# Interprofessional role boundaries in diabetes education in Australia

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## Abstract

Diabetes presents a challenge to healthcare services worldwide. Diabetes educators work with individuals and communities to reduce the impact of diabetes. In Australia, diabetes educators derive from one of several primary qualifications such as nursing, medicine or a specified allied health background, and have an accredited postgraduate qualification in diabetes education. The peak professional body, the Australian Diabetes Educators Association (ADEA), promotes equivalence of all diabetes educators in terms of their scope of practice. However, in practice, there is evidence of inequities, particularly between those from nursing and allied health backgrounds. This paper uses a neo-Weberian lens to explore the interprofessional role dynamics of a “postprofessional” group of practitioners, who adopt a common role and title to create a professional identity at post-qualifying level. Data were collected via individual interviews with 19 stakeholders and analysed using an abductive template approach. Differential role boundaries between nurse and allied health diabetes educators were established and reinforced in several ways. Diabetes education is considered a sub-specialty of nursing only; access to education and credentialing has been restricted for allied health; reinforcement of professional stereotypes and perceived professional values; and perceived legislative differences in access to medication management for nurse and allied health diabetes educators.

## Keywords

Post-professionalism

Professional role boundaries

Sociology of the professions

Allied health

Diabetes education

## Introduction

Diabetes prevalence is increasing exponentially and represents one of the greatest threats to healthcare systems in developed and developing countries alike (Guariguata et al., 2014). The acute and chronic complications associated with diabetes add significant pressure on already stretched acute healthcare services. Diabetes educators are among the suite of health professionals available to support people living with diabetes to optimise their self-management skills to prevent secondary complications which can negatively impact individuals and the wider community (Deloitte Access Economics Pty. Ltd., 2014; King, Nancarrow, Grace & Borthwick, 2017).

In Australia the diabetes educator workforce is professionally diverse. Nurses, dietitians, podiatrists, pharmacists and several other types of health professionals are able to train in and practise diabetes education at the post-qualifying level. The leading body for diabetes educators in Australia, the Australian Diabetes Educators Association (ADEA), does not consider diabetes educators’ scope of practice to be determined solely by their primary profession, but rather by a combination of variables such as legislation, individual experience and training, available supervision and the clinical context (Australian Diabetes Educators Association, 2015). While each profession will bring a different perspective to the role, there are no recognised distinctions between diabetes educators from different professional backgrounds nor are there articulated differences in their scopes of practice.

For the purpose of this paper, we consider this type of post-qualifying, interdisciplinary qualification as a “postprofessional” qualification (Nancarrow & Borthwick, 2005; Kritzer, 1999). In this illustration, a range of professions from different disciplinary backgrounds adopt a new and common title and recognised role based on the adoption of agreed, shared competencies that are developed and endorsed by an external accrediting body. Each member of the new profession (in this case, diabetes educators) also retains their original professional identity, but can also identify as, and be employed solely on the basis of their new professional identity. The important contribution of this paper is not only understanding the ways that professions from different backgrounds embrace the new identity within their original professional repertoire, but also negotiate interprofessional hierarchies within the new role, either explicitly or implicitly.

Despite the ADEA’s endorsement of a common scope of practice and the post-professional nature of the diabetes educator role, in practice the role is implemented differently by nurses and allied health educators. Within the field of diabetes education, those with a nursing background are perceived to have a wider scope of practice than those with an allied health background (i.e. the non-medical, non-nursing health professions such as podiatrists, dietitians, pharmacists etc.) with respect to medication management (King et al., 2017). These perceived role boundaries between the nursing and allied health professions belie the very nature of post-professional practice. Interprofessional role boundaries have been studied and described extensively in the sociology of the professions literature (Saks, 2012; King, Borthwick, Nancarrow & Grace, 2018). Interprofessional working involves the renegotiation of tasks across professional boundaries, however this takes place in a context in which the occupations engage in their professional project to consolidate their status and identity as a new, legitimate, separate profession. The delineation and reinforcement of role boundaries is a key component of the professional project and is achieved by successful claims of exclusivity to knowledge, skills and practice (King et al., 2018; Freidson, 1970; Martin, 2014).

This study explores the nature of the perceived role boundaries between the nursing and allied health professions when working in the diabetes educator role and is informed by neo-Weberian theory. An overview of the credentialing systems and diabetes education practice in Australia will be provided, followed by a description of the neo-Weberian approach to exploring the professions.

### Diabetes education: qualification and clinical practice in Australia

Diabetes educators are health professionals with additional qualifications in diabetes education. The ADEA was established by nurses in 1981 (King et al., 2017). The trademark title, *Credentialled Diabetes Educator* (CDE) was introduced in 1986 and is attainable by diabetes educators who have met a range of criteria as set out by the ADEA including completion of an ADEA-accredited postgraduate certificate course, mentoring with a CDE, participation in workplace learning, among several other requirements. Initially only nurses were eligible, however with time, the ADEA has deemed dietitians, medical officers, podiatrists, pharmacists, exercise physiologists, midwives and physiotherapists eligible to pursue CDE status (Australian Diabetes Educators Association, 2015; King et al., 2017).

The diabetes educator role has evolved over time in response to demographic, technological and policy changes. For example, prior to the year 2000, it was widely accepted that diabetes educators who had a background as a nurse were able to adjust their patients’ insulin (an injectable medication) doses. In 2000 insulin was rescheduled by the National Drugs and Poisons Committee from a Schedule 3 (pharmacy-only) to a Schedule 4 (prescription-only) drug which significantly altered the diabetes educator role (King et al., 2017). The settings in which diabetes educators practise have also diversified. Whereas diabetes education was initially provided almost exclusively by nurses in the acute hospital environment (King et al., 2017), diabetes educators now work in various settings in Australia including publicly-funded hospitals and community health centres, privately-funded hospitals and clinics and other non-government organisations (Australian Diabetes Educators Association, n.d.). Private services can be funded directly by the service user or through their individual private health insurer (Australian Institute of Health and Welfare, 2018).

Medicare, Australia’s state funded insurance system, provides an alternative source of funding for diabetes educators working in the private setting. Eligible patients who access healthcare professions included in the Medicare Benefits Schedule (MBS), such as ADEA-credentialed diabetes educators, can access state funded rebates for services (King et al., 2017; Australian Institute of Health and Welfare, 2018). Therefore, while the attainment of the CDE title is not mandatory for diabetes educators, it does offer several advantages, including increased access to funding through conditional access to MBS remuneration (King et al., 2017). In light of these macro-level and historical influences on the diabetes educator role, it lends itself to a neo-Weberian analysis (Saks, 2010).

### Neo-Weberian theory of social closure

The neo-Weberian theory of social closure represents one of the more practical and frequently used frameworks by which authors have explored various professional projects (Nancarrow & Borthwick, 2005; Saks, 2012). In the neo-Weberian tradition, the professions are perceived to be dynamic, competitive and predominantly concerned with achieving professional closure by securing their role boundaries and consequently their social status, access to employment opportunities, income and level of power (King et al., 2018; Saks, 2012). Legislative reinforcement represents the most legitimate, visible and powerful strategy of professional closure (Martin, 2014; Parkin, 1979) and reduces the profession’s risk of external interference and scrutiny (Parkin, 1979).

Credentialist strategies represent another approach to professional closure and involve the use of educational certificates and credentialing processes to limit access to professional titles, employment opportunities and other benefits (Larson, 1979; Parkin, 1979; Witz, 1992). In her neo-Weberian analysis of nursing’s historical professional project, Witz (1992) documented the significant work undertaken by the nursing profession to control the systems of education and training and ultimately the admission of nurses to the national register. These credentialist tactics focused on maintaining a standardised system of education of nurses with a single entry point and tightly-controlled syllabus (Russell, 1990; Witz, 1992).

Professional closure strategies intended to delineate role boundaries can also be implemented discursively. Barnes & Grace (2018) explored the strategies deployed by dietitians and naturopaths working in the area of dietary management to protect their respective domains. The authors noted that both groups used discursive tactics to elucidate their profession’s strengths and simultaneously discredit the other.

The establishment of professional sub-specialties has been associated with benefits such as enhanced status, higher levels of autonomy, desirable employment opportunities and higher income. However, these benefits are only realised where there is wider recognition of the sub-specialty. This is often achieved by formalised systems of education and credentialing ([Bacon & Borthwick, 2013](#_ENREF_7); [Currie, Lockett, Finn, Martin, & Waring, 2012](#_ENREF_16)).

While alternative sociological theories are applicable to this study (e.g. Bourdieu’s symbolic power, Foucault’s disciplinary-power), as data collected progressed and simultaneous analysis occurred, themes such as legislation, credentialing and under and post-graduate education became apparent, this study appeared naturally amenable to neo-Weberian analysis. Moreover, as historical and macro-political factors came to light, the utility of a neo-Weberian lens became more pronounced.

The nursing profession has established a number of sub-specialties such as surgical, cancer, critical and diabetes care (Bacon & Borthwick, 2013). Coulthard (1998) noted that the framework established by the nursing profession for diabetes educators paved the way for critical care and gastroenterology nurses to develop their respective frameworks.

Through a neo-Weberian lens, this paper explores the nature of the perceived role boundaries between the nursing and allied health professions when working in the diabetes educator role and seeks to answer the research question: how have the roles, boundaries and scopes of practice of diabetes educators from nursing and allied health backgrounds been constructed and reinforced in Australia?

## Study design

This qualitative study is underpinned by an interpretivist epistemology which is based on the assumption that reality is subjective, evolving and that there is no single or ultimate way of knowing (Bunniss & Kelly, 2010). Data were collected via three methods: a systematic review of the literature pertaining to professional role boundary competition in healthcare; a documentary analysis which traced the history of the ADEA and diabetes educators’ roles and scopes of practice; and interviews with key stakeholders in the diabetes educator field. The findings of the former two methods have been published elsewhere (King, Nancarrow, Borthwick & Grace, 2015; King et al., 2017), hence this paper presents the findings from the stakeholder interviews.

### Participant recruitment

Key stakeholder group types were identified prior to participant recruitment as: clinicians working in the diabetes care area, relevant professional associations or executives, postgraduate educators, regulators and policy-makers. This ensured that the perspectives of the range of groups with an interest or influence in the field of diabetes education practice were canvassed (Patton, 2002).

A sample of stakeholders was initially recruited strategically via the lead researcher’s professional network. Subsequently, snowball sampling was employed and the researcher sought confirming and disconfirming cases.

### Data collection

With ethics approval via the Southern Cross University Human Research Ethics Committee, interviews with purposively sampled, key stakeholders in the diabetes educator field were conducted from September 2014 to September 2016. A total of 19 interviews were conducted with 10 clinicians working in the diabetes field (five nurse diabetes educators, two allied health diabetes educators, two allied health professionals with an interest in diabetes, one chronic disease nurse); one advanced practice nurse with a special interest in nursing scope of practice and legislation; two ADEA representatives; one senior podiatry executive; one nurse union representative, two postgraduate course coordinators; one policy-maker and one allied health regulator.

A semi-structured interview guide was used to ensure the relevant information was obtained while maintaining a level of exploratory flexibility (Liamputtong & Ezzy, 2005). The interviews sought to understand participants’ perceptions of the roles of nurse and allied health diabetes educators; differences in these roles (i.e. the presence of any role boundaries); and the nature of any perceived role boundaries between diabetes educators from different primary professions.

### Researcher reflexivity

The lead researcher held a role as a healthcare professional and had previously worked in the diabetes education field and therefore brought important insights to this study. Researcher reflexivity was maintained through journaling and critical discussions by the research team throughout the entire study, particularly during the data collection and analysis processes (Patton, 2002).

### Data analysis

The flexible seven stage template analysis technique described by (King, 2012) was utilised throughout the process of data analysis. In line with this technique, the researchers’ insights into the diabetes education field in Australia and neo-Weberian theory informed apriori themes. Interviews were transcribed verbatim and the lead researcher became familiar with the data. Initial inductive codingof a sub-set of the data was undertaken in order to establish the initial template, which involved a clustering the initial codes into cursory higher order themes. The researchers returned to the sociology of the professions literature and employed an abductive approach to determine the paradigm which resonated most closely with the data: neo-Weberian (*social closure)* theory (Parkin, 1979; Witz, 1992) which provided the basis for the template. The template was applied to the full dataset and was used to interpret the findings. Throughout the aforementioned stages, researcher reflexivity was observed by ensuring the data analysis was not skewed by researchers’ assumption or biases (King, 2012).

## Results

The results are presented according to five key themes identified in the interview data:

1. recognition of diabetes education as a formalised nursing sub-speciality;
2. protected access to education and credentialing for diabetes educators;
3. perceived legislative boundaries;
4. indeterminate qualities inherent of nursing values; and
5. threats to exclusive access to employment for nurse diabetes educators.

Included participant quotes have been lightly edited for brevity, but retain the participants’ intended meaning. Ellipses (…) indicate where words were removed and square brackets [] around words indicate they have been inserted to add context so that the quote makes sense.

### Recognition of diabetes education as a formalised nursing sub-speciality

The diabetes educator role is a recognised nursing sub-specialty or an extension of nursing practice. Both nurse and non-nurse participants acknowledged that the diabetes educator role was perceived to be part of the nursing profession’s remit, having “grown out of the nurse role.” The nurse participant quoted below expressed concern that other members of healthcare workforce (e.g. referring general practitioners [GPs]) assume diabetes educators are nurses, reflecting the wider belief that the field of diabetes education is indeed synonymous with the nursing profession, rather than constituting an area of postprofessional practice:

The ADEA, although I believe started with nurses, has evolved into more of a business model and is much more inclusive of other groups ... I think it has grown out of the nurse role and ... without wanting to be too territorial about it I think primarily in hospitals GPs referring to diabetes educators often assume they’re referring to a nurse, but in fact could be an exercise physiologist ... (Registered Nurse CDE 2)

The characteristics of a recognised professional sub-specialty, such as established systems of education and credentialing, were highlighted in this study. The participant quoted below placed emphasis on the professional framework established for nurses seeking to specialise in diabetes education. She also highlighted the lack of a formalised framework for the “other health professions”:

They’ve [nurse diabetes educators] done a Bachelor Degree and they’ve done a postgraduate certificate in diabetes nurse education, which builds on what they’ve already got. They may have already had considerable experience. … Then they do their accreditation process … now that they’ve extended their scope of practice so that they’re getting into an advanced practice nurse [role]. If they choose to, they can go on and do a Masters in Nurse Practitioner and be a Nurse Practitioner in Diabetes Nurse Education. So this example is showing how nursing has a very set framework which is put out by the Nursing and Midwifery Board of Australia. ... So I would suggest that other health professionals, if they wish to advance, build on what their current scope of practice is. (Australian Nursing and Midwifery Federation Representative)

The comparative lack of employment opportunities for allied health diabetes educators was considered to be both a factor influencing perceived role boundaries in diabetes education and also an outcome. As the following participant observed, diabetes educator roles are often earmarked for nurses:

One of the bigger issues is that most hospitals employ “nurse diabetes educators” rather than a “diabetes educator”. The roles are set up as nursing roles from the outset. The podiatrists that end up in the diabetes educator roles often tend to develop the role themselves where they are already working. (Podiatrist)

This systematic reservation of employment opportunities for nurses, rather than diabetes educators excludes allied health diabetes educators, facilitates employment security for nurse diabetes educators and further challenges the postprofessional nature of the role.

### Protected access to education and credentialing for diabetes educators

The data indicated that the systems of education and credentialing have been used to construct professional role boundaries in diabetes education and to control the entry of CDEs into the workforce in a number of ways. Some allied health diabetes educators were denied opportunities to develop their competencies during their postgraduate training. As the participant below explains, there are inequities around postgraduate training which can reinforce professional stereotypes rather than draw on the interdisciplinary role of the diabetes educator:

When I was on placement, I was not being seen as equal by the nurse educators and it was constantly said to me, “you’re a podiatrist and we have to rework our student training for you because we’ve never had a podiatrist going through before”. And I was often given the role of the foot care education … (Podiatrist Diabetes Educator)

The ADEA credentialing process prevented aspiring CDEs with an allied health background from pursuing a career in diabetes education. Profession-based ineligibility led the participant below to abandon her postgraduate study:

I did actually enrol in the course but I was told that even though I would complete the course the likelihood of me becoming a credentialled diabetes educator would be virtually none. (Exercise Physiologist with an interest in diabetes)

Similarly, the participant quoted below was unable to maximise his career prospects in diabetes education due to his profession-based (pharmacy) ineligibility. This participant quoted below used terms such as “protecting turf” and “level playing field”, emphasising the competitive nature of interprofessional relations (Abbott, 1988; King et al., 2015). Eventually, pharmacists were deemed eligible to pursue CDE status, however the slow and “frustrating” process discouraged this participant from persisting:

… I loved my work in diabetes, but was somewhat limited by the lack of income for providing education to patients. I emailed the ADEA asking about the process. I remember being promptly informed not to bother, as pharmacists at that time were not on the ‘list’ of people who could apply for credentialing. … a number of other national bodies began to lobby for pharmacists to be added to the list. It took some time, and there was a lot of resistance, particularly from nurse CDEs, but with continued pushing ... it finally happened. But it was not a quick process ... The experience was extremely frustrating in that I believed the delays were very political and more about “protecting turf” rather having a fair and equitable playing field. (Pharmacist with a special interest in diabetes)

There was evidence that even allied health professionals aspiring to become diabetes educators perceived that they must first become a qualified nurse: “there are still mixed messages out there” (Professional Services Manager, ADEA). Control over the systems and criteria for credentialing has facilitated the monitoring and protection of the field of diabetes education. Some confused and / or misinformed aspiring allied health diabetes educators have been delayed, discouraged or precluded from achieving CDE status as a result of the profession-based exclusionary protection of the title, therefore reinforcing the nursing profession’s pre-eminence in the field and detracting from the ADEA’s vision of a postprofessional role.

### Perceived legislative boundaries

An important finding of this study was that nurse educators were widely perceived to have unique legislative rights to access aspects of practice in diabetes care that were not available to allied health educators, specifically in the area of medication management. This misconception was a strong driver of the reinforcement of role boundaries between nurse and allied health educators, from both parties, as illustrated by the incorrect assumptions stated in the quote below. Yet, there are no legislative boundaries between nursing and allied health practice in any aspect of diabetes management.

It says quite clearly in the law at the moment that doctors prescribe, pharmacists dispense, registered nurses and medication endorsed nurses administer – that’s it, that’s the law. It doesn’t say that anyone else can do it. (Australian Nursing and Midwifery Federation Representative)

The above excerpt reflects the decisiveness associated with legislative closure (“that’s it, that’s the law”) (Borthwick, Nancarrow, Vernon & Walker, 2009; Borthwick, Short, Nancarrow & Boyce, 2010; King et al., 2018; Parkin, 1979; Saks, 2013). The misconception that nurse diabetes educators had exclusive authority to practice medication management was reinforced by several nursing and allied health diabetes educators and drove behaviour that reinforced this misconception:

If we [podiatrist and dietitian diabetes educators] felt that somebody needed to have their dose adjusted, we would have to run it past the nurse diabetes educator first before we could actually adjust it. … In some respects it did get a little bit difficult, so I just thought, “I’ll just refer them off to the nurse diabetes educator”. (Podiatrist Diabetes Educator)

In the case above, the perceived role boundaries between nurse and allied health diabetes educators resulted in inefficient practices and eventually the podiatrist ceased working in the area of diabetes education, further reinforcing the boundaries between nurse and non-nurse diabetes educators.

Contrary to the widely-held belief that legislation delineates the boundaries between nurse and allied health diabetes educators, from the ADEA’s perspective, all diabetes educators, regardless of their primary profession, are able to practise to the same scope, particularly with regard to medication management:

At the moment the ADEA Board would recognise that in actual fact everyone is in line [to manage medication]. They wouldn’t actually say that CDE RNs can be involved in medicine management and someone else can’t be. ... from an ADEA point of view, they would say that everyone does have the same scope of practice at the moment and that medicine management in a sense is an extension of that scope of practice for any of the individuals. (ADEA Board Representative)

As the following quote illustrates, the legacy of the perceived legislative boundaries between nurse and allied health diabetes educators that were thought to emanate from historical practices in diabetes education in the 1980s and 1990s, when insulin was a Schedule 3 (pharmacy only) drug. The following participant described the circumstances surrounding the rescheduling of insulin to a Schedule 4 (medical prescription only) drug and the impacts this had on nurses working in the field at that time and beyond:

In the late 90s it [insulin] became a Schedule 4 ... that meant nationally registered nurses who were CDEs could not adjust doses. So up until that time we could adjust doses. ... It was just a convention that if you were a nurse who did the diabetes course, you could adjust doses. Then it became a Schedule 4 and that changed everything. ... because it was then realised that there was a different scope of practice in terms of legal requirement ... nurses are not allowed to change Schedule 4 unless there is a policy or some sort of standing order. So there’s still a hangover effect that allied health CDEs still feel exists because any of the old timers remember a time when there were no restrictions around that. (Nurse Practitioner)

Several other participants highlighted the ambiguity over the relevance of legislation and regulation in diabetes education practice, including the following participant who provided insight into legislation impacting nurse diabetes educator practice:

I’m not aware of any legislation that either allows nurses to become nurse educators or prohibits them from [it] ... I don’t know that diabetes education or titrating insulin would actually come under regulation unless you were to have it specified by your employer. (Advanced Practice Nurse with an interest in nursing regulations and scope of practice)

This highlights the ambiguity around the scopes of practice of those working in this field and challenges the foundations upon which the role boundaries which have been constructed. However it is also clear that at the micro-level, there is a persistent belief that nurse diabetes educators have a wider scope of practice with regard to medication management which is reinforced by nurses and accepted by the allied health diabetes educators.

### Indeterminate qualities inherent of nursing values

Boundary reinforcement strategies also took a discursive form. Nurse participants frequently emphasised the qualities inherent in nursing values such as a high level of commitmentto patient care and taking an holistic approach. These values were perceived as being central to their ability to provide more informed and comprehensive diabetes education services than those of allied health background. The next participant framed nurse diabetes educators as “caring” and suggested they have a responsibility to their patients that allied health professionals do not:

Whereas the nurse is not as educationally prepared to the depth of any one allied health group, they have a unique body of knowledge. They have a very, very broad understanding of many health issues that relate to patients. From psychosocial, to reproductive, to children, their education is right across the lifespan and I think that’s what they bring to diabetes education. So those counselling skills, the reassurance, the trust, the caring - just the general caring role. Nurses have a responsibility to care that other allied health groups don’t have. (Registered Nurse CDE 2)

The participant quoted above also emphasised the capacity of the nurse to counsel, reassure, gain trust and care for the people they work with. These indeterminate attributes were perceived to be beyond the repertoire of those outside the nursing profession (Allen, 2000; Larson, 1979)and therefore contributed to the preservation of the nursing profession’s pre-eminence in diabetes education practice. Similarly, for the next participant, nurses’ broad experience and clinical exposure were perceived to contribute to a higher level of suitability to the diabetes educator role:

They [nurses] have exposure to more medical conditions and to more clinical settings and diabetes is so different in those clinical settings ... I think it’s possibly just sheer exposure. … you see people at their best and worst, where you deal with a number of dead and dying people, it gives you a greater sense of what might be happening outside in that person’s world, not just what you see in your office. (Nurse Practitioner)

The above excerpt suggests that nurses have greater insight into a person’s health and state of being beyond what they see within the confines of the “office” and therefore are more capable of approaching diabetes education holistically. The above quote implies that these indeterminate qualities are values inherent to nursing and not other professions, and must therefore be learned by non-nurses in order to effectively fulfil the diabetes educator role. These qualities serve to distinguish nurse from allied health diabetes educators and highlight the professional role boundaries.

Threats to exclusive access to employment for nurse diabetes educators The data indicated that some nurses felt threatened by the increasing interdisciplinarity of the diabetes education workforce and by the potential impact on their access to employment. When additional professions are deemed eligible to pursue CDE status, the competitive nature of the professions becomes apparent. This raises concern for some nurses about their employment and economic security, one of the most coveted benefits associate with professional closure (Nancarrow & Borthwick, 2005; Saks, 2013) Such concerns have been expressed to the ADEA, as described by the participant below:

Lots of our CDEs are worried that their jobs are going to be taken over by practice nurses, pharmacists, general nurses working in the community. And then obviously we do find that nurse CDEs probably are a bit worried about their job when the ADEA provides another eligibility for the CDE list. (Professional Services Manager, ADEA)

The nurse quoted below indicated that while she believed that the increased profession-based diversity in the diabetes educator workforce is advantageous, others in her network were threatened by this and were concerned with protecting their “turf” rather than focusing on “the big picture” (i.e. increasing access to diabetes education services):

I’ve been to meetings and have been in a big group of diabetes educators with nursing background and it can get quite a heated debate about it. And out of 15 only about two of us have a similar opinion to me. Everyone else is so busy looking after their turf that I feel they’ve lost the big picture. It’s not about us, it’s about the people, the clients. It’s mostly been around pharmacists applying for diabetes educator jobs. (Registered Nurse CDE 1) ­­

The above participant also draws attention to nurses’ engagement in “heated debates” as a means to express their concerns about their employment security, which in turn may energise the nursing profession’s efforts to secure its pre-eminence in diabetes education.

## Discussion

This paper provides three important insights into the sociology of the professions. The first is the unique description of the emergence of ‘postprofessions’ which are a new species of profession emerging from existing professional groups, to form a new, recognised profession. Each member of that profession also retains their primary profession. Diabetes educators are one example of a postprofession. Others include mental health workers, which may incorporate nurses, social workers, psychologists, counsellors (Cosgrave, Hussain & Maple, 2015).

This paper also highlights the dissonance between the broader impetus toward postprofessional practice in diabetes education and the perceptions and experiences of diabetes educators working in the field. The field of diabetes education was initially established by the nursing profession and was subsequently opened up to other professional groups over time. Despite the increased profession-based diversity of the diabetes educator workforce and the impetus toward flexible approaches to healthcare delivery, the nursing profession’s pre-eminence in the field has persisted. The historical development of diabetes education as an extension of the nursing role has influenced the perceptions of the contemporary role and the role boundaries. Traditions such as employing only nurses in diabetes educator roles in most hospitals further reinforce the role boundaries between nurse and allied health diabetes educators by preventing allied health diabetes educators from accessing the benefits associated with professional closure in the field of diabetes education, including employment and income (King et al., 2018; Nancarrow & Borthwick, 2005; Parkin, 1979; Saks, 2013).

The second point emerges from the first, and that is that the challenges of creating a new profession which incorporates a range of disciplines which have their own professional identity, and within that, their own expectations and hierarchies. This paper examines the dynamics of those expectations when those professions have different traditions and experiences.

References to the values inherent to nursing practice (holism, commitment, exposure and experience) and their relevance to diabetes education, served to consolidate perceptions of role boundaries (Allen, 2000; Bochatay, 2018; Timmons & Tanner, 2004). While these non-codifiable qualities are not exclusive to nurses, there is an implication that allied health diabetes educators may not practise in accordance with these values and in turn may not fulfil the role as effectively (Sanders & Harrison, 2008; Timmons & Tanner, 2004).

Restrictions concerning profession-based eligibility for CDE status has facilitated the monitoring and control of the diabetes educator field by the nursing profession, and effectively excluded aspiring allied health diabetes educators from achieving CDE status. Moreover, aspiring allied health diabetes educators’ access to learning opportunities has been inhibited by nurses who were skeptical of their capacity to practise the same skills. Similarly, in their analysis of the barriers to sonographers gaining competency in performing ultrasound guided injection therapy and therefore expanding their scope of practice into an area historically dominated the medical profession, (Innes, Maybury, Hall & Lumsden, 2015) noted restricted access to essential education and training by non-medical healthcare professionals.

The third important contribution of this paper relates to the relatively unexplored issue of role boundaries between the allied health disciplines and nursing. The professions are normally examined in the context of their power relationships and influence over one another (Timmons & Tanner, 2004). Because it is relatively unusual for nurses and allied health professions to work within a structure in which one profession has authority over the other, the power relations between nurses and allied health are rarely examined. In this example of the diabetes educator role, while nurses have no formal or endorsed authority over the allied health disciplines, the history of the diabetes educator role and the hierarchical structures of nursing (that are absent in the allied health professions) have been emphasised.

Legislation pertaining to medication management is broadly considered to be the foundation upon which the perceived role boundaries between nurse and allied health diabetes educators lie. However, the legitimacy and currency of this foundation has been brought into question. This paper highlights that although nurses appear to perceive legislationas the point of delineation between their scope of practice and that of allied health professionals working in the diabetes educator role, the current legislation neither explicitly supports nor precludes nurses or allied health professionals from engaging in medication management.

Securing legislative role boundary reinforcement is considered the most decisive strategy of professional closure and is therefore commonly at the core of professional projects (Saks, 2010; Saks, 2012; Saks, 2013). However, attempts to secure legislative underwriting are often met with resistance (Borthwick et al., 2010) and may be abandoned in favour of employing charismatic authority to establish a formalised sub-specialty, much like diabetes specialist podiatrists have done in the UK (Bacon & Borthwick, 2013). This paper illustrates that by adopting an authoritative position and reinforcing the perception of the legislative nature of role boundaries, whether these are legitimate or not, can be an effective strategy of professional closure. It appears that there is a myth being promulgated that only nurses can assist with medication management. Nurses seem to believe it, others are confused, and as the largest and dominant discipline in the diabetes educator field and the founding profession, nurses exert considerable authority over this myth.

The development of nursing sub-specialties such as critical care, genetics, cancer and theatre have contributed to an intra-professional hierarchy wherein those nurses who have attained a role in a recognised sub-specialty assume a higher position (Currie et al., 2012; Timmons & Tanner, 2004). Programs of education and the ADEA’s credentialing system have aided in the consolidation of diabetes education as a nursing sub-specialty. Accordingly, nurse diabetes educators benefit from the enhanced status, employment opportunities and income associated with this area of clinical practice (Nancarrow & Borthwick, 2005), none of which are apparent for allied health professionals working in this area. This study shows that threats to the nursing profession’s exclusive access to these benefits has elicited concerns, fear and insecurity among nurse diabetes educators and protectionist strategies and behaviours have ensued (Baker, Egan-Lee, Martimianakis & Reeves, 2011; Martin, Currie & Finn, 2009; Saks, 2013). These strategies appear to have undermined the impetus toward interdisciplinary care, the potential for more efficient and effective diabetes education (Martin et al., 2009; Nancarrow, 2015; Nancarrow & Borthwick, 2005) and the realisation of diabetes education as a postprofessional role.

### Methodological limitations and further research

The researchers included a broad range of stakeholder groups in the field of diabetes education in order to develop an understanding of the nature of the role boundaries from a range of perspectives, however diabetes education service users were not included in the interviews. Interviews with service users would have added valuable insight to the research and ought to be considered for future research exploring role boundaries in the health professions.

A neo-Weberian framework provided the underpinning for the data analysis. Bourdieu’s symbolic closure, which draws upon the neo-Weberian concept social closure, would have added additional and interesting insights to this study.

This research was conducted in Australia and therefore contextualised by the nation’s unique and complex healthcare systems. However, the findings may still be applicable to other countries in which an interdisciplinary diabetes educator workforce has been established (e.g. the UK, USA and New Zealand). The findings may also be relevant to other areas of healthcare in which multiple professions practise, such as mental health and rehabilitation.

This research found the legislation pertaining to medication management in diabetes education to be dubious, however with the recent advancement in non-medical prescribing (Borthwick et al., 2010) further research into contemporary non-medical prescribing practices across the ADEA-eligible professions could help inform future efforts to expand interdisciplinary diabetes education practice.

## Conclusion

This study exemplifies the implementation of professional closure strategies to reinforce historical role boundaries, resist modernising changes to the practice of diabetes education and undermine directives to improve efficiency in healthcare. Although the foundations upon which the perceived role boundaries are constructed are questionable, the nursing profession has successfully maintained pre-eminence in the field of diabetes education and near-exclusive access to the benefits associated with professional closure. These enduring and widely-held perceptions of role boundaries in diabetes education resonate with other neo-Weberian analyses of the professions.

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