St Vincent's Hospital's Homeless Health Service: "Bridging of the Gap" between the Homeless and Health Care

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Summary

St Vincent's Homeless Health Service provides specialist health care to the inner-Sydney homeless population. The Community Outreach Medical Emergency Team (COMET) delivers primary health care clinics at drop-in services frequented by homeless people. Tierney House provides sub-acute care through short residential stays linked to outreach health care. This study examined the health outcomes of homeless people accessing these two services and the costs and benefits associated with achieving these outcomes.

The study found that:

- Tierney House generated substantial cost reductions in the first year post-contact with the service, and these were even greater in the second year. Savings for COMET were only realised in the second year, resulting in a modest net cost over a two year period.
- The greater cost savings generated by Tierney House is possibly due to the additional health benefits associated with having adequate shelter, good nutrition and improved hygiene.
- The effectiveness of the two services was related to the personalised health care that demonstrated respect and understanding for homeless people and supported them to make positive decisions about their health.

Providing health care tailored to the specific needs of the homeless population results in improvements in health status and savings to the health system.

People experiencing homelessness have more health problems and die earlier than the general population. Physical health issues, including musculoskeletal disorders, respiratory tract infections, skin infections and poor oral health are all common amongst people experiencing homelessness (Hwang, 2001). Much of this burden is thought to be related to the experience of homelessness itself, as homelessness is associated with poor nutrition, poorer access to health care, higher exposure to smoking and substance use, as well as challenges to adhering to medications and treatment (Fazel et al, 2014, Hwang, 2001). Homeless individuals also exhibit high rates of mental disorder, trauma, cognitive impairment, suicide and other premature deaths (Teesson et al, 2004; Buhrich et al, 2000; Hibbs et al, 1994). The homeless also have disproportionately higher use of acute health services compared to non-homeless individuals, including more frequent emergency department visits and inpatient hospital admissions and longer hospital stays (Fazel et al, 2014; Moore et al 2011). In combination, these issues mean that people who are homeless have more complex health needs than the general population.

St Vincent's Hospital Sydney provides two unique services to address the health needs of homeless people and reduce the costs associated with the higher use of the ED and hospital by this population. The Community Outreach Medical Emergency Team (COMET) delivers primary health care to homeless individuals via street-based and community outreach activities. The main activity of COMET is the operation of primary health clinics at four community organisations in inner-Sydney: The Station, Hope Street Women's Space, The Wayside Chapel, and St Canice's Church Kitchen. COMET specifically targets homeless persons

that are not currently accessing mainstream health services. The objective of COMET is to meet their health needs, improve their health literacy and facilitate access to the health services they require. Tierney House is a 12-bed residential facility located nearby the St Vincent's Hospital. Tierney House operates as a 'step-up/step-down' model to deliver sub-acute health care to homeless people. The objective of Tierney House is to stabilise health conditions and improve the functional health status of homeless persons.

About the research

This research aimed to:

1. Document the health needs of homeless individuals accessing outreach primary health care and sub-acute residential care
2. Estimate the cost-effectiveness of the two services
3. Describe the practices linked to the key health outcomes for each service

A mixed methods study was employed. Administrative data collected by COMET and Tierney House was analysed descriptively to document the health needs and service attributes for all persons accessing these services during 2013 and 2014. These data were then linked to St Vincent's emergency department (ED) presentations and hospital separations from 2012 through to June 2015. A comparison group of patients presenting to the ED or admitted to hospital during the same period was randomly selected using the identifier 'no fixed address'. The comparison sample was frequency matched to the COMET and Tierney House sample on age, sex and Indigenous status. This linked dataset enabled a comparison of key performance indicators (e.g. re-admission rates) between the two samples; interrupted time series was used to estimate the cost-effectiveness of the two services. Finally, qualitative interviews were conducted with 18 key stakeholders – including service users, homelessness service providers, and health service providers. These interviews explored the specific health needs of the homeless population, the benefits and challenges of providing health services to this population, and how key health outcomes were met.

The success of COMET and Tierney House in improving health outcomes

The study found that COMET and Tierney House service users presented with a range of health problems. These were predominantly physical health conditions: skin problems (such as abscesses and cellulitis), injuries (such as wounds, fractures), and respiratory and cardiac problems. Additionally, COMET service users presented for general medical assessments, medication and prescriptions. Presentations for substance use and mental health problems were relatively rare.

> "I think it was very largely due to the support at Tierney House – the fact that she was given a non-judgemental, very supportive environment…I think she needed a safe place where she could just get off the bottom rung" *[Health Provider]*

Although the two services are operationally distinct, the interview data confirmed that both services share core characteristics that enable homeless individuals to prioritise their health care and access mainstream health services. Firstly, the services provided a soft entry point into the health care system. This was considered important by homeless service providers because of clients' distrust and fear associated with prior experiences of being scheduled or hospitalised for long periods of time. Service users echoed this sentiment describing mainstream health service as "confronting" and where you "look different and stand out".

Both COMET and Tierney House provided a departure from the stigma and discrimination that can occur in mainstream healthcare environments. These services were described as cultivating a "human relationship" with service users and in doing so provided them with a sense of dignity and respect. Respect was

demonstrated in several ways. COMET and Tierney House staff were described as health providers that listened and were genuine in their care and attention to clients. This was illustrated in the following comment by a partner of a service user: "they're interested in who [client] is… they give him an identity, not just a homeless man." Respect was also demonstrated through the patient and tolerant delivery of health care that was mapped to the pace set by the service user.

In the context of such relationships, COMET and Tierney House provided service users with the stability required to address their health concerns. For COMET, this stability was linked to bringing health care to 'safe' spaces where homeless people sought refuge. As a result, COMET was able to improve the health literacy of clients, by supporting them to "be better equipped with knowledge" about their health conditions, including when and how to access the specialist health care they required. For Tierney House, stability was generated both through the relationships and the physical provision of accommodation. This enabled a person's health status to be monitored and provided a central point for the coordination of health care for each service user.

Finally, COMET and Tierney House supported service users to access the mainstream health system. Sometimes this was achieved by accompanying service users to specialist medical appointments. This often made the experience less frightening for service users and, because staff acted as 'health care interpreters', meant service users were able to ask questions of the specialist and comprehend the medical advice given by specialists. Access was also facilitated through staff liaising directly with medical specialists and other health care providers. This is illustrated in the quote to the right where the urgency of a health condition was communicated by the COMET doctor resulting in timely and responsive access to treatment. Tierney House staff also liaised with health care providers on behalf of clients and in doing so, were able to increase the 'homelessness literacy' of the health professionals involved in an individual's care. Additionally, for Tierney House, the fact that service users were residing on-site meant staff were able to remind individuals about their appointments and reinforce and encourage adherence to medication and other treatment. Rachel describes the impact of Tierney House on her wellbeing:

> "I went to see the [COMET] doctor and I said "What's that?" And she didn't know. That's why she rang a specialist…. That's how worried she was… It just virtually appeared overnight… She wanted to get me to see a skin specialist ASAP and that's why she got in the hospital because I told her I had an appointment and she sped it up by a week." *[Service User]*

> "If it wasn't for Tierney House letting me stay here until I got some accommodation, I would be dead by now… [Tierney House staff member] has been a big help to me, 'cause when I first came here, I used to just lay on the couch all day sleeping, but she got me out and about to go to Wayside and Ozanam for art and Diabetes cooking classes and she even took me for a drive up to Centennial Park so I get some fresh air. And somehow I got myself all better, but I actually can thank all of the staff (…) they put me on a special diet, they made sure I stuck to my special diet. I didn't want to leave here after six months, because this place would feel like my home." *[Service User]*

The cost savings when health needs are addressed

Considered over a two year forecast, both COMET and Tierney House were found to be cost-effective in delivering health care to people experiencing homelessness. Overall, service users had a higher ED presentation and hospital admission rate relative to the comparison group. Moreover, there was an initial

increase in presentations and admissions following contact with both services, likely associated with improved access to needed health care. Additionally, the health problems recorded for COMET and Tierney House service users were acute – these types of presentations often require follow-up health visits but these lessen over time with improved management of the health presentation. In contrast, length of stay did not differ between the COMET and Tierney House cohort and the comparison homeless sample. Thus the difference in health care costs between the two groups was related to the *frequency* of health service utilisation. Although initial health care costs were higher among the COMET and Tierney House cohort, the subsequent gradual decline in health service utilisation resulted in an overall net saving to the health system.

Table 1 compares the cost (in 2014 dollars) per client of providing each service with the net cost/savings related to changes in ED presentations and hospital admissions for St Vincent's Hospital. Tierney House generated substantial cost reductions in the first year post-contact (-$3,827 per person) and these were even greater in the second year (-$11,621). Moreover, the cost reductions associated with the Tierney House program were much greater than the cost of the program itself. In the case of COMET, the cost reductions were not evident until the second year (-$2,793 per person). This difference in cost savings between the two services may be due to the additional health benefits provided by the physical environment of Tierney House such as adequate shelter, improved nutrition and hygiene, as well as the capability of being able to monitor and respond to the health status of individuals.

Table 1 Net cost/benefit per service users over 1 and 2 years, expressed in 2014 dollars*

	COMET	Tierney House
Cost per client of providing the service	$3,148	$7,172
Change in ED costs in 1st year post-contact	$59	-$305
Change in hospital costs in 1st year post-contact	$764	-$3,522
Net cost/benefit over 1 year	**$3,971**	**$3,345**
Change in ED costs in 2nd year post-contact	-$770	-$1,596
Change in hospital costs in 2nd year post-contact	-$2023	-$10,025
Net cost/benefit over 2 years	**$1,178**	**-$8,276**

*Estimates are likely to be conservative as they do not include potential cost reductions at hospitals other than St Vincent's

What do the findings tell us?

This study has shown that appropriate and tailored health care for homeless people can reduce their reliance on the hospital system for their health care and deliver significant cost savings in the short-medium term. The study highlighted the importance of the relational context of health service provision for this population. This necessitated a different 'pace' of service delivery that, while requiring a substantial investment of resources up-front, nonetheless proved effective in improving the health status and health service access of homeless people over time.

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Contact the Homeless Health Service on 8382 1512
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