The Dashboard implementation study

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Outline of the session

- The Digital Dashboard- short recap

- Why evaluate implementation?

- The ELDAC Digital Dashboard Implementation study :

    - Plan

    - Progress

    - Challenges

    - Lessons learned

- **Way forward**

The Dashboard recap

- Integrated palliative care web-platform that is designed to track and visually represent key end of life care processes and indicators relevant for reporting and clinical decision making.

- The dashboard aims to :

  - Support a consistent and comprehensive approach to end of life
  - Show what is happening (client level, manager level, organisation level)
  - Provide triggers and flags for care prompts
  - Assist in reporting and/or benchmarking

Visualising the Dashboard
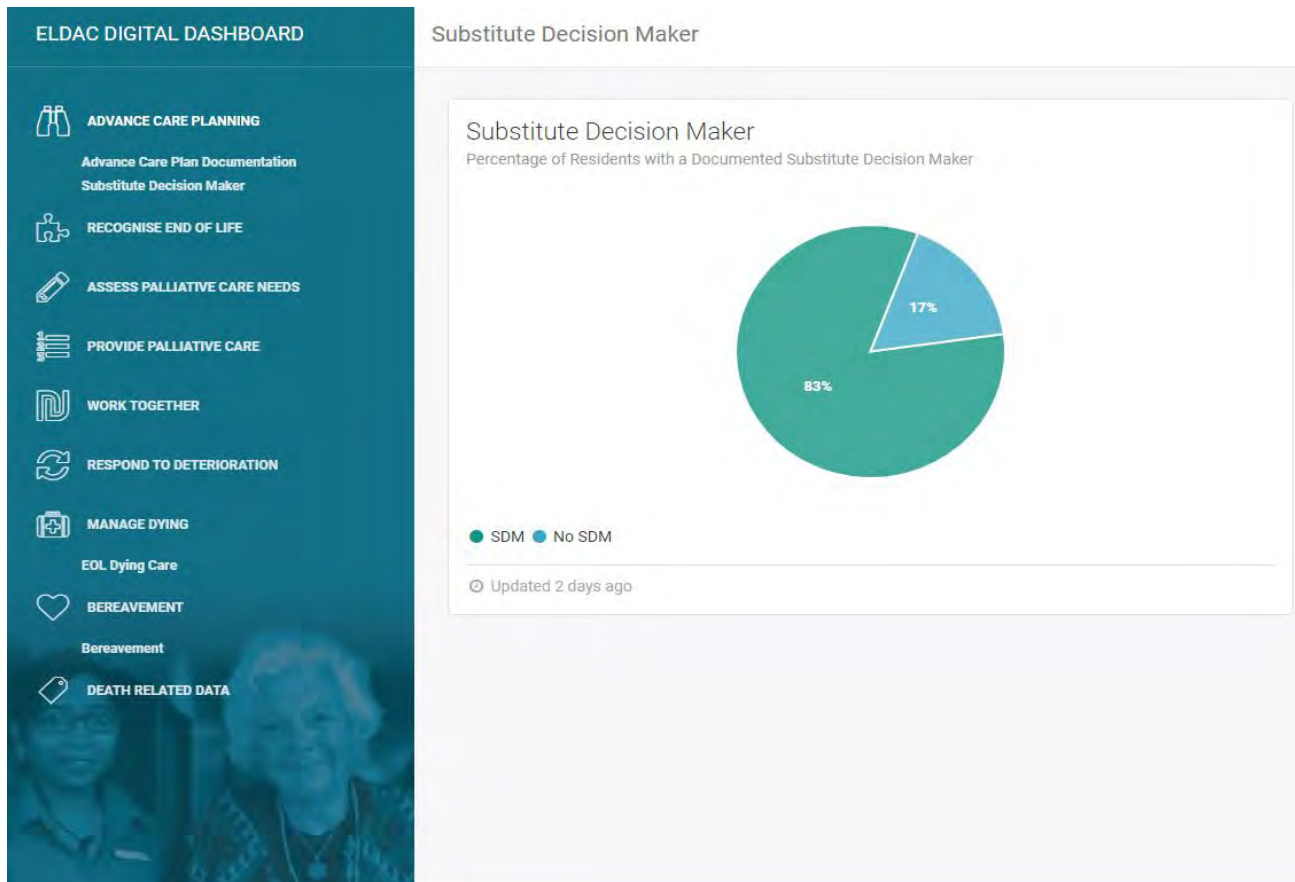
The Dashboard recap

- Successful integration: Four IT teams/companies

  - Three have active aged care clients

- The Dashboard was ready for use by the aged care sector

End of engagement?

Obligation and curiosity

- Obligation for support?

- Do we want to understand the real world implementation of this novel product?

Ideas are easy.
Implementation is hard.
Guy Kawasaki

~~Innovation sells itself~~

- Multitude of factors influence a new technology's implementation in the health/aged care setting.

    - Technical [usability, acceptability, integration, accessibility]

    - Social [attitudes and concerns, benefits/values, motivation/resistance, training support, champion]

    - Organisational [leadership and management, user ownership, change readiness]

    - Socio-political [industry context, policy, local and international developments]

Cresswell, K. M., Bates, D. W., & Sheikh, A. (2013). Ten key considerations for the successful implementation and adoption of large-scale health information technology. *Journal of the American Medical Informatics Association : JAMIA*, *20*(e1), e9–e13. https://doi.org/10.1136/amiajnl-2013-001684

The Digital Dashboard implementation

- Critical to support and understand the ELDAC digital dashboard implementation in the Australian aged care setting.

Conceptualisation and planning of the 'ELDAC Digital Dashboard Implementation[EDDI] study.

ELDAC Digital Dashboard Implementation[EDDI] study

Primary objective:

To explore the merit of a palliative care dashboard, and the factors and agents that influences its implementation in the Australian aged care setting.

Key elements of exploration/evaluation

- Merit

- Acceptability

- Implementation

Study duration

Total of 3 months with an 8 week Dashboard use trial period at each site.

Participants of the EDDI study

Service level: Aged care services with access to the newly integrated Dashboard
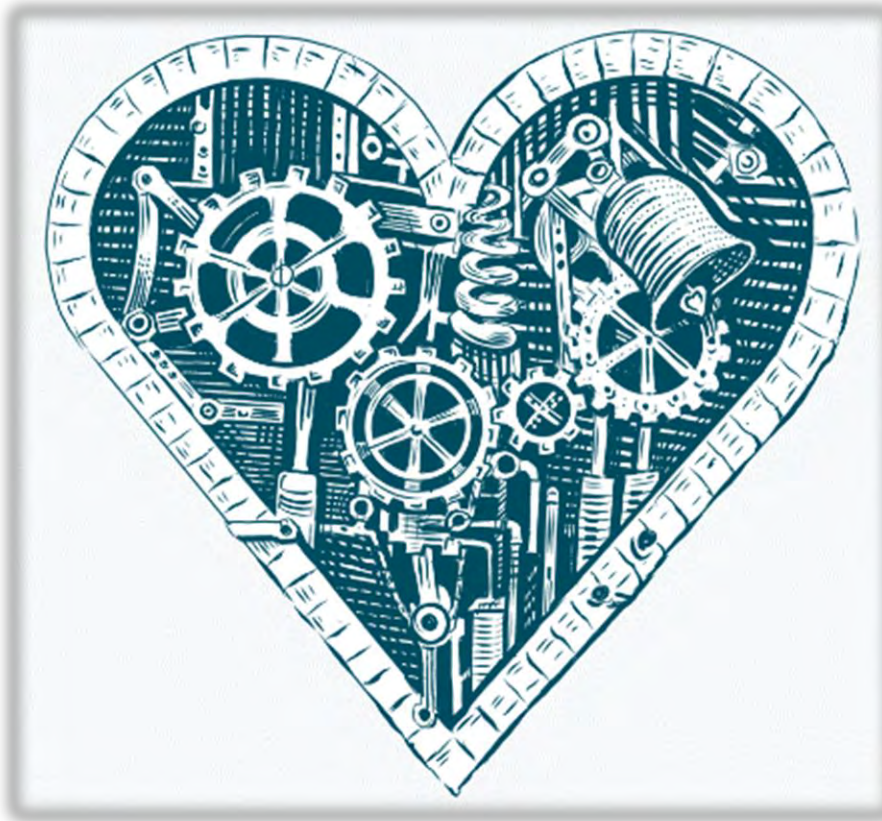
Individual level: Clinicians who will be using the Dashboard

Individual level: dashboard champion of each site

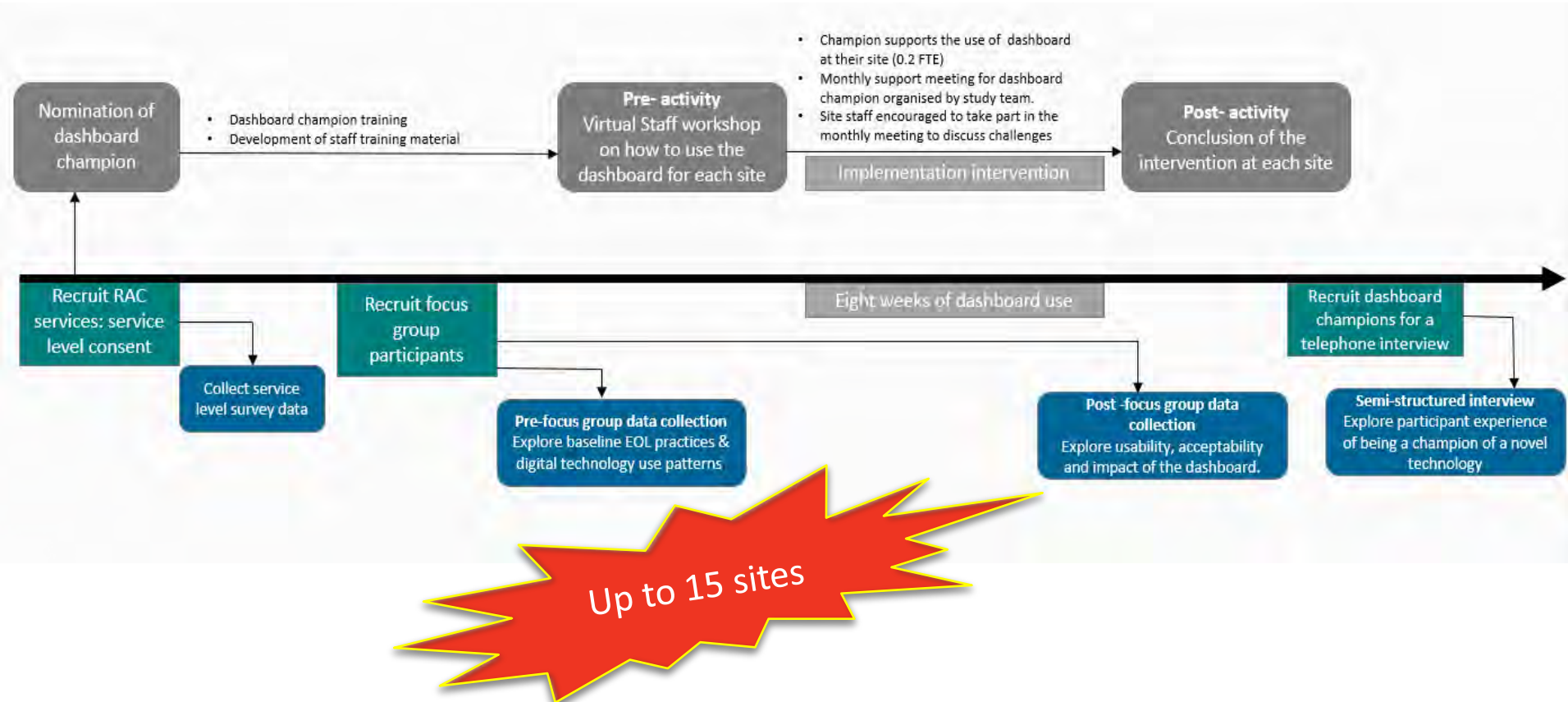# The heart of the matter: Dashboard champions

Implementation agents

Dashboard champions at each site

- 0.2 FTE per week

- Works with study coordinator to train site staff on dashboard use.

- Supports dashboard use at their site during the 8 week dashboard trial period.

- Champion supports the use of dashboard at their site (0.2 FTE)
- Monthly support meeting for dashboard champion organised by study team.
- Site staff encouraged to take part in the monthly meeting to discuss challenges

Nomination of dashboard champion

- Dashboard champion training
- Development of staff training material

Pre- activity
Virtual Staff workshop on how to use the dashboard for each site

Implementation intervention

Post- activity
Conclusion of the intervention at each site

Recruit RAC services: service level consent

Collect service level survey data

Recruit focus group participants

Eight weeks of dashboard use

Recruit dashboard champions for a telephone interview

Pre-focus group data collection
Explore baseline EOL practices & digital technology use patterns

Post -focus group data collection
Explore usability, acceptability and impact of the dashboard.

Semi-structured interview
Explore participant experience of being a champion of a novel technology

Up to 15 sites

Key study activities

1. Recruit the service

2. Recruit the dashboard champion

3. Recruit focus group participants

4. Conduct the pre-focus-group

5. Prepare the site staff training material > conduct staff training session

6. Ensure seamless dashboard access > commence the 8 week trial

7. End of 8 week trial period> conduct post-focus-group.

8. Recruit dashboard champions for a telephone interview > conduct the interview

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Study progress: Recruitment

- **Aged care services**

14 residential aged care services recruited via 2 successful IT integrators > one IT team within a Residential aged care service, and one IT company providing clinical data management platform.

Aged care services description

- 8 metro sites, 6 remote/regional
- 13 in QLD, 1 in WA
- 20-146 bed services
- 2 services specialising in Aboriginal and Torres Strait Islander communities

- **Dashboard champions**

- All 14 sites have active dashboard champions

- **Focus group participants**

- 13 sites have recruited their focus group participants

Study progress: Focus group

- Pre-focus groups session conducted at 10 sites.

    - Additional one-on-one sessions conducted with staffs at two of the 10 sites

- Pre one-on-one interview session(s) conducted at 3 sites

- Currently liaising with the 14th site regarding focus group recruitment and planning.

All sessions virtual due to COVID restrictions

Study progress

Training

Two sets of training materials developed > specific to 2 IT providers

- Training materials tailored as per the site's requirements (if any)

Staff training session conducted at 13 sites.

- 14th site awaiting focus group completion before staff training session planning work occurs.

The trained 13 sites are now in their 8 week trial period.

- Finishing their trial period 1st- 2nd week of December

Brief snapshot of engagement so far

Focus group

- 72 clinicians consented

  - 57 participated in the focus group/interview.

- Majority were RN/ENs, some CNCs, and few site managers.

- Focus group sessions were between 27-53 minutes long

Training

- Most sites had 5-6 staff attendees

- Site CNC and manager present at most sessions

Trial period commencement and dashboard access

- One of the IT provider had deployed the dashboard before training was provided.

- Another IT provider carried out deployment after site training was conducted

Study Challenges
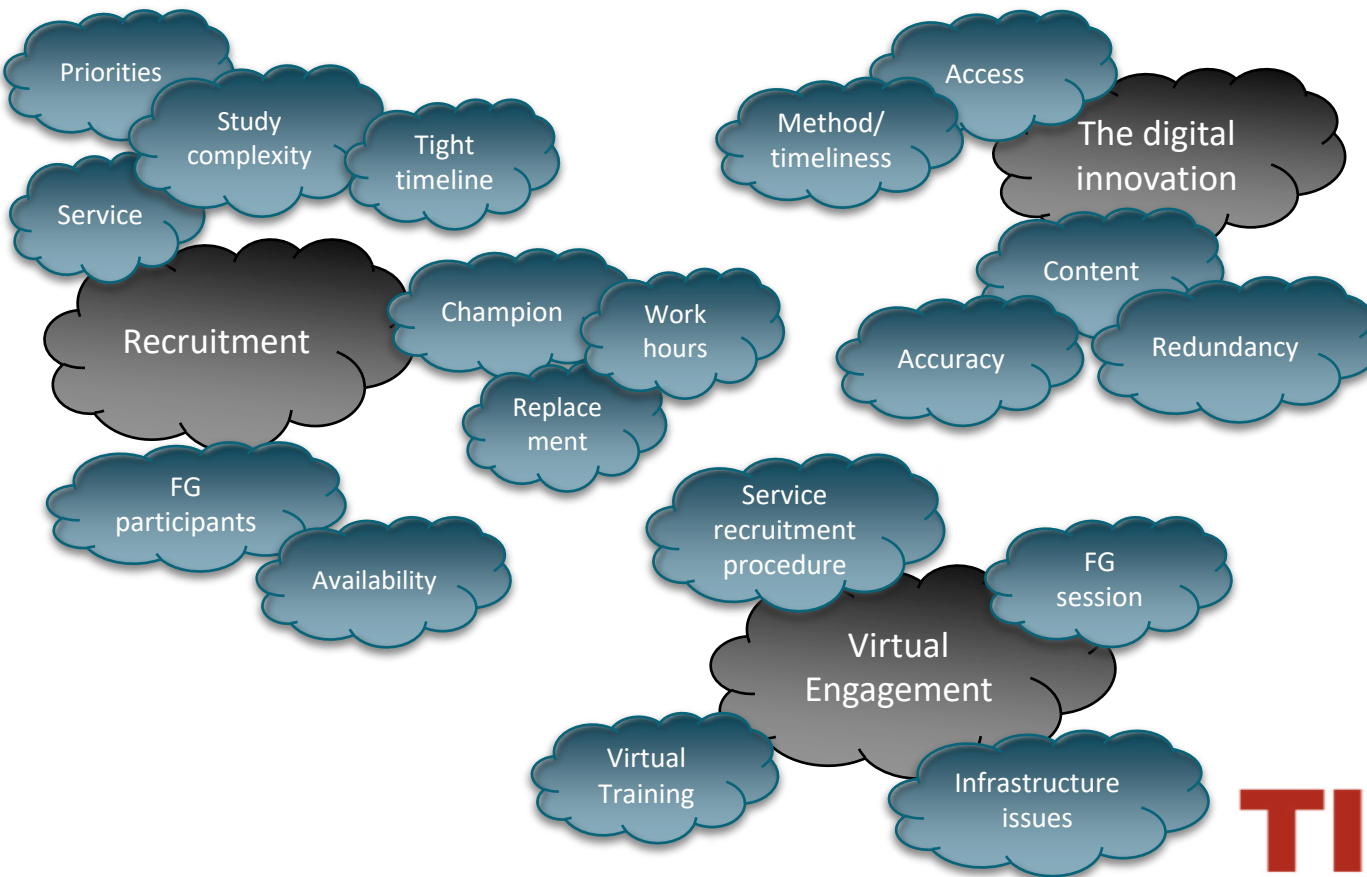
Study challenges: Recruitment

Service level

To participate or not to participate: That is the question.

- Complex structure of the study meant home care services were hesitant to take part.

- Complexities of aged care services meant completing priorities and staff time allocation is always a challenge.

- Strictly tight timeline of the study (has to end by December 31st) added to the burden and anxiety of participation.

Study challenges: Recruitment

Champion level

To participate or not to participate: That is the question.

- Enormous workload of aged care nurses meant little enthusiasm in taking on this role in many cases.

- 0.2FTE per week salary coverage was useful, however workhours/days arrangement was tricky to play out in real life.

- Dashboard champion leaving the facility for a different role, or resigning from their champion role required immediate input from management to carry on study activities while looking to recruit a replacement.

Study challenges: Recruitment

Focus group level

To participate or not to participate: That is the question.

- Time availability within (or outside) workhours was challenging due to busy schedule.

- Some staff were keen to participate and supplied signed consent form, but were unable to join in via digital means.

Study challenges: Virtual engagement

Service recruitment

• Confusion around appropriate document completion for service level contracts, reimbursement agreements, and invoicing.

  • Benefit of face-to-face explanation and on site visit support not possible.
  • Email correspondence based follow ups translated to delays in study commencement

Service level infrastructure limitations

• Limited availability of computers with Teams/Zoom software

• Poor quality internet

Study challenges: Virtual engagement

Focus group session

- Attrition due to participants' inability to establish virtual access to the focus group

  - Issues of device, internet, appropriate room etc.

- Poor mic quality at the participant end > poor interview recording

- Cameras not always set up to capture the whole room> difficult to decipher who was speaking/contributing.

- Some sessions had poor engagement as it is difficult to garner lively and organic interaction virtually in some instances. Especially if the group hasn't had such virtual engagements in the past.

- COVID related precautionary measure of having to wear mask at most (if not all) the time meant muffled voices.

Study challenges: Virtual engagement

Virtual training

- Training material development challenge for those sites who didn't offer access to the site's dashboard to us

  - Reliance on the champion, however no way of cross checking the features.

- Attendees' focus and attention hard to capture well doing virtual session.

  - Disabled mic (and camera)

- Digital 'walk through' of the dashboard at the sites who didn't offer us access to their dashboard was reliant on how well each champion knew the dashboard features.

  - Need to "jump in" and explain the features.

Study challenges: The digital innovation
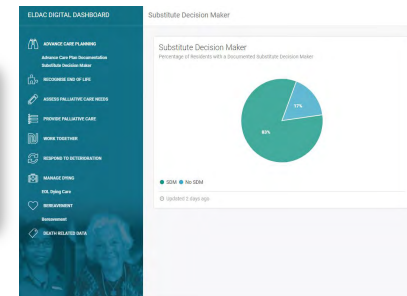
The nature of the dashboard, the fact that it was a technological innovation, brought along some unique challenges.

- Access

- Content

Study challenges: The digital innovation

## Dashboard related challenges: Access issues

- One IT provider waited till completion of the site staff training activities at all of their 11 sites before deploying the dashboard.

    - Last minute deployment challenges> conflicts with existing clinical platform
    - Need to establish access via a temporary (test user login) approach, until permanent solution is devised.

- Champions from 3 sites (out of 11) present at IT training session dashboard access.

    - Study coordinator support for the rest of the sites to establish support

- Interrupted access.

    - Champions comfortable to contact study coordinator outlining the issue.
    - Champions seemed to be struggling to maintain ongoing dashboard access and had difficulty navigating how to seek help from their dedicated IT team > digital competence

Study challenges: The digital innovation

Dashboard related challenges: Content issues

- Changes in some back-end data points (forms/questions within CDMS) between integration commencement and deployment .

    - Inaccurate data capture
    - Redundant questions being linked to the back end.

- Ongoing feedback and amendment process needed to ensure the dashboard was accurate enough to be useful.

- Some new data collection points added into the systems of one of the IT providers. This meant, staff using this system had to be open to using the newly added forms/questions.
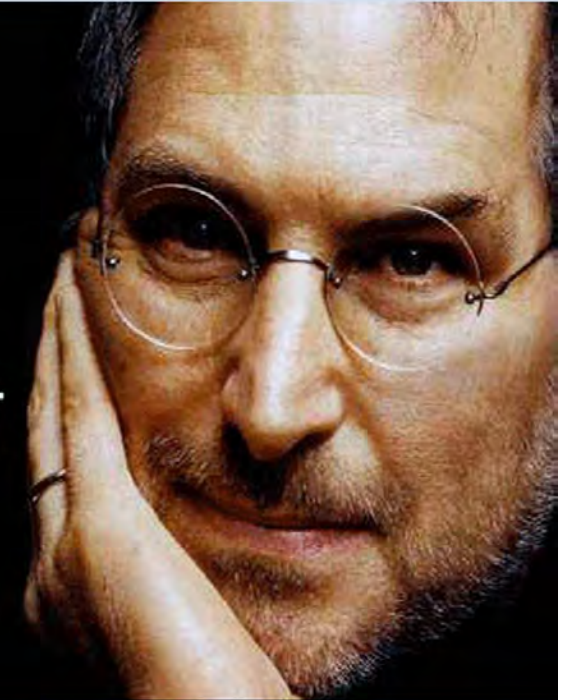
Lessons learned

Novel technology in the aged care setting	Implementation study
Deployment activity is finicky. Anxiety around glitching the main CDMS.	Implementation evaluation is valuable.
Clinicians are not very digitally competent when it comes to new technology and new method of use.	Balance between study complexity and usefulness to the participating sites
Limitations in training (limited access to dashboard) reliance on champion	Reimbursement + management buy in significant. Challenges still remain though!
Dedicated champion of a technology is the bare minimum when introducing new technology into aged care.	Virtual engagement doable but challenging- attention, engagement, infrastructure.
Aged care workers seem open to trialling a new palliative care technology in their workplace	Your deadlines are not my deadlines

Way forward

EDDI Study

- Complete the study trial period

- Carry out data post-data collection

  - Data analysis

  - Report back to Commonwealth.

Key contribution of this work

- Value proposition of the dashboard

- Recommendation/guidance on how to implement a novel technology in aged care

Thank you and questions