Key methodological, recruitment, and implementation challenges within a randomised trial of a Community Health Navigator intervention with patients transitioning from hospital to home

Sharon Parker[1], Sarah Wright[1], Parisa Aslani[2], Margo Barr[1], Richard Osborne[3], Fiona Haigh[1], Carole Bandiera[2], Anthony Brown[4], Fiona Doolan-Noble[5], Sara Javanparast[6], Anurag Sharma[1], John Cullen[7], Michael Wright[1], Jean-Frederic Levesque[8], Debra Donnelly[7], Regina Osten[8], Mark Harris[1]

[1]University of NSW; [2]University of Sydney; [3]Swinburne University of Technology; [4]Health Consumers NSW; [5]Curtin University; [6]Flinders University; [7]Sydney Local Health District; [8]NSW Agency for Clinical Innovation

Background

Community Health Navigators (CHNs) are increasingly being incorporated into health systems to undertake a variety of roles aimed at reducing barriers to health care access. CHNs may help prevent unplanned hospitalisation by aiding the transition to home following acute care, providing linkage to social and community supports, increasing patient and family engagement, promoting self-management skills, identifying emerging needs within communities, and assisting the health system to prevent families falling through service gaps (Mistry et al., 2021; Torres et al., 2014). Navigation has been shown to reduce readmission rates and improve access to health and social care for disadvantaged groups (Kangovi et al., 2014).

Methods

This parallel group, pragmatic randomised trial commenced November 2022. Recruitment process is outlined in ***Figure 1***. CHNs are employed by Sydney Local Health District (LHD) within the Planned Care for Better Health (PCBH) program; a hospital outreach service that identifies vulnerable patients at risk of re-hospitalisation, using the Risk of Hospitalisation (RoH) portal, to strengthen the care provided to them.

Figure 1 Recruitment process for CHECC Trial

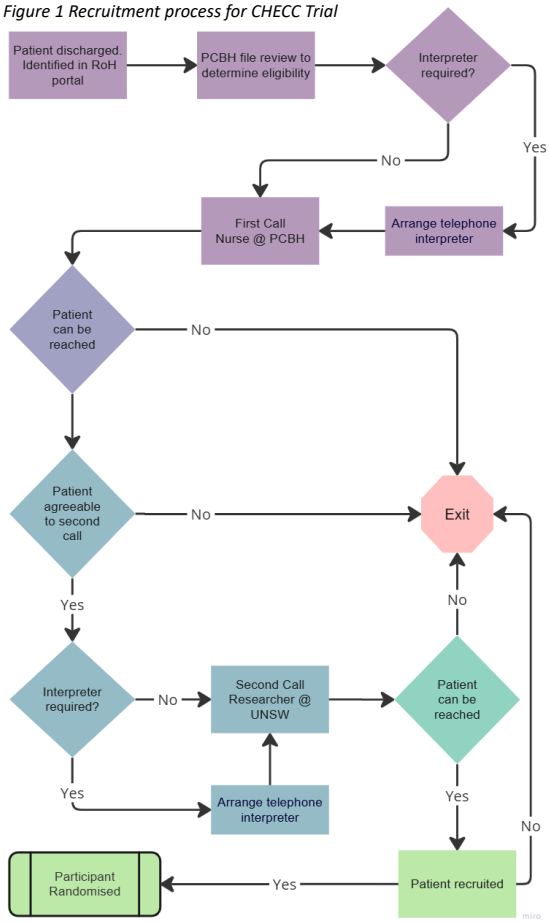
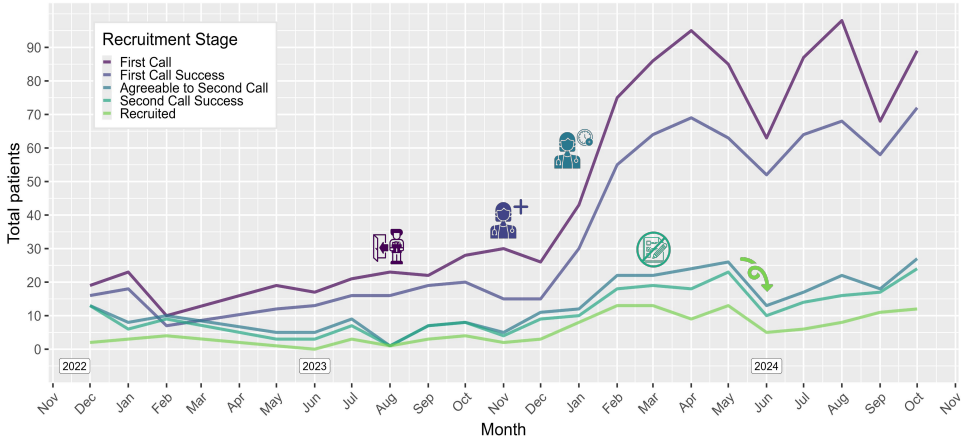


Figure 2 CHECC Trial – Monthly Recruitment Numbers at Each Recruitment Stage



Box 1 Response to recruitment barriers

- PCBH Champion changes roles, lower screening time and inconsistencies
- Hired dedicated research nurse, additional screening day added
- Research nurse secured for full recruitment period. Outreach to hospital staff
- Baseline data collection optional. Alternative methods of completion.
- High rates of respiratory admissions, discharges to nursing homes, etc.

Table 1 Reasons for non-participation

Reason	*n*	%
Additional support not desired/needed	23	26.1
Not interested	23	26.1
Too sick	14	15.9
Not available to discuss study/complete baseline data	10	11.4
Does not want visitors	6	6.8
Overwhelmed	6	6.8
Not available for CHN visit	4	4.6
Does not want to be randomised to control condition	2	2.3

Findings

The key methodological, recruitment and implementation barriers and implications are highlighted below.

***Barriers over time*:**

- Significant challenges to recruitment, retention, and implementation of intervention. Recruitment rates, barriers, and interventions to address them are summarised in ***Figure 2 and Box 1*.**
- Ethical concerns about researchers approaching in hospital or 'cold calling' – arm's distance approach.
- Distributed departments across multiple sites (hospitals)
- Communication difficulties (hearing loss, interpreters, etc.)
- Difficult to impart lengthy and complex information to patients over the phone, particularly if still unwell.
- To be effective, CHNs needed to make contact to provide support within 72 hours of discharge. Facilitating contact and conducting a home visit in this timeframe has proven difficult and was affected by patients' lack of familiarity with the role.
- Patients have competing demands post-discharge. Reasons provided for non-participation in ***Table 1***.

Implications:

- Trial processes including ethical requirements intended to protect can impede participation.
- Central to addressing challenges has been a collaborative and problem-solving approach between the LHD, CHNs, and research team.
- Employing nurses to undertake screening and initial contact with patients has improved sample identification and recruitment.
- Streamlining recruitment processes and patient communication and reducing the pressure of data collection at baseline has increased patients' willingness to participate.
- Large difference between first contact and recruitment remains, partly due to competing demands when settling back into community.

Scan me for more information

References: Kangovi et al., (2014), doi: 10.1001/jamainternmed.2013.14327; Mistry et al., (2021), doi: 10.1007/s11606-021-06667-y; Torres et al., (2014), doi: 10.12927/hcpol.2014.23983