Research and Evaluation Board Update:
An integrated approach to building the evidence base
Australian Digital Health Agency
August 2017
The Agency’s approach to Research and Evaluation

Better health for all Australians enabled by seamless, safe, secure digital health services and technologies that provide a range of innovative, easy to use tools for both patients and providers.

Informing the success of the Agency

Purpose: To facilitate and coordinate the creation of evidence to support our ongoing national investment in digital health services and technology, with a focus on our Agency work plan deliverables and the benefits of MyHR national expansion.

Outcome: Effective and efficient delivery of evidence based digital services to Australians.

World Leading Digital Health Research

Purpose: For the Agency to be recognised, respected and trusted as thought leaders in digital health.

Working with experts: Partner and contribute to world leading digital health research initiatives or collaborations that support our national digital health strategy workplan priority areas.

Outcome: To position the Agency as a respected leader in evidence based digital health policy and practice, both domestically and internationally.

Internal Engagement and Integrated Working

Purpose: Evidence is appropriately used and understood so it can inform current and future activities as outlined in the Agency Strategy.

1. Applying a matrix working culture: Agency programs are informed and driven by evidence and best practice methods.

2. Building capacity and capability: Agency staff will understand the importance of evidence based practices in an environment where evidence can be easily applied.

3. Measuring benefits: The tangible benefits of our key workplan priority areas and the MyHR system are evaluated and used to drive performance.

Outcome: By 2018 the foundations have been built to ensure evidence is used to inform the delivery of services.

Engage and Build External Digital Research Infrastructure

Purpose: Work with the research community to design, deliver and translate high quality research that strengthens the delivery of digital health services.

1. Equitable engagement: Requests for Agency support of externally led research projects are assessed equitably against approved criteria.

2. Increasing digital health research investment: Additional external funding sources are leveraged to ensure the continuation of ongoing digital health research investments.

3. Building the talent pool: Contribute to building the academic and broader health community research workforce.

Outcome: Established domestic and international partnerships and collaborations that produces translatable research which underpins the Agency’s products and services.
Research and Evaluation overview

Purpose

To facilitate and coordinate the creation of evidence to support our ongoing national investment in digital health services and technology, with a focus on our Agency work plan deliverables and the benefits of MyHR national expansion.

There are three overarching work streams

1. Internal engagement and integrated working
   - Agency programs are informed and driven by evidence and best practice methods
   - Agency staff will understand the importance of evidence based practices in an environment where evidence can be easily applied
   - The tangible benefits of our key workplan priority areas and the MyHR system are evaluated and used to drive performance

2. Engage and build external research infrastructure
   - Requests for Agency support of externally led research projects are assessed equitably against approved criteria
   - Additional external funding sources are leveraged to ensure the continuation of ongoing digital health investment
   - Contribute to building the academic and broader health community research workforce

3. World leading digital health research
   - Partner and contribute to world leading digital health research initiatives or collaborations that support our national digital health strategy workplan priority areas
1. Internal engagement and integrated working

Agency programs are informed and driven by evidence and best practice methods.

We will underpin our work with:

- Evidence from current research and innovation (domestic and international) to shape our development and delivery of services (led by Research Programs team)
- Robust evaluation findings that will be used to build our knowledge base and drive performance across all programs (led by Benefits Evaluation team)

To deliver this across the Agency, we are creating:

- A Research Strategy with a Research Translation framework
- An Evidence Collection to support evidence briefs, Agency reports and publications
- Our ‘Research at the Agency’ webpage, informing Agency staff and external stakeholders
1. Internal engagement and integrated working

Agency staff will understand the importance of evidence based practices in an environment where evidence can be easily applied.

To achieve best results all of our work practices will:

• Use an integrated (matrix) approach from Research Programs Team and Benefits Evaluation Team to build knowledge across whole of business, supporting:
  • core operations (focus on MyHR expansion),
  • clinical programs (medication safety, pathology and DI)
  • innovation and development (enhancing clinician and consumer experiences)
  • government and industry collaboration (research partnerships with stakeholders)
  • organisational excellence and staff education and development (grand rounds)

• Be underpinned by a robust Research Strategy and Translation Framework
1. Internal engagement and integrated working

The tangible benefits of our key workplan priority areas and MyHR are evaluated and used to drive performance.

To maximise the use of evaluation findings, we will deliver this by:

- Dovetailing the MyHR expansion program benefits measurement framework with the benefits evaluation plans being adopted within other Agency divisions including clinical programs, innovation and development. For example:
  - improved medication safety (avoiding ADEs)
  - pathology and diagnostic imaging to the MyHR system, (reduced test duplication)
  - usability and consumer/clinician experience design evaluation of the MyHR system (time savings)
  - secure messaging (improved care coordination)
  - quality and safety led evaluation of MyHR in emergency care (avoided hospital admission)
2. Engage and build external research infrastructure

Requests for Agency support of externally led research projects are assessed equitably against approved criteria

We will establish a Research Programs Reference Group:

• external research expertise from a range of disciplines within digital health research and education
• ad hoc, to advise the CMA on externally facing projects delivered by our Research Programs team (eg Research Strategy, Annual Digital Health Report, developing our Digital Health placements policy and procedures)
• building relationships and supporting Agency knowledge and opportunities for translation of externally led research
• assuring equitable partnership processes for funded and in-kind support of priority research
• build trust and external assurance that we are adopting an evidence based approach to our workplan deliverables
2. Engage and build external research infrastructure

Additional external funding sources are leveraged to ensure the continuation of ongoing digital health investment.

We will work with the research community to:

• support the creation of evidence through digital health research with:
  • formal partnerships
  • commissioned research projects, and
  • in kind support across academic, clinical and industry participants

• guide the evidence building led by the external research community to allow the Agency to have input into research design, targeting evidence building where a stronger knowledge base is needed to support investment in our workplan priority areas

• ‘future proof’ the Agency, ensuring the delivery of our digital health services are evidence based and outcomes focused (improved health and well-being, achieving clinical priorities)
2. Engage and build external research infrastructure

Contribute to building the academic and broader health community research workforce.

**Building capabilities to test longer-term digital health solutions by participating in:**

- Domestic research partnerships to support Agency engagement with leading digital health research and development
- Collaborations across DOH and the jurisdictions, and other Commonwealth entities
- Scope and develop our Digital Health Placement policy and procedures to offer a learning experience or research opportunities. This will focus upon:
  - The Agency contributing to capacity building a skilled ehealth research workforce
  - Positioning the Agency as desired digital health destination to gain knowledge and experience
  - Collaboration and partnership arrangements, building relationships with academic and training institutions
  - Process of hosting students/academics for short-term placements, higher degree awards and post doctoral research that aligns with the National Digital Health Strategy
3. World leading digital health research

Partner and contribute to world leading digital health research initiatives and collaborations that support our national digital health strategy workplan priority areas

Guided by the Agency’s research strategy, working towards:

• priority partnerships with leading national and international digital health research leaders, organisations and institutions to build our international profile as leaders in digital health
• improving our understanding of methodologies and findings to support our research and evaluation approaches
• positioning the Agency as being recognised, respected and trusted as international thought leaders in digital health
Example of our matrix approach to research and evaluation: MyHR benefits measurement project

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<td>Inform</td>
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<td>Inform</td>
<td>Lead</td>
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<td>n/a</td>
<td>Support</td>
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<tr>
<td>6 Project mgmt and reporting</td>
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Delivery timeline Research Programs 17/18 work plan

16/17 Research Programs
- Transformative Research Collaboration
- Embed Grand Rounds

17/18 Research Programs
- Establish research partnerships
- Digital Health Report (MyHR evidence summary)
- Research and evaluation annual update (internal)
- Development of Research Strategy
- Establish Digital Health Placements policy and procedures
- Targeted NDHS and MyHR research and evaluation projects

BAU activities
Projects with external costs in 17/18 Research Programs budget
## Research programs: risks, issues and mitigations

<table>
<thead>
<tr>
<th>RISK</th>
<th>Likelihood</th>
<th>Impact</th>
<th>Severity</th>
<th>MITIGATION</th>
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<tr>
<td>Matrix approach within Agency to embed research and development with a focus on benefits and strategy priority areas is poorly adopted</td>
<td>Unlikely</td>
<td>Major</td>
<td>High</td>
<td>Benefits team and research programs team are engaging with programs across organisation to support the development of evaluation plans (MyHR expansion program, clinical program priority areas path/DI and medication safety, secure messaging); project governance established for MyHR expansion program benefits evaluation integrating cross Agency divisions</td>
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<td>Externally funded research projects are delayed due to delays in identifying research partners and Agency commissioning processes</td>
<td>Possible</td>
<td>Moderate/Major</td>
<td>High</td>
<td>Establishment of commissioning processes and external advisory support (RAC) for equitable research project commissioning are underway, priority research questions are in development with benefits and research programs teams; engagement with a range of research organisations with range of methodological skills underway</td>
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<td>Externally procured or commissioned research projects may lead to research outcomes that do not demonstrate positive benefits, or demonstrate negative benefits</td>
<td>Possible</td>
<td>Moderate/Major</td>
<td>Medium</td>
<td>Initial focus on market research with Agency led question development; integration of case studies and benefits evaluations targeting geographic areas where MyHR implementation, community and clinical uptake has occurred; ongoing education/communication with external stakeholders regarding expectation of benefits realisation over 10 year horizon</td>
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<td>Secondary use framework development led by DOH is delayed or does not permit SO to undertake MyHR health data linkage at an individual level without individual consent</td>
<td>Possible</td>
<td>Moderate</td>
<td>Medium</td>
<td>Advocate through secondary use consultation for ability to access clinical data and undertake data integration for evaluation purposes; consider external research projects commencing ahead of the secondary use framework being available with individual consent within methodology; Consider a range of alternate research methods, including subcontracting external groups holding datasets containing MyHR usage, funding health service research grants through external foundations to stimulate research focused on research questions that require qualitative methods</td>
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