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From the Editor

David Schmidt[1]
Journal Manager

Welcome to Volume 2 of *Health Education in Practice: Journal of Research for Professional Learning* (HEPJ). As the journal enters its second year, we look to the future of health education, focusing on equipping our health workers for the future challenges facing the health workforce.

The first paper in our Research and Evaluation stream, 'Education pathways, mentoring and future intentions of nurse and midwifery consultant in a NSW health district', highlights the future skill development requirements of the clinical nurse and midwifery consultant workforce. With an eye on career development and succession planning, Edgar et al. reveal a desire for improved clinical skills and leadership over other domains of practice.

Two growing issues within Australian society are an emerging population living with chronic pain and mental health issues. Health professionals deliver services to people with these long-term conditions and may experience these issues themselves. Recent changes at the federal level to pain medication availability have shifted the focus of health services to non-pharmaceutical approaches to chronic pain. With chronic pain increasing in the Australian community, White et al.'s educational pilot demonstrates an important strategy in upskilling primary healthcare workers to provide evidence-based care to this client group. The change of attitudes in response to a multifaceted training package shows an encouraging shift in perceptions towards non-pharmaceutical approaches for people living with chronic pain. This attitudinal shift is critical to ensure improved service to a group that can often feel marginalised through interactions with health services.

Our third paper by Holmes et al., 'Wellness in allied health students: the case for change', explores implementing a wellness program for young allied health professionals to combat the rise in mental health issues and stress. A recognition of the increased pressures of clinical placements on students prompted this pilot program. The program demonstrated a willingness and ability for allied health students to incorporate wellness strategies to manage their mental health. These developments in self-care strategies will be an important protective mechanism as these students become graduates working within the health system.

Since the last issue, we also have bid farewell to the journal's founding editor-in-chief, Dr Suzana Sukovic. We thank Suzana for all her work in establishing the journal, which has a growing audience and has experienced over 60 per cent growth in terms of website activity and article reads in the first half of this year alone.

Other important activity related to the journal include a refresh of the HEPJ website and interface. During this issue, HEPJ has welcomed a new responsive web design that incorporates a more accessible

experience for readers and users. Articles are now being published in HTML once approved for publication, expediting access to articles as part of our commitment to a rolling publication model. Digital object identifiers have now been integrated into HEPJ articles and will be included with published articles from this issue onwards, bringing the journal into line with other online publishers and improving the ability for authors to cite their work in the journal. Social media plugins have been embedded in articles, increasing the ease of sharing and promotion of articles. HEPJ editorial policies are now available online in full. Policies, author guidelines for submission and instructions for reviewers are now available on the HEPJ website. We trust this assists potential authors in submitting to the journal.

HEPJ is now also indexed in Trove and Google Scholar. With the increased reach provided as a result of this indexing, we hope to see continued growth of the journal's reach and readership.

As the journal's new manager, I am proud to work with our editorial assistant Jamaica Eisner to bring you this issue. Our audience is growing, as is our network of reviewers, under the guidance of our editorial board. We look forward to continued growth for this journal and the appointment of a new editor in the near future.

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Education pathways, mentoring and future intentions of nurse and midwifery consultants in a NSW Health District

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Abstract

Clinical Nurse and Midwifery Consultants (CNC/CMCs) play an important role within NSW Health Services. They are required to function within five domains of practice: clinical service and consultancy, clinical leadership, research, education, and clinical services planning and management. This study engaged with one Health District's current CNC/CMC network members with a view to informing the development of a strategy for career and succession planning. One hundred CNC/CMCs were invited to participate in an online survey and in one of three focus groups. The survey explored: the participants' demographics, their educational pathways prior to and during the role, the relationship of this education to the five domains of CNC/CMC practice, their priorities for their own future education needs, the education priorities they suggested for other aspiring CNC/CMCs, and who was mentoring into their role. The focus group added further clarity to the survey data. The survey was completed by 61% of invitees and 19% attended the focus groups. The findings identified an experienced workforce, with 25% of CNC/CMCs intending to leave over the next five years, yet only 20% mentoring others. Nearly half (47%) of the participants held or were working towards a Master's degree. A third of these Master's degrees were considered by the participants to support knowledge in all five of the CNC/CMCs' domains of practice, in comparison to only 11% of graduate certificates. The focus-group participants expressed the view that the Master's qualification supported them to meet the domains of the CNC/CMC role, and suggested that aspiring CNC/CMCs should aim for this level of education. When considering their own personal educational needs, the CNC/CMCs prioritised service planning and management and research, but they felt that aspiring CNC/CMCs should prioritise the development of clinical knowledge, followed by clinical leadership.

Keywords: clinical nurse consultant, clinical midwifery consultants, education preparation, succession and career planning

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INTRODUCTION

This study was conducted in one Local Health District (LHD) in NSW Australia that has a combined rural and regional status. The LHD comprises eight hospitals and 45 community-based service sites. It employs 3,500 nurses, including 95 permanent Clinical Nurse/Midwifery Consultants (CNC/CMCs). All CNC/CMCs belong to a CNC/CMC Network – a local professional body that meets regularly to discuss professional issues and to plan their collective requirements for supporting and enhancing these roles. A growing concern within the CNC/CMC Network was the age of its current members and the need for succession planning; this is a concern shared by the Nursing and Midwifery Executive (Walsh et al. 2015). The current District mentoring program provides support when new CNC/CMCs are appointed, but there is no formal program in place for aspiring CNC/CMCs.

A small group of diverse CNCs (n = 5) came together to enhance their research capabilities, research being a domain of the CNC role. This group agreed to find a research question that was of interest to the CNC/CMC Network and to the District's Nursing and Midwifery Leadership team. The topic of succession and career planning was discussed and the research team began to consider how it could be approached from a research perspective. It was apparent that a central repository of demographic information about the CNC/CMC Network as a collective was lacking, making it difficult to confirm or deny the CNC/CMCs' concerns.

BACKGROUND AND LITERATURE

The CNC/CMC role has been embedded in the fabric of NSW Health's nursing workforce since the 1980s, giving reward and recognition to expert nurses (Chiarella, Hardford & Lau 2007). The role encompasses five domains of practice: research, education, clinical leadership, clinical services and consultancy, and clinical service planning and management (NSW Ministry of Health 2017). However, in reality, these consultant roles are diverse and complex in nature (Bloomer & Cross 2011; Walsh et al. 2015) and are often enacted with large variability (Roche et al. 2013; Walsh et al. 2015). A number of factors can account for this diversity. First, the role has been divided into three grades (1–3), with the functionality of each domain becoming more complex as the grade increases (NSW Ministry of Health 2017). Additionally, the role is often co-created by the needs of the employing organisation and the individuals within the role, rather than by the role domains captured in the position description (Jokiniemi et al. 2012). Despite differences in nomenclature, the role is similar to those of the United Kingdom's 'Nurse Consultant' and the United States' 'Clinical Nurse Specialist', who also experience similar issues around role enactments of their role descriptions (Jokiniemi et al. 2012). These roles all belong to a broader term of 'advanced practice roles', which have been,

> 'recognised and described as a level or practice rather than a role or a title'
>
> (Dragon 2016)

CNC/CMCs provide a positive contribution both to their organisation and to patient outcomes (Bloomer & Cross 2011; Jannings & Armitage 2001; McIntyre et al. 2012; Philip et al. 2015; Roche et al. 2013; Walsh et al. 2015; Yacopetti et al. 2010). Often it is their high level of clinical knowledge, and their knowledge of how to work within the complexity of the health care system, that ensures the needs of patients, the health service, the team and the organisation are met (Walsh et al. 2015). Supporting the career and succession planning of these advanced nursing and midwifery roles would therefore benefit all stakeholders, including the LHD, the team, the current CNCs, those aspiring to the role and, most importantly, patients.

Eligibility for a CNC/CMC position requires the nurse/midwife to have between five to seven years' full-time post-registration experience, and experience in their specialty field. In addition, the employee must have an approved post-graduate nursing/midwifery qualification relevant to the field in which he/she is appointed, or other qualifications or experience deemed appropriate by the public hospital or public health organisation. An employer may also require a higher qualification in the specialist-nursing field, where such a qualification is considered essential for the performance of the individual position (Industrial Relations Commission of New South Wales 2017).

A number of studies have previously explored education preparation for the CNC/CMC role (Baldwin et al. 2013; Chiarella, Hardford & Lau 2007; Wilkes, Luck & O'Baugh 2015). Chiarella and colleagues (2007) found 10% of CNCs across New South Wales held no post-graduate qualification in their specialty, with one tertiary hospital finding as many as one third of CNCs not possessing post-registration graduate nursing qualifications (Roche et al. 2013). A gap has been identified in the literature regarding the contribution that education courses make to enhancing the CNC/CMC's knowledge and function in the five domains. Since every tertiary qualification comes at a financial and personal cost to the individual nurse/midwife, one objective for this research is to explore the contribution of education courses to the CNC/CMC practice domains.

Almost a decade ago, Burton, Bennett & Gibbon (2008) identified that succession planning for future UK consultants was neglected in policy development. In 2018 there remains a scarcity of literature on the subject. Planning for a future workforce is often difficult and, without adequate forward thinking, advanced nursing roles may not be replaced adequately in times of leave or resignation (Raftery 2013; Sprinks 2015). There is a need for LHDs to consider the costs of *not* implementing a strategic succession plan, rather than focussing on what strategic succession planning would cost (Hoffman & Womack 2011). According to Carriere and colleagues (2009), critical elements of a successful succession plan include: the development of a strategic plan outlining the organisation's objectives; the desired skills and individual needs of candidates who will support the strategic plan;

adequate resource allocation; future development processes; and an inbuilt evaluation tool. Early identification and mentoring of successful candidates are also recommended. Reviewing these elements assisted the research team to consider topics for exploration in this study.

Career planning is defined as the continuous process of thinking about your interests, values, skills and preferences, exploring the life, work and learning options available to you, ensuring that your work fits with your personal circumstances, continuously fine-tuning your work and learning plans to help you manage the changes in your life and the world of work (Institute of Managers and Leaders 2018).

Succession planning and management focusses on identifying future leaders and preparing them for the role. It is a deliberate and systematic effort by an organisation to ensure leadership continuity in key positions, so as to retain and develop intellectual and knowledge capital for the future and to encourage individual advancement (Rothwell 2010).

AIMS OF THE STUDY

This study was conducted to generate evidence to support the development of a local CNC/CMC Network career and succession planning strategy aimed at current and future CNC/CMCs. The objectives were to:

1. Collect demographic information about the CNC/CMC members in order to identify current and future workforce needs.
2. Identify the education path CNC/CMCs take prior to the role and currently, and how they perceive this education has supported them to meet the domains of CNC/CMC practice. This may support the education choices of future CNC/CMCs and identify gaps in the education preparation of current CNC/CMCs.
3. Identify the current CNC/CMCs' education needs to support them to meet their role domains, and explore the current CNC/CMCs' perceptions of the education needs of aspiring CNC/CMCs. This will support education planning for the CNC/CMC group and assist future CNC/CMCs' planning.
4. Identify the number of CNC/CMCs who were mentored before or whilst they were in the CNC/CMC role, and their current mentoring of others, in order to support and revise the current mentoring program.

METHODOLOGY

TARGET GROUP

One hundred (n = 100) CNC/CMCs employed by this LHD were invited to participate in the study, including those in secondments and in temporary contracts.

STUDY DESIGN

A mixed methods approach was used, which combined both quantitative and qualitative data-collection methods within an electronic survey. Following the survey and its analysis, focus groups were held to explore the survey findings further.

This research received ethical approval from the joint University of Wollongong and the Local Health Districts Medical Human Research Ethics Committee (LNR 2017/144). Data collection began in March 2017 and was completed by June 2017. Approval to conduct this research project was provided by the research team's line managers.

METHODS

Written participant information sheets outlining the overall details of the project were developed and forwarded by email to all CNC/CMCs within the Network. The project plans were discussed at CNC/CMC Network meetings, and all CNC/CMCs were invited to participate in the survey and/or the focus groups.

PART 1: ESURVEY

An electronic 20-minute survey was developed, tested, revised and then disseminated using eSurvey Creator™ (See Appendix 1: Example of survey questions). A blend of multiple-choice questions and free-text questions was used. The survey explored the following topics: demographics, education, and mentoring activity. To avoid ambiguity, the term 'education' was defined as,

> 'the process of receiving or giving systematic instruction, especially at a school or university, or a body of knowledge acquired while being educated, or information about or training in a particular subject'
>
> (Oxford Dictionary)

and mentoring defined as,

> 'a senior professional (mentor) who invests and shares their time, effort, knowledge and expertise with a less experienced professional (mentee) to nurture their knowledge, skills and professional growth'
>
> (Management Mentors 2018)

Demographics included: the respondent's age; years worked as a nurse; how they obtained initial registration; years in the CNC/CMC role; years in the specialty before gaining the position; employment status; years they anticipated continuing in the role; and full- or part-time status.

The education questions explored the respondent's education pathway before becoming a CNC/CMC, and how they believed this then linked to knowledge of the five domains of the CNC/CMC role. The same questions were repeated, focussing on the respondent's education pathway after becoming a CNC/CMC. Also investigated were the CNC/CMC's priorities for their future educational needs, and what they perceived an aspiring CNC/CMC should prioritise for their education.

Mentoring question explored the number of CNC/CMCs who had received mentoring prior to, and whilst in, the CNC/CMC role. It was deemed important to identify whether they were currently mentoring a potential successor into their role.

The CNC/CMC Network provided 100 prospective participants' names (including those CNC/CMCs in seconded positions). Their email addresses were entered into the survey system and they were sent an invitation to participate. The surveys were anonymous and participants were given the option to skip questions that they felt might potentially identify them. Using this survey system allowed three reminders to be sent, two weeks apart, to those who had not completed the survey, up until the close date. All participants were known to have computer and email access. Consent was implied by completion of the survey.

The survey platform, eSurvey, supported data analysis, as it developed an automatic report and a summary of quantitative results. This data is reported as descriptive statistics. The free text answers were themed by the research team. Information collected about the courses undertaken by the survey respondents also included their perceptions of how the course supported their knowledge in each of the five domains. The research team then reviewed the courses and categorised each into what they deemed to be that course's primary domain focus: e.g. a graduate certificate of leadership and management was placed in the leadership domain as its primary focus, whereas a graduate certificate in aged care was deemed to have a major clinical focus. Those with a broad remit, such as the Master's of Nursing (with no specialty assigned to them) were categorised as 'broad', and when the grade of the course was mentioned but no name given it was labelled 'unspecified'.

PART 2: FOCUS GROUPS

All CNC/CMCs were invited to participate in Part 2 (focus groups). Completing Part 1 (eSurvey) was not a pre-requisite. Attendance was voluntary. An expression of interest was sent to all CNC/CMC Network members twice by email, and one face-to-face invitation was announced at a CNC/CMC Network meeting. (This invitation to participate was minuted for those not in attendance.) Of the total CNC/CMC group, 19% attended one of the three focus groups.

A series of three face-to-face focus groups were conducted: Focus Group A (FGA) with nine participants; Focus Group B (FGB) with six participants; and Focus Group C (FGC) with four participants. The focus group format was developed following analysis of the survey results. It consisted of a PowerPoint presentation of the survey data findings,

following which the participants were asked to give meaning to the results and further clarify any questions the researchers had about the results from the survey. The focus groups were held in two different locations and lasted approximately 90 minutes each. Written consent was required to participate in the focus group. The focus groups were led by one of the co-investigators with support from the lead investigator. During the focus groups, one investigator facilitated and one scribed notes to capture key points, which were then fed back to the participants for checking. The focus groups were also audio-recorded and the recordings were transcribed.

The qualitative data was analysed for themes using a thematical analysis process, an approach that can be used by those with less experience conducting qualitative research (Braun & Clarke 2014). Braun & Clarke (2006, p. 10) state that,

> 'through its theoretical freedom, thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex account of data.'

All the researchers read the focus group transcriptions. The transcripts were then coded, categorised and themed. The themes were finalised when the research team were in agreement. No software was used; the coding was done manually and an audit trail was developed and saved as part of the research data.

RESULTS

This section combines both survey and focus group results under the following headings: Demographics (objective 1); Education preparation (objective 2); Education priorities (objective 3); and Mentoring (objective 4).

The survey was completed by 61% of the CNC/CMCs and 19% participated in the focus groups. Despite only three focus groups being held, each revealed common themes with very little variability, achieving data saturation. This study captures CNC/CMCs across a large geographical area consisting of both regional and rural services. There was good participation across all clinical streams and different CNC/CMC grades, with a variety of experience in the role.

DEMOGRAPHICS

Table 1 depicts the CNC/CMC Network as a very experienced workforce with a large majority (approximately 70%) of its members having 20 years' or more nursing/midwifery experience. Despite being clinically experienced, 44% of the CNC/CMCs have been in the role for four years or less. 44% percent of CNC/CMCs worked in their specialty for 5–9 years before obtaining the CNC/CMC role, whilst 39% worked in their specialty for 10 years or more before obtaining the role.

Almost three quarters of the participating CNC/CMCs work full time (74%) and 82% were in permanent positions.

As can be seen in Table 2, a large majority of CNC/CMCs (more than 80%) are aged 40 years or older and 1 in 12 are aged 60 years or more. Almost a quarter (24%) of the respondents reported that they intend to leave the role within 5 years, with a further loss of another 25% within the next decade.

Table 1: Demographic information

Number of years the participant has worked as a nurse/midwife (*n* = 62)		Number of years the participant has been working as a CNC/CMC (*n* = 61*)		Number of years the participant worked in their specialty before gaining their CNC/CMC role (*n* = 62)	
1–4 years	1.61%	1–4 years	44%	1–4 years	17.74%
5–9 years	8.06%	5–9 years	28%	5–9 years	43.55%
10–19 years	20.97%	10–19 years	23%	10–19 years	29.03%
20–29 years	30.65%	20–29 years	5%	20–29 years	9.68%
30–39 years	29.03%				
40 years or greater	9.68%				

*One answer in error removed

Table 2: Demographic information of CNC/CMCs by age and number of years continuing in the role

The current age of the participant (*n* = 62)		The number of years the participant saw themselves continuing in the role (*n* = 51*)	
20–29 years	3.23%	Less than 1 year	1.96%
30–39 years	14.52%	>1 year but <2 years	3.92%
40–49 years	33.87%	2–5 years	17.65%
50–59 years	40.32%	6–9 years	27.45%
60–66 years	8.06%	10 years or greater	43.14%
		Skipped this question	5.88%

**Only those in permanent positions answered this question*

Two themes emerged within the focus groups in regards to the demographic data: 'opportunity for strategic planning' and 'passion before age'.

OPPORTUNITY FOR STRATEGIC PLANNING

The focus-group participants felt that the likely loss of highly experienced nurses over the next decade can be explained by the age of the CNC/CMC Network members and future retirements. This was seen as an opportunity for strategic planning by the CNC/CMC Network in collaboration with the LHD Nursing and Midwifery Executive, to support current CNC/CMCs and persons aspiring to the role. However, consideration needs to be given to the current pool of nurses from which new CNC/CMCs will be drawn, and thus mentoring will become an imperative. The participants also urged the LHD to offer greater flexibility in working hours in order to retain the current highly skilled and experienced nurses/midwives, with part-time working an option that many CNC/CMCs would take.

PASSION BEFORE AGE

Some focus-group participants expressed the view that age should not be seen as an indicator of experience or ability, and should not be seen as a pre-requisite to becoming a CNC/CMC. The word 'passion' was used to describe the attribute required of the aspiring CNC/CMC:

> 'It's when you show that passion and interest, and you learn every day about the subject and you're questioning and making changes at your ward level'
>
> (FGA)

EDUCATION PREPARATION

Table 3 indicates that 55% of CNC/CMCs were university trained. Over 90% have obtained a graduate certificate or greater as their highest level of education since registering as a nurse/midwife. The 6.45% who chose the 'other' category as the highest level of education were those who obtained Bachelor degrees and one specialty course, which was equivalent to a Master's level. A small number (n = 2) had 'specialist course' as their highest level of education, which was defined as courses over two days in duration but not at graduate level. The participants were asked to select their highest level of qualification; 35% chose a Master's degree. However, in the dataset a further eight Master's were found and we can only assume these were courses in progress, which could adjust the percentage of CNC/CMCs either working towards or having obtained a Master's degree or above from 39% to 47%. This would include the two CNCs who each had a PhD and three Master's courses between them.

The 62 participants were broadly educated, having undertaken an additional 142 education courses (Table 4). Some had completed more than one course. The majority of CNC/CMCs had undertaken further education prior to becoming a CNC (n = 88 courses), of which 66 courses were at a post-graduate level. Of the courses taken prior to the role, only 32% (n = 27) were completed with the aim of working toward the CNC/CMC role. Approximately two thirds of those who held a Master's level qualification obtained this before becoming a CNC/CMC.

CNC/CMCs who had been in the role for 10 years or less undertook 70% of all Master's courses.

Table 3: Initial registration and highest level of education

How the participant obtained their initial registration as a nurse/midwife (*n* = 62)		The highest level of education the CNC/CMC achieved after gaining registration as a nurse/midwife (*n* = 62)	
Hospital trained	38.71%	Other	6.45%
University trained	54.84%	Specialist courses	3.23%
Other	6.45%	Graduate certificate	33.87%
		Graduate diploma	17.74%
		Master's	35.48%*
		Doctorate	3.23%

*Master's 47% if including those completing course

Table 4: Level of courses taken by CNC/CMC participants prior to and while in the role, and the researchers' opinion of the courses' primary domain

Course level	Clinical		Leadership		Research		Services planning		Education		Broad		Unspecified	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Short course	3	8	0	8	1	2	0	0	0	0	0	1	2	2
Certificate III or IV	0	1	0	0	0	0	0	1	8	4	2	0	0	0
Bachelor	0	0	0	0	0	0	0	0	1	0	5	0	0	0
Graduate certificate	28	9	2	5	0	0	0	0	4	0	3	0	2	0
Graduate diploma	3	0	1	0	0	0	0	0	0	0	1	1	0	0
Master's	8	6	4	3	3	1	0	0	0	0	5	1	1	0
Doctorate	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Totals	**42**	**24**	**7**	**16**	**5**	**4**	**0**	**1**	**13**	**4**	**16**	**3**	**5**	**2**

Table 4 shows that, of the 88 courses undertaken prior to the CNC/CMC being in the role, 44% (42/88) primarily focussed on a clinical specialty and 15% (13/88) focussed primarily on education. Over half of the CNC/CMCs continued to undertake further education courses while in the CNC/CMC position (*n* = 54 courses), of which 44% focussed primarily on a clinical specialty and 30% on leadership. Only one participant undertook a course with a primary focus on service planning and management.

Only 11% of graduate certificates and 37% of Master's courses were reported to increase the participant's knowledge across all five domains.

The focus groups identified intrinsic and extrinsic factors that motivated participants to pursue further education. Three sub-themes emerged from the intrinsic drivers: personal motivation, passion, and progression of career. The influence of the LHD was an extrinsic driver.

INTRINSIC DRIVERS

PERSONAL MOTIVATION

Personal motivation to learn more about the subject or specialty prior to the role was seen as a key intrinsic driver. CNC/CMCs believed that personal drive and an interest in the subject motivated them to study and to develop professionally. These courses were often not undertaken specifically to gain the CNC/CMC role, but they often helped when applying for a position.

PASSION

Passion is the personal drive to improve care or service for better patient outcomes**.** The participants believed that passion for their work was vital to the delivery of better service and improved patient experiences and outcomes. Passion often drives the pursuit of specialty education.

> 'The passion drives the piece of paper'
>
> (FGA)

Education choices become more purposeful once in the CNC/CMC role, as education enhances the knowledge and functionality within the role. Knowledge is also acquired through various modalities other than formal studies, such as: attending conferences, reading journals, and being part of specialty working parties and research.

PROGRESSION OF CAREER

Progression of career is the personal motivation and self-improvement required to obtain and perform the role well. Education was thought to provide access to better job opportunities and to progress their careers:

> 'I did my Masters to make sure I got the job.'
>
> (FGA)

The participants also believed that education gives a good foundation to better functioning within their role. Focus-group participants with a Master's level of education overwhelmingly stated that it helps them meet the CNC/CMC domains. There was disagreement in regards to the timing of that Master's level of study. Some participants stating that it should be undertaken prior to commencing the CNC/CMC role in order to better prepare for work across the domains, while others felt a specialty qualification would

help them to progress into the role, and then the Master's course could be more tailored to the CNC/CMC's specialty and needs.

> 'If I went into another role without that formal training with the Master's I would have a lot of trouble… it really made a huge difference.'
>
> (FGC)

EXTRINSIC DRIVER

Some participants had experienced managerial support to pursue further education through encouragement to apply for scholarships, while others felt that further education was expected of them in order to enhance their knowledge and skills within the five domains. The participants remarked on the cost of education and suggested that the LHD could consider some form of education scholarship. Additionally, the current industrial agreement does not support the payment of an education allowance for CNC/CMCs, but does for those employed at a lower clinical level.

EDUCATION PRIORITIES

Table 5 indicates the survey participants' responses regarding prioritising their own education needs in relation to the five CNC/CMC practice domains (clinical services and consultancy; clinical leadership; research; education; and clinical service planning and management). The scoring ranged from 1 = highest priority to 5 = lowest priority, with their mean scores ranging from 2.62–3.59. Service planning and management was the top priority, with a mean score of 2.62, followed closely by research (mean score 2.84).

The CNC/CMCs were also asked to rank the domains that an aspiring CNC/CMC should focus their development on. These results were in almost reverse order, with the clinical service and consultancy domain being the key priority (mean 1.77) followed by clinical leadership (mean score 2.21), with service planning and management deemed the last priority (mean score 4.07). The scores for the aspiring CNC/CMCs were spread across a greater mean range than were the current CNC/CMCs' priorities (mean scores range 1.77–4.07).

Despite the overall education priorities captured by the survey, the focus-group participants highlighted that there also needs to be consideration of the individual CNC/CMC's education needs. These needs were explained by each CNC/CMC's role being unique: the work contexts differ, there is a range of CNC/CMC job descriptions, and different individual nurse/midwives bring different previous experiences, knowledge and education to the role. Clinical Nurse/Midwifery Specialists were discussed as these staff often step

Table 5: The CNC/CMCs' future education needs to meet the domains of their role mapped to how they would advise aspiring CNC/CMCs to prioritise in preparation for the role (*n* = 61)

	Educational needs	1 highest	2	3	4	5 lowest	Mean	Rank
Service planning	Current	22.95%	32.79%	19.67%	8.20%	16.39%	2.62	1st
	Aspiring	3.28%	14.75%	9.84%	16.39%	55.74%	4.07	5th
Research	Current	27.87%	16.39%	16.39%	22.95%	16.39%	2.84	2nd
	Aspiring	1.64%	9.84%	13.11%	42.62%	32.79%	3.95	4th
Leadership	Current	16.39%	16.39%	34.43%	21.31%	11.48%	2.95	3rd
	Aspiring	36.07%	22.95%	24.59%	16.39%	-	2.21	2nd
Clinical consultancy	Current	31.15%	11.48%	13.11%	14.75%	29.51%	3.00	4th
	Aspiring	52.46%	26.23%	14.75%	4.92%	1.64%	1.77	1st
Education	Current	1.64%	22.95%	16.39%	32.79%	26.23%	3.59	5th
	Aspiring	6.56%	26.23%	37.70%	19.67%	9.84%	3.00	3rd

up to the CNC/CMC role and should have leadership, education and consultancy skills. These individuals would require support with the other domains to make the transition.

The CNC/CMCs' choice of clinical service planning and management as their highest priority for future education needs is explained by a lack of specific education available for this domain. There were avenues to gain education in the other four practice domains. The participants explained why research was the second priority within the survey, identifying that they do not possess enough knowledge in this area and that it is something they would like to achieve:

> 'If you do research, you understand evidence-based practice… which helps you with transferability and translation into practice"
>
> (FGB)

However, this priority was also prompted by the Chief Executive Officer's expectations regarding research output from CNC/CMCs.

Clinical service and consultancy knowledge was recognised as a strong requirement for the CNC/CMC, due to the autonomy of the role and the need to be clinical experts in their specialty. being seen as clinical experts. For some current CNC/CMCs this was a priority for their own education, but less so for others. The focus-group participants did not identify any specific reasons why education was ranked as the lowest priority for themselves.

The participants overwhelmingly ranked the clinical consultancy domain as the highest education priority for aspiring CNC/CMCs, explained by the need to ensure that they are safe and knowledgeable clinicians. Leadership was also acknowledged as an essential skill to be an effective CNC/CMC:

> 'If you are a good leader then the results will follow'

and this happens because you

> 'can smooth the way and stand up for what you think and be recognised in that position'

(FGA)

MENTORING, SUCCESSION PLANNING AND CAREER PLANNING

Table 6 shows that only one in five CNC/CMCs were currently involved in mentoring aspiring CNC/CMCs. There was a greater number of CNC/CMCs mentored while in the CNC/CMC position than those who had experienced mentoring prior to holding the position (57% versus 34%).

In the focus groups, succession and career planning were seen as everyone's responsibility: the aspiring CNC/CMC and the CNC/CMCs within the position, and the LHD. The interplay between these groups would allow the aspiring CNC/CMC to 'step up' into the role and trial the position in a supported way, whilst the LHD supports the CNC/CMC to 'step away' from their position. A range of barriers have been identified for mentoring others into the role. These will be discussed below.

Table 6: Mentoring activity

The number of CNC/CMCs mentoring someone into the CNC / CMC role at this time (*n* = 61)		**Mentoring before and after starting as a CNC/CMC**	
Yes mentoring	19.67%	Mentored prior to starting their role	34%
No not mentoring	80.33%	Mentored after starting their role	57%

Table 7: Key themes emerging from the focus groups

Focus	Key themes
Demographics	Opportunity for strategic planning Passion before age
Education preparation	Intrinsic drivers • Motivation • Passion • Progression Extrinsic drivers • Opportunities and scholarship • Organisation expectations
Education priorities	Individual Current CNC/CMC • Service planning and management • Research Aspiring CNC/CMC • Clinical • Leadership
Mentoring and succession/career planning	Stepping up Stepping away Allowing stepping up and stepping away to occur

STEPPING UP

The participants identified that aspiring CNC/CMCs need: to be passionate about their specialty; be clinically experienced; be valued by others; have a commitment to lifelong learning; be educated to a specific level; and have patience.

The survey indicated that more than 40% of roles may not be vacant for ten years or longer; however, many participants described how some new roles just transpired and they were then under prepared for the transition into the role. An aspiring CNC/CMC needs to be proactive in expressing their desire for the role so that, when the role becomes available, they are already potentially being considered for it. As one participant stated,

> 'I think you'll find that nearly every CNC if you ask them, will probably say they've had a tap on the shoulder to say that they would be a good candidate for it (the role) to throw their hat in the ring.'
>
> (FGA)

To prepare and support aspiring CNC/CMCs, mentors need to be sought who can assist them in identifying their strengths and explore how best to invest their time.

Some participants identified a number of educational initiatives they already provide to aspiring CNC/CMCs, such as supporting their access to formal education programs, providing learning packages, and encouraging them to apply for conference funding. There were

also experiential learning opportunities for the aspiring CNC/CMC. These included: opportunities to work with current CNC/CMCs on collaborative projects; taking aspiring staff to meetings; and encouraging networking opportunities, both internal and external to the LHD. This relationship allowed the aspiring CNC/CMC to be exposed to the larger health arena as one clinical nurse consultant explained:

> 'they [the aspiring CNC/CMCs] need support for challenging situations rather than fend for self. How do you voice for your service? What do these behaviours look like? Role model... I learned from another CNC you have to be involved in your bigger LHD.... You need to get involved with a professional group.'
>
> (FGA)

STEPPING AWAY

Many CNC/CMCs were not ready to step away from their role as they perceived many benefits to it, such as,

> 'maintaining clinical contact with people and patients'
>
> (FGB)

and less shift work. However, being able to step away from the role for either short-term or permanent leave required the CNC/CMC to be organised, and to ensure adequate internal and external support for their replacement. Some were unsure of where to start with succession planning, but there was an awareness of needing to be proactive, no matter what stage you were at in your CNC/CMC role.

A number of barriers to stepping away affected succession planning and mentoring:

1. For some CNC/CMCs there was a dependence on the Clinical Nurse Specialist (CNS) to '*backfill*' their leave. However, not all CNC/CMCs had a 'pool' of staff to draw from for leave relief. Many of the focus group-participants discussed their own progression from CNS to CNC/CMC, and how relieving in the role provided a good opportunity to gain experience.
2. At times it was found to be too difficult to get staff released from the wards.
3. There were many new CNC/CMCs (as shown in Table 1) and some were struggling with their own role, as they felt that they had not had the support they required to adjust to its demands. It was difficult to mentor others into their role when the CNC/CMCs were grasping it for themselves.

ALLOWING STEPPING UP AND STEPPING AWAY TO OCCUR

The focus-group participants offered a range of strategies to support career and succession planning However, there was a sense that it is all in the

> 'too hard basket'
>
> (FGA)

causing frustration amongst some of the participants. This frustration was directed towards the aspiring CNC/CMCs not being supported to step up to the participant's roles during times of CNC/CMC leave. To facilitate stepping up, the participants suggested the following:

1. A proactive, consistent approach across all specialties, with an equitable opportunity for a leave provision plan that did not rely solely on the CNC/CMC themselves finding a replacement.
2. Allowing aspiring CNC/CMCs to have an 'adjustment' period in order for them to fully understand the intricacies of the role.
3. Providing all CNC/CMCs with further education on the role and responsibilities of a mentor, in order for them to understand this concept fully.
4. Consideration of a CNC/CMC development program, similar to the Nursing Unit Managers' program within this LHD.
5. The need for the LHD to allow for more flexible working practices, as part-time employment would allow for ongoing support of new CNC/CMCs by clinical experts already in the role.

> 'I was at a CNC meeting…and they were talking about succession planning, they were all talking about who would take their places while they are on leave and I said to them, "Excuse me, I'm in this room and you're not even mentioning my name and you're not giving anybody an opportunity to go for these jobs."'
>
> (FGB)

There was a dissonance between the LHD and the CNC/CMCs in regards to the education requirements for those covering leave provisions. Often, specialty education is a pre-requisite for applying for a secondment CNC/CMC role, which significantly reduces the number of potential applicants. The CNC/CMCs themselves would prefer someone in their role with clinical expertise, rather than educational qualifications. For some, stepping into the CNC/CMC role for leave provision sent them on an education pathway to ensure that they secured the position when it became available in the future.

DISCUSSION

The aim of this research was to generate evidence to support a local career and succession planning strategy for current and future

CNC/CMCs. To meet this aim, current CNC/CMCs were invited to share: their demographics, their education pathways, their education needs; their perceptions of the education needs of aspiring CNC/CMCs; and their mentoring experience. The findings of this research can support future thinking for managers, current staff and aspiring CNC/CMCs, as succession and career planning was deemed to be everybody's business. Recommendations have been integrated into this discussion.

These findings confirmed that CNC/CMC Network members' concerns about their own ageing workforce were warranted. Nearly 50% of the cohort were 50 years old or older; this is consistent with others' findings (Chiarelli, Hardford & Lau 2007; Wilkes, Luck & O'Baugh 2015). The knowledge that a high percentage (24%) of CNC/CMCs intend leaving within five years, with a further expected loss within ten years, provides evidence that a CNC/CMC succession planning strategy is required now. The release of a local nursing and midwifery workforce plan confirms that this district has 'leadership' succession planning on its agenda and is making a systematic effort to ensure leadership continuity. As important clinical leaders, the CNC/CMCs need to ensure that they are seen as part of the succession planning strategy as it is currently aimed at managers. Otherwise, the LHD will risk losing the knowledge and skills of highly experienced clinical leaders without prior transference of these skills and knowledge to others. For those aspiring to the role of a particular CNC/CMC specialty, it would be worth investigating the intention of the current role holder, as 50% of CNC/CMC positions will not be available for ten years or longer and this may influence career choice and educational preparation for future roles.

This study provides additional areas for nursing and midwifery leaders to consider within a succession planning strategy: flexible work practices; ongoing supports; and experiential learning opportunities. Within this LHD almost 35% of the nursing workforce works part time, in comparison to 25% of CNC/CMCs (Illawarra Shoalhaven Local Health District, Nursing and Midwifery 2016). Within the focus groups, many participants indicated that they would be prepared to work part time to allow for succession planning to occur. These flexible work practices have the potential to provide a supportive environment for a CNC/CMC's transition period. Supportive environments have been recognised as a key requirement for the nurse to function in newly developed advanced roles (Hourahane et al. 2012). This study also identified that some CNC/CMCs felt a lack of support in their role. In their systematic review of Australian advanced nursing practice roles within acute settings, Ramis, Pearson & Wu (2013) found a lack of professional support and professional isolation and recommended supports to avoid the risk of burnout due to the demands of the advance practice nursing roles. Therefore, ongoing support of new and established CNC/CMCs must be an integral part of succession planning or career planning, rather than something that ceases on their entering the role.

A successful succession plan requires resources (Carriere et al. 2009). The CNC/CMCs expressed the importance of 'backfilling' their roles and allowing others time in the position to support experiential learning.

Leave provision does not occur consistently across divisions and departments and requires planning at a strategic level. The issue of backfill for these roles is not unique to this LHD (Bloomer & Cross 2011), or to CNCs – Nurse Practitioners share the same issues (Raftery 2013). A partnership between the nursing and midwifery executive and the CNC/CMC Network could negotiate time for aspiring CNC/CMCs to learn the role in different ways, being mindful of today's economic climate. Backfilling roles requires mentoring beforehand.

Mentoring is a form of positive support where an experienced and a less experienced professional work together to help the mentee to reach their full potential and to develop their career. In their integrated literature review, Carriere and colleagues (2009) found mentoring to be an important factor in successful succession planning. A proactive approach to identifying potential candidates is recommended to provide a resource when a gap occurs. At this time, only 20% of CNC/CMCs are formally mentoring someone into their role; this does not match the number of staff intending to leave their position. This research provides evidence to review and revive a current LHD mentoring program. However, it is important to acknowledge that the question was in relation to formal mentoring and it has been shown that mentoring can occur informally by nurses, 'simply doing their job during the normal course of the day' (Thomka 2007, p. 23). Thomka interviewed nurses who described relationships of an informal nature, formed over time due to the proximity of working together, resulting in knowledge sharing. This is achieved through teaching, role modelling and leading patient care. Mentorship is not just for those aspiring to or new to the role, it has also been proposed that advanced practice nurses consider longer term mentorship with a range of multiple mentors, as their needs change over time (Doerksen 2010; Franks & Howarth 2012). Finding ongoing mentors for CNC/CMCs would serve three functions: to provide ongoing support (Ramis, Pearson & Wu 2013); to help them with domains such as service planning and management (an area that the study found was not covered by many educational courses); and to role model how mentoring should occur so the CNC/CMCs can then emulate the process with aspiring CNC/CMCs.

Identifying common education paths taken by the CNC/CMCs prior to the role, and exploring how they perceive this education has supported them to meet the domains of CNC/CMC practice, has the potential to support aspiring CNC/CMCs in decision-making and career planning for their future. The current literature only reports the highest qualifications that CNC/CMCs have achieved, with no reports on the relationship of these courses to the CNC/CMC practice domains (Baldwin et al. 2013; Chiarella, Hardford & Lau 2007; Wilkes, Luck & O'Baugh 2015). This study found only 11% of post-graduate certificates were perceived to provide knowledge across all five domains, in comparison to 37% percent of all Master's level qualifications. Despite the small sample size, this is an important finding and warrants further exploration in a larger study. The minimum current recommendation for incoming CNC/CMCs' education preparation is a post-graduate qualification in their specialty. A larger study would determine the minimum level of qualification to support the CNC/CMC to have the

knowledge to fully function in the role. However, the contribution the Master's course provides to fully function in the role was also verified in the focus groups.

This study found that a myriad of different courses and education pathways were undertaken prior to the CNC/CMC role, which may partly be due to the fact that the courses were not in preparation for the role. This study also found that different job descriptions, work contexts, and the individual nurse/midwives' previous experiences, knowledge and education also impact current and future education. The organisation's needs are known to affect how the advance nursing roles are enacted (Jokiniemi et al. 2012), but these organisation needs also play a role in the education undertaken by the CNC/CMCs. Using the five domains of practice in career planning or performance appraisal would support the ongoing development of aspiring and current CNC/CMCs and may provide some form of uniformity in the enactment of the role in line with the industrial award. Incorporating the principles of adult learning would allow the CNC/CMC to take the lead in their education needs, with a commitment to gain knowledge in all five domains.

This study found that 65% of CNC/CMCs who obtained their Master's qualification did so before being in the role. This indicates that, despite the minimum entry level being a graduate qualification, aspiring CNC/CMCs are preparing themselves to a higher Master's level and, according to the CNC/CMCs interviewed, they are thus better prepared to work across the role domains. A Master's level is recommended in the UK for Nurse Consultants (a similar role to that of CNC) (East et al. 2015). Other UK studies have found that a Master's level qualification and previous engagement with research (along with the nurses' attributes and nursing experience) support Nurse Consultants with the requirements of the role (Burton, Bennett & Gibbon 2009; Woodward, Webb & Prowse 2005). It has also been proposed that higher degrees in the clinical specialty may not necessarily be required; preparation in research or leadership may be more beneficial, as the nurse is already an established clinician before obtaining the role (Franks & Howarth 2012). Considering the cost of post-graduate courses, it is important for aspiring CNC/CMCs to review the education courses they are considering and how they align to the five CNC/CMC practice domains. It may also be relevant to those who are employing or mentoring future CNC/CMCs to consider the CNC/CMC's strengths in the domains and areas where development can be focussed. Each workplace also provides rich sources of learning – formally and informally – that should not be discounted in favour of purely academic courses.

The current CNC/CMCs, many of whom did not proactively chose their education with a view to the CNC/CMC role, encourage aspiring CNC/CMCs to concentrate their future development upon two clear domains: clinical consultancy and leadership. This is not surprising as many CNC/CMCs function in the clinical service and consultancy domain at the expense of the other domains (Roche et al. 2013). Walsh and colleagues (2015), in their qualitative study looking at how CNC roles were viewed in this LHD, found the clinical and leadership domains to be interlinked, as being professionally credible allows the CNC/CMC to achieve leadership and work with others. Although

CNC/CMCs function at the clinical interface, for the role to be successful they must influence both at the clinical and at the organisational level, which requires leadership development (Hourahane et al. 2012).

Career planning also applies to the nurse/midwife in the role and their ongoing learning needs. There was a reduction in formal education courses taken after being employed in the role, but learning continues through different modes: attending conferences; reading journals; participating in research and quality improvement activities; and receiving mentorship. A UK study reported that non-medical consultants found conferences provided them with more currency than academic courses did (Burton, Bennet & Gibbon 2009). This study found most courses provided no knowledge of the service planning and management domain, which explains the expressed education need of the current CNC/CMCs. This research did not identify a solution to this problem, but it is one that needs to be considered at a local level as part of the career and succession planning strategy as it is not being provided by the academic organisations. This is a domain where executive leaders with service planning and management skills could support clinical leaders to increase their knowledge.

'Research' was the second highest education priority of the current CNC/CMCs. The vision of the Chief Executive Officer had a 'flow through' effect, with many managers asking for research outputs from the CNC/CMCs, indicating the contextual and LHD influence on the enactment of the CNC/CMC practice domains (Jokiniemi et al. 2012; Wilkes et al. 2015). Research has been reported as being difficult for advanced practice nurses, despite it being a key expectation of the role. There are a range of reasons behind this: the time for conducting research is often lacking (Bloomer & Cross 2011), whilst some CNC/CMCs perceive that it should not be a frequent part of their role (Wilkes, Luck & O'Baugh 2015), and others see it as an extra task (Cashin et al. 2015). However, a more recently published study of Australian advanced practice nurses (including the CNC/CMC), found that these roles scored significantly higher at the advanced practice levels in the areas of research and professional leadership than did specialist and registered nurses (Gardner et al. 2017). In this LHD, the CEO has provided ongoing support to nurses and midwives through the appointment of a Professor of Nursing and Midwifery Research. This position provides an internal research resource for all nurses and midwives and, in other LHDs, working with academic staff has proven to have a positive effect (Gallagher et al. 2013). Again, a research mentor could support aspiring CNC/CMCS.

LIMITATIONS OF THIS STUDY

These results may not be generalisable to the metropolitan hospitals or other LHDs as this is a regional and rural District Health Service. The number of Master's degrees taken was too small to make vast inferences about their ability to support knowledge across all domains. However, further study in this area may be warranted. In particular, are the current education criteria for a CNC/CMC within the NSW Health Service adequate to support the nurses/midwives to perform their roles across the five domains?

Given the opportunity to redo this research, the researchers would more thoroughly investigate the role that mentoring plays in developing aspiring CNC/CMCs and whether the current CNC/CMCs were seeking mentoring themselves towards individual CNC/CMC domains.

CONCLUSION

The intellectual capital and practice wisdom of many CNC/CMCs will be lost over the next decade if a succession and career planning strategy is not put in place within this LHD. A number of areas were identified for nursing and midwifery leaders to explore within their succession and career planning strategy, such as flexible work practices, support mechanisms (including mentoring for aspiring and current CNC/CMCs), and providing experiential learning opportunities.

Despite being a local project with a relatively small sample size, some findings may be of interest to other LHDs and areas and warrant further research. The CNC/CMC role spans five practice domains and, from our findings, few courses provide knowledge across them all. This raises the questions: how can a CNC/CMC prepare for the breadth of the role; and what can an organisation do to support them in their role? Master's courses performed better than graduate certificates, but the numbers of courses were too small to make large inferences. Few courses provide support in the service planning and management domain, which was seen as the priority area of education need for many CNC/CMCs. Aspiring CNC/CMCs are advised to develop their consultancy skills and clinical knowledge and their leadership skills and should also explore education courses to ensure a return on their financial investment.

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Conflict of Interest

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APPENDIX

EXAMPLE OF SURVEY QUESTIONS

Mentor definition: A senior professional (mentor) invests and shares their time, effort, knowledge and expertise with a less experienced professional (mentee) to nurture their knowledge, skills and professionals

1. DEMOGRAPHICS

- What clinical division do you belong to?
- How many years have you worked as a nurse?
- How did you obtain your initial registration as a nurse?
- How many years have you been in the CNC/CMC role?
- How many years did you work in the speciality before gaining your CNC/CMC role?
- What is your employment status?
- How many years do you see yourself continuing in the role?
- Are you working full or part time?
- How many hours do you work if P/T?
- What is your current age?

2. EDUCATION

- What is the highest level of education you have achieved following registration as a nurse?
- Did you take any course PRIOR to becoming a CNC/CMC?
- What course did you take? Name course, level of course, duration, was it taken towards a CNC/CMC role? Please identify if you felt these studies prepared you for any of the CNC/CMC domains? (repeated x 13)
- Did you take any course AFTER becoming a CNC/CMC?
- What course did you take? Name course, level of course, duration, was it taken towards a CNC/CMC role? Please identify if you felt these studies prepared you for any of the CNC/CMC domains? (repeated x 13)
- As a CNC/CMC rank the domains in order of priority that you think requires more education in order for you to meet the needs of your role?

3. SUCCESSION AND CAREER PLANNING

- Prior to becoming a CNC/CMC did you have a formal or informal mentor to support your career development?
- After becoming a CNC/CMC did you have formal mentoring to support your CNC/CMC role development?

- If you were to mentor an aspiring CNC/CMC rank in order of priority which domains you think they should focus their development on?
- Are you currently mentoring anyone to the CNC/CMC role?

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Training primary care providers in opioid deprescribing and chronic pain management based on local guidance: a pre–post study of attitude change

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Abstract

Background. *Local chronic non-cancer pain guidance recommends that general practitioners should consider opioid deprescribing and referral to multidisciplinary healthcare providers for behaviourally based treatments. We designed a training package called AIMM (Assess, Inform, Manage and Monitor) to reinforce this stewardship.*

Aim. *To identify whether participation in AIMM training effectively aligned clinicians' attitudes with local guidance for treating chronic non-cancer pain.*

Design and setting. *In 2014–15, the AIMM training was tested using a pre–post-test non-randomised design at two sites in NSW, Australia. The primary outcome measure was an 11-item, study-specific, pain attitude questionnaire (PAQ).*

Method. *Step one of AIMM training involved online completion of the PAQ and review of a specialist pain website. Step two involved attendance at two face-to-face, two-hour interactive workshops led by pain experts who addressed opioid deprescribing and switching to broader care. A repeat PAQ survey was completed at the conclusion of the second workshop.*

Results. *Nineteen participants attended the workshops, including general practitioners (n = 7), nurses (n = 5), exercise physiologists (n = 2), a dietitian (n = 1), community pharmacists (n = 2) and psychologists (n = 2). Significant shifts in six attitudes occurred, including prescribing less pain medication, greater emphasis on social reconnection, increasing planned activity and adopting anti-inflammatory nutrition ($p < .05$). Responses to the item regarding expectations of a positive recovery was not aligned with local guidance and no significant attitudinal change was found. Four other attitudes were aligned with local guidance at baseline and did not change during the study.*

Conclusions. *Online information and face-to-face training can achieve a change in healthcare provider attitudes towards non-pharmacological treatment of chronic non-cancer pain. Further work is needed to assess whether attitudinal changes are maintained and translate into behavioural change.*

Key words: attitudes, chronic pain, deprescribing, medical education, opioids, primary healthcare

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INTRODUCTION

Non-cancer pain is currently considered 'chronic' when it has persisted for more than three months and is associated with significant emotional distress and functional disability (Meskey & Bogduk 1994). Recent proposals suggest using the term 'chronic primary pain' when the pain is not better accounted for by another condition (Nicholas et al. 2019). Classification aside, globally, people who experience chronic pain are most frequently managed in primary care (Becker et al. 2018). Australian data from 2013 suggest that of the 20 per cent of patients presenting to primary care with chronic pain, 56 per cent are managed by medication alone with many people being treated with prescription opioid analgesia (POA) (Harrison et al. 2012; Henderson et al. 2013).

In the past, the practice of treating people experiencing chronic non-cancer pain (CNCP) with long-term POAs was considered a viable option in well-selected cases. Careful selection excluded people with a history of substance abuse or addiction (Nielsen et al. 2015; Noble et al. 2010). The view that long-term POAs are clinically viable has been challenged by a recent pragmatic randomised clinical trial that examined the comparative effectiveness of prescription analgesics versus non-opioid medications for people experiencing chronic back, hip or knee pain (Krebs et al. 2018). There was no difference between groups in pain interference, while pain intensity and adverse effects were significantly worse in the opioid group compared to the non-opioid group (Krebs et al. 2018). Another recent pivotal study found that after discontinuation of long-term POAs, pain intensity either did not change or improved slightly (McPherson et al. 2018).

Many studies have noted the substantial harms and poor functional outcomes related to taking opioids over the long term (Ballantyne 2017; Blanch, Pearson & Haber 2014; Chou et al. 2015; Jamison et al. 2017; Rivat & Ballantyne 2016). Further, for those people who reported a benefit in reducing pain intensity, almost half stated they would like to reduce the dose or cease their POAs completely due to adverse effects (Howe et al. 2012). This accumulation of evidence highlights the need

to consider dose reduction or cessation of POAs as a health priority for people with CNCP (Hunter Integrated Pain Service [HIPS] 2014; Von Korff & Franklin 2016; Wyse et al. 2018).

However, there is a lack of information outlining effective strategies for deprescribing opioids. A recent Cochrane systematic review determined that there was insufficient evidence to draw conclusions on the effectiveness of any regimes for opioid withdrawal for people experiencing CNCP (Eccleston et al. 2017). Nonetheless, recent non-randomised clinical trials suggest that a positive outcome may result from offering a broad approach to care, including a combination of support during an opioid taper, psychological elements to target anxiety and functional components (Frank et al. 2017; Gilliam et al. 2018; Huffman et al. 2017; McPherson et al. 2018). The most commonly studied method of applying broader behaviourally based care is via 'interdisciplinary' (or fully integrated) approaches in which disciplines work together in the same location (Gatchel et al. 2014; Gilliam et al. 2018; Sullivan et al. 2017). In an Australian context, this level of service delivery is accessed by referral to tertiary pain clinics but, historically, waiting times for access to these facilities have been prolonged (Hogg et al. 2012).

Therefore, the challenge remains to organise and deliver integrated interventions in primary care through which most ongoing management of complex and chronic conditions occurs. To deliver integrated interventions in primary care, it is necessary to enhance the capacity of general practitioners (GPs) and affiliated teams of multidisciplinary healthcare providers (MHCPs) to deliver regimes similar to specialist units (Foster & Mitchell 2013; Hegney et al. 2013; Seal et al. 2017). To address this gap, we developed a Medicare-funded primary care pilot intervention called Assess, Inform, Manage and Monitor (AIMM). Under Australian Medicare rebates, people with chronic pain can access rebates for a range of allied health services using a GP-written plan called a GP Management Plan. AIMM was based on a theoretical behaviour change framework called COM-B (McKillop et al. 2011; Michie et al. 2011). The COM-B model explains patients' behaviour change from three fundamental aspects: capability, opportunity and motivation. AIMM uses GPs to work closely with a team of MHCPs (i.e., practice nurses, psychologists, dietitians, physiotherapists, exercise physiologists or other geographically available health professionals, such as occupational therapists or social workers) to provide whole-person assessment, consistent information, non-pharmacological management and monitoring. Further, AIMM supports people to enhance their self-management capability while undertaking an individualised opioid tapering regime.

To test AIMM, a real-world pain training package was designed with a particular emphasis on training GPs in deprescribing opioids and influencing MHCPs' attitudes that improved function was possible. Such training prior to pilot interventions has been successfully implemented elsewhere (Chelimsky et al. 2013; Slater et al. 2012; Sowden et al. 2012). The AIMM training package was developed with the input of an expert panel of clinicians, including GPs, a practice nurse, clinical psychologist, community pharmacist, pain-trained physiotherapist, exercise physiologist, dietitian and a specialist pain

medicine physician. AIMM was based on evidence regarding optimising non-pharmacological treatment of CNCP outlined in local health district pain management guidance (HIPS 2014).

The aim of this study was to test the effect of the AIMM training package on GPs and primary care-based MHCPs by assessing whether it resulted in attitudes more closely aligning with local guidance for deprescribing and managing people experiencing CNCP. We hypothesised that the AIMM training would significantly improve the alignment of MCHPs' attitudes to the broader whole-person recommendations provided in the training.

METHODS

ETHICAL CONSIDERATIONS

This study received ethics approval from the Hunter New England Health and University of Newcastle Human Research Ethics Committees (HNEHREC Reference No. 15/10/21/5.01; NSW HREC Reference No. LNR/15/HNE/371; SSA Reference No. LNRSSA/15/HNE/372).

SETTING AND PARTICIPANTS

Two participating AIMM pilot general practices, located in low socio-economic areas in regional NSW, Australia, provided an onsite training space. Each practice estimated they had more than 50 patients experiencing CNCP who were using POAs for more than 90 days and were willing to engage with the AIMM opioid deprescribing intervention.

Nineteen health provider participants agreed and consented to participate in the AIMM pilot. Participants included GPs (n = 7), nurses (n = 5) and MHCPs, including exercise physiologists (n = 2), a dietitian (n = 1), community pharmacists (n = 2) and psychologists (n = 2).

DATA COLLECTION

One week prior to their first face-to-face workshop, participants were invited by email to access an online pain attitude questionnaire (PAQ) (see Figure 1) to obtain their baseline attitudes. At the conclusion of the web-based questionnaire, participants were redirected to the HIPS website (HIPS 2013) on which they were asked to spend 30 minutes familiarising themselves with the available resources. At the conclusion of the second face-to-face workshop, participants completed a paper-based post-test PAQ.

Figure 1: Pain attitude questionnaire

	Questions	Where 1 = Completely disagree and 5 = Completely agree				
1	Opioid therapy should be reserved for people experiencing acute pain, cancer pain, for palliative care and for those with opioid dependency or addiction	1	2	3	4	5
2	Only after pain is significantly reduced can people address their other life issues	1	2	3	4	5
3	In managing people who are experiencing chronic pain it is important to understand the social and psychological factors surrounding the onset and persistence of pain	1	2	3	4	5
4	People experiencing pain need relief before other health providers can be of any assistance	1	2	3	4	5
5	Focusing on medication to reduce pain has limited benefit on people's quality of life and function over the long term	1	2	3	4	5
6	Once someone has experienced pain for three months it is likely to be an enduring problem	1	2	3	4	5
7	Assessing people who are experiencing chronic pain for depression or anxiety is always important	1	2	3	4	5
8	Helping people with social reconnection may help with pain management	1	2	3	4	5
9	Planned regular physical activity does not help reduce the pain experience for most people	1	2	3	4	5
10	Addressing sleep problems helps people cope better with their pain experience	1	2	3	4	5
11	Helping people adopt a healthy lifestyle to reduce widespread inflammation may help with pain management	1	2	3	4	5
	(Scoring 2,4,6,9 are reverse scored)					

INTERVENTION

Pre-workshop online training involved clinicians accessing the HIPS website (HIPS 2013) to view various clinical resources. First, clinicians were directed to view the clinical sections of the website, including a local pain stewardship document titled 'Reconsidering Opioid Therapy' (HIPS 2014). This document is based on current international evidence and professional consensus regarding opioid deprescribing for people experiencing CNCP. Clinicians were also directed to view two brief YouTube videos developed by the HIPS that were created to emphasise the key messages in pain treatment (HIPS et al. 2014a, 2014b).

A week after the pre-workshop link was emailed, clinicians met face-to-face at the first of two non-reimbursed workshop sessions. The two workshops were scheduled a week apart and titled 'AIMM to Change the Practice of Pain Medicine in Primary Care'. Each two-hour session used well-accepted training strategies, such as an interactive format, and delivered the content by clinician-trainers who were recognised as competent community opinion leaders (Hecht, Buhse & Meyer 2016). The first session highlighted current evidence relating to CNCP and the importance of behaviour change. A key message was for GPs to initiate a conversation on gradual opioid deprescribing and promote to their

patients the potential benefits of switching to effective self-management strategies, guided by a local team of MHCPs. An interactive discussion was facilitated regarding specific roles for each MHCP to achieve a range of behavioural targets, including increased physical activity levels and increased supportive connections. The second session focused on consolidating pain management skills using role plays such as working with a person who is convinced they require a higher medication dose, as they perceive the opioids are no longer working (Alford 2013; Ballantyne et al. 2012). The clinicians observed the therapeutic communication style used by the trainers and discussed and analysed role plays as time permitted (Jensen et al. 2010; Swinglehurst et al. 2012).

Hard copy AIMM intervention training manuals were provided at the workshops, including role play scripts. Copies of the website resources were also provided on a USB stick at the first face-to-face workshop (Giguère et al. 2012). The manuals provided were not intended as a rigid set of treatment directives, but rather a more flexible guide to the application of the components necessary to enable behaviour change (Michie 2005). The entire training package was accredited continuing education for GPs and nurses. The face-to-face workshops for each of the practices were led by expert pain clinicians (CH & HR) and took place between November 2014 and May 2015.

OUTCOME MEASURES

The primary outcome measure was change in score on the PAQ (see Table 1).

Table 1: AIMM workshop attitudes at baseline and post-test, expressed as mean (standard deviation), n = 19

Variable	Baseline Mean (SD)	Post-workshop Mean (SD)	*z* score and *p* value*
Opioid therapy should be reserved for people experiencing acute pain, cancer pain, for palliative care and for those with opioid dependency or addiction	3.84 (0.83)	4.05 (1.17)	$z = –0.939$, $p = .3476$
Only after pain is significantly reduced can people address their other life issues	3.79 (1.18)	1.78 (.97)	$z = 3.321$, $p = .0009$**
In managing people who are experiencing chronic pain it is important to understand the social and psychological factors surrounding the onset and persistence of pain	4.84 (0.37)	4.89 (0.31)	$z = –0.577$, $p = .5637$
People experiencing pain need relief before other health providers can be of any assistance	3.73 (1.28)	1.68 (0.94)	$z = –3.317$, $p = .0009$**

Focusing on medication to reduce pain has limited benefit on people's quality of life and function over the long term	4.36 (0.68)	4.84 (0.37)	z = –2.714, p = .0067**
Once someone has experienced pain for three months it is likely to be an enduring problem	2.89 (0.93)	3.21 (1.35)	z = 0.804, p = .4213
Assessing people who are experiencing chronic pain for depression or anxiety is always important	4.68 (0.47)	4.78 (0.41)	z = –0.816, p = .4142
Helping people with social reconnection may help with pain management	4.47 (.61)	4.89 (.31)	z = –2.638, p = .0083**
Planned regular physical activity does not help reduce the pain experience for most people	4.05 (1.07)	1.36 (0.49)	z = –3.801, p = .0001**
Addressing sleep problems helps people cope better with their pain experience	4.42 (0.69)	4.73 (0.56)	z = 1.704, p = .0885
Helping people adopt a healthy lifestyle to reduce widespread inflammation may help with pain management	4.21 (.97)	4.73 (0.45)	z = –2.153, p = .0313**

Notes: Levels 1–5 (1 = completely disagree to 5 = completely agree)
* p values for differences between pre- and post-workshop scores using Wilcoxon signed ranks test
** Significant

Pain Attitude Questionnaire

An 11-item, English language, study-specific PAQ (see Figure 1) was developed by the research team using the relevant literature to examine attitudes towards the treatment of people experiencing CNCP in a manner that was applicable to GPs and a range of MHCPs. All items were tested for face validity with clinicians and behavioural researchers and refined accordingly. The PAQ addressed a range of concepts covered in evidence-informed, local opioid stewardship documents (HIPS 2014). Items measured biomedical orientation (e.g., 'People experiencing pain need relief from medications before other health providers can be of any assistance') and broader whole-person orientation (e.g., 'Addressing sleep problems helps people cope better with the pain experience') to managing chronic pain. For each item, participants gave their responses on a 5-point Likert scale (i.e., 1 = completely agree to 5 = completely disagree). Questions were presented in the survey using a balance of positive (pro-evidence) and negative (anti-evidence) framing. The negative questions (i.e., 2, 4, 6 and 9) were re-coded to be unidirectional at analysis.

STATISTICAL ANALYSIS

The quantitative data from the PAQ were analysed using Stata/IC 13.1. Descriptive statistics and subsequent analysis using the Wilcoxon rank sum test were used to test the null hypothesis of no mean difference

of responses on each of the PAQ items over the two time periods. The level of significance was set at $p < .05$ for all tests.

RESULTS

Of the 19 invited participants, all attended both workshops and completed both PAQs. As shown in Table 1, participants' attitudes demonstrated statistically significant shifts towards local pain stewardship in the following six items: 'Only after pain is significantly reduced can people address their other life issues', 'People experiencing pain need relief before other health providers can be of any assistance', 'Focusing on medication to reduce pain has limited benefit on people's quality of life and function over the long term', 'Helping people with social reconnection may help with pain management', 'Planned regular physical activity does not help reduce the pain experience for most people' and 'Helping people adopt a healthy lifestyle to reduce widespread inflammation may help with pain management'.

The attitude 'Once someone has experienced pain for three months it is likely to be an enduring problem' was not aligned with local guidance at baseline and failed to demonstrate a statistically shift in attitude. The four remaining attitudes, already aligned with guidance, did not achieve statistically significant attitude shifts.

DISCUSSION

The primary aim of this study was to test whether a training package for GPs and MHCPs in primary care settings aligned perceptions regarding the nature and treatment of people experiencing CNCP with treatment approaches outlined in available local pain stewardship documents (HIPS 2014). While pain is a complex experience, the results of this study suggest that brief, targeted training is useful in influencing clinicians' attitudes towards evidence-informed treatment for CNCP.

The shift away from a focus on medications to reduce pain suggests that clinicians' attitudes can successfully align with the knowledge that long-term opioids likely hinder functional improvement for most patients. Traditionally, intervention effectiveness has been assessed by a reduction in pain scores, but this move towards patient-centred aspects is important if the delivery of behaviourally based care is to proceed, particularly when the restoration of role function is the goal (Loeser & Cahana 2013; Parchman et al. 2017).

A ceiling effect most likely explains why some attitudes failed to change (i.e., 'In managing people who are experiencing chronic pain it is important to understand the social and psychological factors surrounding the onset and persistence of pain' and 'Assessing people who are experiencing chronic pain for depression or anxiety is always important').

The attitude 'Once someone has experienced pain for three months it is likely to be an enduring problem' failed to shift in the workshop despite the workshop content emphasising that improvements in

physical and emotional functioning are possible when patients adhere to active treatments, including opioid tapering (Butow & Sharpe 2013). It is possible that this was a deeply engrained attitude or that the participants felt that generic messages about expected recovery may constitute false reassurance (Hasenbring & Pincus 2015). It is also possible that this item may have been challenging for participants, given the imprecise wording might evoke a wide variety of patient circumstances beyond the intended patient group.

The results of this simple pre-test-post-test study with a small sample need to be interpreted with caution. While it appears that the training program was effective in partly changing clinicians' attitudes, it does not provide robust evidence that actual behaviour will change or that any attitudinal change will be enduring. In Australian settings, other researchers have shown that training provided to early-career GPs regarding deprescribing behaviour has done little to change deprescribing decisions (Holliday et al. 2017). Overseas researchers have found similar positive attitudes reported at guideline training workshops with little actual use reported in actual practice (Chang et al. 2016). This contrasts with experiences in the United States of America (US), where the rise of prescription opioids and related harms may have been exacerbated by an insurance system that severely limits the accessibility of interdisciplinary care programs and more expensive non-opioid analgesic medications (Webster 2016). The epidemic proportion of opioid use in the US has necessitated many risk mitigation strategies (Webster 2016). One US initiative has shown that a multifaceted training intervention can be effective in assisting primary care providers to help patients achieve opioid dose reduction, at least when patients are on higher morphine equivalent doses (Von Korff 2011, 2012).

LIMITATIONS

We used a non-validated outcome measure, the PAQ, in our study. There are few tools available to measure MHCPs' attitudes and beliefs about CNCP (Bishop, Thomas & Foster 2007). One potential option, a validated pain, attitudes and beliefs scale (Ostelo et al. 2003), was not used, as it specifically examines attitudes regarding low back pain. We may also have encountered a ceiling effect with some of the questions in the PAQ. Further, our instructions did not explicitly state that the PAQ related to people experiencing CNCP for whom functional recovery was the therapeutic goal. Along with imprecision around PAQ item wording, this may have influenced MHCPs' responses.

CONCLUSION

Online information and face-to-face training emphasising key messages about the nature of CNCP was partially successful in achieving its aim of attitudinal alignment with local guidance for treating CNCP, including deprescribing. Further refinement of the program may identify strategies for changing the remaining attitudes. Future research needs to determine whether attitudinal changes were maintained or whether they were related to changes in clinician

behaviour, particularly prescriber behaviour, which is an area for future research (Johnson & May 2015; Wightman & Nelson 2016). Further work would be required prior to obtaining broader professional endorsement and dissemination of the resources.

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Conflict of Interest

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no direct or indirect financial support for this work that could have influenced its outcome.

Competing Interests

None declared.

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Wellness in allied health students: the case for change

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Abstract

Introduction: *The case for change. There are increasing mental health issues among young people, including higher education students. millennial students face unique challenges relating to attention, critical thinking and managing stress. Specifically, allied health students engage in multiple placements in which they need to interact with real people in real time while being evaluated in assessment and treatment strategies. Some universities have been using wellness programs and mindfulness strategies to support student mental health across campuses for some time. However, as allied health students face unique challenges, there is a need for a particular focus on wellness at an individual allied health course level. The curriculum in allied health courses is determined by accreditation bodies and is comprehensive with little scope for additional information. It is possible for short activities to be embedded in tutorials and the authors argue a focus on wellness is vital for the future allied health workforce.*

Methodology for pilot project*. This project used questionnaires to investigate student perceptions of a short program of activities to promote wellness and mindfulness in third-year speech pathology students who were also engaging in clinical placements.*

Results and discussion. *Students were positive about the activities, developed their own wellness plan and learned new strategies to manage their mental health at university and in their future careers.*

Future directions. *This short program could easily be adapted to other allied health courses.*

Keywords: allied health, wellness, mental health, mindfulness, students

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INTRODUCTION

According to the World Health Organization, mental health is 'a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community' (World Health Organization 2014, para 1). One in five (20%) Australians aged 16–85 experience a mental illness in any year, resulting in almost half (45%) of Australians experiencing a mental illness in their lifetime (World Health Organization, 2014). Four million people received mental health-related prescriptions in 2017–18 (Australian Institute of Health and Welfare 2019) but 54 per cent of people with mental illness are not accessing treatment (Australian Bureau of Statistics 2009).

The number of young people who experience stress-related anxiety and depression has reached epidemic proportions, with Australians aged 18–24 years having the highest prevalence of mental illness and being at the highest risk (Mission Australia, 2017, p. 5). This is the age group of many university students, who have the additional stress and pressure of multiple commitments, including study, assessments and often full-time work, affecting their mental health and wellbeing (Wright & Winslade 2018, para. 2). Similarly, in the United States of America (US) and Canada, it has been found that the mental health of students is poor (Danitz & Orsillo 2014; Rose, Godfrey & Rose 2016). For example, in Canada, 89 per cent of students feel overwhelmed by their workload, with 57 per cent feeling overwhelming anxiety (Rose et al. 2016)—and these rates are increasing. In the US, 87 per cent feel overwhelmed and 21 per cent feel anxiety (Danitz & Orsillo 2014). There are a number of reasons for this decrease in mental health among the young.

MILLENNIAL STUDENTS

The current demographic of young people born post-1990, generally referred to as millennials, have grown up with highly developed technology, mobile devices and constant access to the internet that have become an indispensable part of their lives. It has been suggested that this has resulted in millennials having a unique set of expectations and characteristics of connectivity, change and mobility (Nimon 2007; Oblinger 2003). Millennials are continuously bombarded with stimuli that can be challenging to manage (Bowman, Levine, Waite & Gendron, 2010), creating information overload. There is evidence that human cognition is ill-suited both for attending to multiple inputs and for simultaneously performing multiple tasks (Marois & Ivanoff 2005, p. 296). The hyperkinetic environment drives a perceived need for multi-tasking although true multi-tasking is impossible, as one can only pay attention to a single task at a time (Killingsworth & Gilbert 2010, p. 932).

During multi-tasking, the brain is actually distracted and inefficient (Ophir, Nass & Wagner 2009). Findings suggest that the distracted brain sacrifices areas important for attention and alertness to recruit enough brain resources to perform a secondary cognitive task (Hölzel et al. 2009, p. 11). When people believe they are multi-tasking, they are actually just switching from one task to another very rapidly and every time they do, there is a cognitive cost in doing so. This sacrificed time

is known as *attentional blink* because the brain experiences a delay of 200–500 milliseconds during each attentional switch, which is increased by stress (Levitin, 2014). Anecdotal evidence suggests that the simple fact of having an unanswered message on your mobile device is sufficient distraction to lower your IQ score by 10 points (Levitin 2014). Attention deficit trait has been identified as a newly recognised neurological occurrence that was developed as a response to a hyperkinetic environment (Hallowell 2005, p. 54). Attention deficit trait is described as similar to the typical version of attention deficit disorder. However, it is a condition induced by modern life, in which people have become busy attending to so many inputs and organising outputs that they become increasingly distracted, irritable, impulsive, restless, anxious and, over the long term, underachieving (Hallowell 2005, p. 54).

STRESS

There are multiple factors that contribute to perceived stress levels, including increased social media use (Sidani et al. 2016, p. 36), which is common among university students. Sidani et al. (2016) investigated social media use in a group of young adults in the US and found individuals who had higher social media site visits per week and those with a higher global frequency score had significantly increased rates of depression (Sidani et al. 2016).

Another stress factor is high levels of 'anxious preoccupation' that can decrease performance (Bellinger, DeCaro & Ralston 2015). Anxious preoccupation is the inability to deal with challenging and stressful situations, such as exam anxiety that particularly affects higher education students. For millennial students, these challenges result in poor mental health, affecting their academic performance (Rose et al. 2016).

Allied health students face additional challenges, with high academic contact hours and a mandatory requirement to complete hundreds of hours of clinical education placements 'in an increasingly complex and changing environment' (Rodger et al. 2008, p. 56). These students need to deal with the 'ambiguity of practice' (Skovholt & Trotter-Mathison 2011, p. 79) for which they often feel unprepared and experience performance anxiety. Allied health students need support to manage their emotions, develop resilience and learn coping skills so they can complete the challenges of tertiary education and prepare for future practice. Universities have a duty of care and responsibility to equip students to manage their own stress levels and mental health across their lives and roles. A focus on wellness is one strategy that shows promise.

WELLNESS

Wellness is a strengths-based approach for managing mental healthcare and a variety of models are presented in the literature (Myers & Sweeney 2004, p. 234). Research shows that wellness is a complex construct involving multiple factors (Hermon & Hazler 1999; Myers & Sweeney 2004). Some universities have been offering wellness programs for a considerable time (Hermon & Hazler 1999; Rose, Godfrey

& Rose 2016; Russell et al. 2011), such as libraries offering de-stressing activities during examination periods (Rose et al. 2016). Research has found that students who embed wellness practice, such as spiritual behaviour, leisure activities and sleep hygiene, into their lives are happier (Hermon & Hazler 1999). This indicates the benefits of encouraging and supporting students to focus on their own wellness as part of an undergraduate course curriculum.

Although a whole-of-campus approach is important (Rose et al. 2016), a wellness focus can be embedded into a specific course. For example, Yager (2011) embedded a wellness curriculum into a pre-service teacher education course that focused on developing trainee teacher students' wellbeing and how they might embed wellbeing activities and practice into their future classes. Results from questionnaires and assignments indicated students had experienced transformative learning in the area of their wellbeing. Stalnaker-Shofner and Manyam (2014) carried out a wellness intervention program with postgraduate students during their counselling practicum and found statistically significant improvements on the Five Factor Wellness Inventory after just one workshop. The workshop included a follow-up wellness plan for students to implement. Even a 90-minute acceptance-based-behavioural therapy intervention for first-year law students affected their levels of depression on the Depression, Anxiety and Stress Scales and resulted in high acceptance scores on the Philadelphia Mindfulness Scale compared to a control student group (Danitz & Orsillo 2014).

In their meta-analysis of stress reduction interventions in higher education, Regehr, Glancy and Pitts (2013) found that interventions do influence students. Cognitive, behavioural and mindfulness-based interventions of a range of lengths can reduce symptoms of anxiety (Regehr et al. 2013). However, the effect of short wellness interventions specifically for allied health students is not widely reported in the literature.

Universities have a responsibility to support wellness in students (Rose et al. 2016). Although university-wide programs have an effect, individual-level interventions can be tailored to specific student's needs, such as placement demands for allied health students and the requirements for self-care during their careers (Skovholt & Trotter-Mathison 2011). An eclectic approach can be used, as it seems that various lengths, components and strategies can be successful in reducing stress in students (Regehr et al. 2013). Mindfulness training has been found to be an effective component of wellness and stress management (Regehr et al. 2013).

MINDFULNESS

One frequently used tool to enhance wellness, reduce stress and improve mental health is mindfulness training (Regehr et al. 2013). Mindfulness can be defined as a mental discipline aimed at training attention and involves learning to focus attention on moment-by-moment experiences with an attitude of curiosity, openness and acceptance (Hassed et al. 2009, p. 389). Mindfulness is the awareness that emerges through paying attention—purposeful, non-judgemental and in the present—to the unfolding of moment-by-

moment experiences (Kabat-Zinn 2003). Mindfulness is traditionally associated with Buddhist spiritual practice but does not depend on any religious association (Dobkin & Hutchinson 2013; Hassed et al. 2009). Mindfulness practice involves meditation that is used to develop the skill of mindfulness (Marchand 2014). Mindfulness practice is regarded as a logical extension of 'reflective practice', the goal of which is to become more aware of one's own mental processes, recognise judging thoughts and to act with principle and compassion (Dobkin & Hutchinson 2013). Reflective practice is a key attribute of allied health practice (Mann, Gordon & MacLeod 2009) and self-compassion is crucial for managing stress, developing compassion for others and promoting wellbeing (Sinclair et al. 2017).

Mindfulness training improves functioning in areas related to executive function, attentional control, self-regulation, sensory processing, memory and regulation of the stress response (Kang et al. 2012 Marchand 2014), all of which are challenges for millennial students. There is also evidence from functional magnetic resonance imaging studies to show that mindfulness training results in increased cortical thickness in the hippocampus, which is involved in memory and learning (Fox et al. 2014; Pagnoni & Cekic 2007). Both these functions have been shown to be important in the process and outcomes
of mindfulness training (Gard, Hölzel & Lazar 2014; Kilpatrick et al. 2011; Lazar et al. 2005; Pagnoni & Cekic 2007). Mindfulness practices have become increasingly popular as therapeutic strategies for managing stress-related anxiety and depression. Khoury et al. (2013), in their meta-analysis of mindfulness-based therapy interventions, found mindfulness practice to be an effective treatment for anxiety, depression and stress.

Mindfulness training is being widely used across the lifespan for a range of mental health and medical issues (Gotink et al. 2015; Khoury et al. 2013), including in schools and higher education (Shapiro, Brown & Astin 2008; Hassed et al. 2009). Dobkin and Hutchinson (2013) conducted studies on medical students from 14 US medical schools and demonstrated links between anxiety measures, high-stakes mathematical performance and mindfulness practice. They also showed that students who followed mindfulness programs experienced decreased psychological distress and an improved quality of life. Further, mindfulness training improved students' retention of the information conveyed during the lecture in each of the three experiments (Dobkin & Hutchinson 2013). Others have also demonstrated this finding (Ramsburg & Youmans 2014). Mindfulness training is also being used to support healthcare workers to reduce their stress and promote wellness (Raab 2014), indicating usefulness for allied health students.

THE CASE FOR CHANGE

The increasing mental health challenges of millennials, coupled with their increasing distractedness and stress levels, require intervention by universities. Allied health students have additional stresses caused by increased academic load, placements in complex work environments and placement performance anxiety, requiring specifically tailored activities. Wellness programs show promise and could be embedded into a single unit of a course, giving just-in-time support for allied health students attending placements. Mindfulness has been widely used as a tool to support the development of reflective practice in healthcare workers and would be appropriate to support allied health students. Although allied health courses have busy curriculums, short efficient programs can yield positive outcomes and ought to be evaluated with students.

This pilot project developed a wellness program, including mindfulness activities that was piloted with third-year undergraduate speech pathology students at an Australian university to inform the feasibility of a short, efficient intervention for allied health programs. The project aimed to support students to manage their mental health, reduce stress and consider their wellness by developing a plan and engaging in activities. It also aimed to give teaching staff a vocabulary and reason to discuss mental health directly with students.

METHODOLOGY

WELLNESS PROGRAM

The first author's interest in developing students' wellness was sparked when, to the shock of her peers and staff who had not noticed any difficulties, a high-achieving student became seriously mentally ill in her final year of her four-year undergraduate degree program. It appeared both staff and students needed a vocabulary and permission to engage in discussions about stress levels, mental health and the supports available, encouraging and enabling students to seek professional help earlier. It was decided the focus would be on wellness, with students being proactive in managing their own wellbeing. A wellness plan from the University of Nebraska–Lincoln (UNL), who have been developing wellness for over 30 years (Barth & Johnson 1983), was chosen. UNL has been using their Wellness Model, especially developed for the university setting, since 2008 as a whole-of-university program (UNL 2008). In this study, UNL's Wellness Model was adapted for use in tutorials for a single unit of study.

The unit chosen was the second semester practicum unit in third year, the second major practicum experienced by the students and the last one before the high-stress block placements in fourth year. Students attended weekly tutorials and one day on placement each week. At each tutorial during the 13-week semester, the topic was addressed for 10–20 minutes. The wellness program had a four-pronged approach.

1. Wellness discussion

Students were introduced to the concept of wellness using UNL's Wellness Model (UNL 2008). Their model has seven areas of wellness: emotional, social, physical, environmental, occupational, spiritual and intellectual. Students discussed each category and brainstormed personally relevant activities week by week. Students also discussed:

- triggers that decrease wellness and how to manage them
- developing a support network
- early warning signs that professional help may be required
- managing stress
- dealing with procrastination
- managing distractions
- time management strategies.

Discussion of wellness factors is important to include in an intervention (Yager 2011) and engaging millennials in discussion with each other supports the development of critical thinking, increasing the likelihood of behaviour change (Russell et al. 2011). As Russell et al. (2011, p. 119) stated, 'critical thinking within wellness courses can be defined as reflective thinking used to make reasonable and defensible decisions about health choices'.

2. Mindfulness activities

Each week, students were taught a mindfulness activity to practice and potentially add to their wellness plan. The activities chosen were silent meditation with a focus on the breath, three big sighs for stress reduction, a guided relaxation meditation, mindful eating, free writing in a journal, mindful walking, keeping a gratitude journal and making a finger labyrinth.

3. Wellness plan

Students were encouraged to develop their own wellness plan to use during fourth year. They were provided with a template with daily, weekly and monthly activities allocated for each area. Development of a personal wellness plan has found to be helpful for students (Yager 2011). In fourth year, students were allocated to small tutorial groups, including a member of the academic staff and were expected to provide a copy of their plan to their tutor at the beginning of fourth year. Tutors then referred to health and wellness during fourth-year tutorials, as it is important for students and staff to work in partnership to implement wellness strategies (Goss 2011).

4. Resources

Resources to support mental health were also discussed. A handout was provided, various resources were shared on the learning management system and links were provided to evidence-based websites and apps (e.g., a website for students called The

Desk [University of Queensland 2019] and the Headspace app [Headspace 2019]).

The purpose of the program was to offer students permission to talk about mental health, provide them with a vocabulary to do so, present strategies to manage mental health and engage all academicstaff in supporting the mental health and wellness of speech pathology students.

SUBJECTS

Twenty, third-year speech pathology students enrolled in their second semester clinical practicum unit were required to attend two-hour tutorials each week alongside their one day a week placement at a school or adult clinic as part of the university curriculum.

QUESTIONNAIRE

At the end of the semester, students were invited to complete an anonymous online questionnaire for quality assurance purposes. Students were sent a link via email and were reminded both in tutorials and via email to complete the questionnaire. However, there was no obligation to complete and no penalty for not completing the questionnaire. As the questionnaire was an evaluation of a program already occurring for students, ethics clearance was not deemed necessary by the human ethics committee of the university. The purpose of the questionnaire was to explore how many of the strategies students had previously been exposed to and whether students would use the strategies in the future. The questionnaire was open for a month and the response rate was 50 per cent (n = 10). The questionnaire contained nine yes/no questions and one open-ended question for free text answers (see Appendix). Comments from the anonymous end-of-semester evaluation tool were also examined and informal conversations held with staff members who had students in tutorials in 2017.

RESULTS

Students willingly participated in activities each week and freely discussed and shared strategies and experiences. They engaged in discussion about mental health and wellness. One student privately reported seeking additional support for a developing mental health issue because of the discussions.

WELLNESS

The questionnaire results related to this area are shown in Table 1. Only 10 per cent of students had developed a wellness plan prior to the course and 90 per cent agreed they would be implementing new strategies to manage their wellness in the future. Some areas of wellness were less familiar to students than others. Although around two-thirds of students had implemented strategies in the past, students reported they found new strategies for overcoming

procrastination (100%), managing stress (90%) and dealing with distractions (70%) through the tutorial discussion.

Table 1. Wellness questionnaire results

Question	% Yes (n)
Did you have a wellness plan (either formal or informal) before the start of this semester?	10% (1)
Did you consider these things to be part of your health and wellness before the start of this semester:	
Emotional wellness	70% (7)
Social wellness	80% (8)
Physical wellness	90% (9)
Environmental wellness	20% (2)
Occupational wellness	20% (2)
Spiritual wellness	30% (3)
Intellectual wellness?	30% (3)
Did you find the discussion of a wellness plan useful?	90% (9)
Will you be implementing new strategies to manage your health and wellness now?	100% (10)
Prior to the start of this semester have you implemented strategies to manage:	
Procrastination	70% (7)
Stress	60% (6)
Distractions?	60% (6)
During the semester did you find new strategies to manage:	
Procrastination	100% (10)
Stress	90% (9)
Distractions?	70% (7)

MINDFULNESS ACTIVITIES

For each of the mindfulness activities, 50 per cent or less of the students had tried them before. The majority of students enjoyed the strategies and would consider using them again. These results are shown in Table 2.

Table 2. Mindfulness questionnaire results

Question	Had you tried or regularly used any of these mindfulness strategies before the start of this semester? % Yes (n =)	Did you enjoy trying/using these strategies in the tutorials? % Yes (n =)	Would you use them again in your life? % Yes (n =)
Silent meditation focus on breathing	50% (5)	100% (10)	90% (9)
Three big sighs for stress reduction	40% (4)	90% (9)	100% (10)
Guided meditation/relaxation	50% (5)	90% (9)	100% (10)
Mindful eating	20% (2)	70% (7)	78% (7)
Keeping a journal	40% (4)	80% (8)	80% (8)
Bushwalk/mindful walking	30% (3)	90% (9)	100% (10)
Gratitude journal	10% (1)	80% (8)	90% (9)
Labyrinth	0% (0)	80% (8)	80% (8)

FREE TEXT ANSWERS

There were only three free text comments recorded. These were all positive as this example shows:

> *I found this a really practical and helpful thing to add in to the unit plan. It allowed me to make sure I was putting my overall health first. I usually run myself into the ground during semester as I have always considered that is what was expected of me. Now that I am aware that the university does not expect this of me but instead would rather I was healthy I feel a lot less stressed about completing fourth year* (third-year student).

At the end of semester, eight students completed the university's standard unit evaluations (40% response rate). When writing free text comments on the best aspects of the unit, six students (75%) mentioned the wellness program as these examples demonstrate:

> *I love Abigail's holistic approach to health and wellness e.g. writing a health and wellness plan. Practicing meditation, mindfulness activities particularly the nature walk where we took pictures of flowers that caught our interest. She really highlighted how important it is to be mindful rather than having a mind full* (third-year student).

> *I really enjoy the mindfulness aspect of this unit. I found this semester very stressful and it really helped my overall quality of life* (third-year student).

> *The mindfulness activities were THE BEST! It was so nice to be able to go to class and just take a minute to relax before getting started* (third-year student).

The following year (2017), students were encouraged to take their wellness plan to their tutor for their fourth-year block clinical placement. This enabled the tutor to discuss and refer to aspects of mental health and wellness, managing stress and seeking professional help when required. Anecdotal feedback from tutors indicated they engaged in discussions about mental health and wellness and found this plan was a useful opening for meaningful discourse on sensitive topics that students might normally find difficult to raise. It also allowed students to raise issues indirectly and safely by discussing their wellness plan. The activities were continued with subsequent third-year cohorts.

DISCUSSION

This pilot project gathered student perceptions of a short and efficient program focusing on developing wellness and mindfulness in students. Students readily participated in the program and results showed they enjoyed and engaged with the opportunity to discuss wellness and engage in mindfulness activities. Few students (10%) had developed a wellness plan before the program and most (90%) reported planning to implement new strategies in the future. Despite being at the end of their third year at university, most learned new strategies to deal with procrastination, stress and distractions. Although mindfulness activities are currently popular, 50 per cent or less of the students had tried them previously and most reported they will consider using them again. Free text comments showed students found the activities helpful and practical for their everyday lives. Tutors also valued the wellness plan as a segue into discussing the management of mental health in a safe and supportive way. This program would be relatively easy to embed in allied health courses, as it is short and efficient.

Developing a wellness plan engaged students in self-care that is critically important to prevent the burnout that is common in healthcare professionals (Skovholt & Trotter-Mathison 2011). Developing self-care and engaging in mindfulness supports the development of self-compassion and compassion for others (Raab 2014; Sinclair et al. 2017). Therefore, these aspects should be an important component of any allied health professional's training.

LIMITATIONS

This was a small pilot project and so generalisation of findings is limited. Evaluating the program with increased numbers and disciplines would

increase the validity of the results. There is no evaluation of the outcomes of the program on students' stress levels and mental health in fourth year. A pre- and post-standardised assessment would add weight to the findings.

It is acknowledged that student perceptions of which strategies they intend to undertake in the future is open to bias. This could be overcome by students selecting from and mapping to what previous students have successfully used in their practice.

WIDER APPLICATION

Wellness activities can be applied to any course but some consideration should be given to the professional context to maximise student participation and application. A wellness program has been embedded in an undergraduate paramedicine degree course to aid the students throughout their studies and encourage the creation of coping strategies for placements and ultimately their careers in a pre-hospital emergency setting. While the program has similar outcomes to that of speech pathology, different presentations and activities are used to align with the research around mental health and wellbeing of paramedics to encourage participation by the students, as they are more practically focused. Due to the nature of the course and the high rates of stress and mental health issues experienced by first responders (Beyond Blue 2018), these activities are linked to several units across the course and focus on self-care and support of others in the context of university, clinical placements and the profession. Mindfulness activities are introduced in first year of first semester and are linked to promoting discussion, openness and reducing the stigma of mental health within the community and profession. Discussion and activities are initially focused around coping with study and the academic journey. Topics include planning study, procrastination, self-care and awareness, with mindfulness and stress reduction activities embedded as specific generic topics as opposed to being stand-alone topics. This then builds over the course and is linked to own, colleague and patient mental health and wellbeing, support seeking, coping strategies and assisting others, including having difficult conversations within the context of paramedicine. These activities help to reduce mental health stigma and it is hoped that mental health patient care will improve as a result of education, understanding and a more empathetic approach.

CONCLUSION

As millennial allied health students face a number of challenges to their mental health and wellness, an embedded wellness program with mindfulness activities is recommended. This pilot project showed a short intervention can be added to tutorials relatively easily and provide students strategies and support to manage their own mental health and wellness at university and throughout their career. It has also been demonstrated that inclusion in another quite different allied health course, in this case paramedicine, is possible through knowledge of the issues specific to the area and careful consideration

and adaption of activities. There is further scope for a broader range of allied health professions, such as occupational therapy, dietetics and beyond.

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APPENDIX

HEALTH AND WELLNESS QUESTIONNAIRE

This semester we have explored health and wellness, mindfulness activities and the development of a health and wellness plan for fourth year. Please complete these questions to give your feedback for quality assurance purposes.

Did you have a health and wellness plan (either formal or informal) before the start of this semester? Yes/No

Did you consider these things to be part of your health and wellness before the start of this semester?

- Emotional wellness Yes/No
- Physical wellness Yes/No
- Social wellness Yes/No
- Environmental wellness Yes/No
- Occupational wellness Yes/No
- Spiritual wellness Yes/No
- Intellectual wellness Yes/No

Had you tried or regularly used any of these mindfulness strategies before the start of this semester?

- Silent meditation focus on breathing Yes/No
- Three big sighs for stress reduction Yes/No
- Guided meditation/relaxation Yes/No
- Mindful eating Yes/No
- Keeping a journal Yes/No
- Bush walk/mindful walking Yes/No
- Gratitude journal Yes/No
- Labyrinth Yes/No

Did you enjoy trying/using these strategies? Yes/No

Would you use them again in your life? Yes/No

Prior to the start of this semester have you implemented strategies to manage:

- Procrastination Yes/No
- Stress Yes/No
- Distractions Yes/No

During the semester did you find new strategies to deal with these? Yes/No

Did you find the discussion of a Health and Wellness plan useful? Yes/No

Will you be implementing new strategies to manage your Health and Wellness now? Yes/No

Any other comments/feedback? (free text)