ABSTRACT

Objective To implement, refine and evaluate an assertive community health nurse (CHN) model of support for people experiencing or at risk of homelessness that aims to improve their access to health and social care services.

Methods Participants were recruited between 30 August 2013 and 31 October 2015, including clients residing in a Victorian southern Melbourne metropolitan suburb, who registered with the CHN and stakeholders from local service provider organisations engaging with the CHN. A collaborative approach using demographic data collected from client records to identify needs and measure the time clients took to engage and access services, qualitative data gathered during Stakeholder Advisory Group meetings and feedback from face-to-face interviews with service organisation representatives informed refinement of the CHN model.

Results Thirty-nine clients (22 Female, mean age 50±11 years) participated. Clients engaged with services after an average of seven CHN visits. Eighteen clients independently accessed services after approximately 9 weeks, including medical and housing services. Client need and feedback from 20 stakeholders and three community nurses contributed to refining the model to ensure it met local needs and informed the necessary organisational framework, the CHN role and the attributes, knowledge and the skills required.

Conclusion A collaborative CHN model of support for people at risk of or experiencing homelessness has been articulated. Evaluation of the role demonstrated increased client engagement with health and community services and social activities. Additionally, the CHN assisted other service providers in their delivery of care to this very complex client group.

INTRODUCTION

The health and social care needs of people experiencing homelessness in Australia are inadequately addressed. A lack of financial, social, emotional resources, support services, and having no sense of hope, together with complex health and psychosocial problems, often leads to a delay in accessing health services until a crisis occurs. Additional barriers include lack of knowledge of available services, not having a Medicare/Health Care Card or a fixed address, transport issues, cost of services, perceived negative attitudes of service providers and existing services struggling to meet the needs of this very complex group. Consequently, people experiencing homelessness are frequent users of emergency departments (EDs) accounting for up to one-third of all ED visits. This crisis driven response to address health needs is often uncoordinated and leads to poorer care and health outcomes.

A single service or approach is inadequate to address the complex and varied needs of homeless populations. Housing support and supply, specialist health and welfare support services with multiple access points and flexible assessment and referral processes to
ensure that the system response is adequate are all essential.\textsuperscript{12} As a result, alternative models of service delivery are required.\textsuperscript{12} In 1978, a large home nursing service provider established a Homeless Persons Program (HPP) to overcome barriers to healthcare and address the diverse health and social needs of this group. The HPP utilises a community health nurse (CHN) model to deliver holistic primary healthcare and assertive outreach to enable greater engagement with this vulnerable population. Importantly, the CHN operates as a first point of contact for people experiencing homelessness, their clients, with the client directing the care that they receive.\textsuperscript{6}

Between 2006 and 2011, an outer southern suburb of Melbourne, Australia, with a mix of low to high disadvantage, experienced a 35% increase in the number of people experiencing homelessness.\textsuperscript{15–18} A needs analysis of this population, undertaken by the HPP, also identified a high level of unmet health needs of people experiencing homelessness in this area.\textsuperscript{19} In 2013, Gandel Philanthropy provided funding for the HPP to employ a CHN to work in this southwest metropolitan region, and for this expansion of the programme to be evaluated. This paper articulates: a framework for the implementation of a collaborative CHN model, how it was refined to suit the local context (address current gaps, complement existing services) and the CHN’s facilitation of client engagement with health and social care services.

\section*{METHODS}

\subsection*{Study design}

\textbf{Theoretical framework}

A collaborative approach, based on participatory action research (PAR) principles was undertaken to refine the CHN role to the local context.\textsuperscript{20} Client records including case notes were reviewed to measure the length of time clients took to engage with the CHN and to access services and identify the services they accessed. PAR is an approach to research that includes the involvement of the community to understand their world and to ensure that research outcomes are appropriate to identified needs.\textsuperscript{20} PAR in this instance was based on feedback from interviews with the CHN, stakeholders representing local specialist homeless support services and from feedback obtained during monthly Advisory Group meetings.

\textbf{Setting}

The CHN was co-located with a Christian charity organisation that provided services to vulnerable people in a southern Melbourne metropolitan suburb. People experiencing or at risk of homelessness were high users of these services. The CHN also had the flexibility to assertively approach potential clients in other community settings (ie, parks, other venues who provided food programme, rooming houses).

\textbf{Intervention}

The CHN model was originally developed for an inner-city workforce, to meet the specific health and social care needs of individuals experiencing or at risk of homelessness who did not access mainstream services. The model requires integration with existing service system structures, influencing how services operate as ultimately, the CHN aims to enable and empower people experiencing or at risk of homelessness to obtain care through these mainstream services. Further, the CHN aims to support service providers to better understand the needs of this challenging group. However, due to varied organisational requirements and mainstream staff attributes, knowledge and skills, sometimes the CHN is unable to bridge this gap.

In the current project, the CHN filled a gap in the region, by providing a flexible primary healthcare response to people who were homeless or at risk of homelessness 4 days per week. The services provided by the CHN included primary care (eg, wound care, diabetes education), linking clients to needed existing services and providing emotional support during their time of need, through a combination of assertive outreach and a fixed clinic. To undertake the role, the CHN also mapped existing services, established services that were not available and formed collaborations with other service providers to fill the identified gaps in services available to clients.

\textbf{Patient and public involvement}

This project did not involve patients or the public in the research process.

\textbf{PARTICIPANTS}

There were two groups of participants: (1) Stakeholders who provided services to people at risk of or experiencing homelessness and members of the project Advisory Group. (2) People at risk of or experiencing homelessness who resided in this southern metropolitan suburb and who registered as clients with the service offered by the CHN. Potential clients were individuals currently in Frankston who self-reported that they were experiencing or at risk of homelessness. They were either approached by the CHN at venues that this group generally use (for example, parks, food programme, low-cost hotels, boarding sites and caravan parks), or the individuals approached the CHN for care at the fixed location in Frankston that was co-located with a local charity. These individuals became clients once they agreed to accept support from the CHN, and data from all individuals who became clients of the service across the evaluation time frame were included in this evaluation.
DATA COLLECTION

Quantitative – client data
On registration, clients provided consent for their service data to be used. Demographic and clinical information was obtained from the client information management system and the CHNs case notes. Case notes captured the number of referrals made, which services were accessed by clients, the type of assistance provided, the progress of clients and changes in self-determination as evidenced from engagement with services, decision-making and participation in other activities.

Qualitative - interviews and service mapping data
The CHN and stakeholders associated with the CHN were invited by either email or telephone to be interviewed. Face-to-face interviews, in the form of a guided conversation, explored stakeholders’ views and experiences of the CHN pre and post implementation of the role. Areas explored included thoughts about whether the role had been beneficial; how the role had benefitted services or people experiencing homelessness and whether it could be improved. A focus group also explored the same areas from the perspective of other HPP team members. Interviews were undertaken by two experienced researchers (DG and JH), the duration ranged between 30min and 1 hour.

In order to refine the CHN role to meet the needs of the local context on commencement of the role, it was necessary to identify and address any gaps in existing services (see figure 1). An electronic scan of services combined with feedback from stakeholders and project Advisory Group members was used to map existing services and create a living document of contact details and descriptions (see figure 2). Stakeholder interviews were used to substantiate these interpretations.

DATA ANALYSIS

Quantitative data analysis
A descriptive analysis of quantitative data was undertaken using the Statistical Software for Social Scientists (IBM SPSS V.23).

Qualitative analysis
Face-to-face interviews and focus groups were audiorecorded, transcribed verbatim, checked for accuracy and then imported into the NVivo 10 qualitative software package (QSR 2015) to aid thematic analysis. Thematic analysis using an inductive approach to allow for themes and findings to emerge from the data, grounding the findings in the perspectives and experiences of participants. The team met to engage in peer debriefing and reflexive conversations to ensure that there was agreement on the themes and all interpretations of the data were considered in the articulation of the final CHN model. The team included two doctoral trained (DG, RO) and one quality improvement trained (JH) researchers, and all three of the researchers were working for the home nursing service. By using reflexivity, we aimed to limit our beliefs and assumptions impacting on the articulation of the

Figure 1  Services accessible to clients experiencing homelessness in Frankston (pre-HPP). ED, emergency department; GP, general practitioner; HPP, Homeless Persons Program.
CHN model, allowing findings to inductively emerge from the analysis. Drafts of the model were further reviewed by those providing the service to ensure the final model was credible and accurate. Confirmability is ensured through an audit trail of audio-recordings, verbatim transcriptions and the data analysis file.

A diagram/schematic mapping that the identified services was also circulated to members of the Advisory Group as a living document, for further input throughout the duration of the project.

Consent
Participants gave written consent prior to participation in the study.

Dissemination plan
The results have been disseminated to study participants and participating organisations.

RESULTS

Participants
Thirty-nine clients (22 female, 17 male) registered with the CHN between August 2013 and October 2015. The clients were between 28 and 78 years of age (mean SD 50±11). Over a third were experiencing primary homelessness. The most common reason for presentation were mental health, physical health and social issues (see table 1).

During this same time frame face-to-face interviews were conducted with 12 stakeholders and three members of the CHN project team. Eight other stakeholders participated in a focus group. The key stakeholders interviewed represented specialist homeless services across the areas of emergency relief, mental health, and homelessness, nutrition and community services/activities in the region.

Community health nurse - organisational framework
Key stakeholders noted that the CHN was able to function effectively through her ability to provide an assertive outreach service and engage with clients over time. The autonomy, flexibility, resources, culture and peer support provided by the organisation created an authorising environment enabling this model of care (see figure 3).

Autonomy and flexibility
Stakeholders identified that having the autonomy and flexibility to provide assertive outreach and long-term engagement was essential to assist clients with very complex needs and advocate on their behalf:

‘She (the CHN) does assertive outreach. So while (she) will see people at (the fixed clinic) on a Thursday, as part of their dinner programme, (she) …will go into rooming houses, and … into other community settings. (The CHN) will go to the breakfast programme or lunch programme to engage with clients. Then see clients and then advocate for them, support them, network and get them into community services. Or other health services that they need.’

Stakeholder 2

Figure 2  Schematic of service and support networks for homeless clients, post-HPP commencing in Frankston. CHN, community health nurse; GP, general practitioner; HPP, Homeless Persons Program.
Table 1  Demographic and clinical characteristics of Frankston HPP clients

| Participant demographics | N (%) | n = 39 |
|--------------------------|-------|-------|
| Gender                   |       |       |
| Female                   | 22 (56) |       |
| Male                     | 17 (44) |       |
| Age                      |       |       |
| 25-34                    | 5 (13) |       |
| 35-44                    | 6 (15) |       |
| 45-54                    | 17 (44) |      |
| 55-64                    | 6 (15) |       |
| 65+                      | 5 (13) |       |
| Cultural background      |       |       |
| Australian               | 29 (74) |       |
| Aboriginal or Torres Strait Islander | 3 (8) |       |
| Fiji                     | 1 (3) |       |
| UK                       | 1 (3) |       |
| New Zealand              | 2 (5) |       |
| Unknown                  | 3 (8) |       |
| Relationship status      |       |       |
| Married/defacto          | 6 (15) |       |
| Divorced/separated/widowed | 18 (46) |       |
| Single                   | 14 (36) |      |
| Unknown                  | 1 (3) |       |
| Housing status*          |       |       |
| Primary homelessness     | 13 (33) |       |
| Secondary homelessness   | 7 (18) |       |
| Tertiary homelessness    | 5 (13) |       |
| Marginal housing         | 5 (13) |       |
| Evicted                  | 2 (5) |       |
| Not known                | 7 (18) |       |
| Clinical characteristics (predisposing† factors for seeking assistance from HPP) | | |
| Mental health issues     | 35 (90) |       |
| Physical health issues   | 25 (64) |       |
| Social issues            | 26 (67) |       |
| Alcohol or drug issues   | 17 (44) |       |
| Behavioural issues       | 2 (5) |       |
| Intellectual issues      | 1 (3) |       |
| Top three combinations of predisposing issues | | |
| Physical, mental health and social issues | 16 (41) |       |
| Mental health, social and alcohol or drug issues | 8 (21) |       |
| Physical, mental health and alcohol or drug issues | 6 (15) |       |

Secondary homelessness encompasses those who move from shelter to shelter (transient), use crisis accommodation, live at refuges or temporarily live with family/friends (also considered as ‘couch surfing’). Tertiary homelessness refers to those living in boarding houses (without security of tenure or separate bedroom, living room, kitchen or bathroom facilities) and also in caravan parks.

*Primary homelessness includes a person living in the street, park, squats/dilapidated buildings, cars and railway carriages.
†Predisposing factors were assessed by the CHN as the reason underpinning clients need for assistance from the HPP CHN.
CHN, community health nurse; HPP, Homeless Persons Program.

Key stakeholders acknowledged that while their own service may address some of the needs of people experiencing homelessness, there were areas that were outside the scope or capacity of their organisation that the CHN was able to address, especially in regard to health and social care and the immediacy of her response.

‘… if I was to complete an assessment and could identify and move around medical physical mental health need that I feel that the nurse could assist me with, prior to having that programme’s flexibility and having them on site or close by we may have a 2 or 3day turnaround … In that time frame we could see there’s been disengagement with the client. We could see an exacerbation of the current situation, maybe even more serious - where that person may do themselves harm, or others harm … (The CHN is) an intervention that we cannot offer.’ Stakeholder 11

‘(prior to the implementation of the CHN) We had no healthcare services. We only had referral. Go to the hospital, go to the doctor, go to this clinic and so forth. That’s all we could do, was advocate or refer. So there was a lot of people who would leave with their health conditions (still unaddressed)…’ Stakeholder 7

Funding and resources
Resources such as access to a team-based approach to support, office space, a mobile telephone, a computer and client database, a dedicated vehicle and parking space were acknowledged as vital for the CHN to provide the service. Additionally, the means to be able to meet the urgent material needs of the clients they engage with were also identified as crucial.

‘… to put somebody out on the street without resources to buy … food or a drink or pay for their (clients) medication or pay for their glasses is unreasonable … you’re just setting them up to feel as powerless as the client group … We just don’t drop a nurse into a position and walk away…’ Stakeholder 1

Organisational culture/peer support
The organisational culture and peer support was also identified as being important for the success of the model. The HPP model ensured that the CHN didn’t become overwhelmed by the job or the level of her client needs. The model additionally acknowledged what the CHN required to facilitate her clients achieving their goals. These principles underpin how the CHN delivered services to clients.

‘It is about having an agreed philosophical underpinning which talks about homeless people having a right to a service. …It’s actually the client who’s in control of the interaction.’ Stakeholder 1

‘ … I have been given incredible support by my team leader … I think if that hadn’t of been there, it would have made it a hundred times more difficult.’ CHN
The community health nurse role

The multi-faceted nature of the refined CHN role comprised four key functions: (1) Mapping the services in the area/filling service gaps, (2) Providing assertive outreach and a fixed clinic, (3) Assessing and prioritising client needs, (4) Linking with other services (see figure 4).

System service mapping and service collaboration/filling gaps in services

As there was no accessible, updated resource on all of the local services available for people experiencing homelessness in this region, service mapping was undertaken in conjunction with local stakeholders (see figures 1 and 2). Many people experiencing homelessness were not accessing services or were not aware of services that existed and subsequently, their health needs were unmet.

‘The (CHN) definitely fills a service gap … (other agencies) work within their speciality … so (the CHN is) definitely meeting clients’ needs (mental health) … because we couldn’t fulfil that.’ Stakeholder 9

The gaps in services are not necessarily a result of services or agencies not performing well. Agencies and services are often funded to provide specific services, constraining their ability to go outside those parameters. In addition, many services reported that they did not have the capacity to do outreach work and clients are required to come into a service which limited their accessibility to this client group.

‘…the CHN has got the ability to go out and actually see people either with workers or on her own whereas we couldn’t fulfil that. Yet (the CHN) is able to become aware of them and assertively engage them herself and get them linked in’ Stakeholder 6

Another factor that potentially contributed to the above situation was the lack of communication between services.

‘So there was … a (lack of) communication between two major systems who didn’t know about one another … That is an ongoing thing … we have got people working in very different areas and (who should be) coming together and it’s not happening.’ Stakeholder 2, time point 3

Public mental health services in the area were reported to be extremely stretched. Sometimes if a client had a diagnosis of borderline personality disorder, they were excluded from treatment on the grounds that they were too complex or that they wouldn’t attend appointments.
or engage. To address this issue, the CHN established relationships with private mental health services.

‘Because if we can get them appropriate treatment, things will improve for that person. I have found that by using the private psychiatrist and the private clinical psychologists, there’s been some really good outcomes for people. But they wouldn’t have got it because they wouldn’t have been able to get into the public system.’ CHN

The CHN also linked in with general practitioners (GPs) and established opportunities for clients to engage in social activities such as community garden programme, lawn bowls and a free veterinary service for pets ‘Pet in the Park’.

‘So they (the clients) might come to me and say, I’ve got this, have a look at it, what do you think? I say, we need to go around to the GP. I’m very lucky there’s a GP around the corner … they always make time if I ring and say, I’ve got this client that needs to see someone, they will always put us in.’ CHN

‘Pets in the Park, it’s been a really fantastic programme … now socially they’re (clients) meeting people, oh yeah, and (asking) how are you this month?’ CHN

Stakeholders recognised that many services in their region did not specifically address their clients’ needs. These stakeholders noted the addition of the CHN role to the area filled known service gaps.

‘So services that didn’t exist before (the CHN) were the College of Optometry, Centrelink coming (to the fixed clinic once a week). So those clients … were coming to (the CHN) and they’re coming because (they) know that (the CHN) will be able to bring these other services as well…’ Stakeholder 2

Providing assertive outreach

Although the CHN provided a fixed clinic service 1 day a week, it was the assertive outreach component and patience of the CHN, along with her ability/freedom to not have to rush clients to address their issues and develop a trusting relationship, which was reported by stakeholders to facilitate this vulnerable population group to engage with services. Workers in larger organisations reported that they did not have the level of flexibility, autonomy or resources that the CHN had to do this, however they found that by collaborating with her they could gain greater outcomes for their clients.

‘… The beauty of the (the CHN) is the immediacy in which we can have that support, that flexibility within that programme whether it be to advocate around Webster packs. Whether it be to advocate to get an urgent mental health assessment. Really and any health
or medical need we can use the HPP programme to assist us with that advocacy and overall outcome for the clients.’ Stakeholder 11

‘… we always find that outreach services are the better way to engage … building that relationship and that trust - going to where (people experiencing homelessness) are, rather than expecting them to come to a service.’ Stakeholder 14

In contrast, many other services have a requirement that clients formally attend meetings and must be willing to work on issues if they are registered into those programme.

‘While most people do have a health concern there are things they may be not ready to address just yet, if that makes sense. So they may be more willing to address the housing whereas for us to purely just work on housing isn’t part of the (service).’ Stakeholder 9

Assessing and prioritising client need

Factors, such as unstable housing and the chaotic lives of clients can result in a high degree of mobility that results in sporadic contact with the CHN over a lengthy period of time. Further, these clients have needs are not the general health needs of the general community. Stakeholders reported that the CHN had the flexibility to be able to assist these clients that would otherwise not be assisted.

‘… the most classic situation of the homeless man who had multiple addiction and health issues … He had … a dog as well and we realised the dog was the most stable and satisfying relationship he had in life. So the dog - it was never an issue that he shouldn’t have a dog but the dog was just a barrier to any sort of accommodation. So we saw (the CHN) over a long period of time engaging with other people as well who could help him, gradually and a lot of perseverance and tolerance and patience, … and gradually solving or putting remedies to issues one by one. Now, it would probably be at least a year now, (the client) is stable. Living in a good environment (with the dog) … a classic example of a lot of effort required but there’s a life that’s really turned around from hopelessness to one of fruitfulness.’ Stakeholder 7

Linking with other services

Stakeholders noted that the CHN needed to work constructively with other services and develop professional relationships that assist clients to access to services they need but would not normally access. The CHN brought services to the clients and attended appointments with clients, acting as a trusted support and advocate.

‘… Our commitment to delivering a service at point of contact, our commitment to taking the service to where people live and gather, rather than expecting them to come to us. One of the key things we do is offer people a bridge into mainstream services, but what we also do is we support both the client and the service system to engage in a way that brings about positive outcomes for the individual.’ Stakeholder 1, time point 2

To assist clients who were intimidated by attending formal appointments at Centrelink the CHN and a representative from the local Centrelink office started attending one of the dinner programme once a week.

‘So while (the CHN is) not particularly doing anything in the sense of organising the Centrelink payments or the Centrelink things, (the CHN is) being the conduit for the Centrelink person to do that. (The CHN is) there so clients are going to come because they know that every Thursday the Centrelink person, (and the CHN), will be there. … It means then clients can come to Centrelink who wouldn’t have otherwise. …the clients might also see (the CHN) for something else too …. ’ Stakeholder 2, time point 2

The CHN was described by stakeholders as acting as an advocate, communicating, educating and working with service staff, highlighting the healthcare needs of clients and the impact of homelessness. This was seen by stakeholders as integral to how the CHN worked with other services to improve the coordination of care delivered. It was also acknowledged that the CHN facilitated client engagement by transporting and accompanying clients to appointments.

‘If there wasn’t a CHN there, the clients with mental illness will fall through the gaps because of possibly how serious their illness is and how disengaged they are with any service, then they would not have the support that they should have to access those services … the advocacy is a huge part.’ Stakeholder 15

‘… (the) flexibility within that programme whether it be to advocate around (medication) Webster packs … (or) to advocate to get an urgent mental health assessment. Any health or medical need we can use the programme to assist us with that advocacy and overall outcome for the clients.’ Stakeholder 11

‘… the position generally has created, particularly among the GPs, much more awareness about the barriers that homeless people face in accessing those services. So I think (the CHN) has been a very good advocate and been a very good voice for these clients in terms of dealing with the GPs and developing an understanding about the reasons why they haven’t been accessing healthcare, why, you know compliance with treatment might be a problem. A lot of the time I think services and other professionals can be a little bit naive about the difficulties that homeless people face. So, I think (the CHN has) been great with that. I think if the position wasn’t continued, we would - that would be a big hole in the sector.’ Stakeholder 6
The CHN facilitated additional services for clients, potential pathways to interaction with these services and a breaking down of barriers to client’s access to services.

‘...the HPP position would (facilitate) the intake process for example for the mental health community support services, ... I think a lot of the homeless clients don’t have the capacity to ... follow-up this process all the time. So, I think (the CHN) ... will get more clients through.’ Stakeholder 6

The CHN was able to link different services together in order to provide a more cohesive service to clients.

‘...it’s been really illuminating to have (the CHN) on board and to say, hold on - let’s not just talk about that - let’s talk about dental - let’s talk about podiatry, these are some really important needs that are not being met for this community and it’s really impacting on the quality of their life.’ Stakeholder 13

Importantly what the CHN brought to the service system was complementary, increasing what services were able to do for clients and helping to improve service delivery and efficiency, enabling services to concentrate on their core business which was not health.

‘... we’re the housing specialists. So she’s redirecting to us and then looking at the health. So I don’t have to worry about that. I can focus on my core business which is the housing, but that assists us. So we’re not caught up trying to make all these immediate referrals. Ringing the chemist - that takes time away from me to be looking at affordable housing options for (the client).’ Stakeholder 11

Overall stakeholders recognised the uniqueness of the HPP CHN model when compared with other services. A common theme expressed was:

‘... (the HPP) CHN is a very unusual service and ... I think it’s one that actually is able to connect with people who often may have given up all hope or services have given up on them.’ Stakeholder 3 time point 5

### Community health nurse attributes, knowledge and skills

The complex needs, behaviour and characteristics of people experiencing homelessness required the CHN to be highly skilled in clinical assessment, independent and resourceful, empathetic and caring, knowledgeable about the social aspects of healthcare (both physical and mental health, as well as drug and substance abuse issues) and how the system operates and patient and understanding. The CHN also required the ability to work collaboratively with other services and also recognised gaps in services and facilitate establishment of services needed to fill these gaps. (see figure 5).

‘... you’d need to have someone ... to see the whole social health model and ... That person is more

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**Figure 5** Attributes, skills and knowledge required by the CHN. CHN, community health nurse.
than just their heart condition or their liver disease or their alcohol problem. It is the whole person and what is affecting that person. So, it is their living accommodation, their social connections, the agencies around them, their cognition, their physical health, their mental health. So, the whole thing has to be looked at. So, there's a very, very encompassing role. So ... you have to have a nurse ... who has a very good grasp of what community health means. ...If we were social welfare only, we'd miss a number of the whole health aspect.’ Stakeholder 2, time point 2

**CHN clients: health service utilisation and social participation**

It took an average of 6 weeks or seven visits with the CHN before clients were ready to commence engaging with services. Eighteen clients took an average of 9 weeks to independently access services. Services that were identified as needed, referred to and accessed were: general practitioners (87%), consultant psychiatrists (77%), clinical psychologists (47%) and housing (85%). Other services that were accessed with assistance from the CHN were optometry, community mental health, welfare services (Centrelink) and legal aid (see tables 2 and 3). Activities initiated by the CHN to improve social connection are shown in table 4.

**CHNs impact on services and client outcomes**

In addition to the stakeholders recognition that the successful implementation of the CHN role in this area was facilitated by the particular organisational framework she worked within, her role and attributes, knowledge and skills stakeholders also stated that they observed improvements in the health and well-being of clients resulting from the CHNs promotion of holistic healthcare, determination to break down barriers to accessing services and her encouragement of clients increased self-determination.

**Breaking down barriers**

Stakeholders reported that the activities of the CHN addressed access barriers, positively impacting on clients’ ability to access needed services. These activities included supporting clients in navigating the system and linking them into services that they were previously unable to access. Additionally, it was acknowledged that achieving improved client outcomes was enabled by the relationship the CHN developed, not just with clients, but through collaboration with service providers in the area.

‘I think (the CHN has) broken down a lot of the barriers ... it's quite a lengthy process for people and it's a long telephone screen and that's a lot of follow-up phone calls ... and ... generally when we pick up referrals ... and see someone, a lot of the times they know (the CHN) already. That work of having to get someone into a GP or podiatry or optometry or whatever has already been done because the client has already engaged with (the CHN). So (the CHN is) so beneficial and very, very welcomed in the area.’ Stakeholder 6

**Holistic healthcare**

Stakeholders also reported that the CHN promoted holistic healthcare such as: ensuring clients’ experiencing adverse medication events were immediately linked in with appropriate health services; providing referrals that were practical and acceptable to both clients and services, complementing care and improving the efficiency with which services deliver their care; enabling clients with mental health issues to access private psychiatrists and psychologist when public mental health services were not available.

**Increased self-determination**

Case note data and observations from stakeholders indicated that clients started to show an increased self-determination by beginning to voluntarily access health and community services independently of the CHN. This was also displayed in their desire to participate in social activities. The positive flow-on effect on other clients was also noticeable.

‘... one of the clients that’s in the garden group, her housing - she’s now in a caravan park, which ... is a

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**Table 2** Length of time required by CHN to assist clients’ engagement with services

| Time (weeks) to first engagement by clients with a service | Number of visits to first engagement by clients with services | Time (weeks) taken for clients to start independently making service connections for themselves |
|----------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Average 6                                               | Average 7                                                   | Average 9                                                                                         |
| Min 1                                                   | Min 1                                                      | Min 1                                                                                             |
| Max 21                                                  | Max 43                                                     | Max 28                                                                                           |
| Most frequent duration 21                               | Most frequent number of visits needed 25                    | Most frequent number of weeks needed 22                                                          |
| Number of clients reliant on active support from CHN 13 | Number of clients independently engaging with services 18  |                                                                                                  |

(CHN, community health nurse.)
Table 3  Client linkage and access to services

| Service name and type        | Needed, referred and accessed (n) | Needed and referred (but not accessed) | Needed (but not referred) | Total (N) | %, of total (n/N), clients who needed, were referred to and accessed services |
|-----------------------------|----------------------------------|----------------------------------------|---------------------------|-----------|--------------------------------------------------------------------------------|
| Health services             |                                   |                                        |                           |           |                                                                                |
| GP                          | 26                                | 3                                      | 1                         | 30        | 87                                                                              |
| Optometry                   | 5                                 | 4                                      | 0                         | 9         | 56                                                                              |
| Dietician                   | 2                                 | 1                                      | 0                         | 3         | 67                                                                              |
| PenDAP (AOD)                | 0                                 | 2                                      | 1                         | 3         | –                                                                               |
| Surgery                     | 0                                 | 1                                      | 0                         | 1         | –                                                                               |
| Podiatry                    | 0                                 | 0                                      | 0                         | 0         | –                                                                               |
| Mental health services      |                                   |                                        |                           |           |                                                                                |
| Consultant Psychiatrist     | 17                                | 3                                      | 2                         | 22        | 77                                                                              |
| Clinical Psychologist       | 7                                 | 3                                      | 5                         | 15        | 47                                                                              |
| CMHS*                       | 1                                 | 4                                      | 3                         | 8         | 13                                                                              |
| Breaking the Cycle          | 1                                 | 1                                      | 1                         | 3         | 33                                                                              |
| Counselling                 | 0                                 | 0                                      | 3                         | 3         | –                                                                               |
| Partners in Recovery        | 2                                 | 0                                      | 0                         | 2         | 100                                                                             |
| Welfare services            |                                   |                                        |                           |           |                                                                                |
| Housing                     | 17                                | 2                                      | 1                         | 20        | 85                                                                              |
| Centrelink                  | 12                                | 1                                      | 3                         | 16        | 75                                                                              |
| Legal                       | 3                                 | 3                                      | 2                         | 8         | 38                                                                              |
| Child protection            | 1                                 | 1                                      | 0                         | 2         | 50                                                                              |
| Community support services† | 0                                 | 3                                      | 6                         | 9         | –                                                                               |
| Social support              | 5                                 | 1                                      | 3                         | 9         | 56                                                                              |
| Other                       |                                   |                                        |                           |           |                                                                                |
| Financial                   | 0                                 | 3                                      | 9                         | 12        | –                                                                               |
| Other                       | 2                                 | 3                                      | 4                         | 9         | 22                                                                              |
| Veterinary                  | 3                                 | 0                                      | 1                         | 4         | 75                                                                              |

Data extracted and coded from de-identified client case notes.

‘CMHS refers to Community Mental Health Services (eg Mobile Integrated Health, Mentis Assist).
†Community support services can be charity based (eg City Life) or be government funded emergency relief services (eg Community Support Frankston).
AOD, alcohol or other drug; GP, general practitioner.

2 hour trip up, 2 hour trip back to come to the garden group. She was telling me the other day how she’d gone into Salvos herself because she had some goods in storage … she came to me and said, I actually went in and asked them - normally she would never go anywhere on her own.’ Stakeholder 3, time point 3

‘…three or four of them (clients) that are regular … still came and watered (the community garden when the CHN was on holiday) and they know the code now for the garden and they’re engaged … they’ve been to working bees … The clients have really taken it on board.’ Stakeholder 10

Other clients demonstrated an increased sense of belonging to place and expressed a desire to ‘give back to their community’ and were supported by the CHN to do so.

‘They were telling me (the CHN) about, what could they do around (this area)? Because they noticed there were needles and there was rubbish, and maybe they could just go picking it up … So I (the CHN) gave them the council contact, one of the rangers … and I said, give her a call and see what she says. So (the council) provided them with the buckets and those pincer things (and) … they’re still cleaning up. They come and tell me so proudly that they’re still going and they’re still doing it … (it’s been) about 5 months.’ Stakeholder 3, time point 3

**DISCUSSION**
The CHN role was successful in improving client access to health and community services and their engagement in...
Outreach services can bridge that gap. Similarly, it has been demonstrated that an assertive outreach approach can lead to better outcomes for youth with severe mental health issues.

Previous work has identified that navigating a complex health system and knowing how to effectively advocate for their rights are major barriers faced by people experiencing homelessness. It has also been recognised that outreach services can bridge that gap. Similarly, it has been demonstrated that an assertive outreach approach can lead to better outcomes for youth with severe mental health issues.

The success of the CHN model was also recognised as stemming from its uniqueness that allows for assertive outreach into places where people experiencing homelessness go to and are comfortable in and for its rights and equity model underpinning the CHN role and practice framework. This included the CHN having personal accountability to the client group, the autonomy to be a change agent, the flexibility to be able to leverage resources and the support to put in place innovative solutions around the individuals the CHN was working with.

Increasingly, there is recognition of the proliferation of homeless healthcare services and programmes, but no sharing of models of care designed to relieve the significant burden on the healthcare system or the building of a more shared and coordinated approach to the health of the homeless population in Australia. A call from the recently formed National Alliance to End Homelessness purports that to prevent decline into health inequality, healthcare and housing services need to work together to improve outcomes for people experiencing homelessness.

We propose that the CHN model outlined in this paper not only offers culturally sensitive consumer-directed health and well-being support for people at risk of or experiencing homelessness, but that it is well placed to address health inequities through the provision of a rights based, holistic, person-centred, inclusive model of support.

**Strengths and limitations**

All 39 individuals experiencing or at risk of homelessness that became clients of the programme were included in the evaluation, providing comprehensive information on a subset of this group; the census figures for 2011 estimated that there were 360 people experiencing homelessness in Frankston. We cannot state that we have captured a representative sample, however, the CHN used the most effective approach possible to recruit this difficult to capture group.

There is a dearth of literature articulating the components that are required to successfully implement a holistic support role for people experiencing homelessness and limited evidence about the value of the CHN response. This study addresses this gap by documenting the components that are integral to this model of community healthcare and social support to assist people experiencing homelessness. The observations, location familiarity and expert knowledge of the stakeholders that were interviewed was used to inform our analysis of the CHN role and the articulation of the necessary components.

Due to the difficulties that can occur locating and following up this vulnerable and complex group CHN clients were not interviewed, therefore although we were able to capture clients’ access to care through client case notes, we did not directly assess individual health outcomes. The CHN case notes and feedback from the CHN interviews were used to garner the clients' perspective and experiences.

The establishment of a CHN in this south eastern metropolitan suburb of Melbourne led to improved access for people experiencing homelessness and to an increase in their willingness to engage with health and social care services and to engage in social activities. While the role of the CHN is a necessary part of a wider system response...
to address the health and social care needs of people experiencing homelessness, it is insufficient in itself to reduce homelessness at a population level. An integrated, multi-sectoral response to health and housing is needed.

CONCLUSION
This collaborative CHN model of support for people at risk of or experiencing homelessness facilitated engagement with health and community services and participation in social activities. It also addressed several service gaps and assisted health professionals, including general practitioners, psychiatrists and psychologists, in their engagement and delivery of care to this very complex client group.

We have articulated the three key components required to implement a culturally sensitive CHN role: a practice framework structure; detail of what the CHN role entails and a description of the attributes, skills and knowledge required to undertake the role. As the concepts of the CHN model are universal, there is potential for them to be applied across different contexts (to meet local population and geographical needs) as well as service sectors.

Acknowledgements
We would like to acknowledge Theresa Swanborough, former manager of the Homeless Persons Program (HPP), the contribution of the members of the project reference group for their valuable feedback on the HPP model throughout the evaluation, their willingness to participate in interviews and their input in regard to mapping of local services.

Contributors
DG and RO co-designed the data collection tools and co-wrote the statistical analysis plan. DG monitored and supported data collection for the whole of the trial. DG and JH undertook data collection, data entry and cleaned the data. All authors contributed to analysing the data and undertook the final drafting of the article, revised it critically for important intellectual content, read and approved the final version of the report and accept accountability for all aspects of the work. RO is the corresponding author.

Funding
This work was supported by funding from Gandel Philanthropy.

Competing interests
None declared.

Patient consent for publication
Not required.

Ethics approval
Ethics approval to conduct the study was obtained from the organisations' standing Human Research Ethics Committee project number 147.

Provenance and peer review
Not commissioned; externally peer reviewed.

Data availability statement
Data are available upon reasonable request.

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