Teaching resource

Digital Health Foundations for Nursing and Midwifery:
Competency Preparation for Placement

Introduction

This teaching resource is designed to support faculty delivering the Digital Health Foundations for Nursing and Midwifery: Competency Preparation for Placement course. The course aims to prepare nursing and midwifery students for clinical practice in digitally enabled healthcare environments. It includes five key modules, each aligned with the National Nursing and Midwifery Digital Health Capability Framework, ensuring consistency with national standards and supporting effective curriculum delivery.

Course Overview

This pre-placement course equips nursing students and midwifery students with foundational knowledge and skills to navigate the evolving digital health landscape. Fundamental to the course is an introduction to My Health Record, a pivotal tool in Australia's healthcare system, offering students practical insights into its role in clinical practice and patient care.

The course is structured around the National Nursing and Midwifery Digital Health Capability Framework, which supports the development of digital competencies across five key domains that are Digital Professionalism; Leadership and Advocacy; Data and Information Quality; Information-Enabled Care and Technology.

Students assess their digital capabilities, identify areas for growth, and build confidence in using digital tools effectively through interactive modules and applied learning. The students are better prepared to contribute to a technology-enabled healthcare environment and transition smoothly into professional practice at the end of course.

Australian Government
Australian Digital Health Agency

Intended course learning outcomes

It is expected that participants who have completed this course will be able to:

- apply digital health knowledge and skills to make safe and responsible decisions when using health data and technology
- critically analyse opportunities to integrate My Health Record and other national digital health tools into professional practice to promote patient-centred care
- evaluate the principles of quality data collection, analysis, and evaluation to improve patient outcomes, as required for technology-driven healthcare environments
- construct and implement digital professionalism and advocacy strategies that aim to enhance healthcare delivery and patient outcomes.

What students said about the course

Students reported that the course helped them build **valuable knowledge in digital health**, grow their **confidence using digital tools**, and feel more **motivated to apply these skills** in their studies and future practice. Their feedback highlighted the course's relevance, clarity, and practical impact.

"The digital health course was very informative for me. It has highlighted how technology supports safe and efficient nursing practice."

"This course improved my understanding of digital health and its role in safe, person-centred care. I feel more confident using tools like My Health Record and the learning was engaging."

"I recognize that digital health is a rapidly evolving field, and maintaining competency requires a commitment to continuous learning and adaptability and I understand that their mastery is essential for delivering the highest standard of patient-centred care in the 21st century."

Course design

Figure 1: National Nursing and Midwifery Digital Health Capability Framework (ADHA, 2020)



The course was developed through a collaborative and outcome-focused process, engaging a diverse range of stakeholders including clients, nursing academics, clinicians, recent graduates, and industry partners. This inclusive approach ensured the course content was informed by multiple perspectives and aligned with sector expectations.

Feedback was gathered through an advisory panel, focus groups, course surveys, and a pilot program. The resulting design is purposefully aligned with real-world healthcare challenges, ensuring the course effectively supports students in developing the digital capabilities required for contemporary practice. The course was also mapped to National Nursing and Midwifery Digital Health Capability Framework and the other National Standards as shown below.

Mapping

The course is divided into five modules that align with National Nursing and Midwifery Digital Health Capability Framework, across the following five domains:

- **Digital Professionalism**
  Focuses on legal, ethical responsibilities, digital identity, and policy compliance essential for professionals**.**
- **Leadership and Advocacy**
  Teaches students to advocate for digital health and promote inclusive digital access for all.
- **Data and Information Quality**
  Emphasises accurate data capture, management, and cybersecurity to maintain information integrity.
- **Information-Enabled Care**
  Trains students to use digital information for evidence-based, patient-centred care and coordination.
- **Technology in Practice**
  Helps identify and apply digital technologies, governance policies, and problem-solving in clinical settings.

Table 1 below maps the course learning outcomes to relevant frameworks and standards, while Table 2 maps the course learning outcomes against the module learning outcomes and the evaluation method (discussion activity).

Table 1: Mapping course learning outcomes to relevant frameworks and standards

Course Learning Outcome	Blooms Taxonomy Level	NMDHCF Domain / Sub-Domain	NMBA Registered Nurse & NMBA Midwife Standards for Practice	ANMAC Accreditation Standards (2019)	Australian Digital Health Agency Train the Trainer Toolkit
1. Apply digital health knowledge and skills to make safe and responsible decisions when using health data and technology.	3 – Apply	Domain 1 – Digital Professionalism Domain 3 – Data and Information Quality Domain 4 – Information Enabled Care Domain 5 – Technology	Standard 4: Comprehensively conducts assessments RNs accurately conduct comprehensive and systematic assessments. They analyse information and data and communicate outcomes as the basis for practice.	Standard 3: 3.4 Teaching and learning reflects contemporary practices in nursing, health and education, and responds to emerging trends based on research, technology and other forms of evidence.	1. Apply core technical concepts in digital health, including data, technologies, and information and knowledge management. 4. Analyse the social, economic, environmental, political, legal, regulatory, and ethical factors in the co-design, development, management, use, delivery, and evaluation of digital health solutions.
2. Critically analyse opportunities to integrate My Health Record and other national digital health tools into professional practice to promote patient-centered care	4 - Analyse	Domain 3 – Data and Information Quality Domain 4 – Information Enabled Care Domain 5 – Technology			3. Analyse the social, economic, environmental, political, legal, regulatory, and ethical factors influencing digital health development and adoption. 5. Critique digital health transformation initiatives and practices in Australia, and propose strategies to advance health equity, better consumer experience, greater health outcomes, workforce well-being, and high-value care.
3. Evaluate principles of quality data collection, analysis, and evaluation to improve patient outcomes, as required for technology-driven healthcare environments	5 - Evaluate	Domain 3 – Data and Information Quality Domain 4 – Information Enabled Care Domain 5 – Technology			6. Examine the role of the human–technology interface in clinical reasoning, decision-making, and care delivery, evaluating the risks and benefits to healthcare outcomes. 8. Analyse the person-centred approach to the use of technologies in healthcare practice, emphasising respect, collaboration, and shared decision-making.
4. Construct and implement digital professionalism and advocacy strategies that aim to enhance healthcare delivery and patient outcomes	6 - Create	Domain 1 – Digital Professionalism Domain 2 – Leadership and Advocacy	Standard 4: Comprehensively conducts assessments RNs accurately conduct comprehensive and systematic assessments. They analyse information and data and communicate outcomes as the basis for practice.	Standard 3: 3.4 Teaching and learning reflects contemporary practices in nursing, health and education, and responds to emerging trends based on research, technology and other forms of evidence.	2. Explain the importance of digital professionalism, including health literacy, legal and governance application, and ethical considerations, in the management and use of digital technologies and data. 7. Critically reflects on the application of digital health technologies for interprofessional practice, including the scope of practice in your own discipline and in other disciplines.

Table 2: Constructive alignment of the course learning outcomes against the module learning outcomes and the evaluation method (discussion activity)

Module Learning Outcomes	Course Learning Outcome alignment	Evaluation (Discussion Activity)
Examine legal, ethical, and privacy responsibilities in digital health	CLO 1, 4	Accessing My Health Record and privacy controls
Manage personal and professional digital identity boundaries	CLO 1, 4	Digital footprint in EMR and audit trails Online identity and reputation
Construct strategies which advocate for patient digital health rights	CLO 1, 2, 3	Promoting digital health equity
Contribute to organisational and national digital health leadership at a beginner level	CLO 1, 4	Leadership actions in digital settings Digital innovation and review of digital health system
Generate complete, timely, and accurate data	CLO 1, 2, 3	Data integrity for decision making
Integrate data management principles for privacy and reliability	CLO 1, 3	Quality in data capture
Explain the data lifecycle in healthcare	CLO 1, 3	
Critique and apply digital data to inform and coordinate care	CLO 1, 2, 3	Use of client data decision making
Compose, compile and share information securely	CLO 1, 3, 4	Interprofessional data creation and sharing for continuity of care
Propose evidence-based digital tools that support and extend practice	CLO 2, 4	Understanding Healthcare Provider Identifier–Individual (HPI-I) Reflection on emergency access protocols and privacy codes.
Analyse the appropriateness of digital technologies for clinical settings	CLO 1, 2, 3, 4	Leading digital health innovation
Apply governance policies for ethical and secure use	CLO 1, 4	Digital health literacy and governance
Demonstrate critical utilisation of digital tools for problem-solving and decision-making	CLO 1, 2, 3, 4	Evidence-Based digital health tools

Course teaching approach

The course integrates a variety of interactive and practical learning strategies to build digital health competencies. Unfolding case-based scenarios are used to contextualise key concepts, helping students apply theory to real-world situations. Simulation activities, including animated exercises such as electronic health record (EHR) tasks and digital consent role plays, provide hands-on experience with essential tools and processes. Animated discussions and branching scenarios allow students to explore complex challenges, while role plays enhance communication and problem-solving skills.

Assessment methods are equally diverse, incorporating scenario-based questions, decision trees, and practical skill demonstrations to ensure learners can confidently apply their knowledge in clinical practice. Course vignette animations can be used in class as follows to reflect or guide deep meaning for students.



Module 1: Digital Professionalism

Objectives:

- Examine legal, ethical, and privacy responsibilities in digital health.
- Manage personal and professional digital identity boundaries.

Case Study

Samantha navigates My Health Record during orientation, learning about ethical access and digital identity.
Vignette Animations
Samantha considers posting a picture of a client in an arm sling with the following caption
#Ilikecats #nottheworstnurse "! Loving my placement!
https://share.mindstamp.com/w/ITDMyGobGnfZ

“A person has walked into hospital that she knows from the community and considers opening the EMR to check the reason for admission?!“
https://share.mindstamp.com/w/obPGZCUHpybU

Samantha considers posting the following online

- *"I can't believe how badly I'm being treated on this placement! My Buddy Nurse is rude, unhelpful, and makes me feel like I shouldn’t even be here. No support at all! Do other nursing students go through this?!"*

Discussion Activities:

- Accessing My Health Record and privacy controls
- Digital footprint in EMR and audit trails
- Online identity and reputation



Module 2: Leadership and Advocacy

Objectives:

- Construct strategies which advocate for patient digital health rights.
- Contribute to organisational and national digital health leadership at a beginner level.

Course Vignette Animations:

Samantha, a nursing student on placement at a busy primary care clinic, is assisting with the digital intake process for new patients. During her shift, she helps Mr. Jafari, a new patient in his late 50s who speaks limited English, navigate the clinic's online intake form. Mr. Jafari appears uncertain and hesitant, asking questions like, "Why do they need all this information? Who will see it? Is it safe?"

Discussion Activities:

- Promoting digital health equity
- Leadership actions in digital settings.
- Digital innovation and review of digital health system

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Module 3: Data and Information Quality

Objectives:

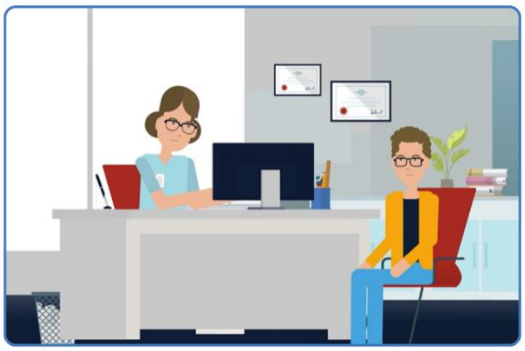
- Generate complete, timely, and accurate data.
- Integrate data management principles for privacy and reliability.
- Explain the data lifecycle in healthcare.

Course Vignette Animations

On her aged care placement, Samantha is reviewing a resident's file before administering medication. Samantha notices a recent note stating the resident experienced dizziness after a medication change. The current medication chart hasn't been updated. She brings this to the attention of the RN, who investigates and confirms the chart had not yet been reconciled.
https://share.mindstamp.com/w/MCiCQKUcYswX

Discussion Activities:

- Data integrity for decision making
- Quality in data capture
- Use of client data decision making



Module 4: Information Enabled Care

Objectives:

- Critique and apply digital data to inform and coordinate care.
- Compose, compile and share information securely.
- Propose evidence-based digital tools that support and extend practice.

Course Vignette Animations

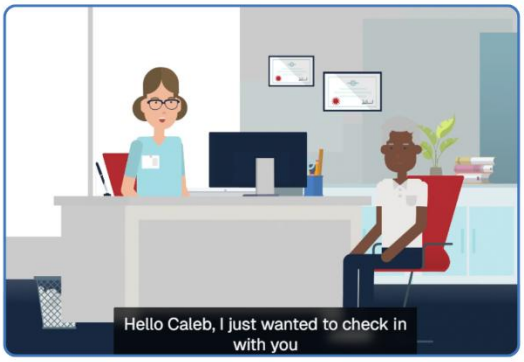
Samantha accesses John Smith's file and navigates to the "Today's Notes" section. John is seeking advice about immunisation for going oversees to Japan. Samantha seeks information from diagnostic assistance in clinical. She selects travel medicine and the country Japan, then proceeds to discuss the recommendation with John.

She writes: "John is going overseas and was seeking advice on immunisation. John has been given information and waits GP Review for prescriptions. Vitals recorded."

Samantha attempts to generate an Event Summary in My Health Record but receives an error message indicating that it cannot be created. What does she do next?
https://vimeo.com/1081668868/fabc0810bd?share=copy&fl=sv&fe=ci

Discussion Activities:

- Interprofessional data creation and sharing for continuity of care
- Understanding Healthcare Provider Identifier–Individual (HPI-I)
- Reflection on emergency access protocols and privacy codes.



Module 5: Technology in Practice

Objectives:

- Analyse the appropriateness of digital technologies for clinical settings.
- Apply governance policies for ethical and secure use.
- Demonstrate critical utilisation of digital tools for problem-solving and decision-making.

Case Study:

Lately, Samantha has been caring for Caleb Derrington a 71-year-old man with a history of hypertension, heart disease, osteoporosis, type 2 diabetes, cataracts, emphysema and depression. She notes that Caleb has been prescribed numerous medications for these conditions. Samantha is sure she can find some Apps and other digital technology to assist Caleb manage his medication regime and other chronic problems.
https://share.mindstamp.com/w/HuaqJSLhOgTD

Discussion Activities:

- Leading digital health innovation
- Digital health literacy and governance
- Evidence-Based digital health tools