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Health Service Managers' Digital Competencies: A Conceptual Framework

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Context and Rationale

Overall Aim

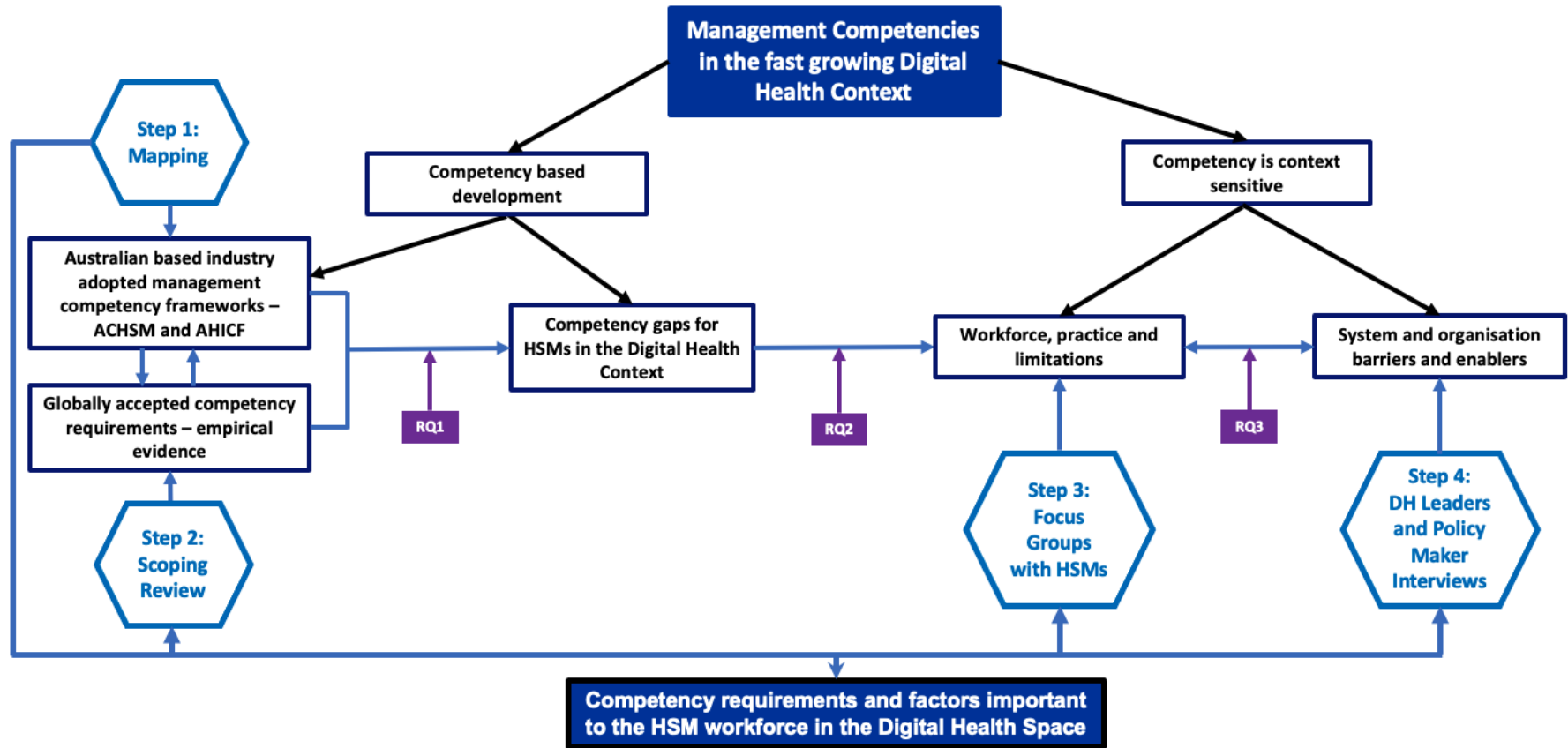
To examine the existing efforts in developing health service managers' competence in working with and managing in the digital health space.

Research Aims

The purpose of this study is to:

1. Determine the applicability and relevance of the digital health competencies for health service managers in the Australian context.
2. Confirm the core digital health competencies that need to be included in the training agenda for health service managers.
3. Identify key factors that impact on the development and demonstration of core competencies for health service managers in working with and managing in the digital health space.

Conceptual Framework



Legend

Blue lines = research process

Purple boxes = research questions

RQ1: To what extent can the existing health service management competency framework guide development of competence for health service managers in understanding and managing in the digital health space?

RQ2: What are the competencies that are necessary for health service managers to acquire in order to effectively work with and manage in the digital health context?

RQ3: What are the key factors that enable and inhibit health service managers to demonstrate digital health competence in the workplace?



Results – Competency Mapping Approach

Of the 21 master's level programs mapped:

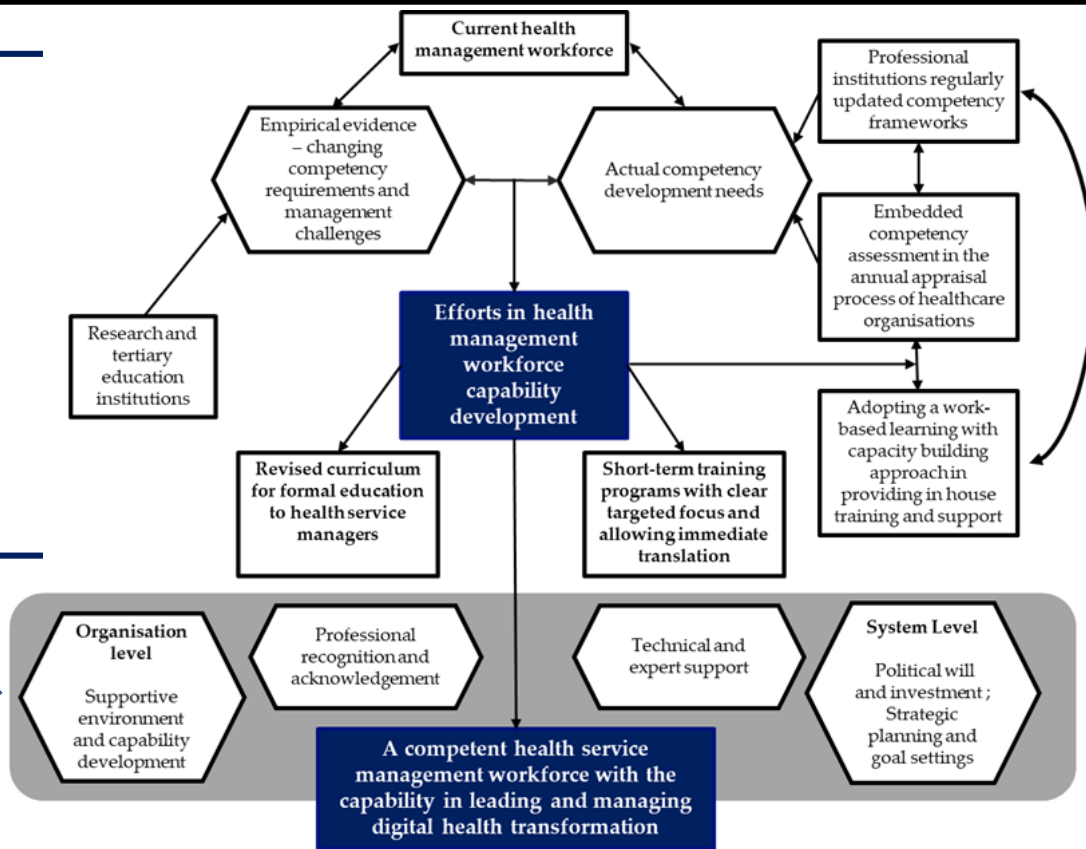
- **19%** of the AHICF competencies were **fully addressed** (all of the AHICF competency key words *and* the health informatics context was identified)
- **9%** of the AHICF competencies were **mostly addressed** (two or more of the AHICF competency key words *and* the health informatics context was identified)
- **19%** of the AHICF competencies were **partially addressed** (two or more of the AHICF competency key words *and* no health informatics context was identified)
- **53%** of the AHICF competencies were **not addressed at all** (none of the AHICF competency key words *and* no health informatics context was identified).



Key strategies for developing health management workforce competency



Key factors that enable health management workforce development in the digital health context





Results – Focus Group Discussions (FGDs)

Existing Skills and Knowledge:

1. agility
2. change management
3. common language
4. data management
5. decision making
6. governance
7. project management
8. risk management
9. system capability

Additional Skills and Knowledge:

1. change management
2. data management
3. educating staff
4. governance
5. negotiating
6. security
7. system knowledge
8. vendor management



FGD Participant Observations – New Skills

- “We need to ingrain **cyber-hygiene** training into the organisation, from top to bottom. The whole workforce.” (6.8)
- “I think the potential **data breaches** is still a critical fear for both patients and clinicians, and every now and then you get the breach of trust and turns the world upside down.” (1.3)
- “We already learned from a previous experience here in our State, where a lot of health services were hit with **cyber-attacks**. We try to think of how best can we insulate ourselves from some attacks?” (3.6)
- “There's a lot of **negotiating**, a lot of strategic level thinking that we previously didn't need to have as managers.” (5.3)
- “**upskilling** people so that they have data skills. So that we have more clinicians and business people who can self-serve with the data that is available and get that more benefit out of it.” (4.7)
- “If you are responsible for the business unit that's running a particular system, it also leads you into more engagement with the **vendors** around the performance.” (4.3)



Results – Focus Group Discussions (FGDs)

Increased Responsibilities:

1. accountability
2. confidentiality
3. decision making
4. expectations
5. governance
6. staff training

Participant Observations – Expectations:

- “With the more technology and the more access people have, they have much, much higher **expectation** on the managers.” (4.1)
- “I’m having a whole digital chain-of-things that I have to approve, but often I don’t have the information, so they’re **expecting** me to approve things, that previously I would have asked questions about before I approved.” (6.4)
- “I’m **expected** to have a level of knowledge and responsibility for making sure this whole setup, not just the EMR, but digital communication works for all of these people.” (1.2)



Implications and conclusion

- Health service managers need to develop leadership and management competency in managing and leading digital transformation, guided by an evidence-informed **framework**, with supportive working environments and enabling mechanisms in place.
- Seven key **factors** that enable health management workforce development in the digital health context have been confirmed and categorised into system, professional and tertiary institution, and organisation levels.
- Five key **strategies** for developing health management workforce competency and capacity have been established and include the needs for competency assessment, using competency models, with formal development, short-term training, and contextualised work-based professional development.



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