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Enablers and barriers to the implementation of a falls prevention platform

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Enhancing the implementation of a digital fall prevention platform using the CFIR-ERIC approach

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Background

- Falls associated with increased morbidity and mortality
- 2020-2021 Australian hospitals reported more than 47,000 falls
- Unclear what interventions best help prevent them
- Unclear which implementation strategies best support falls prevention interventions



About the falls prevention platform

- Speech enabled nurse call communication system
- Location services engine
- Digital dashboards (falls risk and workload allocation)
- Integration with chair alarms, mats, and clip on movement alarms

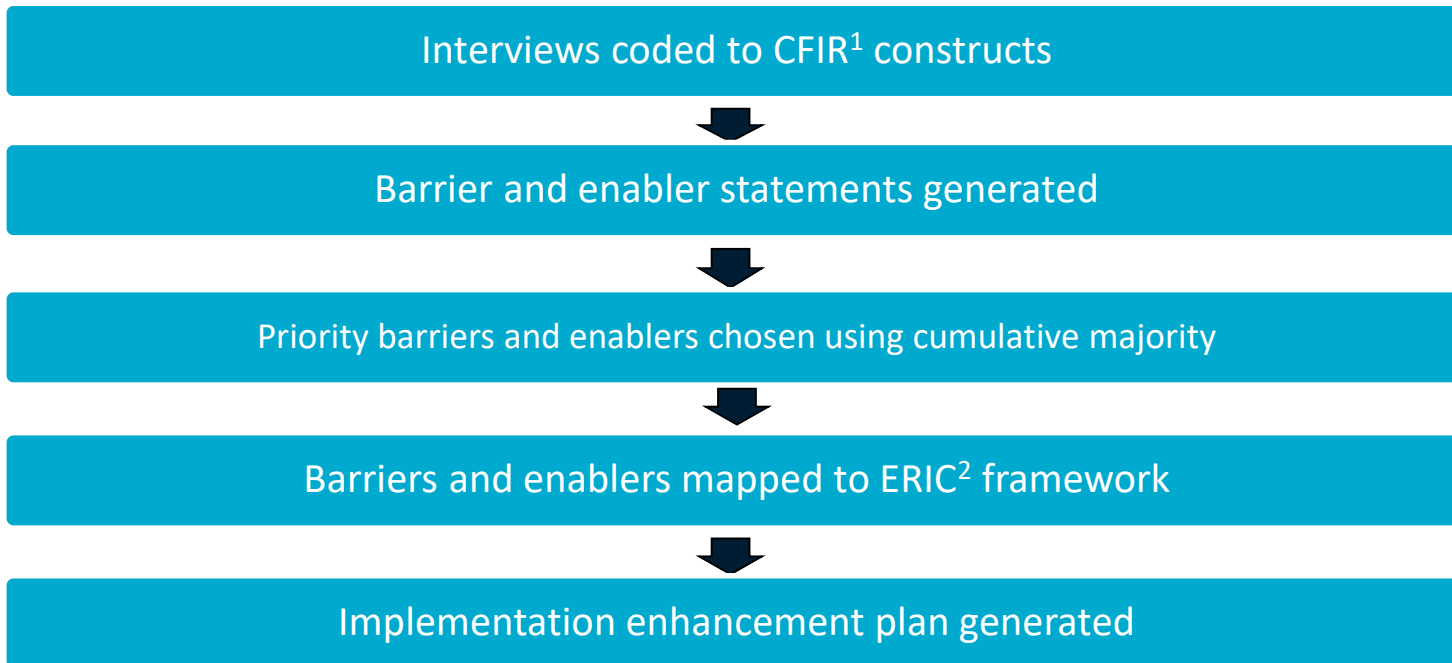


Research approach

- Mixed-methods design (qualitative and quantitative data)
- Implementation theory informed approach (CFIR-ERIC)
- Before and after type-two hybrid effectiveness design (a way to test if something works AND if implementation supports are helping)



Methods





What were the main enablers?

Utility of information
provided by system

System makes
processes more
efficient

Perceived and real
quality of care
improved

Team communication
and accountability
enhanced

Appropriate and
accessible training and
support

Formal communication
channels

Leadership is engaged
in the implementation,
monitoring and
evaluation of the
system.

Orientating patients to
the system is key

Awareness of the
technology being new,
cutting edge or
providing an advantage
to the health facility

Staff feel more
empowered to do their
job efficiently

Staff feel confident to
use the system and
help

Leadership champions

Internal working parties
including leaders help
support uptake



What were the main barriers?

Lack of appropriate and accessible training and support/resources

COVID impacts on staffing and change management

Operational resources (equipment)

Design and function of the buzzer

Lack of consultation/piloting

New ways of working as a team are needed

Workflow creates excess noise, waste and infection control risks

Increased nurse workload due to technology

Contingencies when system down need to be developed



What did ERIC² say should be done?

ERIC Cluster	ERIC Strategy
Train and educate stakeholders	Conduct educational meetings
	Provide ongoing consultation
	Conduct ongoing training
	Make training dynamic
Utilize financial strategies	Access new funding
Adapt and tailor to context	Promote adaptability
Engage consumers	Obtain and use patients/consumers and family feedback
	Involve patients/consumers and family members
Use evaluative and iterative strategies	Purposely re-examine the implementation
Develop stakeholder interrelations	Identify and prepare champions
	Build a coalition
	Involve executive boards



Co-designing solutions

- Workshop held with key hospital stakeholders, nurses, quality staff, educators, managers, leadership
- Facilitated discussion about the enablers and barriers and what the ERIC tool says should be done to enhance, address
- Group developed specific actions, timelines and persons responsible



Implementation enhancement plan³



Train and educate stakeholders

Include in mandatory training using simulation
Online training modifications



Engage consumers

Information integrated into admissions pack
Care board conversations, use of stickers
Refresh staff on patient education need and create audit trail using paperwork



Adapt and tailor to context

Innovation to be adapted – alarms tweaked
Integrate discussion of falls into huddle
Audit + policy and procedure awareness



Implementation enhancement plan



Use evaluative and iterative strategies

Monitoring and reporting – progress and audits
Integrate into leader rounding



Utilise financial strategies

Additional equipment purchased



Develop stakeholder interrelations

Integrate falls metrics and strategies into developing clinical nurse leadership program



Where does digital professionalism fit in here?

- Accountability to use technology which may improve outcomes for patients
- Need for nurses at all levels to be involved with co-designed enhancement plans – feedback is paramount to ensure digital tools are working








Conclusion/Future Directions

- Approach helps develop bespoke implementation enhancement plan – co-design is key.
- Close agreement between the ERIC consensus framework recommendations and the evidence.
- Likely to assist in enhancing the implementation of Rauland Australia's Concentric Care fall prevention platform and other similar workflow technologies.



Article

Creating an Implementation Enhancement Plan for a Digital Patient Fall Prevention Platform Using the CFIR-ERIC Approach: A Qualitative Study

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Thank you

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