

Health Studies

Technology and community are crucial as we move towards prevention rather than just treatment

If you had to describe where the health industry is heading, Professor Kathryn Refshaug has the answer in one word: "Prevention".

As dean of Health Science at the University of Sydney, Refshaug says this means "keeping people well and in the community. They may have a chronic disease but we want to keep them out of hospital and remain independent."

Prevention is one of the main reasons many health practitioners go back to study, according to professor Dominic Upton, dean of Health and Human Sciences at Charles Sturt. "Once you become active clinically, you realise that many of the conditions that you deal with on a daily basis are actually preventative through good public health. Students realise if they want to make a significant difference, that's the way to start," Upton says.

And the growing consensus is that prevention—as well as treatment—has a far greater chance of success when care is integrated and multidisciplinary.

For Claire Hewat, the CEO of Allied Health Professionals Australia, the "cross-fertilisation" of disciplines is critical: "The notion that 'this is your profession and this is what you do' creates silos that can be a disservice to patients. It is disturbing how little the professions actually know about each other; they either have a vague idea or no idea at all." Hewat says more attention needs to be paid to better understanding the individual allied health professions, which include chiropractors, osteopaths, psychologists, dieticians, genetic counsellors, podiatrists and occupational therapists.

Refshaug agrees that health professions need to be well understood across the board: "If a GP doesn't know what a speech pathologist does, then they won't know how to use them." In addition, she believes that health practitioners need greater alignment in their patient care: "A breast surgeon might say don't move your arm, but then the physio is saying you've got to move your arm. It's confusing and contradictory for the patient."

Integrated patient care should only get easier, however, with the federal government's launch of My Health Record, which will introduce centralised

electronic health records into the system. This means health practitioners can more easily see a patient's history, add notes, or contact other practitioners for clarification or to discuss treatment. "From a patient perspective, there are many advantages: you don't have to keep telling your story over and over again, and you can check your record and correct it if needed," Refshaug says.

Digital health is something that Britt Klein, professor of digital health and psychology at Federation University, is passionate about. She is leading a team to provide an all-in-one digital health platform called My Digital Health.

Klein says the platform was originally designed to "find alternative ways of offering services to rural Australians" as well as a response to a "slow uptake of digital health among healthcare professionals over the last decade or so", in part due to the limited availability of digital health systems and training opportunities.

The platform is targeted to both health practitioners and researchers. Practitioners can use it to "prescribe" a program to a client and determine how and when the content is released, such as one activity or module a week. They can also create a multidisciplinary care team by directly inviting other key collaborators such as a psychologist, disability support worker or carer into the platform and on to the client's profile. Other features include autogenerated digital client files, scheduling of periodic symptom assessments and issuing alerts, storage of confidential documents, and shared collaborative digital communication workspaces.

The use of digital health, however, also raises concern about data security and privacy. Klein says "health data security is of course of paramount importance" as well as individuals being able to "control their own data". Additionally, mining large deidentified health datasets, for legitimate research purposes "is also of invaluable community benefit".

Keeping a platform like My Digital Health relevant and user-friendly is important, but Klein acknowledges that the rate of change in the digital space is rapid. "Not upgrading a platform or program semi-regularly can run the risk of it becoming obsolete. Systems that are highly integrated and interoperable will most likely be the ones that stand out and be used in far greater numbers."

As technology advances further into the health

sector, Alison Jones, Deputy Vice-Chancellor (Health and Communities) at the University of Wollongong and executive dean of Science, Medicine and Health, says it is really important that students embrace technology: "I would encourage people to upskill in technology. When there is a lack of understanding, follow that and fill in those holes. We are already seeing robotics in elderly care and nursing ... the future jobs in health will require a different level of tech skills. Don't end up being the graduate who is not tech-driven or literate."

Community will also play a larger role in health: "A lot of what we currently do in hospital practice will be delivered in a much more community-oriented way in the future," Jones says. "That's what patients and their families want, and it means that we have to change the focus of what we're doing in terms of education."

To that end, the university recently launched a \$500 million Health and Wellbeing precinct in partnership with LendLease.

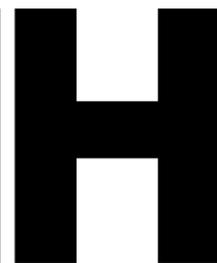
"This is a truly integrated health precinct with the patient at the centre of everything we do. It's about health innovation, autonomy (allowing people to live their lives with minimal intrusion) and training our workforce to be fit for the future of health in Australia," Jones says. Students will have the opportunity to study at a primary and community healthcare clinic offering services ranging from aged care, respite care, rehabilitation services and mental health services.

"We select students who are good team players who are capable of growing on the jobs and learning from new models of practice," Jones says.

Students will also have the opportunity to learn more about preventative health strategies by "working with people and helping them make choices to keep them healthier for longer. We have a really good multidisciplinary team to help the patient and family cope with that."

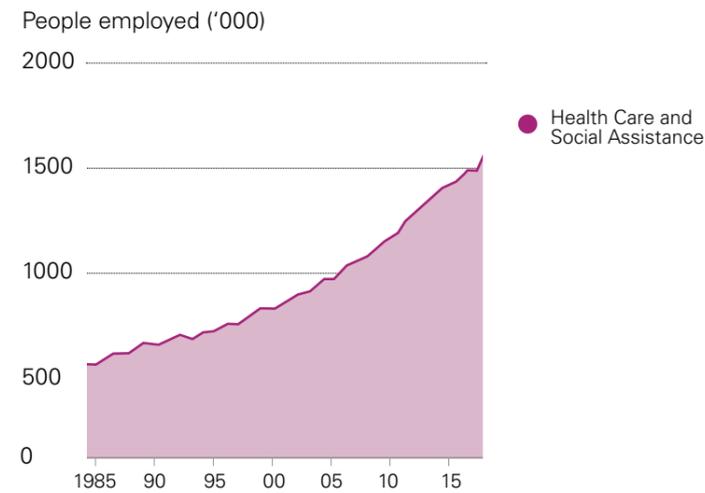
With changing healthcare models from more integrated multidisciplinary practices to digital delivery and community precincts, it's clear there is a lot of scope in the health industry. And as Australia ages, the demand for health professions is unlikely to cool down. As Jones puts it, "If you're training in health, it's not like you're training in a niche thing; it's a growing industry."

For details of all postgraduate health courses, see postgradaustralia.com.au

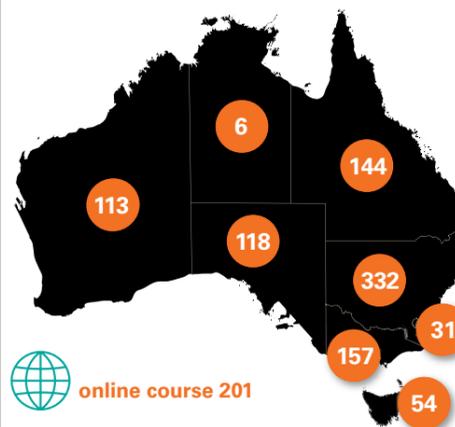


HEALTH SECTOR SNAPSHOT

Right now 66,000 people are studying post-graduate health degrees in Australia

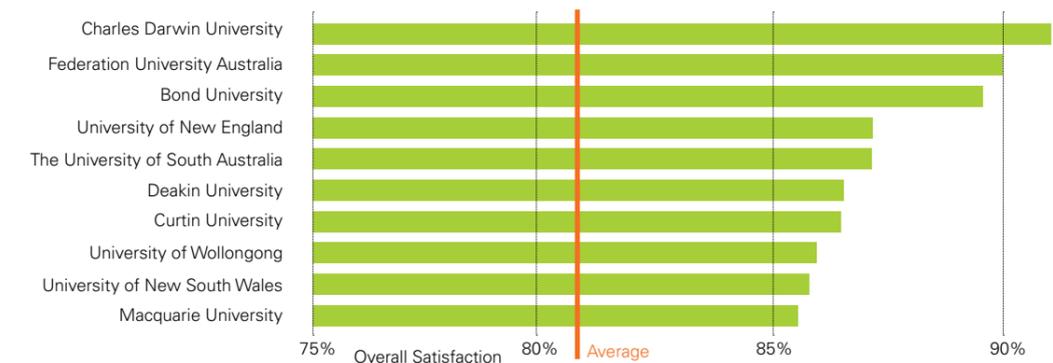


1.7 million people are currently employed in the health sector, up by an average of 3.8% a year over the past decade



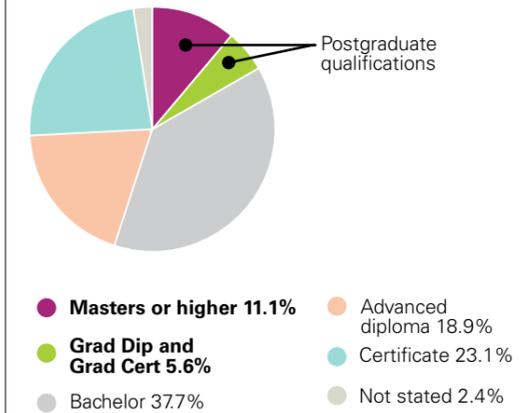
39 universities offer 1,156 postgraduate health courses

The average payback period for a health postgraduate degree is 5 years, although other factors may change this

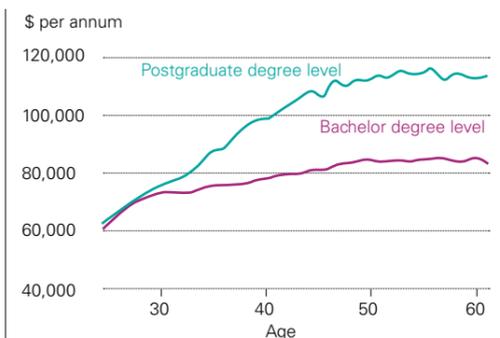


The top 10 universities offering health postgraduate degrees, as rated by recent graduates for overall satisfaction

Highest level of education (% of workforce)



16.8% of the health workforce have postgraduate qualifications, compared to 11.9% in 2006



On average the cost of a post-graduate health degree in Australia is \$29,411 and takes 1.4 years to complete

Over their career, health sector postgraduates will earn \$688,276 more than their bachelor only colleagues



Kate Murray Paramedicine

Kate Murray can't explain why she has always wanted to be a paramedic.

"My family always tells stories of when I was really young that I always liked to play medical roles, like the doctor that fixes the sick baby ... it seems there was always something that drew me to wanting to be in that moment of crisis."

What Murray can tell you is what working in a crisis feels like: "It's like a surge of adrenaline and being completely in the moment. Everything is happening very quickly but it's important to slow yourself down, keep calm and clear your mind, and when you've slowed down, you're actually going at normal pace."

It's this intensity that keeps Murray coming back for more, and why she is currently studying a graduate diploma in paramedicine at Federation University in Victoria. Before this she completed a nursing degree and a postgraduate certificate in emergency health—both with the intention of becoming a paramedic.

"I met some people who were on the job and they advised me to do nursing because they felt [paramedicine] can be quite exhausting emotionally and once you're in it, the pathways can be more limited ... if I had my nursing behind me, though, and grew to a point where I was exhausted by paramedicine, then I would have other opportunities to fall back on."

Murray says she chose the graduate diploma at Federation University because of the unique way it is structured, with blocks of intensive face-to-face learning (a total of about six weeks over the entire program) and the rest online.

Murray believes this self-directed learning means "you can manage your time as you want to manage it" and that "it's really down to the individuals as to how much time and effort they want to put into their study"

During intensives, Federation University organises simulated crises to prepare students for real-life scenarios. In her most recent intensive, Murray was asked to work on a "mass-casualty simulation" with actors roleplaying victims in a car crash. "They had a car with a windscreen all smashed. One actor was screaming her head off and crying—and they all had special effects makeup on to simulate injuries ... it felt incredibly real, the adrenaline really came through."

Students communicated through radios and were allocated specific patients to treat: "It allowed you to recognise how easy it is to get distracted when the environment is intense and so different from a hospital, which is a more controlled setting. It was great to be in that situation and have that exposure."

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HEALTH SECTOR SNAPSHOT



Emma Macri Acupuncture

The idea that learning never stops is one Emma Macri take seriously. A chiropractor and osteopath by training, Macri has completed "possibly thousands of hours in continuing education"

Recently she completed a Master of Applied Science (Acupuncture) at RMIT: "I wanted to learn the full discipline and do it justice ... many of the techniques I use in practice are based on Chinese medicine theories, so for me, it was a logical progression." And in a reflection of the increasingly blended approach in higher education, Macri's masters was delivered primarily online with on-campus workshops in Melbourne four times a year. The course also required 390 hours of external clinical practice in an acupuncture clinic.

"The course content was extensive—we received massive amounts of online course information, pdfs, case studies, and study notes. However, you had to be more motivated to study, as there wasn't much face-to-face contact with our teachers but they were available online most of the time."

Sydney-based Macri had to fly down to Melbourne to attend the workshops: "Each workshop was five intense days of lectures, tutorials and practicals. Days were long, from 8.30am until 5.30pm."

While continuing to run her own private chiropractic practice—which she has done for more than 30 years—Macri admits it wasn't easy going back to study. "Initially I was able to juggle my practice hours and study by working four days a week ... I started to study after work particularly during exam time. The course eventually took over my life."

Still, despite the highs ("I loved the discipline, I loved the information and the theories, I met great people") and the lows ("I disliked the study and its constraints, and didn't like the effect on my personal life"), Macri persevered over the four years to complete her degree. Now on the other side of it all, her advice is that "it's more involved than you think ... but in the end, it's worth it."

AARON FRANCIS; HOLLIE ADAMS