

Supplementary Material

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

Mark F. Harris^{A,}, An Tran^A, Mamta Porwal^A, Parisa Aslani^B, John Cullen^C, Anthony Brown^D, Elizabeth Harris^A, Ben Harris-Roxas^E, Fiona Doolan-Noble^F, Sara Javanparast^G, Michael Wright^H, Richard Osborne^I, and Regina Osten^J*

^ACentre for Primary Health Care and Equity, UNSW Sydney, Sydney, NSW 2052, Australia.

^BSchool of Pharmacy, Faculty of Medicine and Health, University of Sydney, Sydney, NSW 2006, Australia.

^CAged Health, Rehabilitation, General Medicine, Endocrinology, Chronic Care, Andrology, and Hospital in the Home, Sydney Local Health District and University of Sydney, Camperdown, NSW 2006, Australia.

^DHealth Consumers New South Wales, Sydney, NSW 2000, Australia.

^ESchool of Population Health, University of New South Wales, Sydney, NSW 2052, Australia.

^FGoldfields University Department of Rural Health, Curtin University, Kalgoorlie, WA 6430, Australia.

^GResearch Centre for Palliative Care, Death and Dying, Flinders University, Adelaide, SA 5042, Australia.

^HCentre for Health Economics Research and Evaluation, University of Technology Sydney, Haymarket, NSW 2007, Australia.

^ICentre for Global Health and Equity, Swinburne University of Technology, Melbourne, Vic 3122, Australia.

^JCentre Agency for Clinical Innovation, NSW Health, Queanbeyan, NSW 2065, Australia.

*Correspondence to: Mark F. Harris Centre for Primary Health Care and Equity, UNSW Sydney, Sydney, NSW 2052, Australia Email: m.f.harris@unsw.edu.au

COREQ (CONsolidated criteria for REporting Qualitative research) Checklist

Topic	Item No.	Guide Questions/Description	Reported on Page No in clean version.
Domain 1: Research team and reflexivity			
<i>Personal characteristics</i>			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	
Experience and training	5	What experience or training did the researcher have?	
<i>Relationship with participants</i>			
Relationship established	6	Was a relationship established prior to study commencement?	
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	
Domain 2: Study design			
<i>Theoretical framework</i>			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	
<i>Participant selection</i>			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	
Sample size	12	How many participants were in the study?	
Non-participation	13	How many people refused to participate or dropped out? Reasons?	
<i>Setting</i>			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	
<i>Data collection</i>			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	
Repeat interviews	18	Were repeat interviews carried out? If yes, how many?	
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	
Field notes	20	Were field notes made during and/or after the interview or focus group?	
Duration	21	What was the duration of the interviews or focus group?	
Data saturation	22	Was data saturation discussed?	
Transcripts returned	23	Were transcripts returned to participants for comment and/or	

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
<i>Data analysis</i>			
Number of data coders	24	How many data coders coded the data?	
Description of the coding tree	25	Did authors provide a description of the coding tree?	
Derivation of themes	26	Were themes identified in advance or derived from the data?	
Software	27	What software, if applicable, was used to manage the data?	
Participant checking	28	Did participants provide feedback on the findings?	
<i>Reporting</i>			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	
Data and findings consistent	30	Was there consistency between the data presented and the findings?	
Clarity of major themes	31	Were major themes clearly presented in the findings?	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.

Interview guide for all participants

Introduction to interview

- Hello my name is [insert name] and I am from the University of New South Wales. I would like to ask you some questions about assisting patients when they are discharged from hospital back to the community and the role that Community Health Workers could play.
- This interview will be audio-recorded so that we can transcribe and analyze it. You consented at the start of the project, but if you have changed your mind, that's okay. You do not have to be recorded, and you do not even have to continue with this interview. If you decide to start, but change your mind part way through, that is fine too. The interview can be stopped at any time if you wish.
- We have some questions that we would like to ask. You don't have to answer all of the questions or engage in all the discussions if you don't wish to. The aim is to share your thoughts and reflections.
- Do you have any questions about this process? [Answer any questions.] If you think of any more questions you can ask them while we talk.

Interview guide

We are wanting to know about how older patients or those with long-term medical conditions can be better supported when discharged from hospital back into the community.

- 1) What do you think are the main issues that patients face?
 - a) Are there particular challenges that they face with health such as accessing health care (wait for the person to respond, prompt if required- example seeing their doctors GPs, specialists, pharmacists, physiotherapists, psychologists, podiatrists, dieticians etc), continuing to use medications appropriately, adhering to lifestyle or behaviour changes (such as stopping smoking, changing diet, doing more physical activity, reducing alcohol intake).
 - b) What about other issues such as isolation, financial support from family or friends (or lack of it), language or cultural issues, linking with community supports, COVID related issues.
 - c) In your opinion, which groups of patients are most vulnerable to problems when they are discharged and need extra support?
- 2) What do you think could be done to address these issues?
 - a) By existing supports, services, or programs?
 - b) By providing additional support or services?

3) Community Health Navigators (CHNs) are defined as lay health workers who are trusted members of and /or have a close understanding of the community served. This enables them to serve as a liaison /link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.

Have you had any contact or experience with CHNs? Can you tell me about it?

What role, if any, do you think could they perform in supporting patients after discharge?

c) Which problems or issues could they address?

d) What skills or training would they need?

e) How would they be supervised?

4) How could we assess if CHNs were being effective in carrying out these roles?

5) Do you have any other comments or questions?

Conclusion of interview

Thank everyone for their time; the next step of the study is a workshop which will be held would you be interested in participating in the workshop at a time and date suitable to you.

- Yes, I would like to be contacted for workshops to be held in the near future
- No, thank you I won't be able to participate

Codesign Workshop Agenda

1. Welcome & introductions

- Acknowledgement of country
- Welcome & briefly describe plan for the 2-hour workshop
- Permission to record for data analysis purposes

2. Overview of the project

- Objectives of workshop
- Summary of findings from interviews
- Questions and comments

3. Small group discussion

- How can we better support the needs of people discharged from the hospital into the community? Can CHNs play a role in supporting this transition?
- What training, skills, supervision, will the CHNs need to perform their role?
- How can we overall support the CHNs perform their role within the health system?

4. Large group discussion

- Discussion of key issues from the small groups.
- What could be the key indicators of success?
- What further consultation is needed?

5. Summarise and close

- Summarize the outputs of the session, Q & A
- Follow up webinar and reporting
- Process for providing additional questions or ideas to the study team

Small group structure and organisation

Small group discussions were a means to ensure power imbalance was addressed. Each group was carefully constructed with consideration to each participants role and responsibilities. Each group consisted of someone from the local health district, someone from community health care, a consumer (where possible), a community organisation representative and a Community Health Worker. Discussions within these groups were facilitated by an experienced researcher. Research team members also acted as observers or scribes.

CHECC Nodes

Codes

Node	Sub-node	Sub-sub node
Attitude towards CHNs	Confusion about CHNs	
Continuity of care		
Demographics		
Evaluating CHN role		
Impact of COVID		
Issues faced by patients after discharge	Availability of health relevant resources	
	Discrepancy between hospital and home	Lack of understanding by health professionals
		Poor communication by health professionals
	Discrimination	
	Financial issues	
	Health status	Cognitive impairment
		Physical impairment
	Lack of empowerment	
	Language barriers and cultural needs	
	Maintaining healthy behaviours	
Timely access to appropriate services	Health system issues	
Family or social networks		

Node	Sub-node	Sub-sub node
	Health literacy	
	Living situation	
	Medication issues	
	Transport issues	
	Using technology	
Other government support packages		
Other Profession	Community Nurses	
	Clinical Nurse Consultant	Person-centred practice
	Recognition of effort	
Risks of CHN role		
Role of CHN		
Similar CHN models	Client Support Program, CALD	
	Private health care workers	
	Roles referenced that have an overlap with CHN	ACAT
		Caseworker
		Community health workers
		Discharge planner
	Bilingual Community Navigators	
	Aboriginal Outreach Program	Aboriginal health workers
	Xtend	

Node	Sub-node	Sub-sub node
Skills and knowledge for CHNs	Assessment skills	Home assessment
	Communication	Using interpreters
		Using technology
	Cultural sensitivity	
	Health coaching	
	Health systems	Navigation
		Referral systems
		Services
	Organisational skills	
	Person-centred care	
	Practical experience	
	Professional conduct	
	Wound care, First Aid, CPR	
	Documentation and reporting	
Goal setting		
Medication management		
Understanding of disabilities an ageing		
Supervision and Support for CHNs		

Job description: Community Health Navigator

PRIMARY PURPOSE

This position provides support with transition home following discharge from hospital. The Community Health Navigator (CHN) works with individuals and their families, health practitioners and communities to support patients and link them to health and other services. This position requires good skills in communication, identifying and solving barriers in access to care, collaborative problem solving and knowledge of referral to health services.

KEY ACCOUNTABILITIES

- Work with and directly support the patient's transition and navigation through the process of discharge from hospital to home linking them back to their general practitioner and/or allied health staff, community, and other support services.
- Provide home/hospital visits and/or phone contact to patients following discharge from hospital to identify, address and report issues that will assist the patient to maintain their independence and better manage their health.
- Identify barriers that impact on the patient's ability to manage their health and support patients to overcome these barriers, facilitate referral to community resource or other services.
- Communicate effectively with patients, carers, service providers, clinicians, and other healthcare providers.
- Provide education and information to meet the patient's needs in consultation with the general practitioner, nurse, allied health, or other staff.
- Collect accurate health care information and ensure documentation in accordance with Sydney Local Health District policy.
- Participate in regular team or staff meetings and quality improvement activities to improve care for people living with long term conditions.

KEY CHALLENGES

- Understanding of the community health navigation role, referral pathways, understanding boundaries of the CHN role and escalating in a timely and efficient manner to achieve overarching project objectives.
- Working with and establishing rapport with patients who may have difficulty with managing their health due to language, lack of healthcare knowledge or information, difficulty remembering, getting to or affording services or aspects of care, following recommendations or instructions.

SELECTION CRITERIA

- Demonstrated experience in providing care to people living with chronic disease and/or those living with frailty in an acute or community setting.
- Demonstrated understanding of Australian health system.
- Demonstrated ability to use computer-based applications and information systems.
- Demonstrated effective oral and written communication skills, and interpersonal skills.
- Demonstrated ability to work and contribute as a team member.
- Demonstrated understanding of Australian health system.

- Demonstrated understanding of privacy and confidentiality.
- Willingness to undertake work-based training programs.