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Codesigning a Community Health Navigator program to assist patients to transition from hospital to community

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ABSTRACT

Background. This study aimed to identify the potential roles for Community Health Navigators (CHNs) in addressing problems faced by patients on discharge from hospital to the community, and attitudes and factors which may influence their adoption. **Methods.** Twenty-six qualitative interviews and an online codesign workshop were conducted with patients, nurses, general practice staff, health service managers, community health workers, general practitioners, medical specialists, and pharmacists in the Sydney Local Health District. Qualitative themes from the interviews and workshop transcripts were analysed inductively and subsequently grouped according to a socio-ecological model. **Results.** CHNs could assist patients to navigate non-clinical problems experienced by patients on discharge through assessing needs, establishing trust, providing social and emotional support that is culturally and linguistically appropriate, engaging family and carers, supporting medication adherence, and helping to arrange and attend follow up health and other appointments. Important factors for the success of the CHNs in the performance and sustainability of their roles were the need to establish effective communication and trust with other healthcare team members, be accepted by patients, have access to information about referral and support services, receive formal recognition of their training and experience, and be supported by appropriate supervision. **Conclusions.** This study was unique in exploring the potential role of CHNs in addressing problems faced by patients on discharge from Australian hospitals and the factors influencing their adoption. It informed training and supervision needs and further research to evaluate CHNs' effectiveness and the acceptance of their role within the healthcare team.

Keywords: aged care, chronic disease, codesign, community health workers, healthcare navigation, hospital discharge, supervision, training.

Introduction

People with long-term conditions or who are elderly experience many challenges when transitioning from a hospital to their home that put them at risk of re-hospitalisation (Li *et al.* 2015). These challenges are related to a patient's health problems, their home environment, and health service quality (Brunner-La Rocca *et al.* 2020). Problems with medication adherence, mobility, access to food and essential items, activities of daily living, and medication adverse effects may only become apparent when patients return home (King *et al.* 2023). Demands on unpaid or family carers can also increase (Gallagher *et al.* 2011). Poor communication and handover from the hospital to community-based practitioners can result in missed treatments or follow-up appointments and adverse events (Kripalani *et al.* 2007).

Community Health Workers (CHWs) have been demonstrated to reduce health inequities by improving access to care transitions from hospital to community for vulnerable and disadvantaged population groups (Kangovi *et al.* 2018). Features of CHW programs found to improve patient outcomes and sustainability include being embedded in communities, having supportive supervision, being provided with adequate education and support, being integrated into healthcare teams, and being accepted by other health system actors (Scott *et al.* 2018). The content of CHW training is tailored to the context and need for their role but includes training on how to interact with families and deal with conflict, and their professional responsibilities. It involves case based and peer learning as well as supervised practice (Schleiff *et al.* 2021). CHWs require supportive supervision that is trauma-informed, prioritises CHW safety, and provides monitoring and coaching (Brown *et al.* 2020).

There is increasing evidence of the effectiveness of CHWs acting as 'care navigators', which are distinct from other health professionals and include roles in assessing non-clinical needs, facilitating access to and communication with healthcare providers, and assisting patients to attend referrals for health and social care and use of community resources (Willis *et al.* 2013). In randomised trials, CHW navigators have resulted in between 21 and 51% fewer emergency department visits and/or hospitalisations and re-hospitalisations (Jack *et al.* 2017; Kangovi *et al.* 2017, 2018). CHW navigation interventions have been found to be effective in randomised controlled trials in increasing adherence to cancer screening and improving the use of primary care for effective chronic disease management (Jacob *et al.* 2019; Mistry *et al.* 2021; Okasako-Schmucker *et al.* 2023).

Much of the previous research on the role of CHWs as navigators has all been conducted in the United States of America with Afro-American and Hispanic populations. We have recently conducted a feasibility study of their role in general practice (Mistry *et al.* 2023). However there have been no comparable studies on their role in following up patients as they transition from hospital to the community in the Australian context (Parker *et al.* 2024). This study sought to examine the potential roles and training needs for CHWs as navigators for patients discharged from hospital into the community.

Methods

This qualitative study was conducted using interviews and a workshop in the Sydney Local Health District (SLHD), Australia. Based on our previous experience, we used an experience-based codesign approach to engage both patients and health workers in working together to identify and develop solutions to problems experienced in the transition from hospital to community (Donetto *et al.* 2015; Mistry *et al.* 2022).

Aims

In preparation for a trial (Parker *et al.* 2024), this study aimed to identify potential roles for Community Health Navigators (CHNs) in addressing the problems faced by patients in transitioning from hospital to community, the training and supervision needs of CHNs, and the factors that may influence implementation of CHN roles, training, and supervision. In this study, CHNs were defined as CHWs who provided non-clinical support to patients to access health or social care, with a particular focus on navigation in the months following discharge from hospital. The study is reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Supplementary File S1).

Recruitment and selection

Participants were identified from lists of potential participants provided by the SLHD and Central and Eastern Sydney Primary Health Network (CESPHN). Criteria for inclusion were:

- Patients with recent experience of discharge from the hospital who were older (>70 years), or adult patients (>18 years) with chronic conditions and/or their carers.
- Hospital and other staff from SLHD involved in discharge care of older (>70 years) patients or adult patients (>18 years) with chronic conditions.
- General practitioners (GPs), practice nurses, practice managers, and community pharmacists.
- Representatives from culturally and linguistically diverse community organisations.
- Social workers and existing CHWs employed in other roles.

Those with impaired cognitive capacity that limited their ability to provide consent and participate in interviews were excluded. Participants had no relationship with the research team except for the hospital staff, some of whom worked with one of the investigators (JC). Measures to ensure that the latter did not affect participants freedom of expression included ensuring that they were invited independently, did not participate in small groups together, and the investigator was not involved in conduct of interviews or analysis of the transcripts.

Participants were invited to participate by email from the principal investigator (MH) or the study coordinator (MP). One follow-up email was sent to non-responders. Those who expressed interest were followed up by phone prior to the interviews and workshop to explain the process, answer questions, and establish a relationship. Participants were offered a store voucher to the value of A$30 for participating in the interviews and workshop. The original target for participants was 23 (six from the SLHD, six consumers, four from primary health care, three from community organisations, and four other stakeholders). Additional participants were recruited (through SLHD and community newsletters) to represent different parts of the SLHD and community after early interviews suggested that these held a different range of concerns about the post hospital transition.

Data collection

Initial interviews

We conducted qualitative interviews between July and November 2021 prior to the workshop. The questions were pilot tested with community workers from another project in general practice. After this the questions were simplified to be more readily understood (Supplementary File S2). The reasons for the research were described in the participant information and consent form. Consent was obtained verbally and sent for signing after the interview.

Interviews were conducted online (using video and audio) one-to-one or in pairs, upon participant request, and in English. We offered to conduct interviews in the participants own language where this was not English. All interviews were recorded except for one where hand-written notes were used at the participant's request. All interview participants were invited to attend the subsequent codesign workshop.

Codesign workshop

The codesign workshop comprised participants and members of the research team. Two meetings were held with consumer and community organisation participants prior to the workshop to discuss their needs, build trust, and familiarise them with the information presented. These meetings aimed to minimise power imbalances during the workshop, which could impede participation of less powerful or marginalised participants and support these participants to contribute equally.

The 2-hour workshop was facilitated by MH, MP, and CS and conducted in a secure online environment (Microsoft Teams) on 18 November 2021 (Supplementary File S3). At this workshop, a summary of the findings from the literature and the initial interviews was presented. The facilitators then introduced questions about the main issues experienced by participants in the transition from hospital to community and the support they thought that CHNs might provide. These questions were discussed in groups of six participants followed by a large group discussion. The small groups were carefully constructed considering representation from all groups, hierarchy of roles, and to allow in-depth discussions (see Supplementary File S3). The main and small group sessions were recorded and transcribed along with notes from the research team.

Data analysis

The analysis had a phenomenological orientation given our intention to analyse the lived experiences of participants without preconceived assumptions about the nature of the problem or potential solutions (Creswell and Poth 2016). The interview transcripts and workshop transcripts and notes were inductively coded, independently by MP and AT using NVivo (ver. 12.0). These were reviewed twice by MH and discussed together (Supplementary File S4). Identified codes were grouped into key themes that were refined by discussion among the research team and a narrative was written. The themes were subsequently grouped according to four levels of the socio-ecological model (intrapersonal, organisational, environmental/policy) (Bronfenbrenner 1977). The socio-ecological model was chosen because of the multiple levels of contextual influences on patient transitioning from hospital to the community. Only the audio transcripts were analysed. Video recordings were not separately analysed.

Reflexivity

The first three authors MH, AT, and MP were employed by Centre for Primary Health Care and Equity (CPHCE) at UNSW Sydney. CPHCE has a developing program of research on the implementation of community health workers as navigators in the Australian context over the previous 5 years. MH is male, has an MD and is an experienced primary care researcher who has used both qualitative and quantitative methods extensively in research on prevention and management of chronic conditions and health equity in primary health care. MH continues clinical work in primary care part time with refugees in addition to his academic roles. MP has an MPH degree and experience in both quantitative and qualitative research including qualitative interviews and was the project coordinator. AT was an occupational therapist and has an MIPH degree. She has previous experience in qualitative and quantitative research in primary health care including qualitative interviews and analysis. MP and AN are female and from different multicultural backgrounds with English as a second language. MH has a long-term interest in CHW, refugee health and leads the subsequent trial. MP and AN have a long-term interest in the health of culturally and linguistically diverse groups.

Ethics

The study was approved by the Research Ethics and Governance Committee, Sydney Local Health District (X21-0010 and 2021/ETH00062, 10.4/MAR21). All participants gave written consent prior to participation.

Results

Characteristics of sample

Interviews

We conducted 26 (female = 19 and male = 7) interviews with four medical specialists, three clinical nurse consultants, two CHWs, three health managers, three consumers, three GPs, one practice nurse, one community leader, one hospital and one community pharmacist, and four bilingual health workers. Twenty-one one-to-one interviews were conducted in English. One interview was conducted in Bangla by an experienced bilingual researcher (SKM). Two interviews were conducted with pairs of participants because the participants requested this. Interviews lasted 19–54 min (mean 35 min 12 s).

Workshops

Workshop participants included 16 of those interviewed. Ten of those participants who were interviewed were not available for the workshop and an additional two were recruited. The 18 participants were divided between three small groups.

We categorised the themes under four headings: Problems identified after hospital discharge; Potential roles of CHNs; Training and supervision; and Factors influencing adoption of CHN roles, training, and supervision. The type of respondent quoted is indicted in parentheses with the source coded as I (interview) or W (workshop).

Problems identified after hospital discharge

The issues and problems encountered by patients after discharge into the community were grouped at four levels of the socio-ecological model (Table 1).

At the interpersonal level, participants reported that many patients experienced problems with communication and literacy – for example, with limited ability to read, understand, or take actions as detailed in their discharge letter or care plans. This was particularly so for culturally and linguistically diverse (CALD) patients. Providing information in forms other than written text was thus seen as a major role for CHNs – including explaining written information such as the discharge letter.

> The patient gets told a lot of things, and if it's not written down it gets forgotten very quickly. (Consumer, I)

Families could have positive and negative influences: providing support in self-management but also providing misinformation or enabling patients to delay seeking care or not adhere to their management plan.

In the physical and social environment, participants identified older people having needs and risks in their homes related to frailty, mobility, risk of falling, and cognitive difficulties. These could be exacerbated if they lived alone or were socially isolated, lacking family or other social support at home. Participants identified non-adherence to discharge medication regimens and delay in identifying or acting on health concerns that arise soon after arriving home as common problems.

> Those that do not have a husband or those that are single mother and or disabled require support. Someone disabled may have a place to stay but not have someone to support them, those are the ones that need the support the most. (Consumer, I)

At the levels of organisation and policy of the health and social service systems, participants identified multiple challenges for migrants unfamiliar with Australia's health system.

Table 1. Patient problems following discharge from hospital and potential roles of CHNs.

Level	Problems faced by patients following discharge	Potential roles for CHNs
Interpersonal	• Identifying and acting on health concerns • Communication and literacy – ability to read and understand discharge letter, etc. • Trust – some patients were mistrusting of the health system, especially if there was a difference in culture or beliefs • Access and adherence to medications (especially for those on multiple different medications) and the cost to consumers of medications • Knowledge of self-management/follow up care • Family influence on decision making (positive and negative), carer needs	• Assess needs and promote understanding of goals • Provide support to CALD, elderly and patients with complex chronic conditions • Educate and inform • Explain role with the hospital, provide open communication and offer to address their needs so that patients trust the CHN to visit their home and accept support. Support medication adherence • Support self-management • Engage with family and carer
Social and physical environment	• Cultural influences – gender roles, practices, beliefs • Social Isolation – live alone or family unable to provide support, Housing/home environment/safety • Access to essential items (e.g. food, clothing)	• Cultural and linguistically appropriate support • Provide social and emotional support • Problem solving and support access to food, personal help, services
Organisation and policy	• Distance to services; online and phone access • Poor communication between hospital and community-based healthcare providers including poor discharge communication • Access to medication repeats and wait time for appointments with GP • Not knowing what to ask at the GP or specialist visit • Knowledge of eligibility for support packages (eligibility, application process, etc.)	• Assist with arranging and attending appointments • Review discharge letter with patient • Help to contact GP and follow-up clinics for medications, appointments and referrals • Support prior to attending visits • Support with paperwork and phone calls

> Australia's health system is totally different [from their own country, where they have] support available, because they have a big family and they don't need to wait for their husbands to look after them all the time. But in here, the situation is different, because new country, new culture, new systems. (Bilingual Community Health Worker, I)

Participants reported that many older patients had difficulty navigating government online services such as Medicare, 'my Gov' government website, vaccination records, My Aged Care, and other support packages as well as patient information resources available by web or QR code links. Patients also had problems understanding discharge communication with respect to follow-up appointments, contact details for hospital staff, and changes to their medication regimen. This was compounded by limited provision of medications on discharge, delayed access to follow-up appointments with the GP (especially if there is no usual GP) and specialists, and the cost to patients for some medications. The effectiveness of telehealth consultations was limited by patient experience and expertise. When seeing health providers, patients may not know what questions to ask:

> Every time they have to communicate with the hospital and GP, it's very challenging for people like us who came from the other country, yeah. (Community Stakeholder, I)

Potential roles of CHNs

Because the role of CHNs was unfamiliar to all participants apart from those who were themselves CHWs, most related it to existing or past roles (such as Aboriginal Health Workers and/or compared it to their own role). Participants identified a number of potential roles that CHNs could perform.

Supporting specific patient groups

Most participants felt that the role of CHNs would be most suited to supporting patients from CALD backgrounds, elderly patients, or those with chronic conditions, especially those with complex medication regimens. The navigators could play a role in supporting the people more vulnerable or at risk of hospital readmission with advice post discharge.

> And do they know what to do next when they go home? ... or have just said, yes doctor, but haven't really understood everything, and they're the ones, again who it all just falls in a heap when they go home, because they haven't actually understood the medication changes. Or they haven't understood that they were meant to go to a follow-up clinic, and things like that. (Health Manager, I)

Assessing patient needs

Participants felt that CHNs could assess the patient's needs. These included the language and cultural support that they required, their understanding and attitudes to their own treatment, their living conditions, access to necessities of life, ability to access health care and adherence to medications, and family and social support.

> Most people feel that they are adequately supported when they get reviewed in hospital, and it's not until they come home and realise how hard it might be, that they might need a little bit more additional support. (Clinical Nurse Consultant, I)

First establishing a relationship with patients

Participants felt that CHN effectiveness in supporting patients depended on first establishing a trusting relationship so that patients could be confident that they would be supported in navigating their health and accessing services appropriate to their needs.

> I envisage it is a very health literate friend or relative who's quite close to the person and knows their details from the early stages … [and] can assist that navigation process through to completion. (Medical Specialist, W)

Providing information and education to patients, especially in other languages

Participants considered that CHNs could assist patients with establishing clear communication and prevent them from falling through the cracks post-hospital discharge, especially for those not fluent in English. Bilingual CHNs could ensure that people post discharge were followed-up closely and that everything that needed to be was actioned. Participants felt that addressing language and cultural barriers involved more than just using an interpreter or translating the information but required more time to be spent communicating with patients.

> We forget that for somebody, this might be their first experience at the hospital, and the whole thing is so overwhelming. They've never had contact with the aged care system before, it's like a foreign language. It needs to be more systematic, and the person's understanding checked to make sure they are clear on that. (Pharmacist, I)

However, while participants felt that CHNs could play a role in education, some were concerned that they needed to know their limits especially about clinical care.

> Because I'm not being rude, but the community health worker doesn't know what they don't know in regard to skill set and a knowledge base. (Clinical Nurse Consultant, I)

Helping patients to solve their problems

CHNs were seen as identifying any new health concerns and supporting patients to adhere to care plans, to self-manage or seek help. CHNs needed to be able to identify and address a range of practical problems that patients may be experiencing after discharge:

> Make sure they get to the GP, look at their medication, understanding the medication compliance, making sure their nutrition is adequate, making sure their mobility issues have been addressed or is there a problem in the bathroom that needs sorting. (Medical Specialist, I)

Reviewing the goals that health providers have identified with the patient

While not setting clinical goals, participants felt that trusted CHNs could check that patients understood and agreed with their goals and priorities with their health professionals, especially where shared decision making had not occurred.

> It is important for patients and GPs to agree on their management goals – for example, what changes to physical activity, diet, smoking, or alcohol consumption. (Community Health Worker, I)

Supporting family and carers to support patients

Participants envisaged that CHNs would support family and carers where appropriate in providing support to patients especially those who were elderly or culturally and linguistically diverse.

> For my other family members, I remember when they had some surgeries or whatever, some of them is living independently and no English, so it is very scary for them once they leave, because they're not living with us and they're living by themself. (Community Health Worker, I)

Providing social and emotional support

CHNs could identify patients who were distressed and then discuss with their supervisor or manager who could refer accordingly. CHNs could help communicate with family members and provide culturally appropriate support. Patients on discharge may experience a raft of physical needs including the quality and security of the home environment, access to food, financial support, help with shopping etc. CHNs could assess these and, if needed, arrange further support.

> Some live on their own, some have good English and good health literacy, and some do not. Some have sound accommodation, some are renting, some are living in various supported accommodation, some are living in boarding houses. Some can drive a car; some are really transport limited. (Clinical Nurse Consultant, I)

In order to provide this support, CHNs need to know local services that were tailored to patients' needs (including language and culture).

> So it's about how you set up your community visitors, so that they're across all the services. (Consumer, I)

Supporting patients to adhere to their medications

Participants emphasised the importance of supporting patients with medications, especially where there had been changes:

> Someone who has had multiple medication changes or even they just need to be compliant with the usual medicines, but particularly I guess when there are multiple medication changes … it can be very confusing. The pills we give in hospital are completely different to what is received at home. (Pharmacist, W)

Some participants suggested that CHNs could review the patient's discharge letter and check they had all their medications. However, others stressed that review of the reasons behind medication adherence (such as side effects) could only be performed by someone who was clinically trained.

Assisting patients to make and attend appointments and referrals

CHNs could also assist patients in making appointments (or phone on their behalf) and attend appointments (including telehealth appointments) with the patient and provide advice on how to engage and what to ask. Participants considered that the role included helping patients to visit their GP and/or pharmacy and arranging transport for those with no transport or who were unable to use public transport.

> Whether that be another appointment, an outpatient appointment, or simply just seeing their GP for continuous prescriptions of new medications, or different dosages, or things that have happened, whatever has been changed for them. (Pharmacist, I)

Advocating for patient needs to be addressed with other services

Some participants with lived experience felt that, with appropriate training and supervision, CHNs could advocate for care, especially for older people who live on their own, and conduct follow-up visits after discharge from the hospital.

> So, I think they have a real role as being health advocates, but not necessarily quite understood always or valued. (Consumer, I)

The potential roles and tasks and their likely impact are summarised against the patient problems identified in Table 1.

Training and supervision

To carry out the potential roles and tasks above, workshop participants identified that CHNs needed to be supported to develop their knowledge and skills to:

- Ask patients about adherence to medications.
- Support lifestyle changes and prevent and/or self-manage chronic health conditions.
- Identify and adjust their approach to people with disability or cognitive impairment.
- Communicate with patients and their families, especially people from different cultures and language groups.
- Make referrals to appropriate services or healthcare providers.
- Access government support packages.
- Ensure the privacy and confidentiality of health information.

Specific themes and topics identified for the training of CHNs are outlined in Table 2.

The supervision of CHNs was important but participants found it difficult to foresee what would work best. While nurses could provide clinical supervision, they may find it challenging where they had not had direct contact with the patient. If most of the roles were non-clinical, they might be supervised by a coordinator who has good knowledge of the health and social system.

> I don't know who the best supervisor is, so you could have a clinician or you could have a senior health worker. (Health Manager, I)

Table 2. Themes and topics for CHN training.

Theme	Topics
Understanding the problem and context	• The Australian healthcare system • Preventing and managing chronic disease • Protective factors
CHNs' roles and responsibilities	• Professionalism and confidentiality • Record keeping
Establishing effective relationships/ communication	• Introducing the CHN to the patient • Explaining roles to patient • Cross culture communication/use of interpreters
Assessing need	• Medications • Social circumstances and influence on health • Barriers to accessing health care • Transition from hospital to community
Taking action/problem solving	• Finding services in the community (e.g. from community organisations) • Supporting behaviour change • Implementing care plans • Supporting access to health care • Escalating problems and reporting to health care team

Factors influencing the adoption of CHN role, training, and supervision

Acceptance of roles

The acceptance of the role of CHNs by health professionals and patients was seen by participants as the most important factor influencing their adoption. Most participants believed that CHNs would be accepted if they could be of practical benefit to patients, especially older people who lived alone, did not speak English very well, were socially isolated, or had complex health conditions.

Selection, training, and qualifications

Participants felt that CHNs needed to be selected on the basis of their ability to communicate and establish rapport with patients.

> You have to have some kind of trust in the individual and the way you gain that trust is by not asking deeply personal questions, but the simple things, like, 'How are you today?' (Consumer, I)

Most felt that CHNs could establish trust with patients and the health services. However, some felt that CHNs' lack of formal training and qualifications would prevent them being able to perform their roles in the health care team.

Professional standards

They felt that patients' acceptance and expectations of a CHN could be enhanced if other staff explained the role of the CHN in the healthcare team and CHNs were bound by the same professional obligations as other health practitioners especially confidentiality.

> There has to be a framework around that where I think that person has some confidence that there is confidentiality or saying that the information that they are receiving and conveying has the same legal status as when they speak to the doctor so that it's not going to be gossiped around the community, etc. (Medical Specialist, I)

Accountability

Several participants stressed the importance of CHNs being accountable not only to the health system and their healthcare team but also to the community they serve.

> So it needs to have ownership, ownership in the community sector. (Community Leader, I).

Participants differed in where they thought CHNs should be based and employed: community members felt it should be within the community sector; GPs thought CHNs should be located in general practices; and SLHD staff thought they should be incorporated into existing healthcare teams to ensure adequate supervision.

Role conflict

Role conflicts with other health professionals were thought to have the potential to de-rail broader adoption of CHNs and their place within the healthcare teams.

> I'll speak as [a Registered Nurse], we don't like the thought of CHWs taking our territory and that's very confronting for our registered nurses, and all my colleagues would agree very much. And it's the kind of thing that if my mum was at home, I'd actually prefer a registered nurse attending and working all this sort of stuff out rather than the community health worker. (Clinical Nurse Specialist, I)

Participants suggested role conflict may be at least partially addressed by carefully defining the role as a non-clinical one with clear lines of supervision and accountability.

Discussion

The challenges experienced following hospitalisation reported by participants included a range of practical non-clinical problems that could be addressed by patients with the support of CHNs. These included problems at the interpersonal level with communication, language proficiency, literacy, social isolation, access to material, and healthcare needs. To address these for individual patients, CHNs needed to be able to establish communication and trust with patients, assess needs, review goals and provide information in an appropriate form. Communication and trust building have been previously identified as important in other hospital transition programs involving community health workers (Kangovi *et al.* 2018).

At the level of the social and physical environment, participants felt CHNs needed to find common ground with their patients' cultural beliefs and practices. They also needed to engage families and carers not only in providing support and problem solving but also supporting the patient's and carer's continued engagement with health care. The importance of this has been noted in many previous studies overseas, often facilitated by recruitment of CHNs from local ethnic communities (Shommu *et al.* 2016). Because they may be from the same community, it was essential that patients had confidence in the professional relationship, including the ability of CHNs to maintain confidentiality.

At the organisation and policy levels, participants felt CHNs needed to address discontinuities in self-management, medication adherence, and follow-up care with community and hospital providers. Experience with other navigation programs suggests that knowledge and skills in supporting medication adherence were particularly important to building the confidence of the patients and the self-confidence of CHNs themselves (Jam *et al.* 2019). To address systemic challenges, often in the context of poor communication between hospital and community, CHNs needed support from their own healthcare team. Other studies have demonstrated the importance of supervision that is more supportive than is the norm in many healthcare teams, with greater attention to safety, monitoring, and coaching (Brown *et al.* 2020). Participants felt that the support that CHNs received from other members of the healthcare team would help give CHNs confidence in their ability to perform their role.

A key factor influencing the adoption and implementation of the CHNs' role was the acceptance by other health professionals and patients. This acceptance depended on the perceived benefits for patients and their ability to establish trust with them. Some also felt CHNs could help other staff members to perform their own roles more efficiently – releasing them from certain non-clinical tasks and allowing them to focus their time more effectively on clinical tasks. This is consistent with other research demonstrating that non-clinical community health workers can help reduce the burden on clinicians, especially those working in socially deprived areas (Wild *et al.* 2022). However, some health staff were concerned about the lack of formal qualifications and training or they felt it encroached on their own role. These views have been observed in other settings but may be reduced if the scope of the CHNs' role is clearly defined and articulated (Javanparast *et al.* 2018). Another factor was the need for standards of professional practice and accountability not only to the health system but also the communities they serve. However, there was no resolution about where in the health system they should be based or accountable to in Australia's fragmented health and social care system. This has been identified as a challenge for Aboriginal Health Workers and a potential impediment to their sustainability (Topp *et al.* 2018).

The main purpose of the study was to identify the scope, roles, and training needs of CHNs in the follow-up of patients after hospitalisation to inform a subsequent trial (Parker *et al.* 2024). While participants defined the range of roles, tasks, and skills, they did not define the mix of formal education-based learning and experience. Nor did they identify the selection criteria and the exact competencies required. Table 1 and Supplementary File S5 provide an outline of the proposed roles of a CHN. These are congruent with those of peer workers in the HIV AIDs and mental health sectors including facilitating patient referrals, and providing practical and social support, education, and information (Cabassa *et al.* 2017; Krulic *et al.* 2022). Similar factors have been found to influence their adoption (Ibrahim *et al.* 2020).

There were several strengths and limitations to this study. Participants included a broad range of patients, healthcare providers, and stakeholders in the development of the CHN role. However, the number in each category was small and may not be representative of all views from each group. There were only a limited number of participants in each category (e.g. CHWs, patients, and GPs) and it is possible that further themes may have emerged with a larger number of participants in each group. The study was conducted during the COVID-19 pandemic in Australia, and this meant that the interviews and workshop were conducted online, and this is likely to have influenced participation.

Conclusions

This study is the first study to explore the many non-clinical roles that CHNs could perform to address the problems experienced by patients being discharged from hospital. Although most participants were positive about their potential, there were some concerns about how they would fit into healthcare teams and perform their roles. CHNs need training, especially in communication and trust building, up-to-date information about referral services, and active supportive supervision. This study informs the development of CHN roles in the Australian health system as well as identifying some of the potential challenges that need to be overcome.

Supplementary material

Supplementary material is available online.

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Data availability. Code lists are available on request from the corresponding author. Our Ethics Committee approval does not allow provision of transcript data to those outside the investigator team and thus access to that data will require submission of a proposal and approval from the SLHD Research Ethics Committee.

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