

Report Supplementary Material 1 Additional material relating to literature review of primary health care for people who are homeless: evidence-based practice

Table 1 List of search terms used in literature review of primary health care for people who are homeless: evidence-based practice

Homeless population terms	Primary health care terms
homeless*	"primary health care"
squatter*	"general practitioner*"
roofless*	"general practice*"
"rough sleep*"	physician*
"shelter resident*"	nurse
"shelter dwell*"	"health advocate*"
"hostel resident*"	"health outreach"
sofa surf*	"health promot*"
"bed and breakfast"	"personal health service*"
"no fixed address"	"nursing team*"
"no fixed abode"	"family practice*"
"street involved"	screening
	"patient care team*"
	"community health service*"
	"medical service*"
	"community health work*"

Figure 1 Flow chart for the review of primary health care for people who are homeless (a modified PRISMA diagram)¹

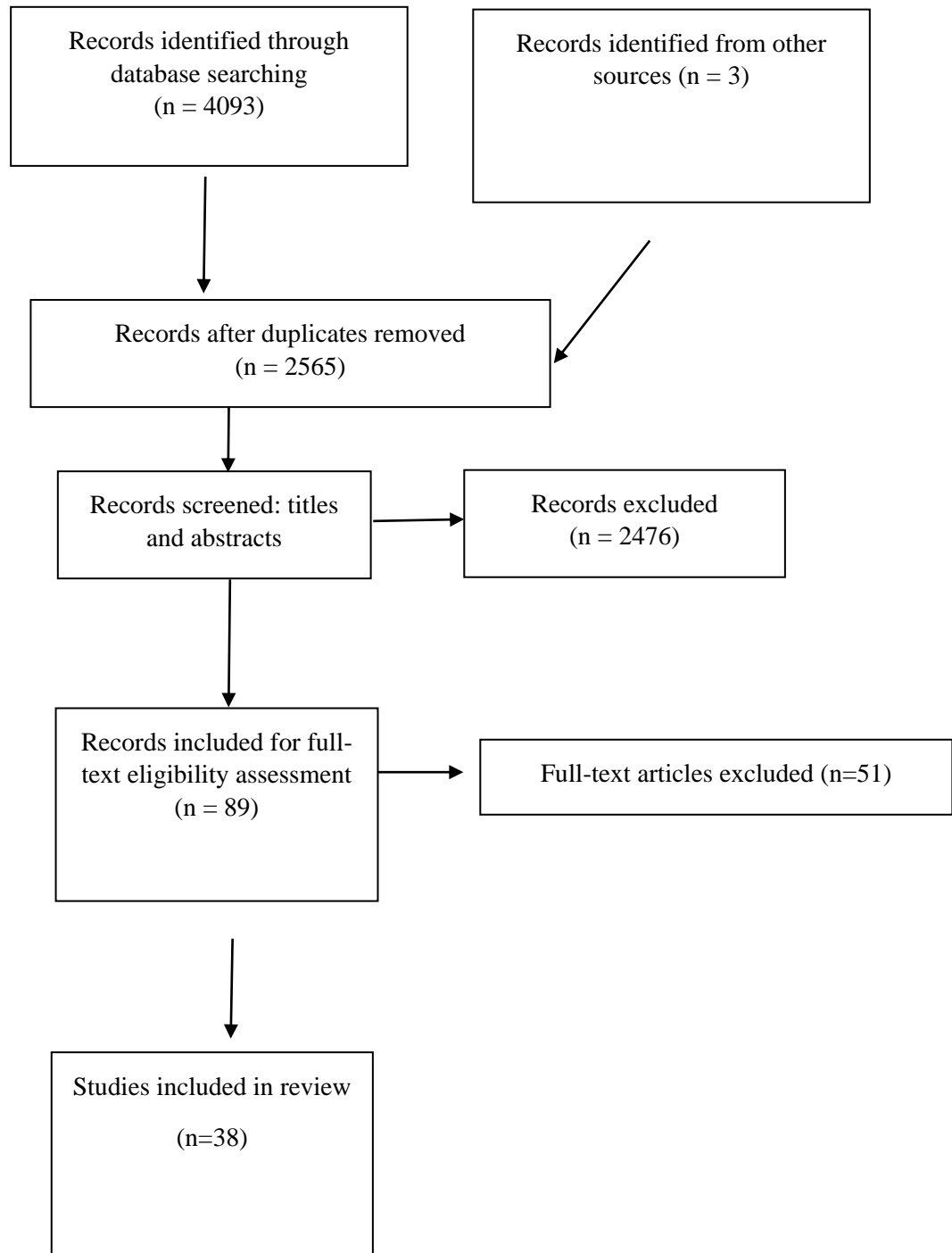


Table 2 Papers included in literature review of primary health care for people who are homeless: evidence-based practice

ID	Reference	Setting	Study aim	Study design	Sample / date	Key findings
Group A: Specialist health centres for people who are homeless						
A1	Beste and Stein, ² 2008	Clinic providing primary medical and dental care to homeless or transiently housed patients in Providence, Rhode Island, US.	To describe implementation of a chronic care model to provide primary care management of hepatitis C (HCV) in a homeless population and to assess provider compliance with guidelines for HCV care.	Retrospective review of medical records	121 homeless and transiently housed people based on a documented positive HCV antibody and/or detectable HCV viral load using polymerase chain reaction. Study conducted 2006.	Clinic practices demonstrated a wide range of adherence to HCV guidelines. Over 80% of patients had liver function tests in past year. However, rates for liver ultrasound, testing for Hepatitis A and B immunity, and HIV were below 50%. Demonstrated implementing the chronic care model is possible in a homeless population.
A2	Bhareel <i>et al.</i> , ³ 2015	Health Care for the Homeless (HCH) Program in Boston, Massachusetts, US.	To evaluate the effectiveness of a cervical screening programme, incorporating point-of-care service, multidisciplinary screening promotion, improved health maintenance forms, population management, process improvement, and increased provider and patient education.	Longitudinal prospective study	2,552 and 2,882 homeless women eligible for cervical screening in 2008 and 2013 respectively.	Use of a 6-step approach for improving cervical cancer screening resulted in dramatic improvement in cervical cancer screening rates, from 19% in 2008 to 50% in 2013.
A3	Greengold <i>et al.</i> , ⁴ 2009	Weingart Center, Skid Row area of Los Angeles, US.	To estimate cost-effectiveness of providing combined Hepatitis A and B vaccines to homeless people through a nurse case-managed intervention plus education, incentives and tracking, compared to standard programmes.	Cost-effectiveness analysis based on data from randomised trial	865 homeless adults in shelters, drug rehabilitation sites, and outdoor sites. Study conducted 2003-07.	Nurse case management with incentives and tracking resulted in substantial improvement with respect to participant compliance and was more cost-effective than standard programmes.
A4	Krautscheid <i>et</i>	Old Town Clinic, Portland,	To describe users of the	Descriptive	73 patients and 7 staff	Patients reported high levels of

	<i>al.</i> , ⁵ 2004	Oregon, US.	integrated physical and mental health care at Old Town Clinic and evaluate the satisfaction of staff and patients.	study	members of the Old Town Clinic. Study conducted in January 2003.	satisfaction regarding clinic location, access to care, health promotion and prevention services. Staff satisfaction was moderate regarding accessibility, response time, communication, support, treatment, completeness of care, and education.
A5	McInnes <i>et al.</i> , ⁶ 2014	Primary care clinic for homeless people at the Providence Veterans Affairs (VA) Medical Centre, Rhode Island, US.	To determine feasibility of text messages in reducing missed appointments in homeless veterans.	Non-experimental pre-post intervention study	20 homeless veterans receiving care at a VA Medical Centre. Study conducted 2013.	Text messaging helped homeless veterans' access services. It resulted in missed appointments being reduced by 19%, and cancelled appointments by 30%. A statistically significant reduction in ED visits was also found (difference of 10; 95% C.I.=2.2, 17.8; $P=0.01$).
A6	Moczygemba <i>et al.</i> , ⁷ 2011	Health Care for the Homeless (HCH) clinic, Richmond, Virginia, US.	To describe the implementation of a collaborative medication therapy management model (CMTM) developed by pharmacists, physicians, nurses and social workers, and integrated into a safety net patient-centered medical home.	Retrospective review of medical records	695 homeless adults with one or more chronic diseases, taking two or more long term medications, and identified as having a CMTM encounter from retrospective review of medical records over 20 months. Study conducted 2008-10.	High acceptance rate of pharmacist recommendations (85%) demonstrated that integration of pharmacy service benefited patients and staff by helping to address medication related problems.
A7	Nyamathi <i>et al.</i> , ⁸ 2006	Weingart Center, Skid Row area of Los Angeles, US.	To compare the effectiveness of a nurse case management programme with incentives on completion of treatment for latent TB with usual care model and incentives.	Randomised controlled trial	520 homeless adults in shelters, drug rehabilitation sites, and outdoor sites from 1998 to 2003.	62% of participants in the intervention group, compared to 39% in the standard care group, completed the six-month course of latent TB treatment. The intervention programme resulted in greater levels of TB knowledge.
A8	Nyamathi <i>et al.</i> , ⁹ 2008	Weingart Center, Skid Row area of Los Angeles, US.	To determine whether a nurse case management programme with incentives and tracking would improve adherence to	Randomised controlled trial	520 homeless adults in homeless shelters, drug rehabilitation sites, and outdoor sites from 1998 to	Nurse case management with incentives achieved a 91% completion rate for homeless shelter residents. It significantly improved adherence to

			treatment for latent TB in particular groups of homeless people unlikely to follow treatment.		2003.	treatment in 9 of 12 subgroups tested, including alcohol and drug users.
A9	Nyamathi <i>et al.</i> , ¹⁰ 2009	Weingart Center, Skid Row area of Los Angeles, US.	To evaluate effectiveness of nurse case-managed intervention plus education, incentives and tracking (NCMIT) on the completion of combined Hepatitis A and B vaccine, compared with two standard programmes: a) education plus incentives and tracking (SIT); and b) education and incentives only (SI).	Prospective, randomised, quasi-experimental study	865 homeless adults in shelters, drug rehabilitation sites, and outdoor sites. Study conducted 2003-07.	Use of nurse case management and tracking (NCMIT) significantly improved completion of a 6-month HAV/HBV regimen, with 68% of participants completing the series. This compared to 61% of SIT participants, and 54% of SI participants completing vaccination programme.
A10	Nyamathi <i>et al.</i> , ¹¹ 2009	Weingart Center, Skid Row area of Los Angeles, US.	To examine predictors of completers of two of three doses of a HAV/HBV vaccine series to simulate compliance with an accelerated series, provided over 4 weeks. See above study.	Prospective, randomised, quasi-experimental study	865 homeless adults in homeless shelters, drug rehabilitation sites, and outdoor sites. Study conducted 2003-07.	81% of NCMIT group completed two doses of the vaccinations, compared to 78% of SIT participants and 73% of SI participants. Use of nurse case-management and tracking, coupled with an accelerated HAV/HBV vaccination schedule, may optimize vaccination compliance in homeless adults.
A11	Poulos <i>et al.</i> , ¹² 2010	Haymarket Foundation Clinic for homeless and disadvantaged persons in Sydney, Australia.	To determine acceptance, completion rates and immunogenicity of standard vaccination schedule for Hepatitis A and B among homeless people.	Longitudinal prospective study	201 homeless people who saw nurse or doctor between 2003 and 2005.	Completion rates for Hepatitis A and B vaccinations were 73% and 75% respectively, and suggested a successful vaccination programme can be undertaken with a vulnerable population.
A12	Stein <i>et al.</i> , ¹³ 2010	Weingart Center, Skid Row area of Los Angeles, US.	To examine risk factors for the completion or loss to follow up for homeless people offered a combined Hepatitis A and B vaccine programme.	Prospective, randomised, quasi-experimental study	865 homeless adults in shelters, drug rehabilitation sites, and outdoor sites. Study conducted 2003-07.	No major risk factors impacted whether participants were found at follow-up; very little variance was explained by unprotected sexual behaviour, needle exchange or prison history.

A13	Upshur <i>et al.</i> , ¹⁴ 2015	Health Care for the Homeless (HCH) Program in Boston, Massachusetts, US.	To test the effectiveness of use of chronic care model compared to usual care model in (i) increasing initiation, engagement and retention in alcohol treatment; and in (ii) improving quantity of alcohol, mental and physical health and housing outcomes.	Randomised controlled trial	82 homeless women with alcohol use problems attending the HCH Program (42 in intervention group and 40 in usual care group). Study conducted 2010-11.	Intervention group had significantly more participation in substance use treatment services, but no significant differences in reductions in drinking or in housing stability, or mental or physical health. Substantial reductions in drinking for both groups suggest screening and brief treatment by primary care provider are positive interventions for homeless women with alcohol use problems.
A14	Wilde <i>et al.</i> , ¹⁵ 2013	Fourth Street Homeless Clinic, Salt Lake, Utah, US.	To study the outcome of two free skin cancer screening clinics for homeless people held in a non-profit community clinic.	Descriptive study	62 homeless people using the Fourth Street Homeless Clinic between 2011 and 2012.	Intervention resulted in skin cancer being diagnosed in 13 of 62 patients, suggesting need for such screening due to poor skin cancer prevention behaviours.
A15	Wilk <i>et al.</i> , ¹⁶ 2002	Homeless Outreach Medical Service (HOMES), Dallas, Texas, US. Intervention undertaken at one clinic site in facility with multidisciplinary services.	To assess the impact of an insulin delivery system on diabetes treatment for the homeless.	Longitudinal prospective study	23 homeless people with diabetes mellitus who used insulin, including 21 followed up at 3-month, and 16 at 6-months. Dates of fieldwork not reported.	Use of insulin delivery device improved compliance and glycemic control.
Group B: Primary health care at homelessness services and on the streets						
B16	Asgary <i>et al.</i> , ¹⁷ 2014	Two New York City shelter-based clinics in Brooklyn and Manhattan, US.	To evaluate and compare rates and predictors of mammograms in homeless and low-income domiciled patients.	Retrospective review of medical records	100 female patients (44 homeless, 56 domiciled) aged 50-74 who used medical services at these clinics at least three times between 2010 and 2012.	No difference in rates of mammogram within past 2 years between homeless and domiciled patients (59% and 57.1% respectively). Overall rates were considerably lower than national average. Need for trained patient navigators and patient education and counselling to address barriers to accessing care and misconceptions.

B17	Asgary <i>et al.</i> , ¹⁸ 2014	Two New York City shelter-based clinics in Brooklyn and Manhattan, US.	To evaluate and compare rates and predictors of colorectal cancer screening in homeless and low-income domiciled patients.	Retrospective review of medical records	174 domiciled and 269 homeless patients aged 50+ years who used medical services at these two clinics at least three times between 2010 and 2012.	Domiciled patients were more likely than homeless patients to be screened (41.3% vs. 19.7%; $P < 0.001$). Homeless and domiciled patients received equal provider counselling, but more homeless patients declined screening.
B18	Ciaranello <i>et al.</i> , ¹⁹ 2006	Transitional housing facilities in Sacramento, California, US.	To assess the effects of an integrated service team consisting of a physician, a nurse and a social worker on access to services and health status.	Quasi-experimental pre-post intervention study	609 individuals, of whom 464 with baseline observation only, 126 with baseline and 6-month follow-up, and 19 with baseline, 6-month and 18-month follow-up. Intervention delivered between 1999 and 2001.	Integrated team increased access and uptake of cervical screening and reduced ED use, but changes to blood pressure not maintained long term and no effect on physical functioning, mental health, dental health or access to specialists.
B19	Cunningham <i>et al.</i> , ²⁰ 2005	Montefiore Medical Centre and CitiWide Harm reduction service, Bronx, New York City, US. Service delivered to people living in single room occupancy (SRO) hotels.	To determine whether the addition of medical physicians to an outreach team would improve service use, increase HIV-related medication use and improve perceptions of access and quality of health care among people with HIV in unstable housing.	Pre-post non-experimental intervention study	161 people with HIV living in SRO hotels; 95 in pre-intervention and 66 in post-intervention groups. Study conducted 1999 to 2000.	Homeless people in post-intervention group, with physicians added to outreach service, were more likely to have a regular provider (O.R.=5.3, $P=0.02$), take antiretroviral medication (O.R.=5.7, $P=0.02$), and have a better perception of quality of health care (O.R.=4.9, $P=0.003$).
B20	Cunningham <i>et al.</i> , ²¹ 2007	Montefiore Medical Centre and CitiWide Harm reduction service, Bronx, New York City, US. Service delivered to people living in single room occupancy (SRO) hotels.	To evaluate the effect of a medical outreach programme on uptake of appointments.	Retrospective review of medical records	2,472 medical appointment records of patients with HIV living in SRO hotels. Study conducted 2003-05.	Patients were more likely to attend walk-in or same day appointments at community-based drop-in centres rather than in their hotel room, or when the appointment was made by a non-medical provider.
B21	Daiski ²² 2005	Mobile health care bus providing services at shelters and out-of-the-cold programmes in Toronto,	To evaluate services provided by the Health Bus from the user perspective.	Qualitative study	58 users of the service. Study conducted in 2004.	Users' experience of the Health Bus was overall positive. They valued the respect given by staff, their competency and the accessibility of the

		Canada.				service.
B22	Dorney-Smith ²³ 2007	Homeless hostel in South London, England.	To describe a 13-week pilot of the community matron model with homeless people.	Descriptive study	6 residents in a “wet hostel” for people with chronic alcohol problems. Study conducted in 2007.	Use of acute services reduced and quality of life scores improved for two patients. There was potential for the model to be used with other alcohol dependent residents.
B23	Matteoli <i>et al.</i> ²⁴ 2015	Outreach service provided by four volunteer physicians in Rome, Italy, using a mobile health service unit. Not stated where service was delivered.	To assess impact of a volunteer mobile health clinic on diabetic foot treatment.	Longitudinal prospective study	21 patients with diabetic foot ulcers seen between 2008 and 2013.	Clinical improvement was observed in 18 patients (86%) after 3 years. A mobile health care unit operated by volunteers could be a suitable option to reduce disparity in diabetic foot care for homeless people.
B24	O’Connell <i>et al.</i> ²⁵ 2005	Massachusetts Department of Public Health Task Force, including Boston HCH, New York City, US.	Development of strategies to reduce morbidity and mortality among people on the streets, including strengthening the service delivery network, and tracking system for high-risk homeless people and weekly reviews of their situation.	Case study	Using data regarding 13 street deaths in 1998-99, a ‘high risk’ cohort of 119 individuals in 2000 who had been sleeping on streets for 6+ months were identified. They were observed for four years (to 2003).	During the four year observation period, an average of 16 street deaths occurred annually, a decline from 24-30 annual street deaths seen previously. The Task Force united a broad coalition of public and private partners in a common mission. Care for homeless individuals was marked by increased outreach, coordination between services, and improvements in enrolling homeless individuals into primary care.
B25	O’Toole <i>et al.</i> ²⁶ 2015	Homeless-oriented primary care clinics at Providence VA Medical Center, Rhode Island and the Homeless Patient Aligned Care Team (H-PACT), Bedford, Massachusetts, US.	To test whether an outreach intervention that included a personal health assessment and brief intervention (PHA/BI), and a clinic orientation (CO) separately and in combination, would increase health-seeking behaviour of homeless veterans.	Prospective randomised controlled trial	185 homeless veterans not receiving primary health care. Participants recruited from 11 sites, including soup kitchens, transitional and emergency shelters and drop-in centres. Date of fieldwork not provided.	77% of PHA/BI plus CO group accessed primary care within the first 4 weeks of the intervention and by 6 months 88.7% had been seen in primary care. Difficult to reach homeless veterans can be effectively engaged in primary and other clinical care services through a relatively low intensity, targeted and tailored outreach

						effort.
B26	Rosenblum <i>et al.</i> ²⁷ 2002	Mobile medical van visited various sites in New York City, US.	To assess the outcomes of a mobile medical outreach clinic provided by doctors, a physician assistant and a social worker, and incorporating on-site intensive case management by a social worker.	Randomised controlled trial - preliminary results only	250 homeless substance users. Experimental group received intensive case management by social worker. Control group could self-refer to social worker. Numbers in each group not reported. Study conducted in 1997.	Both groups showed reductions in drug use, homelessness and health complaints at 4 months. Experimental group received more public assistance and had fewer ED visits than control group.
B27	Schumann <i>et al.</i> , ²⁸ 2007	Eight homeless shelters and four residential drug recovery programs in Skid Row area of downtown Los Angeles.	To evaluate whether the effects of a nurse case management intervention programme in enhancing latent TB infection treatment completion translates to HIV and AIDS risk reduction.	Randomised controlled trial	295 homeless people in shelters and drug rehabilitation sites between 1998 and 2003.	Intervention group had better AIDS knowledge, lower perceived AIDS risk and better self-efficacy for condom use at follow-up compared to control group. Intervention did not impact on substance use or risky sexual behaviours.
B28	Segan <i>et al.</i> , ²⁹ 2015	Royal District Nursing Service Homeless Persons' Program, Melbourne, Australia. Service provided in multiple settings used by people.	To evaluate the feasibility, acceptability and effectiveness of a 12-week smoking cessation treatment model for homeless people.	Uncontrolled before and after study	14 nurses selectively recruited 49 homeless people who were smokers and interested in reducing or quitting the habit, and who were not severely or acutely mentally or physically ill. Study 2012-13.	Integration of cessation support from homeless service staff with government subsidised pharmacotherapy and Quit line was feasible and acceptable. Quit rates were low, but consumption and butt smoking reduced, financial and psychological benefits were also observed.
B29	Tommasello <i>et al.</i> , ³⁰ 2007	Intensive outreach programme by HCH clinic, Baltimore, Maryland, US, at soup kitchens, shelters, abandoned buildings and prisons.	To determine whether an intensive outreach programme could engage homeless people with HIV, persistent mental illness and substance misuse problems in services, retain them in treatment, and improve physical and mental health.	Longitudinal prospective study	110 of 206 eligible candidates enrolled in study, and 82.7% completed 12-month follow-up interviews. Study conducted 1997 to 2001.	Outreach successfully recruited targeted individuals into treatment. They stayed in treatment and demonstrated improvements on measures of physical and mental health 12-months later.

B30	Tsu <i>et al.</i> , ³¹ 2015	United Methodist Watkins basic needs shelter, Phoenix, Arizona, US.	To determine effect of pharmacists providing health education to women on attitudes and behaviours.	Longitudinal prospective study	56 homeless women attended at least one session; 43 in analysis. Study conducted 2014.	Pharmacists providing educational seminars for homeless women significantly increased women's knowledge of health issues and women's confidence in pharmacists.
B31	Tyler <i>et al.</i> , ³² 2014	Homeless encampments and shelters in the Skid Row area of downtown Los Angeles, US.	To examine the effectiveness of nurse case-managed intervention plus education, incentives and tracking on Hepatitis C (HCV) knowledge.	Prospective, randomised, quasi-experimental study	747 homeless adults in shelters, drug rehabilitation sites, and outdoor sites. Study conducted 2003-07.	Significant increase in knowledge occurred in all participants, regardless of HCV education format. Nurse case managed intervention predicted largest gain in HCV knowledge ($P<0.000$).
Group C: Specialist compared to generic health care provision						
C32	Alford <i>et al.</i> ³³ 2007	Primary health care clinic Boston HCH, Boston Medical Centre, US. Different clinics for homeless and housed patients.	To test the feasibility of treating homeless opioid dependent people with buprenorphine in an office-based setting (OBOT-B), and compare with housed patients.	Retrospective review of medical records	44 homeless and 41 housed patients. Study conducted 2003-04.	OBOT-B was effectively implemented in homeless patients with outcomes comparable to housed patients with respect to treatment failure, illicit opioid use, and utilization of substance abuse treatment.
C33	Chrystal <i>et al.</i> ³⁴ 2015	Primary care settings in Pennsylvania, Alabama, California, and Massachusetts. Settings included mainstream VA primary care settings, homeless-tailored VA clinic and a tailored non-VA clinic for the homeless.	To evaluate predictors of favorable primary care experience among homeless people with mental health conditions treated at sites providing different models of primary care.	Cross-sectional study	366 participants with past or current homelessness experience and use of primary health care between June 2008 and July 2010. All participants had self-reported diagnosis of post-traumatic stress disorder or schizophrenia or endorsed severe psychiatric symptoms.	Tailored health care delivery designed for homeless persons' needs predicted a more favorable primary care experience, with such services potentially having special relevance for persons with mental health conditions.
C34	Kertesz <i>et al.</i> ³⁵ 2013	3 Veterans Affairs (VA) mainstream primary care settings in Pennsylvania and Alabama, a homeless-tailored VA clinic in California, and a tailored non-VA HCH programme	To compare homeless people's experiences of care across five primary care settings with variations in homeless-tailored services, using a newly-developed Primary Care Quality-Homeless Survey.	Cross-sectional study	601 people (random subset at each site) with (i) past or current homelessness, and (ii) use of service site 2+ times in past 2 years. Study conducted 2011-12.	Tailored primary care service design was associated with a superior service experience for patients who experienced homelessness.

		in Massachusetts.				
C35	McGuire <i>et al.</i> ³⁶ 2009	Demonstration primary care clinic co-located in same building as homeless social services and mental health programme. Los Angeles, California, US.	To test hypothesis that integrated primary care services co-located with homeless social services and mental health services improved access to health care and physical health for homeless veterans with mental illness or addiction, compared to 'usual care' primary care services.	Quasi-experimental pre-post intervention study	260 homeless veterans with serious mental illness or substance abuse (130 in pre-integration group and 130 in post-integration group) Study conducted 2001-04.	The integrated group was more rapidly enrolled in primary care, received more prevention services and had fewer emergency services. No improvement in inpatient utilisation and perceived physical health status over 18 months.
C36	O'Toole <i>et al.</i> , ³⁷ 2010	Homeless primary care clinic at Providence VA Medical Centre, Rhode Island, US.	To find out whether a tailored approach to primary health care delivery for homeless veterans was associated with better health care and service use outcomes, compared to a usual care approach.	Retrospective protective cohort study	177 homeless veterans: 98 accessing a general internal medicine primary care clinic, and 79 a tailored primary care clinic. Study conducted 2006-07.	Homeless veterans accessing a tailored primary care service had greater improvements in hypertension, diabetes and lipid control, significantly more primary care visits and fewer medical admissions, than homeless persons at the general internal medicine clinic.
C37	O'Toole <i>et al.</i> ³⁸ 2013	Homeless primary care clinic at Providence VA Medical Centre, Rhode Island, US.	To compare service use among homeless and non-homeless veterans newly enrolled in a primary care medical home model (general population or homeless specific Patient-Aligned Care Team).	Case-control study with a nested cohort study	127 homeless and 106 non-homeless veterans. Study conducted 2008-11.	Homeless veterans used significantly more primary health, mental health, substance use and ED services than non-homeless veterans. Homeless veterans who used primary care at higher rates, or who used the specialist service, had reduced ED use.
C38	van den Berk-Clark and McGuire ³⁹ 2014	Demonstration primary care clinic co-located in building as homeless social services and mental health programme, Los Angeles, California, US.	To examine whether a combination of predisposing, enabling, need, and primary care experience variables would predict trust in medical health care providers for homeless veterans over 18 months.	Longitudinal prospective study	260 homeless veterans with serious mental illness or substance abuse (130 in pre-integration group who received usual care services prior to opening of co-located services, and 130 who had access to co-located services). Study conducted 2001-06.	Several factors predicted trust in providers, including race, social support, service-connected disability status, and satisfaction and continuity of care from providers. Trust improved initially and then declined to slightly below baseline levels 18 months later.

References

1. Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Medicine* 2009;6:e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
2. Beste LA, Stein M. Redesign of chronic care for hepatitis C in a Rhode Island homeless population based on provider compliance with hepatitis C guidelines. *Med Health R I* 2008;91:116-8.
3. Bharel M, Santiago ER, Forgione SN, León CK, Weinreb L. Eliminating health disparities: Innovative methods to improve cervical cancer screening in a medically underserved population. *AJPH* 2015;105: S438-S442. <https://doi.org/10.2105/ajph.2014.302417>
4. Greengold B, Nyamathi A, Kominski G, Wiley D, Lewis MA, Hodge F, et al. Cost-effectiveness analysis of behavioral interventions to improve vaccination compliance in homeless adults. *Vaccine* 2009;27:718-25.
5. Krautscheid L, Moos P, Zeller J. Patient and staff satisfaction with integrated services at Old Town Clinic: a descriptive analysis. *J Psychosoc Nurs Ment Health Serv* 2004;42:32-41.
6. McInnes DK, Petrakis BA, Gifford AL, Rao SR, Houston TK, Asch SM, et al. & O'Toole T.P. Retaining homeless veterans in outpatient care: a pilot study of mobile phone text message appointment reminders. *AJPH* 2014;104:S588-S594. <https://doi.org/10.2105/ajph.2014.302061>
7. Moczygamba LR, Goode JVR, Gatewood SBS, Osborn RD, Alexander AJ, Kennedy AK, et al. Integration of collaborative medication therapy management in a safety net patient-centered medical home. *J Am Pharm Assoc* 2011;51:167-172. <https://doi.org/10.1331/japha.2011.10191>
8. Nyamathi AM, Christiani A, Nahid R, Gregerson P, Leake B. A randomized controlled trial of two treatment programs for homeless adults with latent tuberculosis infection. *Int J Tuberc Lung Dis* 2006;10:775-782.
9. Nyamathi A, Nahid P, Berg J, Burrage J, Christiani A, Aqtash S, et al. Efficacy of nurse case-managed intervention for latent tuberculosis among homeless subsamples. *Nurs Res* 2008;57:33-39. <https://dx.doi.org/10.1097%2F01.NNR.0000280660.26879.38>

10. Nyamathi A, Liu YH, Marfisee M, Shoptaw S, Gregerson P, Saab S, et al. Effects of a Nurse-Managed Program on Hepatitis A and B Vaccine Completion among Homeless Adults. *Nurs Res* 2009;**58**:13-22. <https://doi.org/10.1097/nnr.0b013e3181902b93>
11. Nyamathi AM, Sinha K, Saab S, Marfisee M, Greengold B, Leake B, et al. Feasibility of completing an accelerated vaccine series for homeless adults. *J Viral Hepat* 2009;**16**:666-73. <https://doi.org/10.1111/j.1365-2893.2009.01114.x>
12. Poulos RG, Ferson MJ, Orr KJ, McCarthy MA, Botham SJ, Stern JM, et al. Vaccination against hepatitis A and B in persons subject to homelessness in inner Sydney: vaccine acceptance, completion rates and immunogenicity. *Aust N Z J Public Health* 2010;**34**:130-35. <https://doi.org/10.1111/j.1753-6405.2010.00496.x>
13. Stein JA, Nyamathi AM. Completion and subject loss within an intensive hepatitis vaccination intervention among homeless adults: the role of risk factors, demographics and psychosocial variable. *Health Psychol* 2010;**29**:317-23. <https://doi.org/10.1037/a0019283>
14. Upshur C, Weinreb L, Bharel M, Reed G, Frisard C. A randomized control trial of a chronic care intervention for homeless women with alcohol use problems. *J Subst Abuse Treat* 2015;**51**:19-29. <https://doi.org/10.1016/j.jsat.2014.11.001>
15. Wilde M, Jones B, Lewis BK, Hull CM. Skin cancer screening in the homeless population. *Dermatol Online J* 2013;**19**:14.
16. Wilk T, Mora PF, Chaney S, Shaw K. Use of an insulin pen by homeless patients with diabetes mellitus. *J Am Acad Nurse Pract* 2002;**14**:372-379. <https://doi.org/10.1111/j.1745-7599.2002.tb00138.x>
17. Asgary R, Garland V, Sckell B. Breast cancer screening among homeless women of New York City shelter-based clinics. *Women's Health Issues* 2014;**24**:529-534. <https://doi.org/10.1016/j.whi.2014.06.002>
18. Asgary R, Garland V, Jakubowski A, Sckell B. Colorectal Cancer Screening Among the Homeless Population of New York City Shelter-Based Clinics. *Am J Public Health* 2014;**104**:1307-13. <https://doi.org/10.2105/ajph.2013.301792>
19. Ciaranello AL, Molitor F, Leamon M, Kuenneth C, Tancredi D, Diamant AL, et al. Providing health care services to the formerly homeless: A quasi-experimental evaluation. *J Health Care Poor Underserved* 2006;**17**:441-461. <https://doi.org/10.1353/hpu.2006.0056>

20. Cunningham CO, Shapiro S, Berg KM, Sacajiu G, Paccione G, Goulet JL. An evaluation of a medical outreach program targeting unstably housed HIV-infected individuals. *J Health Care Poor Underserved* 2005;**16**:127-138.
<https://doi.org/10.1353/hpu.2005.0007>
21. Cunningham CO, Sanchez JP, Heller DI, Sohler NL. Assessment of a medical outreach program to improve access to HIV care among marginalized individuals. *Am J Public Health* 2007;**97**:1758-61. <https://doi.org/10.2105/ajph.2006.090878>
22. Daiski I. The health bus: healthcare for marginalized populations. *Policy Polit Nurs Pract* 2005;**6**:30-38. <https://doi.org/10.1177/1527154404272610>
23. Dorney-Smith S. Piloting the community matron model with alcoholic homeless clients. *Br J Community Nurs* 2007;**12**:546, 548-551. <https://doi.org/10.12968/bjcn.2007.12.12.27740>
24. Matteoli M, Scaringi C, Carella P, Fruttaldo L, Angeloni U, Laurenza M. A mobile health service to manage diabetic foot in homeless patients. *Am Podiatr Med Assoc* 2015; **105**:424-428. <https://doi.org/10.7547/13-152>
25. O'Connell JJ, Mattison S, Judge CM, Strupp Allen HJ, Koh HK. A public health approach to reducing morbidity and mortality among homeless people in Boston. *J Public Health Manag Pract* 2005;**11**:311-16. <https://doi.org/10.1097/00124784-200507000-00009>
26. O'Toole TP, Johnson EE, Borgia ML, Rose J. Tailoring outreach efforts to increase primary care use among homeless veterans: results of a randomized controlled trial. *J Gen Intern Med* 2015;**30**:886-898. <https://doi.org/10.1007/s11606-015-3193-x>
27. Rosenblum A, Nuttbrock L, McQuiston H, Magura S, Joseph H. Medical outreach to homeless substance users in New York City: preliminary results. *Subst Use Misuse* 2002;**37**:1269-73. <https://doi.org/10.1081/ja-120004184>
28. Schumann A, Nyamathi A, Stein JA. HIV risk reduction in a nurse case-managed TB and HIV intervention among homeless adults. *J Health Psychol* 2007;**12**:833-43.
<https://doi.org/10.1177/1359105307080618>
29. Segan CJ, Maddox S, Borland R. Homeless clients benefit from smoking cessation treatment delivered by a homeless persons' program. *Nicotine and Tobacco Research* 2015;**17**:996-1001. <https://doi.org/10.1093/ntr/ntv062>

30. Tommasello AC, Gillis LM, Lawler JT, Bujak GJ. Characteristics of homeless HIV-positive outreach responders in urban US and their success in primary care treatment. *AIDS Care* 2007; **18**:911-917. <https://doi.org/10.1080/09540120500331297>
31. Tsu L, Buckley K, Nguyen S, Kohn J. Evaluating the impact of pharmacist health education on the perceptions of the pharmacist's role among women living in a homeless shelter. *Pharmacy Practice* 2015;**13**:649. <https://dx.doi.org/10.18549%2FPharmPract.2015.04.649>
32. Tyler D, Nyamathi A, Stein JA, Koniak-Griffin D, Hodge F, Gelberg L. Increasing Hepatitis C knowledge among homeless adults: results of a community-based, interdisciplinary intervention. *J Behav Health Serv Res* 2014;**41**:37-48. <https://doi.org/10.1007/s11414-013-9333-3>
33. Alford DP, LaBelle CT, Richardson JM, O'Connell JJ, Hohl CA, Cheng DM, et al. Treating homeless opioid dependent patients with buprenorphine in an office-based setting. *J Gen Intern Med* 2007;**22**:171-76. <https://doi.org/10.1007/s11606-006-0023-1>
34. Chrystal JG, Glover DL, Young AS, Whelan F, Austin EL, Johnson NK, et al. Experience of primary care among homeless individuals with mental health conditions. *PLoS ONE* 2015;**10**:e0117395. <https://doi.org/10.1371/journal.pone.0117395>
35. Kertesz SG, Holt CL, Steward JL, Jones RN, Roth DL, Stringfellow E, et al. Comparing homeless persons' care experiences in tailored versus nontailored primary care programs. *Am J Public Health* 2013;**103**:S331-S339. <https://doi.org/10.2105/ajph.2013.301481>
36. McGuire J, Gelberg L, Blue-Howells J, Rosenheck RA. Access to primary care for homeless veterans with serious mental illness or substance abuse: a follow-up evaluation of co-located primary care and homeless social services. *Adm Policy Ment Health* 2009;**36**:255-64. <https://doi.org/10.1007/s10488-009-0210-6>
37. O'Toole TP, Buckel L, Bourgault C, Blumen J, Redlhan SG, Jiang L, et al. Applying the chronic care model to homeless veterans: Effect of a population approach to primary care on utilization and clinical outcomes. *Am J Public Health* 2010;**100**:2493-99. <https://doi.org/10.2105/ajph.2009.179416>
38. O'Toole T.P, Bourgault C, Johnson EE, Redihan SG, Borgia M, Aiello R, et al. New to Care: Demands on a Health System When Homeless Veterans Are Enrolled in a Medical

Home Model. *Am J Public Health* 2013;**103**:S374-S379.

<https://dx.doi.org/10.2105%2FAJPH.2013.301632>

39. van den Berk-Clark C, McGuire J. Trust in health care providers: factors predicting trust among homeless veterans over time. *J Health Care Poor Underserved* 2014;**25**:1278-90.

<https://doi.org/10.1353/hpu.2014.0115>