



# Recruitment and Retention of ICU Survivors in Follow-up Studies: A Systematic Review

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# Background and Context

- Physical and psycho-social sequelae of critical illness (Bein et al., 2019; Malmgren et al., 2021)
- Increased survival rates (Gajic et al., 2018; The Australia and New Zealand Intensive Care Foundation, 2024)
- Engagement of survivors crucial to advancing knowledge of recovery (Sheridan et al., 2017; McPeake et al., 2021)
- Challenges of engaging and retaining survivors in research (Perez et al., 2022; Abshire et al., 2017)
- Enablers and barriers to engagement and retention are largely unknown (Savard & Kilpatrick, 2022)
- Increased transparency called for to enhance designs of studies (Nunna et al., 2020; Young et al., 2024)

# Research Question

What are the factors which impact on ICU survivors' engagement with research during their recovery?



# Methods

- JBI for convergent mixed methods systematic reviews  
(Lizarondo et al., 2020)
- Protocol registered with Prospero (CRD42022315688)
- Reported in alignment with the International Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) Guidelines (Page et al., 2021)



# Methods – Search Strategy

Adult ICU survivors AND patient recruitment OR retention AND research

CINAHL+, EMBASE, PubMed, Proquest, Scopus, Psycinfo

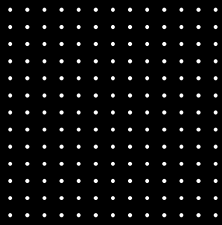


Primary studies all methodologies

Contained data of strategies to enhance recruitment and retention

Manual search of reference lists

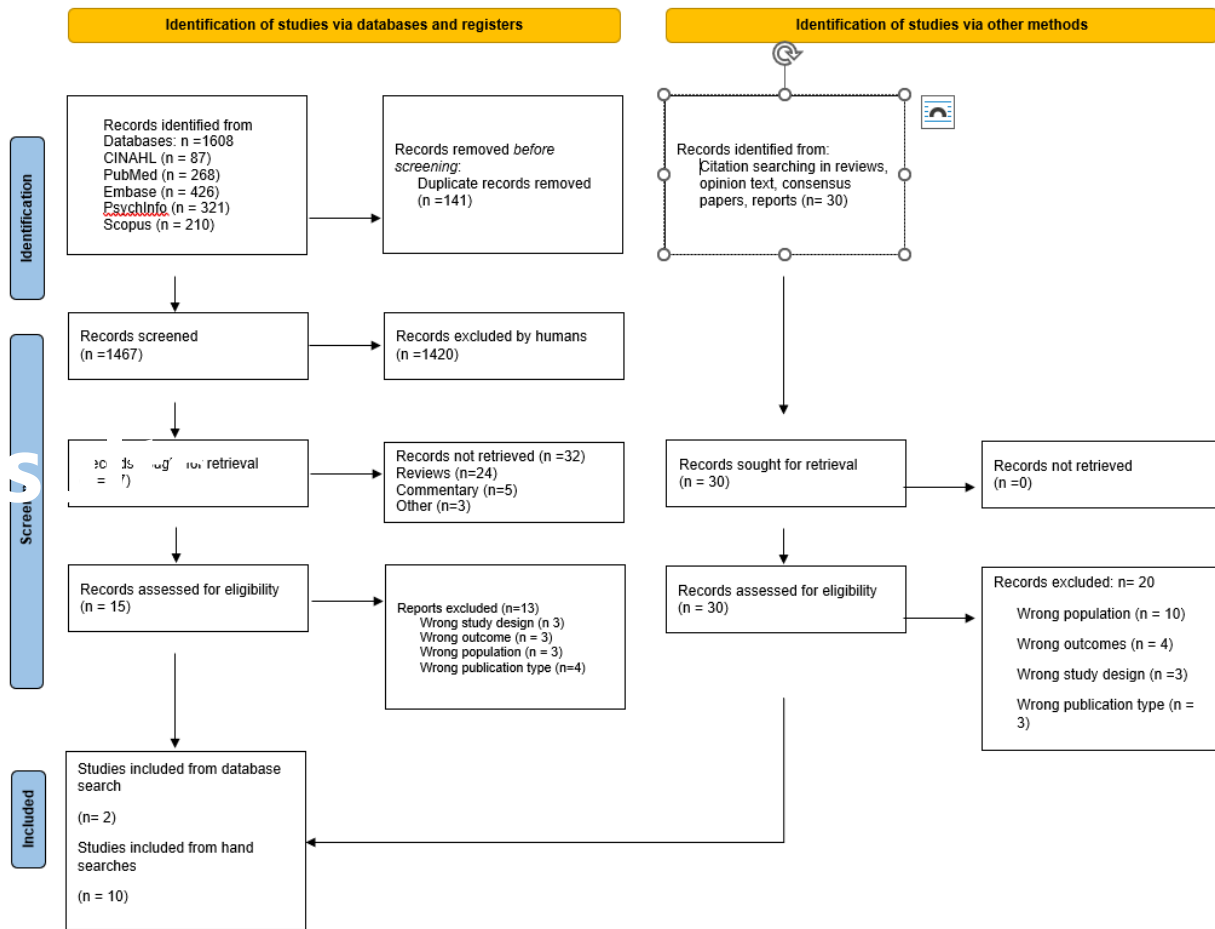
Potential sources uploaded into Endnote and Rayyan



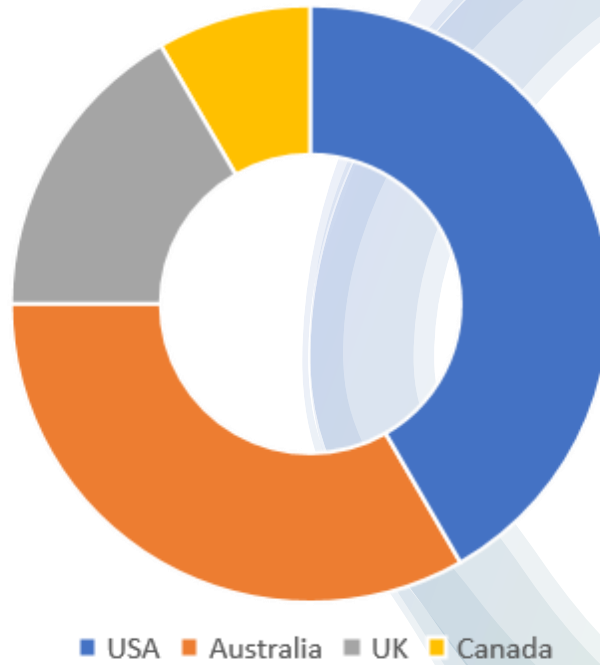


# Methods – Study Selection Process

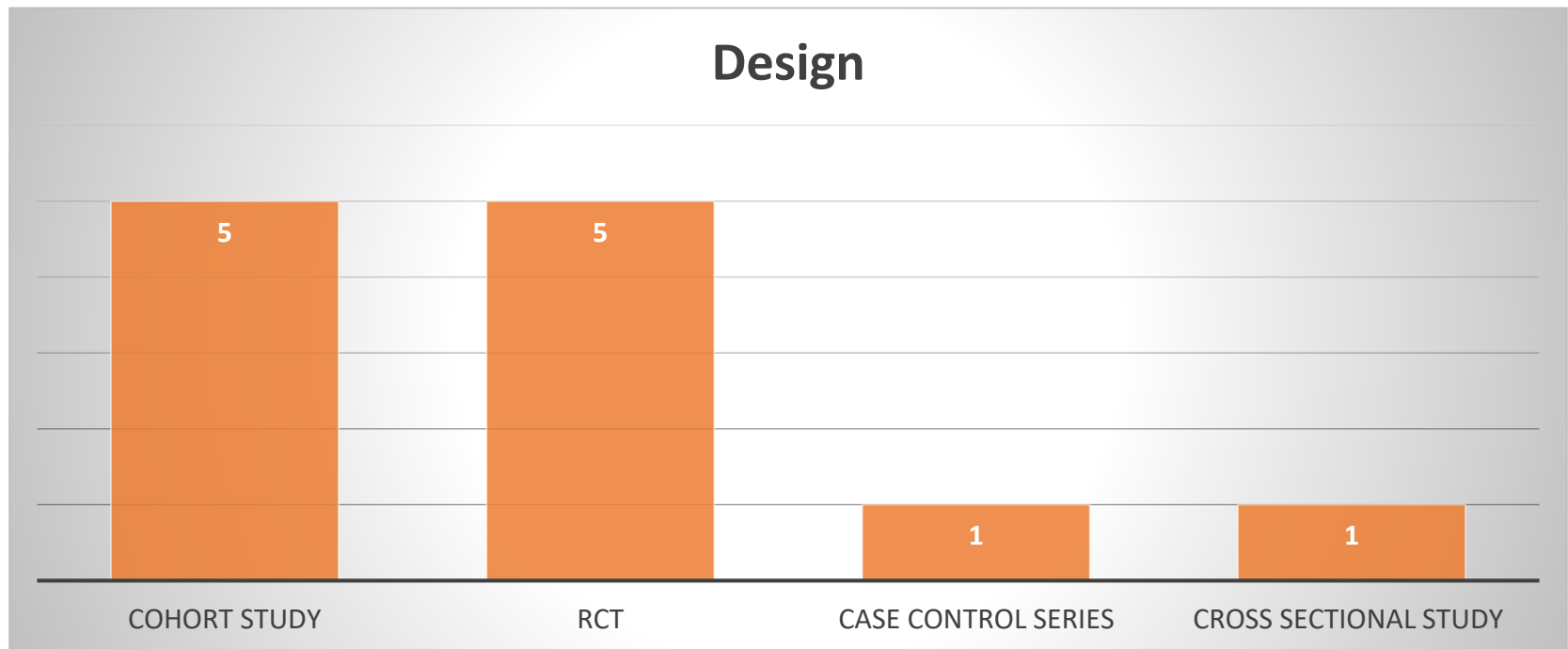
- Two researchers independently reviewed each record, including full text
- Group discussion resolved any conflicts
- Quality appraisal
- Data extraction
- Data analysis



# Study Characteristics



# Study Characteristics





# Main Findings

## Factors influencing participation/non engagement

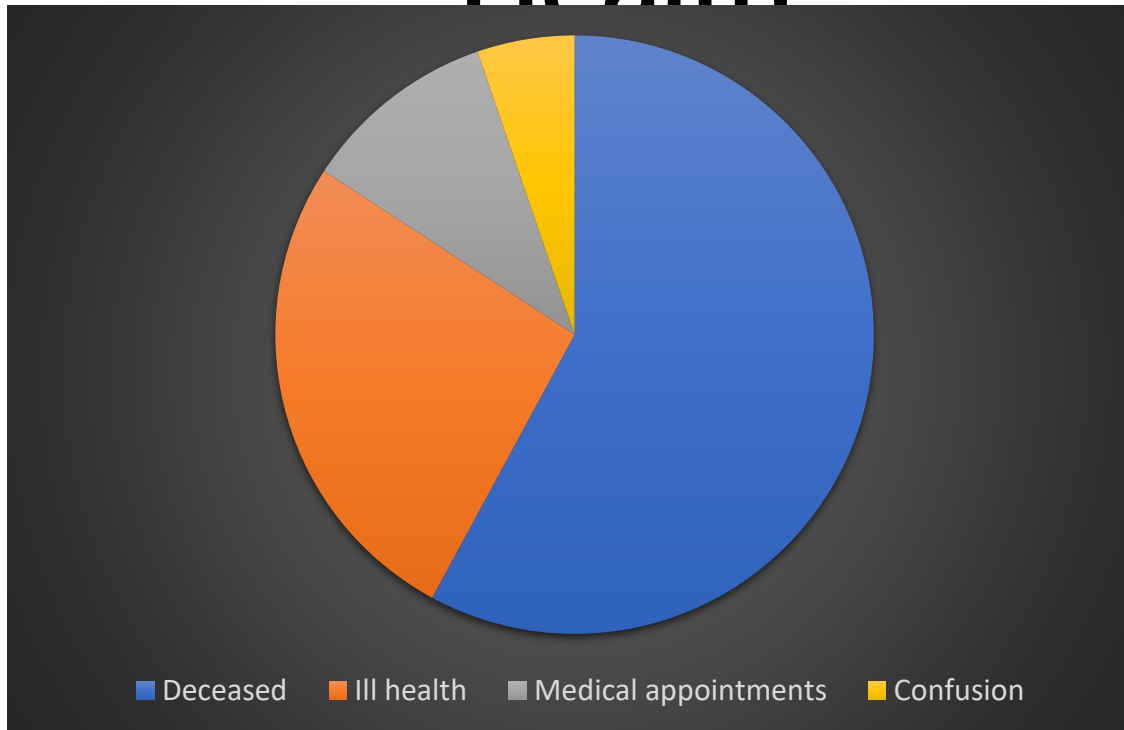
Health issues

Reasons for withdrawal

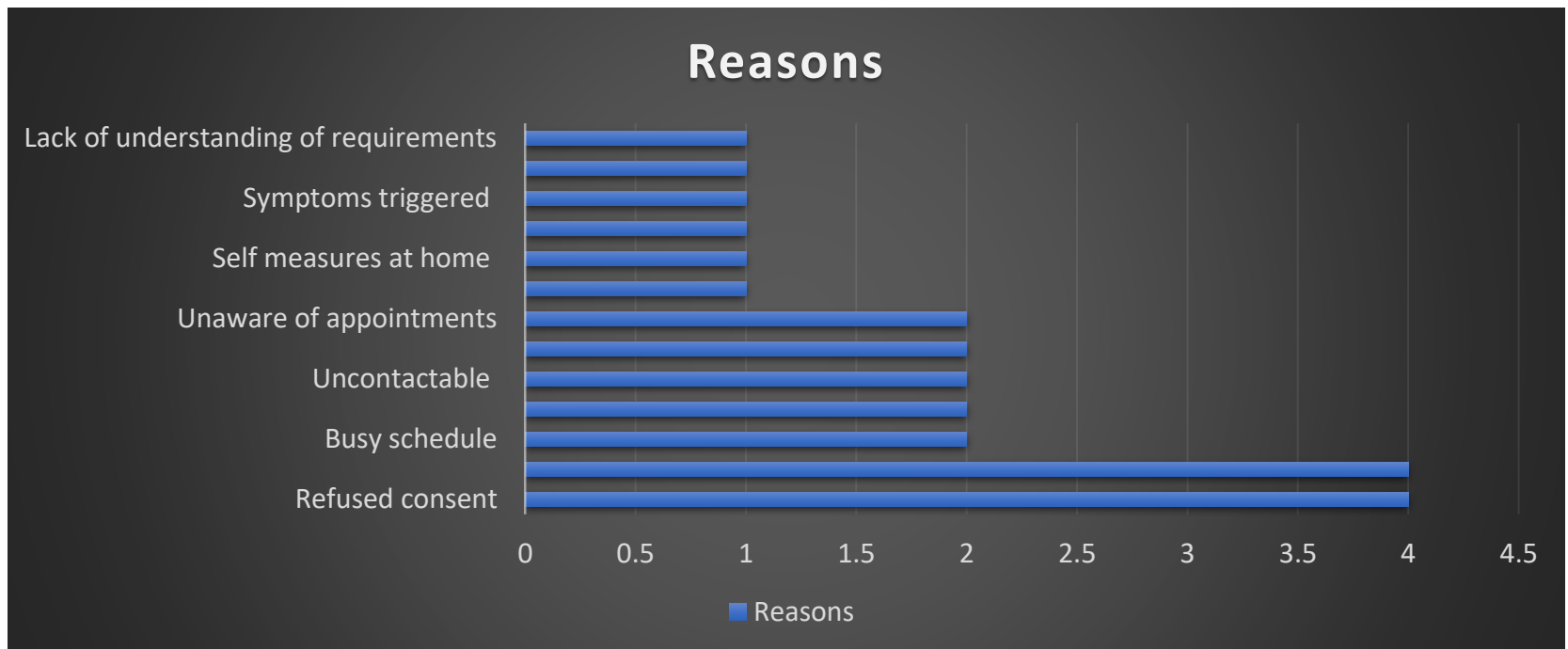
Situational constraints



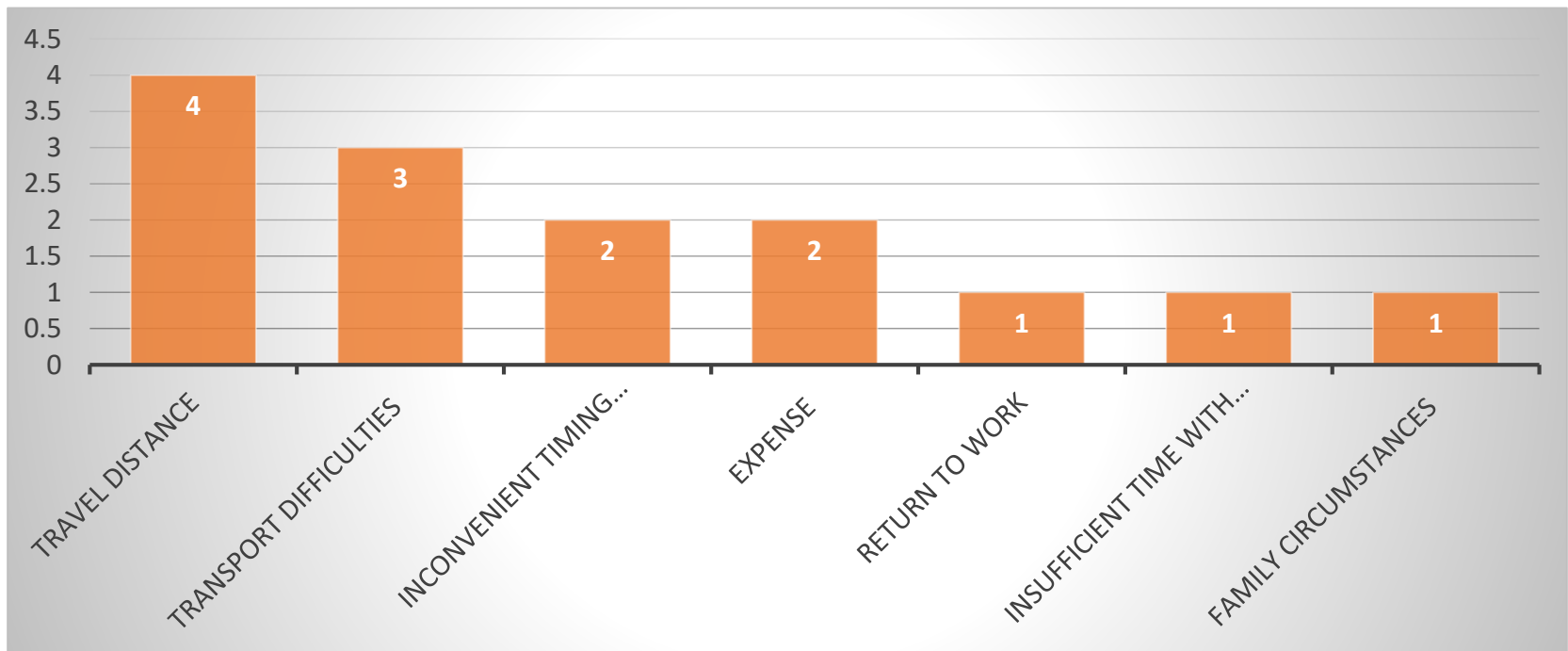
# Factors Influencing Participation/non-Engagement: Health



# Factors Influencing Participation/non Engagement: Non-health



# Factors Influencing Participation/non Engagement: Situational



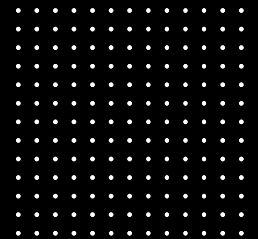


# Main Findings

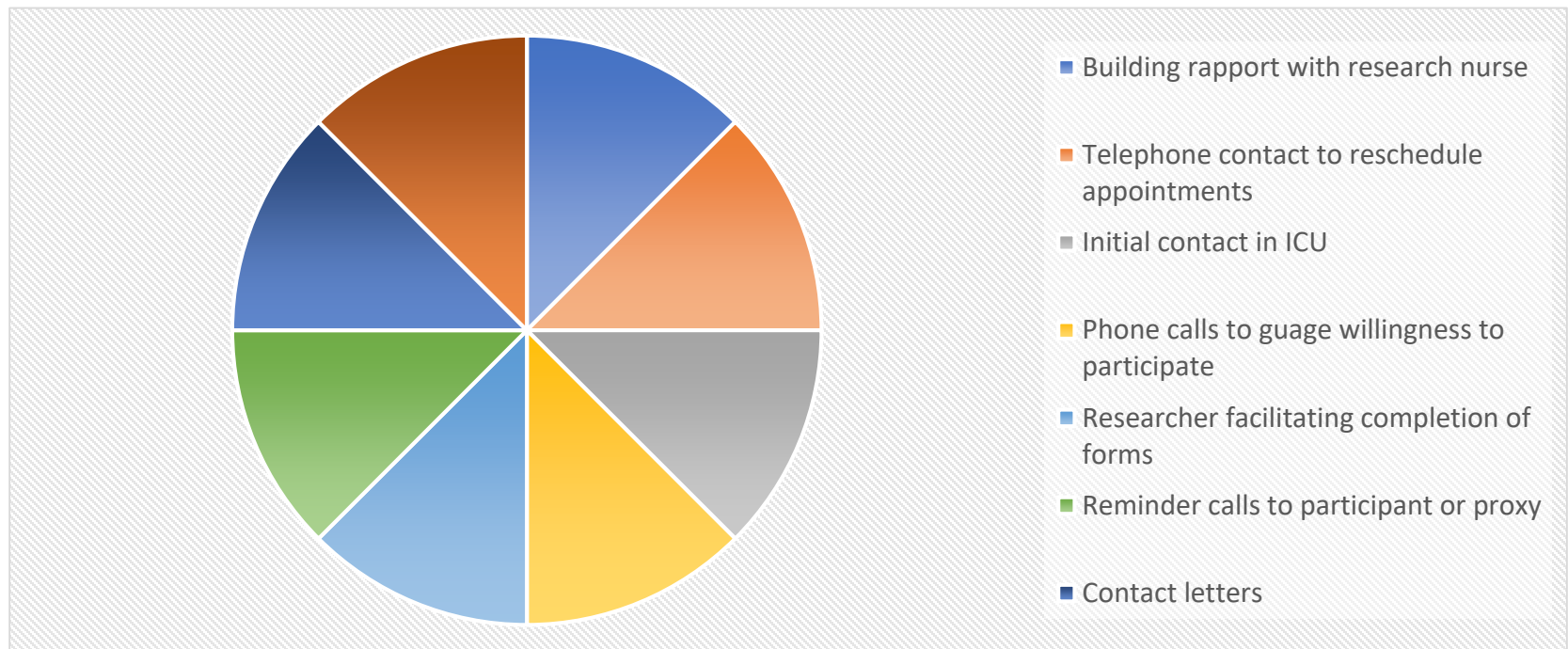
Retention strategies

Communication processes

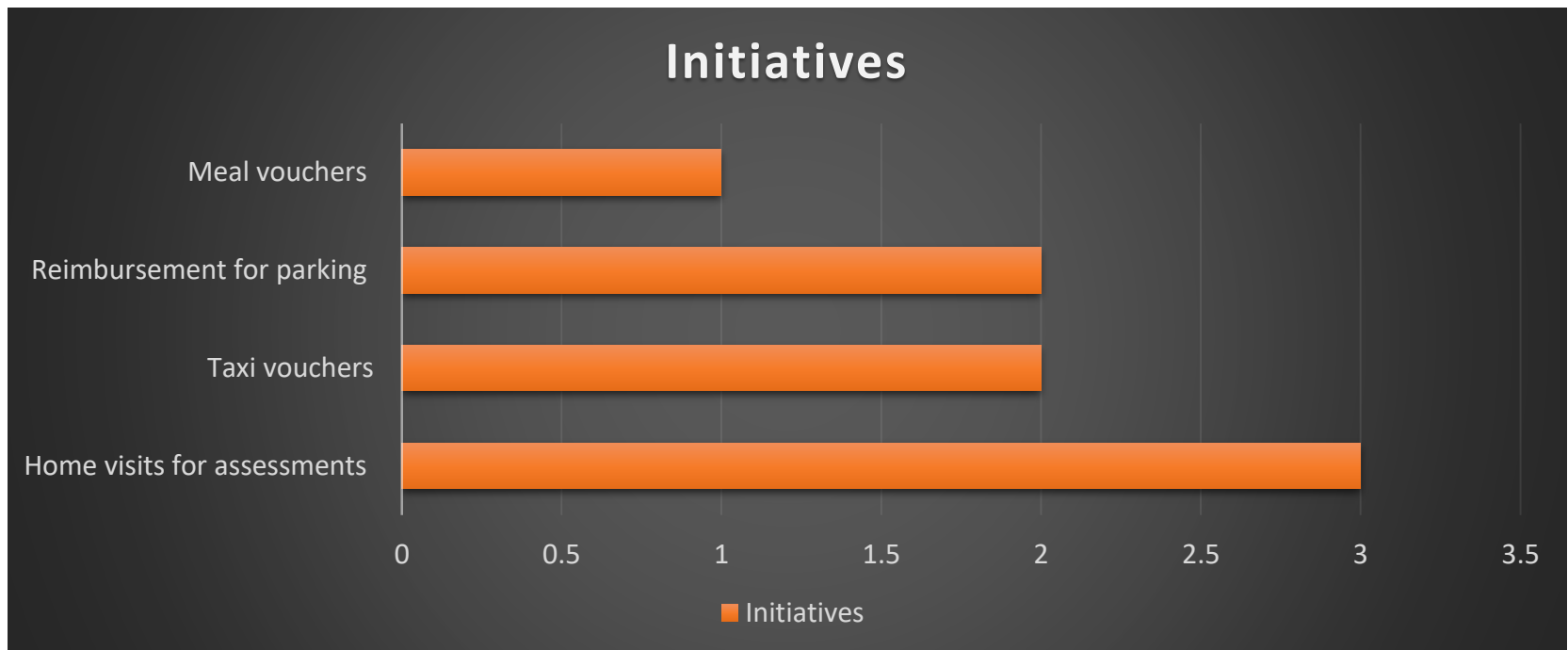
Participation support



# Retention Strategies: Communication



# Retention Strategies: Participation Support



# Researchers' Insights



- Realisation of the impact of illness on survivors
- Gained understanding of the impact of illness on financial situation
- Challenges with compliance with study requirements
- Communication barriers
- Difficulty establishing and maintaining contact
- Unanticipated relationship/reliance with research nurse

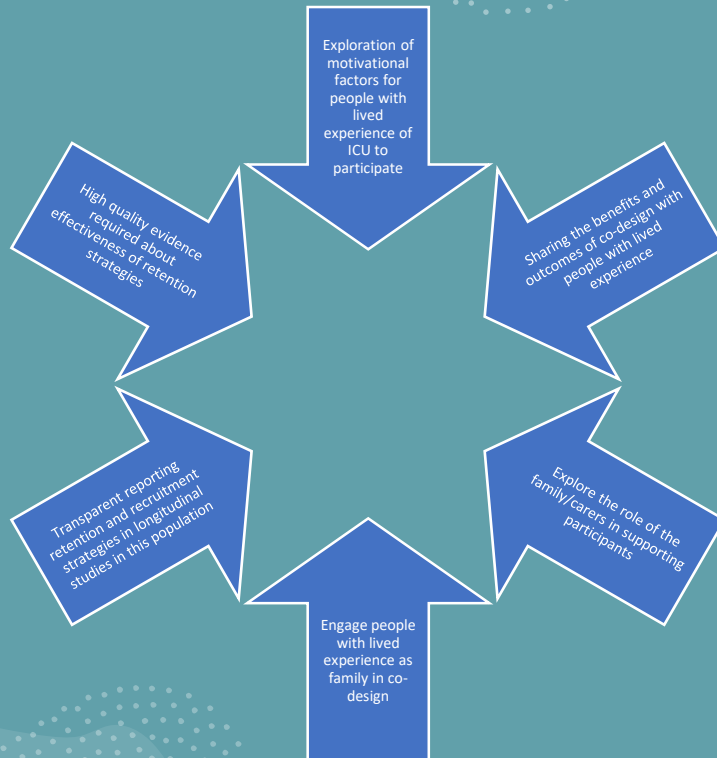


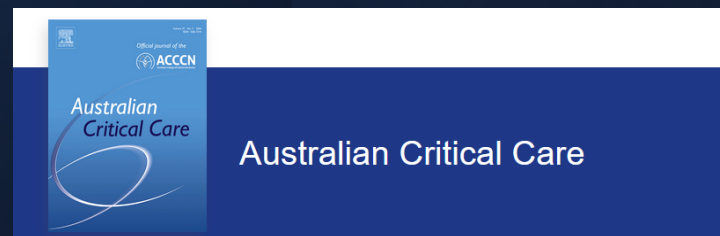
# Recommendations

- Consideration of morbidity and mortality during first year of discharge when calculating sample sizes
- Large sample sizes to account for significant attrition rates
- Consider predicted mortality and disease burden in ICU population
- Researchers to have knowledge of the challenges of the sample; pre-study education
- Consider strategies e.g. home visits
- Co-design with people with lived experience
- Consider personal touches; relationships with researchers
- Tailor strategies to cultural, social and environmental norms
- Financial support and compensation
- Communication strategies



# Future Directions





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Thank you for  
your attention

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