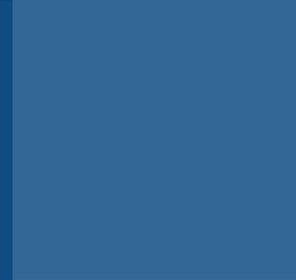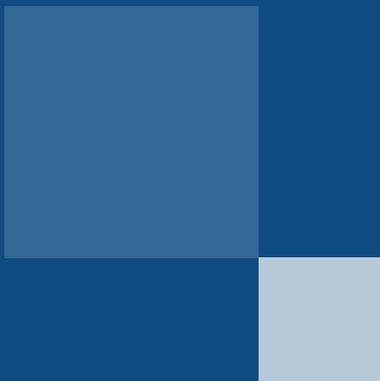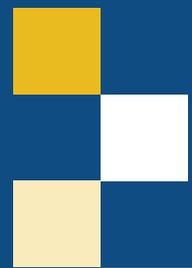# AIDH

AUSTRALASIAN INSTITUTE
OF DIGITAL HEALTH

Australian
Digital Health
Workforce
Insights
2023

Introduction

Throughout 2023, the Australian Institute of Digital Health (AIDH) has actively collaborated with health services, education providers, professional colleges and associations, industry, and key stakeholders to build digital health capability and define career pathways for the healthcare sector, in support of the Capability Action Plan and developing frameworks and a national Career pathway.

This has been a significant initiative aimed at improving the digital skills of the health workforce, which aligns with the Global Digital Health Strategy 2020-2025[1], emphasising the development of the digital health workforce to achieve a sustainable health system.

These initiatives are also in line with the Australian national digital health strategy[2], which emphasises the importance of equipping the health workforce with the necessary digital health skills to meet the evolving healthcare needs.

During the Medinfo23 conference in July 2023, the AIDH and VMware by Broadcom came together to explore key workforce priorities within digital health. The event, drawing an international and national audience, provided an opportunity to informally survey digital health and informatics specialists and understand their career trajectories and future plans.

[1] https://www.who.int/publications/i/item/9789240020924
[2] Strategies and plans | Australian Digital Health Agency

The critical role of workforce in digital health

Healthcare is experiencing significant strain due to growing demand on services and an increased burden on those delivering care. Prevailing service models and the funding and resources that support them are under rising pressure, and there is a realisation that we must change to improve.

At the same time there is a changing focus on health service delivery and care models where there is a cultural and behavioural shift to the consumer and patient experience, enabled by digital health.

To achieve this goal of consumer-centric healthcare, it is vital to inspire and bring the workforce along the digital health journey, standardising language, and approach to steer the evolution of healthcare in a digital and AI enabled society.

Australian peaks, education bodies and jurisdictions are acknowledging the critical importance of workforce development, focusing on current and future skills requirements. For instance, the NSW Health Future of Work 2020 Report[3] identified the impact of emerging technologies on healthcare and outlines the strategic plans they are putting in place to support the uplifting of the workforce to be digitally enabled.

Industry Collaboration and Leadership

Addressing workforce challenges in healthcare requires collaboration across the sector to upskill the workforce and develop fit for purpose digital health career pathways. This should include private and public health services, education providers, professional colleges and associations, and industry. It is imperative for health and care to embrace the increasingly digital environment and the challenges being faced. The complexity of these challenges exceeds the capacity of any single government entity or healthcare provider group.

The AIDH, in partnership with VMware by Broadcom, is playing a crucial role in building digital health capabilities and the digital health expertise, now and into the future. AIDH and VMware by Broadcom are also collaborating with healthcare providers, government, education providers and industry to address several key questions such as:

> "How can we establish clear, effective career pathways that support capability development and advancement in digital health within the health and care sectors?"

---

[3] https://www.health.nsw.gov.au/workforce/horizons/Documents/future-of-work-healthcare-workforce.PDF

Insights from informal survey

At the Medinfo23 Conference in Sydney, VMware by Broadcom and AIDH conducted an informal survey to gather insights from an international and national audience involved or interested in digital health and informatics.

Survey Methodology

A qualitative research design was employed, utilising an exploratory methodology to gain insights into individual experiences and perceptions. Participants were selected opportunistically from attendees at Medinfo23 and approached during coffee breaks and asked to complete a brief survey.

The survey comprised of questions to understand:

- Participants' career aspirations for the next 3-5 years
- Resources and skills they deem necessary to achieve these goals
- Whether their employer has a digital health career advancement pathway program
- Participants' current work areas (clinical, administrative, technical, research, or education).

Informed consent was obtained, and anonymity and confidentiality ensured for all respondents.

Over seventy individuals participated in the informal survey and shared their perspectives. The results identified individuals' priorities and areas of support required to advance their career in digital health and/or informatics, the need for developing a national digital health career pathway, and support mechanisms.

There were limitations of the survey:

- **Methodology:** the data collection method (informal survey during coffee breaks) might have influenced the depth of responses.
- **Representation:** limited time for responses and the specific setting (conference) may not represent the broader health workforce's views.

However, despite the informal survey's small sample size, its findings aligned with other feedback that AIDH received through consultations during 2022/23, as part of the Capability Action Plan initiatives. This included the need for digital health capability uplift of the health and care workforce, and the development of digital health career pathways. Results from the survey will now be discussed.

Question 1: Where would you see your career in 3-5 years?
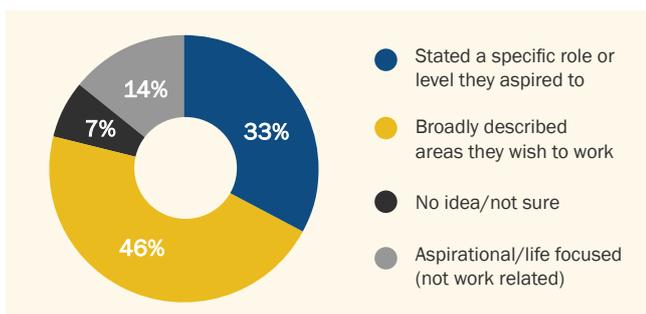
Of those surveyed, 33% stated that they sought a specific role in digital health. A further 46% described the digital health area where they want to work. Of those individuals, 70% indicated that they were looking for education, mentoring, and work experience opportunities to assist in their professional development to advance their career.

Figure 1: Results from survey question one

Question 2: What do you think you need to get there? (advancing career)

Respondents recognised the importance of education, mentoring, and work experience when considering advancing their career. When asked what their career aspirations were and how they think they will get there, 47% said opportunities for work experience, mentoring, and education, combined with being part of a community were incredibly important.
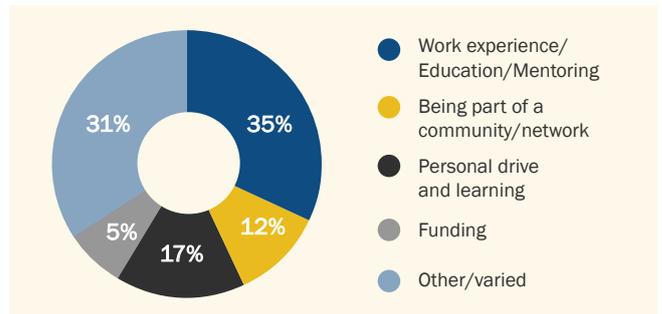

Figure 2: Results from survey question two

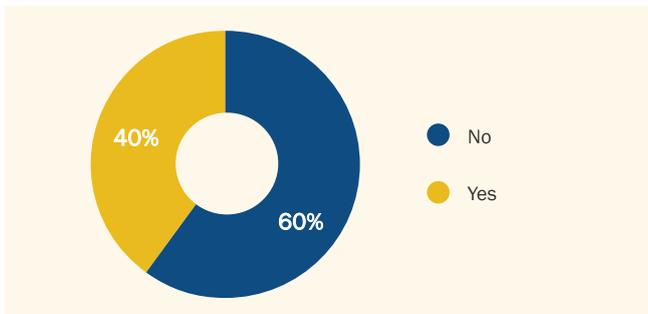## Question 3: Does your employer have a digital program to help you?

Figure 3: Results from survey question three

Results related to this question showed there are digital health professional programs offered by employers to support individual staff's professional development and career advancement.

A digital program in this context refers to structured initiatives or courses designed to enhance skills and knowledge in digital health, aligning with the evolving demands of this field.

Of those surveyed 60% of participants responded that their employer did not offer a professional development program in digital health. This suggests organisations are potentially not yet recognising the benefits of programs that upskill the current workforce. Moreover, there appears to be a mismatch between the desire of the health workforce to upskill in digital health and opportunities made available by employers. Addressing this issue could potentially deliver broader benefits of improved retention as well as upskilling the workforce with digital health expertise.

Question 4: Background of those surveyed?

The backgrounds of the participants surveyed at Medinfo23 revealed a wide-ranging and diverse group, encompassing individuals from clinical, administrative, technical, education, research, and industry careers.

This result demonstrates that the field of digital health does not have a standardised set of skills, which complicates the creation of professional development opportunities and clear career pathways.
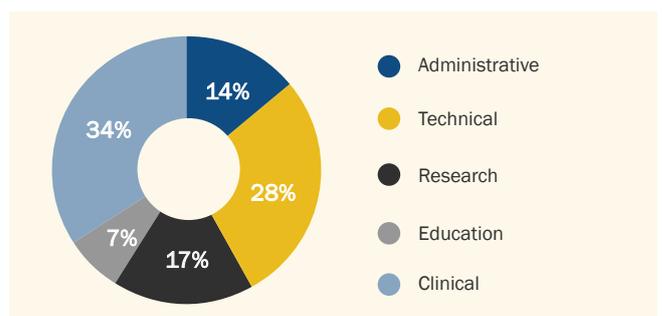

Figure 4: Results from survey question four

Medinfo23: Spotlight on Workforce

Workforce was a prominent theme at Medinfo23. Several presenters described the acute demands on health services around the world, coupled with workforce shortages particularly in clinical roles, and the increasing need for a specialised digital health workforce, due to the digital transformation in healthcare.

The event featured a variety of workshops and presentations from a range of individuals and groups addressing various aspects of the digital health workforce such as:

'Building a global public health informatics workforce' by the University of Texas, USA focused on the development and education of public health digital health and informatics specialists.

'Stories from a small country: The digital professionalism journey in welsh health and care' by the Wales Institute of Digital Information and Digital Health and Care, UK, explored new approaches to integrating digital capabilities into workforce culture and skills.

'Digital Health skills for a safe, effective aged care workforce' from RMIT University, Victoria, Australia outlined the capabilities and skills requirements for a changing aged care workforce.

'Innovative technologies to support and develop the healthcare workforce' presented by the Western Sydney Local Health District, NSW, Australia, discussed new and emerging technologies which can support clinical training and simulate work experience for learning and teaching.

'Digital competencies for good patient-provider relationships' by Osnabruck University of Applied Science, Germany presented on the need for recommendations on what digital competencies are required by the health workforce and the patients to evolve and get the best out of digital in our healthcare interactions.

'Addressing healthcare's pressing challenges: Workforce' from various international perspectives, including the World Health Organisation, and representatives from Wales, UK, UAE, Netherlands, and Australia, discussed how they are approaching digital health and workforce issues.

'Co-building capabilities in the digital health workforce: A connectivist approach' by the Latin-American Digital Innovation Centre (CIDLA), Chile, examined how to advance and attract the capabilities required in the digital health workforce.

'Investing in the digital health capabilities of the allied health professional sector' by eHealth Queensland focused on building and enhancing digital health capabilities as they relate to the work of allied health.

In conclusion, Medinfo23 served as a crucial platform to highlight and address the diverse and pressing needs of the digital health workforce, amidst the rapid digital transformation of healthcare. Other key themes included the necessity for specialised education and training, integrating digital skills into healthcare professions, and adapting workforce culture to digital advancements and the need for global collaboration.

The Medinfo23 sessions mentioned, and others can be viewed via the AIDH's Digital Health TV platform which provides video content from major conferences and other activities including webinars and state events, and can be accessed here. Alternatively, please contact the AIDH directly.

International approach to workforce development

Many countries are recognising the need for digital health capability uplift of the workforce, and establish specific informatics career pathways for individuals, as illustrated by sessions from MedInfo23 referred to above. Various approaches are being adopted internationally to build capability and capacity within the workforce, and support individuals with transferrable skills if they choose to work in other countries.

During Medinfo23, a significant topic of conversation was the improved coordination of global efforts in digital health. This includes opportunities for harmonising the World Health Organization's emphasis on digital health competencies with ongoing initiatives in Australia and other nations. Additionally, discussions explored the potential to align professional and certification programs across countries, including the United Kingdom, Australia, New Zealand, and the United Arab Emirates. This initiative was a major takeaway from Medinfo23, with further discussions and strategic planning set to continue into 2024.

> Professionalisation of digital health with internationally recognised career pathways will equip and prepare the health ecosystem for ongoing transformation driven by innovations in digital health.

Digital Health Workforce Census

Another major piece of work undertaken in 2023 was the national specialist digital health workforce census conducted by RMIT and the University of Melbourne in Q3/4 2023 in association with AIDH and other partners. The census collected data on demographics, careers, qualifications, and other aspects related to individuals who self-identify as part of the specialist digital health workforce. This group primarily involves professionals engaged in the development, maintenance, or governance of health data, information, technology, or knowledge. The report, with findings from this important study, is expected to be published soon.

Capability Action Plan (CAP)

During 2023, the AIDH, in partnership with the Australian Digital Health Agency, successfully completed Phase 1 of the National Digital Health Capability Action Plan (CAP). This phase included the delivery of four (out of eleven) components of the CAP and focused on addressing national education and workforce priorities in alignment with the National Digital Health Strategy.

Over the past year, various resources such as digital health capability frameworks, assessment tools for individuals and organisations, model for career pathways, guideline and the digital health workforce hub have been developed. These resources were created to support the digital uplift of the health and care workforce and career pathways, acknowledging the changing dynamic of interactions between consumers, patients, and practitioners, and the range of innovative and emerging uses of digital technology and its transformative impact on health and care services.

Conclusion

In conclusion, the Australian Digital Health Workforce Insights from 2023, presented by the Australian Institute of Digital Health (AIDH) in partnership with VMware by Broadcom, emphasises the critical need for a skilled and well-equipped digital health workforce to help address the growing healthcare demands and the digital transformation of health and care services.

The paper reflects on various initiatives and collaborations in the digital health workforce and highlights the opportunities arising from Australia hosting Medinfo23 in July.

The insights gathered from MEDInfo and other engagements throughout the year have highlighted some central themes:

- **The necessity of building the capabilities of the workforce and creating clear and viable career pathways in digital health**

- **The importance of employers supporting digital health professional development**

- **A diverse range of skills and backgrounds underpin the strength of the digital health sector**

- **Challenges continue to present in standardising professional development in digital health and creating clear career trajectories.**

Despite recognised limitations, the findings from the informal survey at Medinfo23 resonate with broader feedback and underscore the need for digital health capability uplift and the development of career pathways. This paper also highlights global perspectives on workforce development, with discussions at Medinfo23 focusing on the benefits of harmonising efforts internationally.

As we look ahead to 2024, AIDH will focus on developing detailed career pathways, leveraging existing programs, and consolidating information and resources through the digital health workforce hub. This approach will be in collaboration with government, industry, education, providers, professional bodies, and research, emphasising the collective effort required to advance the digital health workforce agenda.

The AIDH, in partnership with industry leaders such as VMware by Broadcom, remain committed to further this agenda, ensuring that the digital health workforce is well-positioned to meet the evolving demands of a digital and AI-enabled health and care landscape.

Australasian Institute of Digital Health (AIDH)

The Australasian Institute of Digital Health (AIDH) represents a diverse and growing community of professionals at the intersection of healthcare and technology. The Institute has more than 250 distinguished Fellows who are experts or pioneers in digital health, and has a growing membership of professionals comprising doctors, health informaticians, nurses, midwives, allied health, other clinicians, administrators, and health technology business leaders.

The Institute provides objective, non-partisan, and independent advice on the use of technology and health informatics to improve consumer outcomes and solve the most pressing challenges facing our healthcare system. The Institute's unique composition and reach brings together an extraordinary network of Australia's leading digital health experts across the private, public and community sectors to advance our nation's transition to a digital health future.

VMware by Broadcom

VMware by Broadcom is committed to supporting digital leaders to enable digital transformation that reduces complexity, lowers the costs of IT, and improves reliability across critical systems. This is achieved through intelligent digital foundations available across any app, any cloud, and any device, continuously focused on enabling staff to improve patient experience.

Contact details

For further information on the AIDH digital health workforce agenda please contact:

Sonya (Nya) Hilberts
sonya@digitalhealth.org.au or
workforce@digitalhealth.org.au

vmware
by Broadcom

AIDH
AUSTRALASIAN INSTITUTE
OF DIGITAL HEALTH