

Developing and Evaluating palliAGEDnurse App

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palliAGEDnurse Development

Increasing use of apps by health professionals

Apps developed as part of the Decision Assist Project.

- palliAGEDgp released in April 2015
- palliAGEDnurse released in May 2016

Transferred to palliAGED project/website in May 2017

palliAGEDnurse Development

The development process comprised:

- A review of existing apps in the area
- Proposal discussion / endorsement with GATI Advisory Group
- Establishment of an App Review Group
- Review of content options / agreement on content framework
- Content development by GATI Project Team
- Design and build by Genki Design and Morton Blacketer
- User Testing
- Sign off by GATI Advisory Group post-feedback analysis
- Launch, promotion and marketing

Release of palliAGEDnurse 26th May 2016

palliAGEDnurse Evaluation

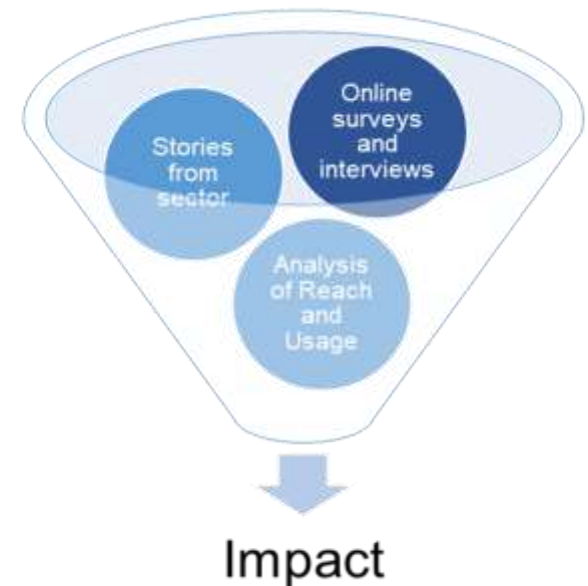
Aims of the evaluation process:

1. To obtain nurses' feedback from those whom had used palliAGEDnurse App– usefulness and any barriers to successful use of the App
 - Iteratively guide future improvements to increase use
2. To increase our understanding of the ways in which nurses use (or don't use) technology in their clinical practice
 - Inform future directions in the development of technology to improve palliative care services and resources to staff

palliAGEDnurse Evaluation

Methodology - 3 Studies

- Study 1: Usage analytics
- Study 2: Online Survey - App Users demographics, experience using palliAGEDnurse and use of Apps generally in clinical practice
- Study 3: Feedback on the use of the palliAGEDnurse App in clinical practice via telephone interviews and Focus Group



Ethics Approval - Social and Behavioural Research Ethics Committee of Flinders University (Project no. 7449)

Study 1: palliAGEDnurse Analytics

Downloads from [Apple Store](#) and [Android Play Store](#)

- Pre-release Prediction: 500 downloads by 30 June 2015
- More than 741 downloads of the palliAGEDnurse app were measured in the first month
- 1,580 downloads end-December 2016

Website analytics

- Top Sections of palliAGEDnurse viewed in this period:
 - Advance Care Planning (1,098, 14.09%)
 - Recognising Dying (1,250, 16.03%)
 - Palliative Care Case Conferencing' (854, 10.96%)

Study 2 (Survey): Overview

- Online survey questions relating to:
 - Demographics,
 - Nurses' experiences with palliAGEDnurse app
 - Experiences with using general Apps in their clinical practice
- Responses were either multiple choice, open-ended, or agreement rated on a 5-point Likert scale
- Survey was available from 26th November 2016 and 9th March 2017
- Promotion through articles featured in aged and primary care newsletters, Twitter and LinkedIn posts, and Decision Assist website

Study 2 (Survey): Respondents

116 online surveys

- 66 “complete” surveys and 50 partially completed

Respondent Demographics:

- 94% female; 62% between 40-59 years
- 32% Victoria and 28% South Australia
- 62% RACF and 69% Registered Nurse

Palliative Care Context

- 56 respondents; 80-100% of their care was directed at people over 65 years (38/56, 68%)
- Estimates of the number of patients/residents cared for in the last 12 months – ranged 0-180 (average 27.8 per respondent)

palliAGEDnurse use

- 31 respondents reported having used palliAGEDnurse App

Study 2 (Survey): General App use

- Palliative Care Apps:
 - Clinical related Apps downloaded (0-15, Median=6.0)
 - 38.7% of respondents used clinical-related smartphone apps according to need, 13.3% used them daily, 20.0% weekly and 1.3% monthly.
26.7% had never used clinical-related smartphone apps.
 - 36% respondents most commonly used their smartphones to search the internet for clinical information daily.

Study 2 (Survey): palliAGEDnurse use

Most common reasons for using the App:

- Planning in the terminal phase (14/31, 45%)
- Palliative approach framework (11/31, 35.5%)
- Case conferencing (2/31, 6.5%)

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
The palliAGED app guides my support of palliative care (n=54)	2 (3.7%)	1 (1.9%)	26 (48.2%)	18 (33.3%)	7 (13.0%)
palliAGEDnurse is easy to use and uncomplicated (n=53)	1 (1.9%)	1 (1.9%)	30 (56.6%)	14 (26.4%)	7 (13.2%)
The framework and processes present within the app are helpful (n=47)	2 (4.3%)	0 (0.0%)	16 (34.0%)	23 (48.9%)	6 (12.8%)

Study 3 (Focus Groups): Overview

Planned:

- 1 NSW Focus group (mixed group of experienced App users) (n=10 participants)
- 2 SA Focus groups (App users, non-App users)
- Survey Eol for phone interviews

Actual:

- Low recruitment, so no SA focus groups (3 phone interviews instead)
- 1 survey Eol phone interview conducted

Approach

- Structured interview and focus group schedule, transcription and thematic analysis

Study 3 (Focus Groups): Participants

Focus Group Participant characteristics (n=10)

- Variety of nursing roles including: Registered Nurses (RN), Residential Managers (RM), Nurse Educator (NE), Care Managers (CM)*, Director of Nursing (DON)*, Nurse Consultant (NC)* [* Familiar with palliAGEDnurse]
- All worked in aged care

Phone Interviewees (n=4)

- Palliative Care Coordinator (2), RN (Dementia), RN (Aged Care)

Study 3(Focus Groups): Themes

Volume of online information available:

- Significant challenges in navigating amount of online evidence-based material
- Apps as a mechanism for facilitating access and also for providing structure.

Organisational policies.

- Smartphones use was commonly not permitted at work or on the floor.
- Unsure about workplace rules surrounding the use of online technologies.

Network quality and internet accessibility.

- Not able to use work wifi
- Poor internet coverage resulting in patchy coverage or dead zones within workplaces

PalliAGED

- Need to create more awareness.
- Opportunities to improve the user friendliness of the palliAGEDnurse app.
- Information on medications and more links to resources

Apps

- Nurses welcomed use of apps to support clinical care
- Familiarity with apps is still developing
- Mechanics are issue for some (eg apps stores, how to download).

Study 3(Focus Groups): Participant examples

“So I think that sometimes you can have an amazing suite of documents or resources or apps or whatever the case may be, but it’s just getting the clinicians on board to you know, have that knowledge of, where do I go to.”

“Like it sort of reiterates what knowledge you already have, like you know, it gives you a revised version because it’s updated. So for example, if you’re thinking oh what should I ask the doctor to write, say it’s an after-hours doctor, so then you have that app to use to give some guidance. You know, they can use it too, but they’re reluctant. But you can say, ‘Oh doctor, this is what you can do,’ and make a suggestion.”

“I think the usability here is a bit limited because we can’t, the RNs can’t use mobile devices because of the internet issues that we have around this area. So they’re stuck with a computer so they’ve got to take the time to log in to that, whereas it would be much easier to use an app rather than a computer. So that’s just a technical issue at this site because of the Wi-Fi connectivity issues.”

“Why haven’t I used it? I think probably because I can generally find what I need in the Therapeutic Guidelines and I’m so familiar with it that I can just about open it to whatever I want.”

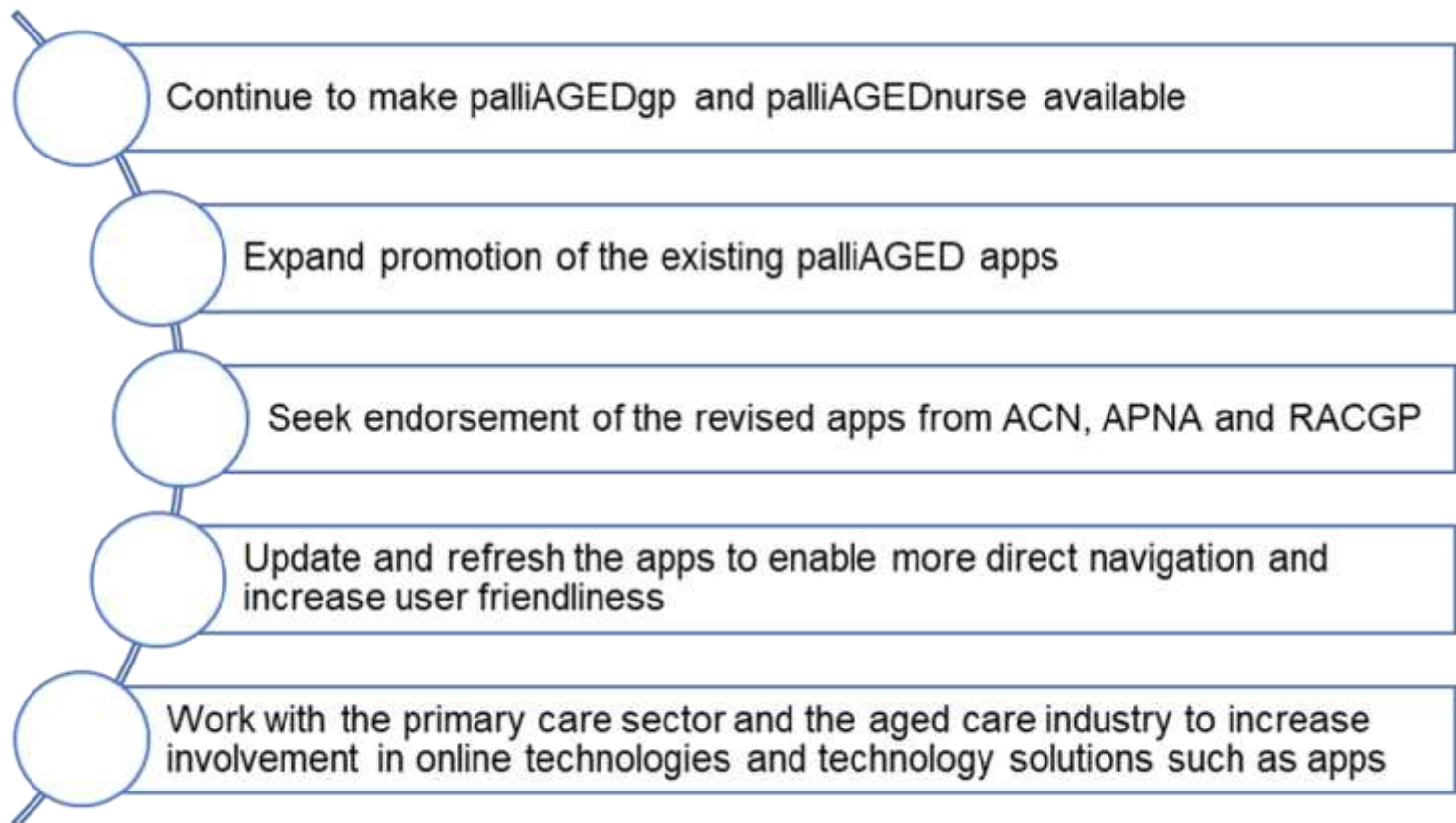
Evaluation Summary

- Use of clinical-related smartphone apps on an as needed basis and nurses may be still be developing confidence and comfort in using apps in clinical practice [Online Survey & Interviews]
- Practical considerations in being able to use technology individually and in the workplace. [Focus group]
- palliAGEDnurse downloads greater than originally anticipated
- Those who had used the app found it guided their practice, was easy to use and that the framework and processes were useful [Online survey]
- The most common reasons for using the app were planning for the terminal phase and understanding the palliative approach framework. [Survey and page view analysis]

Limitations

- The overall findings from the survey, the interviews and the focus groups need to be treated with caution as despite substantial effort to promote the survey and the focus groups, response rates were low.
- Data still contributes to our understanding of attitudes to the role that apps play in nursing practice as well as providing valuable feedback on how palliAGEDnurse is received and could be improved.

Next Steps

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- Continue to make palliAGEDgp and palliAGEDnurse available
 - Expand promotion of the existing palliAGED apps
 - Seek endorsement of the revised apps from ACN, APNA and RACGP
 - Update and refresh the apps to enable more direct navigation and increase user friendliness
 - Work with the primary care sector and the aged care industry to increase involvement in online technologies and technology solutions such as apps

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PALLIATIVE CARE AGED CARE EVIDENCE

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