (Table 2). Overall there was a high level of consensus on the draft standards. Ninety-three percent of the domains, elements and performance indicators achieved >70% agreement by participants in Round one. The controversial items included performance criteria concerning business planning, marketing skills, resource management, capacity building of the workforce and emotional intelligence. Based on the results, the domains, elements and performance indicators that did not reach agreement or that were significantly reworded based on qualitative comments from

participants were included in a revised format in Round two of the survey (Supplementary Table 1).

Round two of the survey was completed by 67 participants (82% response rate from round one) (Table 2). All revised standards achieved consensus (i.e. median score 4 or higher). However three proposed standard statements evoked a larger number of comments and did not achieve 70% agreement. These included the element 'demonstrates leadership' (64% agreement) and the performance criteria related to business and financial planning (58% agreement) and advocating for change to the wider social and commercial environment affecting nutritional intake and the food supply (69% agreement). During examination of qualitative comments linked to these statements, it became evident that it was the wording of these statements rather than the concept itself that lead to lack of agreement. These were further interrogated by the expert working group using the literature, and reworded using survey participants' qualitative comments and finally checked by the working group for cognitive understanding (Supplementary Table 1). The competency standards were finalised to describe four domains: (i) Practices professionally; (ii) Positively influences the health of individuals, groups and/or populations to achieve nutrition outcomes; (iii) Applies critical thinking and integrates evidence into practice; and (iv) Collaborates with clients and stakeholders; accompanied by 13 elements and 55 performance indicators (Supplementary Table 1) and endorsed by the Australian Dietetics Council.

## **DISCUSSION**

This study aimed to define the major work roles, key tasks and observable actions of current and future dietitians. The qualitative investigation found that the major functions of dietitians include being a professional, influencing the nutritional health of

individuals, groups, communities and populations through evidence based nutrition practice and working collaboratively in teams. These findings informed the review of the entry-level competency standards for dietitians in Australia. The iterative multiple methods approach was successful in identifying and seeking consensus on domains, elements and performance indicators of entry-level dietitians in practice and enabled key stakeholders to have input into the process therefore supporting the process of change. It provides a framework for others interested in developing competency standards for the profession.

The high level of consensus achieved for the items in round one of the Delphi survey are not surprising given that many of the standards were derived from existing dietitian competency standards and recent national health workforce competency standards. Many of the main domains were similar to other health professions, such as CanMEDS (Royal College of Physicians and Surgeons Canada, 2005), with the exception of ‘nutrition expertise or the role in influencing nutritional health’, which distinguishes dietitians from other health professionals, just as ‘medical expert’ is the only distinguishing domain in the CanMEDS framework for medical practitioners. The importance of demarcation of professions within society and the subsequent need for the work roles to evolve to be contemporary and situated within the current days practice has been previously reported (Ayala *et al.*, 2014).

The controversial items in round one of the Delphi survey were around business skills, marketing skills, capacity building of the workforce and emotional intelligence. This may reflect the profession’s unease at the growth and evolving nature of the profession and the changed settings in which dietitians work. In Australia there has been a surge in universities providing accredited education of dietitians from eight programs in the

early 2000's to 14 accredited programs in 2014 plus two seeking accreditation (Dietitians Association of Australia, 2014). This has resulted in an influx of newly graduated dietitians and a trend to look beyond traditional roles in hospitals and seek more entrepreneurial or higher level roles or even just working alone in private practice with a potential requirement for different skills. This is reflected in the revised standards with a greater language emphasis on client centeredness, taking systems based approach to practice, applying marketing skills and needing to advocate for the role of the dietitian.

The greater emphasis on professionalism attributes and working across teams is consistent with work in other health professions which has demonstrated their importance as a key components of safe and effective practice across the care giving professions (Health Workforce Australia, 2013; Hodges & Lingard, 2012). The focus group process was effective in identifying the important professional attributes. The views of employers in this instance have been successful in ensuring that meeting the competency standards means that dietitian meet the standards of professionalism required of the future workforce.

Focus groups combined with the reactive Delphi methodology were effective in creating the competency standards. While Delphi techniques are recognised as an effective method for seeking agreement on competency standards (Hughes *et al.*, 2013; Wildish & Evers, 2010), using qualitative focus groups to scope current and future practice was essential in reshaping the focus of the standards before seeking consensus. Analysing the qualitative comments in the Delphi survey data to interpret the quantitative consensus rating was an important part of the methodology for developing these standards and should be considered in future approaches. The multiple methods allowed

130 key stakeholders to be engaged in the process thereby supporting the facilitation of change and allowing the process to evolve with direction from key personnel.

The strength of this study was the use of multiple research methods to review entry level competency standards for dietitians in a short time frame and included key stakeholders, including new graduates and non-dietitian employers in the process. The triangulation of data analysis by all researchers and reflexivity employed when discussing thematic analysis as a research team enhanced rigor (Liamputtong, 2013). In addition, the exploration of items not achieving consensus on the Delphi survey also added strength (De Villiers *et al.*, 2005). The lack of consumer or patients/client and student involvement together with only a small sample of non-dietitian employers perspectives used to define the role of a dietitian are potential limitations. Collecting consumer perspectives on managing diets and student views on learning and assessment towards achievement of competence may be considered in future revisions.

## **CONCLUSIONS AND IMPLICATIONS**

The iterative multiple methods approach was effective in developing competency standards that describe professional expectations of a graduate dietitian upon entry into the workforce. The focus of a dietitian's work role in Australia is to work professionally, using evidence based practice to positively influence the nutritional health of individuals, groups and/or populations by working collaboratively with clients and other key stakeholders. The evolution of the role of a dietitian to be more client centred, have marketing and advocacy skills and be able to work within and influence systems was found. The methodology provides a framework for other dietetic professions and professions generally, wishing to embark on competency standard review or development.

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**Contributions**

Study Design – CP & SA

Data Collection and Analysis – CP, SC, SA, EB, JD and JC

Manuscript Writing - CP, SA, SC, EB, JD and JC

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**Supplementary Table 1: Results of Delphi Survey round 1 and 2 for each domain, element and performance indicator**

Domain, Element and Performance Criteria	% agreement (% shift between round 1 & round 2)
<b>1. PRACTICES PROFESSIONALLY</b>	91
<b>1.1 Demonstrates safe practice</b>	93
1.1.1. Reviews and evaluates the impact of own practice on improving nutritional health <i>Reviews and evaluates the ongoing effectiveness of practice, modifying where necessary</i> <i>Evaluates nutrition and dietetics practice on an ongoing basis</i>	95
1.1.2. Recognises own professional limitations and the professions scope of practice and seeks assistance as necessary <i>Accurately recognises own limitations and seeks assistance as necessary</i>	99
1.1.3. Accepts responsibility for and manages, implements and evaluates own personal health and well-being <i>Accepts responsibility for and manages, implements and evaluates personal and professional development</i> <i>Seeks support where necessary to maintain own health and well-being</i>	96
1.1.4. Shows a commitment to professional development and conduct and lifelong learning <i>Demonstrates enthusiasm and commitment to lifelong learning</i>	78
1.1.5. Consistently demonstrates reflective practice in collaboration with supervisors, peers and mentors <i>Demonstrates consistent, reflective practice in collaboration with peers and mentors</i>	80
1.1.6. Accepts responsibility for own actions <i>Takes responsibility for own actions</i>	95
1.1.7. Demonstrates flexibility, adaptability and resilience and the ability to manage own emotions <i>Demonstrates emotional intelligence, including flexibility, adaptability and resilience</i>	96
<b>1.2 Practices within ethical and legal frameworks</b>	68 (+2)
1.2.1. Exercises professional duty of care in accordance with relevant codes of conduct, ethical requirements and other accepted protocols	98
1.2.2. Demonstrates integrity, honesty and fairness	98
1.2.3. Prepares appropriate documentation according to accepted standards	95
<b>1.3 Demonstrates professional leadership</b>	94
<i>Demonstrates professional leadership to promote the contribution of nutrition and dietetics to health and prevention of disease</i>	74
1.3.1. Uses negotiation and conflict resolution skills when required <i>Uses negotiation skills</i> <i>Uses conflict resolution skills when required</i>	88
1.3.2. Develops and maintains a credible professional role by commitment to excellence of practice	83
1.3.3. Seeks, responds to, and provides, effective feedback <i>Seeks, responds to and provides effective feedback to peers</i> <i>Prepares for, and obtains and accepts feedback from supervisors and other professionals regarding actions to improve own practice</i>	91
1.3.4. Participates in mentoring*	90
	74

1.3.5	Demonstrates initiative by being proactive and developing solutions to problems	92
	<i>Demonstrates initiative by developing solutions to problems</i>	
<b>1.4</b>	<b>Practises effectively</b>	93
	<i>Practises efficiently and effectively</i>	
1.4.1	Applies organisational, business and management skills in the practice of nutrition and dietetics (effective time, workload and resource management)	97
	<i>Accepts responsibility for regulatory, financial, resource and administrative duties, commensurate with entry-level</i>	78
	<i>Participates in business plan development</i>	47
	<i>Optimises the integration of a range of resources, such as financial, physical and human, across private and public health systems and service</i>	51
	<i>Applies business and financial planning principles to practice</i>	58
1.4.2	Utilises suitable evaluation tools to review effectiveness of practice	92
	<i>Delivers effective and efficient nutrition care/services/programs utilising suitable evaluation tools</i>	
1.4.3	Identifies and assesses risks, follows risk management protocols and develops basic risk management strategies for services	83
	<i>Identifies risks and develops basic risk management for services</i>	
1.4.4	Utilises relevant technology and equipment efficiently, effectively and safely	83
	<i>Proactively utilises technology efficiently, effectively and safely in varied contexts</i>	
1.4.5	Applies the principles of marketing to promote healthy eating and influence dietary change	
	<i>Applies the principles of marketing to promote healthy eating</i>	73 (+10%)
<b>1.5</b>	<b>Demonstrates cultural competence</b> (moved from performance criteria to element after round one so retested)	90
	<i>Demonstrates cultural intelligence*</i>	86
1.5.1	Reflects on own culture, values and beliefs and their influence on practice*	88
	<i>Reflects on own culture and its influence on practice</i>	
1.5.2	Seeks out culturally specific information to inform practice*	97
1.5.3	Works respectfully with individuals, groups and/or populations from different cultures*	89
	<i>Works safely with individuals, groups and populations from different cultures</i>	
<b>2. POSITIVELY INFLUENCES THE HEALTH OF INDIVIDUALS, GROUPS AND/OR POPULATIONS TO ACHIEVE NUTRITION OUTCOMES</b>		91
	<i>Influences nutritional health of individuals, groups and population</i>	
<b>2.1</b>	<b>Applies an evidence-based approach to nutrition and dietetics services</b>	
	<i>Uses a scientific and therapeutic approach to the nutrition care process to improve the food supply and nutritional status of individuals, groups, communities and populations</i>	90
	<i>Applies a scientific approach to nutrition care*</i>	93
2.1.1	Collects, analyses and interprets relevant health, medical, cultural, social, psychological, economic, personal, environmental, dietary intake, and food supply data in determining nutritional status	
	<i>Collects, analyses and interprets relevant health and medical, cultural, social, psychological, economic, personal and environmental data</i>	99
	<i>Collects, analyses and interprets food intake, nutritional status and food systems data</i>	92
	<i>Collects, analyses and interprets relevant health and medical, cultural, social, psychological, economic, personal, environmental, food intake, nutritional status and food supply data*</i>	93

2.1.2	Makes appropriate nutrition diagnoses and identifies priority nutrition issues based on all available information	97
	<i>Makes appropriate nutrition diagnoses based on all available information</i>	
2.1.3	Prioritises key issues, formulates goals and objectives and prepares goal oriented plans in collaboration with patient/client or carer, community/population/service, other members the health care team, relevant stakeholders and partners	99
	<i>Prioritises actions and prepares plans for achieving goals in collaboration with patient/client or carer, community/population/service, other members the health care team, relevant stakeholders and partners</i>	
2.1.4	Implements, evaluates and adapts nutrition care plans/programs/services in collaboration with patient/client or carer, community/population/service and other members the health care team or relevant stakeholders and/or partners	100
	<i>Implements and monitors nutrition care plans/programs/services in collaboration with patient/client or carer, community/population/service and other members the health care team or relevant stakeholders and partners</i>	
	<b>2.2. Influences the food supply to improve the nutritional status of individuals, groups and/or populations</b>	
	<i>Uses a scientific and therapeutic approach to the nutrition care process to improve the food supply and nutritional status of individuals, groups, communities and populations</i>	90
2.2.1	Applies an approach to practice that recognises the multi-factorial and interconnected determinants influencing nutrition and health	86
	<i>Applies a systems approach to food and nutrition practice</i>	
2.2.2	Identifies opportunities and advocates for change to the wider social, cultural and/or political environment to improve nutrition, food standards or the food supply in various settings*	94
	<i>Assesses opportunities to improve nutrition standards within a food service setting</i>	91
	<i>Advocates on behalf of individuals, groups and the profession to positively influence the wider political, social and commercial environment about factors which affect eating behaviour and nutritional standards.</i>	80
	<i>Identifies opportunities for and approaches to advocacy in dietetic practice</i>	85
	<i>Recognises opportunities for advocacy for individuals and groups across a range of settings</i>	76
2.2.3	Acknowledges the multiple factors that influence food choice and the provision of service	93
	<i>Works within a social model of health acknowledging factors that influence food choice and the provision of service</i>	
2.2.4	Uses food legislation, regulations and standards to develop, implement and evaluate food systems to maintain food safety	90
	<i>Applies food legislation, regulations and standards to develop and evaluate food systems to maintain food safety</i>	
2.2.5	Applies a socio-ecological approach to the development of strategies to improve nutrition and health	89
	<i>Applies a socio-ecological approach to the development of strategies to improve population health</i>	
	<b>2.3 Facilitates optimal food choice and eating behaviours for health</b>	
	<i>Influences food choice and eating behaviours</i>	94
	<i>Builds the capacity of others to improve nutrition</i>	97
2.3.1	Applies a highly developed knowledge of nutrition science, health and disease, food and food preparation methods to tailor recommendations to improve health of individuals, groups and/or populations	92
	<i>Applies an intricate knowledge of nutrition science, food and cooking to tailor recommendations and innovate with food to improve health of individuals, groups and/or populations</i>	
2.3.2	Displays effective active listening, interviewing and interpersonal skills to better understand perspectives of clients, carers, groups and key stakeholders to inform approaches and influence change	94
	<i>Displays effective active listening, interviewing and interpersonal skills with clients, carers, groups and key stakeholders to gather essential data to inform approaches and influence change</i>	

2.3.3	Uses client-centred counselling skills to negotiate and facilitate nutrition, behaviour and lifestyle change and empower clients with self-management skills	
	<i>Uses client-centred counselling skills to negotiate and facilitate nutrition and lifestyle change and support clients to self-manage</i>	93
	<i>Supports individual behaviour change using client centred counselling including approaches such as cognitive behavioural therapy and motivational interviewing among others</i>	95
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	<b>3. APPLIES CRITICAL THINKING AND INTEGRATES EVIDENCE INTO PRACTICE</b>	97
	<i>Applies critical thinking and an evidence based approach to practice</i>	
	<i>Applies critical thinking to a range of individual, population and health service nutrition problems/issues</i>	96
	<b>3.1 Uses best available evidence to inform practice</b>	
	<i>Critically reviews evidence and integrates an evidence based approach to practice</i>	100
	<i>Uses appropriate and authoritative sources of information</i>	99
3.1.1	Adopts a questioning and critical approach in all aspects of practice	100
3.1.2	Gathers, critiques, uses and shares research and information to support sound decision making with relevant stakeholders	97
	<i>Gathers and shares information to support sound decision making with relevant internal and external stakeholders</i>	
3.1.3	Applies problem solving skills to create realistic solutions nutrition problems or issues	
	<i>Creates innovative solutions which match and solve problems</i>	88
	<i>Applies innovative problem solving skills to create realistic solutions to individual, population and health service nutrition problems/issues*</i>	80
	<b>3.2 Conducts research, evaluation and quality improvement processes using appropriate methods</b>	96
	<i>Applies the research and evaluation process using appropriate methods</i>	
3.2.1	Identifies and selects appropriate research methods to investigate food and nutrition problems	100
	<i>Identifies and selects appropriate methods to investigate practice problems</i>	
	<i>Values research and evaluation</i>	74
3.2.2	Applies ethical processes to research and evaluation	93
	<i>Applies ethical processes and procedures to research and evaluation</i>	
3.2.3	Collects, analyses and interprets qualitative and quantitative research and evaluation data	96
	<i>Collects, analyses and interprets qualitative and quantitative data and documents and disseminates findings</i>	
3.2.4	Accurately documents and disseminates research, quality improvement and evaluation findings*	91
	<i>Documents and disseminates research and evaluation findings</i>	
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	<b>4. COLLABORATES WITH CLIENTS AND STAKEHOLDERS</b>	97
	<i>Collaborates with a variety of clients and stakeholders</i>	
	<b>4.1 Communicates appropriately with individuals, groups, organisations and communities from various cultural, socio-economic, organisational and professional backgrounds</b>	99
	<i>Communicates effectively with individuals, groups, organisations and communities from various cultural socioeconomic, organisational and professional backgrounds</i>	
4.1.1	Practices in a manner that encompasses the needs, preferences and perspectives of others	96
	<i>Practices in a client-centred manner</i>	
4.1.2	Demonstrates empathy and establishes trust and rapport to build an effective relationship with client, carers, families, colleagues, community and other stakeholders	96

<i>Demonstrates empathy and establishes trust to build an effective relationship with client, carers, families, colleagues, community and stakeholders</i>	
4.1.3 Translates technical information into practical advice on food and eating and other relevant topics	97
<i>Translates technical nutrition information into practical advice on food and eating</i>	
4.1.4 Adapts and tailors communication appropriately for specific audiences	97
4.1.5 Communicates clearly and concisely to a range of audiences using a range of media	100
<b>4.2 Builds capacity of and collaborates with others to improve nutrition and health outcomes</b>	
<i>Identifies opportunities and effectively collaborates with other professional/organisations to improve nutrition outcome</i>	94
<i>Identifies opportunities, builds capacity and collaborates with other professionals/ organisations to improve nutrition and health outcomes*</i>	88
4.2.1 Shares information with and acts as a resource person for colleagues, community and other agencies	99
<i>Shares information and acts as a resource person to, and advocate for, colleagues, community and other agencies</i>	
<i>Builds community capacity by sharing knowledge, tools, expertise and experience using community development principles</i>	89
4.2.1 Identifies, builds relationships with and assists in implementing plans with key stakeholders who have the capacity to influence food intake and supply	86
<i>Develops effective and sustainable collaborative relationships and networks with multiple stakeholders who have the capacity to influence food intake, food supply or eating behaviours</i>	65
<i>Develops key elements of the workforce to assist in improving nutrition</i>	76
<i>Contributes to the education of other health workers*</i>	
4.2.2 Empowers individuals, groups and/or the broader community to improve their own health through engagement, facilitation, education and collaboration	96
<b>4.3 Collaborates within and across teams effectively</b>	99
4.3.1 Promotes a high standard of nutrition care, while respecting the goals and roles of clients and other professionals, stakeholders or groups	91
4.3.2 Participates in collaborative decision making, shared responsibility, and shared vision within a team	94
<i>Builds relationships with others and embarks on shared decision making, shared responsibility, and shared vision within a team</i>	
<i>Effectively identifies and builds relationships with a range of different stakeholders across areas of work practice</i>	93
4.3.3 Shares responsibility for team action, recognising the diverse roles and responsibilities other team members play	93
<i>Shares responsibility for team action, recognising the diverse roles team members play</i>	
<i>Resolves conflict and facilitates team processes (covered by professionalism domain)</i>	69
4.3.4 Guides and supports other team members and peers	71
<i>Mentors and supports other team members and peers as needed</i>	
4.3.5 Actively promotes the role of a dietitian and the broader profession of nutrition and dietetics	
<i>Advocates for the profession of nutrition and dietetics</i>	78
<i>Actively promotes the role of a dietitian and the broader profession of nutrition and dietetics through active engagement in a range of settings</i>	77
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Final wording in normal font. Original wording in grey italics *=Round two only	