



‘Technology in end-of-life care is very important’: The view of nurses regarding technology and end-of-life care.

Presenter: Dr Priyanka Vandersman, RN, PhD
Senior Research Fellow, ELDAC Project, Flinders University



Acknowledgement of the country

ELDAC acknowledges the Traditional Custodians of the many ancestral lands and waters throughout Australia. We recognise the knowledge, strength and resilience of Aboriginal and Torres Strait Islander Peoples, and their continuing spiritual and cultural connections to land, water and community. ELDAC pays respect to Elders past, present and emerging.

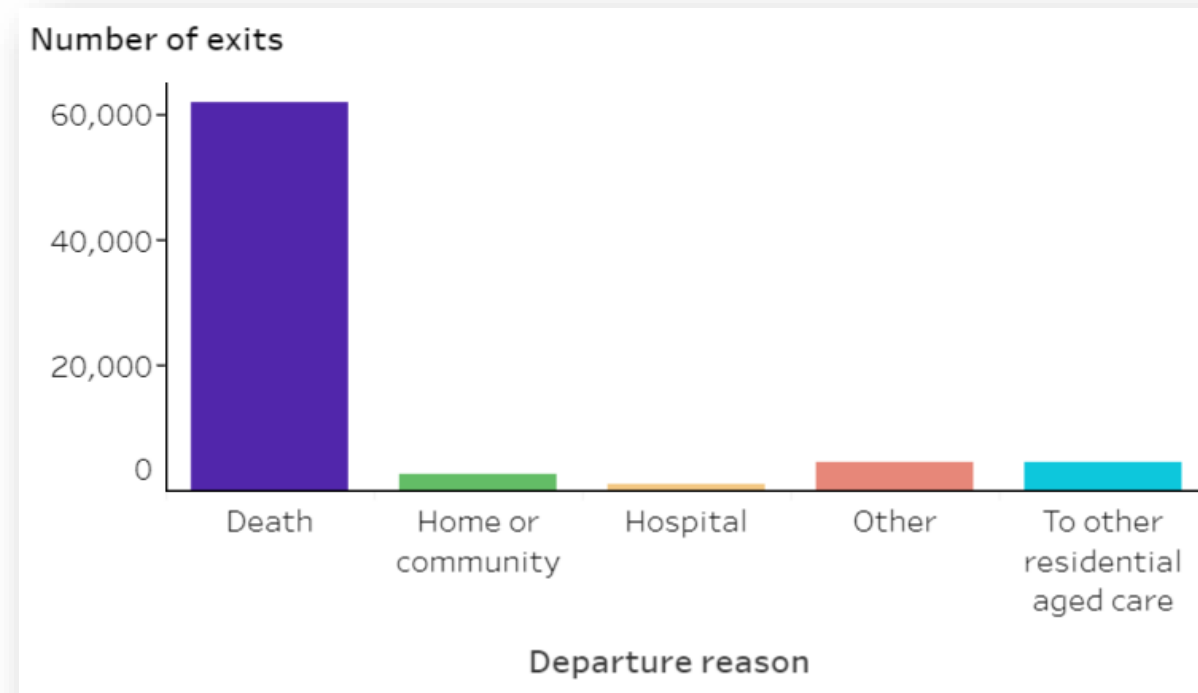
Digital Transformation and aged care

- Significant digital transformation underway -> Australian health, aged and social care system.
- Aged care sector undergoing major digitisation with push for upgrade of infrastructure, programs and approaches for clinical and care data collection, access and sharing.
 - Interoperability
 - Clinical/interactive data collection tools
 - MHR
 - Electronic medication management



Closer look at residential aged care

- Residential Aged Care (RAC) provides care and services to over 220,000 Australians. Most exits [83%] from the setting are via death.
- Many older Australians spend their final year living in RAC setting.
 - Complex comorbidity profile of residents
 - Complex care provision + ongoing considerations of end of life planning necessary.



RAC Nurses- Conduits of care & technology

- Nurses have a key role in providing hands on care in the aged care setting.
- Digitization of aged care environment will require nurses and care workers effectively utilising technology to enhance care process and outcomes.

The challenge: Nurses in RAC are expected to use digital technologies when providing end of life care, but their perspectives on technology use in this context remains underexplored.



To understand the perspectives and expectations of residential aged care (RAC) nurses regarding the utilisation of technology to enhance care at the end-of-life.

Methodological orientation

This qualitative study was part of a larger multi-method implementation study [ELDAC Digital Dashboard Implementation Study] conducted to evaluate the feasibility and merit of implementing a palliative care dashboard into Australian aged care setting.

- Ethics approval was obtained from the Flinders University Human Research Ethics Committee.
- The data reported in this study was collected as part of the pre-focus groups and interviews conducted as part of the larger study.

Participation summary

Setting



14 RAC sites – Two services included focusing on care for Aboriginal and Torres Strait Islander People



3 States: Queensland; Western Australia, Tasmania

Qualitative interview

6 One-on-One Interviews

11 Focus group discussions

Participants

Nurses; care-managers; clinicians; and care/admin support

Majority female [86%], employed as RN [56%]

Study Findings

Theme 1: Engagement with various digital systems and platforms

“We have iCare for all the [client care] information we compile on computers. We use MedMobile, for medications- through iPads and the MedMobile app. And then we’ve got TechOne for our incident reporting and payslips, and Kronos for docking in what time we finish.” [Female, EEN]

“I get a phone call from [hospital-based team]. They send me an email or talk to me, and I liaise- to make sure that I get the links and get online. I actually have to put a note in my diary to go and do the session... to make sure that they [nurses or resident] don’t drop the iPad, they don’t disconnect themselves... to make sure that the device is always charged.” [Female, RN]

Theme 2: Ambivalence toward technology

“I agree, technology is the way to go. Communication is vital, especially in a situation like palliative care where things can change within 24, 48 hours. So, even if we communicate well between resident and the carer and the caregiver [using technology], that would improve the level of care tremendously.” [Male, CSW]

“So, you take around a little tablet [device] when you are doing a person’s cares, but then you are becoming so task [oriented]— as a nurse we are very task-oriented, because we have so much paperwork. And to me, I just think that takes away from the personal, the hands-on care, especially when someone is dying.” [Female, EN]

Theme 3: Challenges and concerns in technology use

“Having all that [clinical data management system] is difficult because it relies on someone like me, to actually upload it. So it is that physicality of having someone stand there and upload them all and then go to the computer and bring them across from our email to put it into iCare. It is a time-consuming process.” [Female, RN]

“When it comes to end-of-life [documentation], it goes to a paper trail which is left in the resident’s room so that the staff go in and do their part... it becomes a paper trail once the doctor announces [the resident is] ‘end-of-life’. Which is a shame because it would be nice if they [clinical data management systems and paper documentation] could speak to each other.” [Female, EEN]

“One of the best things you could do for our situation is training in technology for the nurses to be able to access and to use all that technology.” [Female, Care worker]

Theme 4: Anticipated technology roles in end-of-life

“I think we can build like system that tells us if a resident is end-of-life or not. It takes record of their symptoms and when the symptoms progress, the system would tell us if the resident has progressed in their [decline] trajectory. That way we don’t have to go look at different forms to determine what is happening with the resident and we can just look at their progression in the system.” [Male, RN]

“...to be able to see in one place- where the resident is at, what families have been contacted, and what case review or conversations we have had. To have technology to say how the family are coping, and to be able to plan that care a little bit better, by alerting us into all the areas too.” [Female, CM]

What does this mean?

Openness towards technology

Nurses are keen to engage with technologies for end-of-life provision, despite some ambivalence and challenges encountered in the process.

- ❖ Nurses are exposed to various digital systems and platforms in their everyday roles.
- ❖ The balancing act of hands-on care and technology use when it comes to caring at the end of life.

Implication: Perceptions and attitudes of usefulness of technology shapes its adoption and meaningful use .



Challenges in technology engagement

Nurses face practical and logistical challenges when it comes to technology use in their care setting.

- ❖ Need for multiple-handling of data
- ❖ Poor interoperability between/among systems
- ❖ Systems that are not intuitive or challenging to use



Implication: need to develop technology solutions that do not add to the cognitive load and integrates with existing systems in place.

Need for support

Nurses need appropriate use training and ongoing support to help them meaningfully engage with technologies.

- ❖ Low level digital literacy and capability among the workforce
- ❖ Systems/platforms frequently changed and updated

Implication: Need to provide nurses with support to become familiar with digital tools, build their confidence, and ensure effective technology use.



Technology for end of life caring

Nurses recognised the value of technology in supporting end-of-life and palliative care. There was emphasis on the need for technology-enabled support in symptom assessment and continuous monitoring, medication management.

- ❖ Heavy load of tasks symptom management and daily care in aged care/end of life care.
- ❖ Can be in direct conflict with the interpersonal aspect of caregiving

Implication: Technology solutions should aim at reducing task burdens and foster interpersonal caring opportunities.



End-of-life care data consolidation

Nurses expressed the need for a consolidated dashboard integrating clinical data to monitor residents' decline, reflecting a widespread healthcare challenge.

❖ The well-known challenge of “Data rich, information poor”

Implication: The sector should consider opportunities to integrate dashboards that helps nurses have timely and meaningful access to data that supports palliative and end-of-life care in the aged care setting.



Concluding remarks

- Nurses in RAC are increasingly open to using technology for end-of-life care, despite facing challenges.
- Need for solutions that support end-of-life care practices while enhancing the hands-on aspect of caring.
- To ensure successful adoption, it's crucial to highlight how technology improves care and provide ongoing support and training.
- Consolidated dashboards combining clinical and care data offer further opportunities to enhance end-of-life care in aged care facilities.

Any Questions or comments?



Priyanka.vandersman@flinders.edu.au