Contexts and mechanisms that promote access to healthcare for populations experiencing homelessness: a realist review

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Systematic Review

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Abstract

Objective: The objective of this study was to identify and understand the health system contexts and mechanisms that allow for homeless populations to access appropriate healthcare when needed.

Design: A realist review.

Data sources: Ovid MEDLINE, embase.com, CINAHL, ASSIA and grey literature until April 2019.

Eligibility criteria for selecting studies: The purpose of the review was to identify health system patterns which enable access to healthcare for people who experience homelessness. Peer reviewed articles were first identified through a systematic search, grey literature searching, citation tracking and expert recommendations. Studies meeting the inclusion criteria were assessed for rigour and relevance and coded to identify data relating to contexts, mechanisms and/or outcomes.

Analysis: Inductive coding was used to generate Context-Mechanism-Outcome configurations which were refined and then used to build several iterations of the overarching programme theory.

Results: Searching identified 330 review articles, of which 24 were included. Additional searching of grey literature yielded 50 records of which 12 were included. An additional 11 grey literature and primary sources were identified through citation tracking and expert recommendation for a total of 47 included sources. The analysis found that healthcare access for populations experiencing homelessness is improved when services are coordinated and delivered in a way that is organised around the person with a high degree of flexibility and a culture that rejects stigma generating trusting relationships between patients and staff/providers. Health systems should provide long-term, dependable funding for services to ensure sustainability and staff retention.

Conclusions: With homelessness on the rise internationally, this study will inform health systems policy-making and implementation. It contributes to our understanding how healthcare systems can be more accessible for populations experiencing homelessness by providing long-term stable funding, promoting inclusive cultures and limiting stigma. Health systems should be flexible, timely and connected.

Article Summary

Strengths and limitations

- This is the first realist review of access to healthcare for homeless populations
- The review uncovered modifiable contexts and provides important lessons for policy makers working in this area
- The search strategy was focused on review articles to identify high-level themes meaning we may have missed some relevant literature. However, iterative searching was done and an expert panel was engaged in the analysis.

Background

Homelessness is an extreme expression of social exclusion, experienced by people lacking a stable and secure place to live. According to the European Typology of Homelessness and Housing Exclusion (ETHOS) homelessness occurs in four ways: rooflessness (sleeping rough, without any shelter); houselessness (having somewhere to sleep but temporary in shelter or institution); living in insecure housing (eg insecure tenancies, threat of eviction, violence); living in inadequate housing (overcrowding, unfit housing, caravans on illegal campsites).(1) There are various subgroups within the homeless population, including families and single adults. Some single adults have children but often their children do not live with them.(2)

Populations experiencing homelessness along the full spectrum set out above, experience both increased difficulty accessing healthcare and poorer outcomes than housed populations, with chronically homeless individuals having worse clinical outcomes than those experiencing intermittent homelessness or as a one-off crisis.(3–5) Populations experiencing homelessness access primary care less than housed populations and utilise costly unscheduled acute healthcare at a higher rate than their housed peers.(5–7)

Accessing healthcare is complex because it is dependent on many variables on both the supply side (availability, hours, location, staffing, resources, price, etc) and on the demand side (knowledge of health need, availability of the needed time and resources, distance to service location, psychological factors, disposable income, etc). As a result, a variety of intended and unintended outcomes (accessing the right care, accessing inadequate care, not accessing care, accessing part of a full course of treatment, etc) arise.

Supply side factors of a health system are described in both the World Health Organisation building blocks framework (8) including service delivery, health workforce, and leadership/governance, and in Aday and Andersen’s Framework for the Study of Access to Medical Care (9) with health system factors organised under the categories of ‘health policy’ and ‘characteristics of health delivery system’.

This article focuses on homeless single adults with complex needs who may experience any of the types of homelessness outlined according to ETHOS above. We use the term ‘populations experiencing homelessness’ to refer to this group in this article. The lack of housing in and of itself is not the only driver of poor access to healthcare and poor health outcomes in this population. Homelessness is a marker for and is associated with ‘tri-morbidity’ - the combination of physical ill-health, mental ill-health, and substance misuse.(10) In addition to lacking stable housing, populations experiencing homelessness often face a host of health problems and addiction behaviours associated with complex life circumstances and events including early childhood trauma,
having been in care, relationship breakdowns, poverty, lack of employment and more. While these are common experiences, it is important to stress that they happen to varying degrees and sometimes not at all.

The majority of research exploring access to healthcare for homeless populations has focused on individual level factors and particularly on why, whether and how individuals experiencing homelessness do or do not access healthcare. A focus on individual level factors is illuminating but without understanding and balancing this with health system factors there is a risk that responsibility for accessing services is inappropriately placed with the individual. This review synthesises health system factors that determine healthcare accessibility in order to explore how whole systems can make appropriate healthcare services accessible to whole populations and in particular to those who need them most.

Realist review in the school of Pawson and Tilley is a methods-neutral approach designed for examining complex interventions or topics by seeking to understand the contexts in which particular underlying mechanisms cause a given outcome to occur. Contexts are the only modifiable part of the construct and different contexts can cause different mechanisms, intended and unintended, to ‘fire’. Analysis takes place by explaining the causal relationship between contexts, mechanisms and outcomes in the construction of Context-Mechanism-Outcome configurations (CMOCs).

A review of health system factors which improve access to health care for populations experiencing homelessness is needed because an individual level analysis does not fully explain systemic causes of inadequate access to essential health services. This review sought to answer the following question:

- How, why, for whom, in what circumstances and to what extent can healthcare systems improve access to healthcare for populations experiencing long-term homelessness?

**Methods**

The review followed a study protocol based on Pawson's five iterative stages: 1. locating existing theories, 2. searching for evidence, 3. selecting articles, 4. extracting and organising data and 5. synthesising the evidence and drawing conclusions. The phases of the review are illustrated below in fig 1.

**Initial programme theory**

A rough initial programme theory was developed based on informal reading and discussions with content experts. It listed potentially important contexts and mechanism affecting healthcare access for populations experiencing homelessness.

**Searching**

A search strategy was developed with the input of a subject librarian and a content expert to identify relevant published reviews. Pilot searching was undertaken and final search terms were agreed. A formal search of four electronic databases (Ovid MEDLINE, embase.com, CINAHL, ASSIA) was undertaken in April 2019. Results from each search were exported to Endnote X9 and deduplicated automatically and manually. Full search terms can be found in supplementary materials. Additional articles were subsequently included following citation tracking and after searching grey literature via the internet and websites of organisations working on homeless health. These sources were selected to shed light on CMOCs that were not fully developed from the existing sources and particularly to explore high level health system CMOCs including funding, resourcing, training and goal setting not explored in the included peer-reviewed sources.

**Selection and appraisal of documents**

Studies were included based on their relevance to the review question, ie if they provided information about access to healthcare for homeless populations and would contribute to the development and refinement of the programme theory. RS screened all titles and abstracts and SB independently screened a random 10% sample. During the screening phase an initial evaluation of rigour and relevance (see glossary in supplementary online file for definitions) was done and as was the case at later stages when additional literature was collected. See full search in fig 2.

**Data extraction and analysis**

After the initial screening phase was completed, data extraction was done into a proforma extraction table which can be found in the supplementary data file.

Coding took place in NVivo 12 starting with the most useful articles, regarding rigour, relevance and trustworthiness, as they were expected to best inform the development of CMOCs and programme theory. Coding was done inductively under thematic headings of factors that promote and impede healthcare access as described in the literature. Codes were then organised by headline categories depending on whether a finding was related to the individual seeking care, the healthcare provider and/or programme providing care or the health service/ health system in which that healthcare is organised.

Initial codes were applied deductively to subsequent articles with new codes created as needed. Labels of context, mechanism and outcome were assigned when possible and at times not assigned if a code did not have a clear placement. Contexts, mechanisms and outcomes are not static labels but can change in relation to each other eg something can be a context in one instance but a mechanism in another and an outcome can become a context for another CMOC depending on its explanatory role in the given configuration.
Using a realist logic of analysis, CMOCs were then created initially from data in the 24 review articles included after the first round of searching, drawing from several sources to construct each CMOC. The purpose of the analysis was to identify general patterns, rather than be exhaustive. A list of CMOCs were written in a Word document with its supporting data excerpts listed below. Iterative cycles of analysis took place to refine CMOCs. Through the analysis process, some CMOCs were eliminated and some were combined if they were similar to others. CMOCs were further refined after consultation with various stakeholders on a one-to-one basis and via a formal expert panel meeting with representation by members of an inclusion health team in a local hospital (consultant doctor and social worker), the director of policy for a national homeless charity, an inclusion health GP, a representative for the Health Service Executive, and two academics who work in the areas of homeless healthcare and health policy.

Results

Search results and study characteristics

In total, 330 titles and abstracts were screened and 37 published review articles were deemed to meet the inclusion criteria and these then underwent full-text review. Next, during the data extraction phase with a close reading of each article, it was determined that 13 of the 37 articles that were initially included in the analysis did not fully meet relevance and/or rigour standards and they were thus excluded leaving a total of 24 articles for inclusion. All studies included in the reviews were from high income countries, the majority having focused on the USA, Australia and the UK.

Focus of the review

Initial analysis resulted in two broad conceptual sets of findings: one related to how services are organised and delivered and another related to how staff are trained and developed to best provide such services. Based on team discussions and with the recognition that we would not be able to fully explore all findings, the team decided to focus on the topics most relevant to the research question. The findings around service delivery and organisation were chosen as the focus for the next stage of the review.

Programme theories and CMOCs

Within the focused section of the review, a total of 59 CMOCs were generated. These theorise about the generative causation between each of the contexts and the specific mechanisms that fire within them to produce intermediate outcomes and the ultimate outcome of facilitating appropriate healthcare access. There was overlap between these but it was important to capture and articulate the relationship between each distinct context, mechanism and outcome and to interrogate whether they shared a causative relationship before combining them together.

Building on the 59 individual CMOCs, three consolidated CMOCs explain how health systems and individual health services make themselves accessible in relation to how healthcare is organised, the culture in a healthcare system and in healthcare organisations, and how healthcare is delivered.

To further investigate questions related to health services funding which was mostly absent from the peer-reviewed literature, a further fourteen individual CMOCs were constructed from data from grey literature sources. These were again consolidated resulting in the development of another three consolidated CMOCs explaining aspects of resourcing, funding stability, and system fragmentation and goals.

The six CMOCs are described in detail in the narrative below.

Resourcing

This first consolidated CMOC (fig 3) explores contexts where mainstream health practitioners and staff (in hospital and primary care settings) are expected to treat long-term homeless populations with high needs even if they receive no specialist training and health system budgets assign inadequate funding.(26–29) In these contexts, practitioners and staff feel ill equipped to communicate effectively with and meet the specific needs of the patient group. They experience feelings of inadequacy and lack of professional confidence and display an unwelcoming attitude toward patients.(13,26–28,30–34) As a result, patients do not feel comfortable and choose not to seek care at an appropriate time (eg seeking care early from a GP before a condition gets worse and acute care is needed). (13,26,31,35–37)

The outcome of not seeking care when the care environment is not welcoming becomes a new context which leaves patients instead to seek care only when the need is emergent and out of desperation, and at a later stage than ideal and at a setting that is available (such as the ED).(13,31,33,35,38) This results in the need for the health system to provide more care at a later stage and more intensive care and it generates poorer health outcomes and higher overall costs to the health system.(31,35,39)

Funding stability and source

CMOC2 (fig 4) shows that in a context where funding comes from multiple sources and where funding cycles are short and unreliable, eg grant funding for specific purposes with a short duration,(32,35,37,40) staff members employed on short term contracts experience poor working conditions with a lack of sustainability and stability of the services they work for.(29,37,41–43) The outcome is difficulties hiring and retaining skilled and experienced staff members. (29,37,41–43)
Health system fragmentation and goals

CMOC3 (fig 5) shows that in a context where various parts of a health system operate in silos with narrowly defined goals,(31,32,35,37,44) staff prioritise meeting those goals even though they are not suitable for responding to the complex needs of homeless patients whose care should be organised across a number of domains.(31,32,44) Staff and providers are not incentivised or empowered to take responsibility for creating holistic, coordinated flexible ways of organising care around a patient's needs and wishes. As a result, healthcare is organised around the needs of providers and the system not the person. (14,31,32,35,44,45)

Care organised around the person

CMOC 4 (fig 6) shows that in a context of where care is organised around the person, the mechanism of flexibility and personalisation is triggered, allowing patients to feel that their particular needs are understood and met.(21,29,33,44,46–49)

Health system navigability is enhanced through having coordinated and co-located care,(7,29,33,34,47,50–52) through having clear and intuitive patient pathways managed by staff and providers who bring patients along to the next step,(14,33,47,53,54) and through accompanying patients either by link workers or peer advocates.(21,33,54–58) Having this kind of support helps patients by providing extra motivation and confidence in seeking health services when needed and navigating institutional locations such as hospitals and clinics, and negotiating patient pathways which may be complex.(33,35,47,54) Peer advocates have a unique understanding of the experience the patient is having and have the ability to meet patients where they are and provide emotional support.(33,38,52,55–57)

When care is organised around the person it is inherently respectful of other demands on their time and their particular goals (or lack thereof) for their own health. For example, as many services are carried out in one clinical encounter as possible and through shared and transparent decision making. As a result, responsibility is placed on the service to make itself fit with the patient's life circumstances and to share knowledge and decision making to promote initial accessibility and beyond.(21,33,51,53–56,59)

Inclusive culture and leadership

CMOC 5 (fig 7) examines the importance of culture and leadership in creating health system contexts. Through culture the value assigned to different population groups is implicitly defined and, crucially, creating the right cultural context depends on leadership and management through explicit commitments to values of inclusivity and whole organisation policies and processes.(27,31,35,37,45,60–62)

In the articles reviewed, stigma is a crucial mechanism which keeps individuals experiencing homelessness from accessing healthcare (13,14,21,29,33,52,55,63). On the other hand, when individuals experience an environment that is non-stigmatising, respectful, empathetic, accepting, sensitive and understanding of their life experience and particular needs, trust develops and leads to a relationship developing over time whereby deepening trust facilitates ongoing engagement which leads ultimately to successful access to health services at the right time and right place.(33,34,46–48,51,55–57)

Flexible healthcare delivery

CMOC 6 (fig 8) explores the context of flexibility in healthcare services delivery in terms of appointment length, availability of walk-in appointments and self-referral, opportunistic add-on services such as vaccinations and screenings, allowing dogs, trauma-informed practice and understanding of behaviours that trauma can result in, and more.(21,26,37,40,46,47,50,51,55,64–67) In this context, providers and staff with expertise and experience with the population group are able to anticipate the common interventions that may be needed, to adapt to the particular needs of the patient in front of them, and to provide the treatment that is most needed in the current situation. Communication is tailored to the patient with awareness of potential literacy issues common in the population.(33,34,38,48,53,54,56,59,68) As a result, patients’ needs are identified and if met in the manner described in CMOC4, this experience forms a new context. In this new context (‘needs identified’), experiences of lowered frustration and fear is engendered in patients because they do not have to fit into a mould of a health service which is difficult to navigate and not likely designed with them in mind.(34,38,46,50,51,55) Resulting from that, patients feel seen and understood which becomes a new context (‘patients feel seen and understood’) in which ongoing engagement from both sides is possible and pathways can be created with high levels of flexibility and assistance.(38,46–48,55) Patients are able to follow these peer, key-worker and/or health staff assisted pathways and ultimately this leads to ongoing healthcare access over a course of treatment or on an ongoing basis as needed. A cyclical nature of an ongoing and trusting relationship is established and reinforced over multiple interactions.(21,33,38,55–57,67,69)

The overarching programme theory synthesising the full set of findings from this review (fig 9), shows that a set of interlinking factors must all be in place for healthcare access to be successful for populations experiencing homelessness.

Discussion

Statement of principal findings

Populations experiencing homelessness face a number of barriers to accessing healthcare at the right time and at the right place. Important health system contexts which impact access are resourcing, training, funding cycles, health system fragmentation, health system goals, how care is organised, culture, leadership and flexibility of care delivery. Key mechanisms which arise in these contexts are provider attitudes, provider confidence, staff and provider
experience of stability and sustainability, organisation-centred thinking, flexibility, transparency, timeliness, demonstration of respect and empathy, trust, adaptability, and anticipation.

**Strengths and limitations**

In this review we have used the RAMESES quality standards (70) to rigorously and systematically review the literature included here.

This analysis has taken a high-level view of systematic factors across a breadth of data not focused on specific interventions or disease areas. Our findings have uncovered modifiable health system and service contexts that are applicable and transferrable internationally. The analysis has been informed by the involvement of content experts and stakeholders who have confirmed and challenged findings resulting in further refinement.

Like any review this one relies on the available literature. A number of rigorous and reliable grey literature sources were included in this review and added substantially to the set of findings about high-level health system contexts and mechanisms (eg resourcing, training, funding cycles, fragmentation and goal setting) (CMOCs 1-3). The data to support these CMOCs came almost entirely from grey literature, primarily from the UK.

None of the included peer review studies specifically analysed health system features. Some analysed service/programme level features that promote access (34,57) but the majority of reviews synthesised and described the accessibility of particular individual level treatments such as for TB, diabetes, palliative care and cardiovascular disease. (33,46,54,59,63,71,72)

There was wide variety in the quality of the reviews themselves with some being transparent and following the guidelines of their particular review methodology closely (eg search string and list of databases provided, appropriate quality appraisal tools used, systematic approach, using appropriate reporting standards, etc) while others did so to varying degrees and a few not at all. A majority of reviews were based on qualitative, descriptive, and small-scale quantitative studies using a variety of methods eg RCT, cohort and case-control studies. The majority of included studies evaluated a particular aspect of healthcare access eg association between having health insurance and having a usual source of care. (73)

**Comparisons with existing literature**

We are aware of no other realist reviews examining this topic in this population and of no other reviews of any approach that have examined high-level health system features that promote healthcare accessibility. Other reviews have focused on specific healthcare interventions and most take the point of view of the patient navigating services or systems. This review differs in that we have analysed the upstream health system and service contexts that promote healthcare accessibility and have found generalisable features not specific to a particular intervention or the treatment of particular illnesses. These uncover causative relationships between how healthcare is organised and delivered at a systems and service level and its accessibility for populations experiencing homelessness.

A realist review by Ford et al (74) of factors that impact access to primary care for socioeconomically disadvantaged older people in rural areas focused on the patient journey in accessing healthcare and not on health system features. However, there were similarities between its’ findings and ours: at the service level, both studies found barriers related to ease of booking, clarity of information, system and service navigability, provider responsiveness to patient needs, patient empowerment, social status, trust, and clinician empathy and capacity.

There are similarities between our review and Aday and Andersen’s ‘A framework for the study of access to medical care’. (9) Our CMOCs all explain aspects of the two first boxes in their Framework: health policy (eg financing, education, manpower and organisation) and characteristics of health delivery system (eg resources, organisation).

Our CMOCs also hold some similarities with Levesque et al’s ‘Patient-centred access to health care: Conceptualising access at the interface of health systems and populations’ (75) although it is focused on the individual patient journey. Concepts including acceptability (eg professional values, norms and culture) as well as appropriateness (eg technical and interpersonal quality, coordination and continuity) are important to CMOCs 1, 4, 5 and 6.

**Meaning of the study**

As in other realist works, our analysis has uncovered common mechanisms occurring in semi-regular patterns experienced in the specific contexts described in the literature. The mechanisms and outcomes do not always occur in a given context. Outcomes are occurring at both a system level and individual level. The topic of access to healthcare for homeless populations is a complex one in and of itself but it sits within an area of much more complexity: the general treatment of homeless and socially excluded populations in all areas of society including health, housing and social care. The narrow focus on access to healthcare here is due to the specificity needed to conduct sound research, however, this focus is not meant to be seen as an argument for siloed thinking and service provision.

It is well known that lacking adequate housing in and of itself causes illness to occur (2). It is likely that many of the findings in this review can be applied more broadly to all socially excluded populations and form a basis for thinking about how to make a health system fully responsive to populations experiencing a variety of deprivation or differentiation from ‘the norm’ and thus truly universal, informed by existing approaches such as Universal Design. (76) A non-judgemental, flexible and empathetic approach should be applied to all services for all socially excluded populations and beyond in conjunction with joined up approach to health and social care based (56,69,76).
The first three CMOCs above (CMOC 1-3) were generated almost exclusively from grey literature sources and the next three (CMOC 4-6) were generated primarily from peer reviewed literature. The grey literature included many high-level systems topics including resourcing, funding cycles, the siloed nature of healthcare, health system goal setting and more, as well as describing patient level factors. The majority of the peer reviewed literature described patient level healthcare interactions. In these interactions, contexts are often reflective of systematic or at least service-level planning, managements, culture and leadership decisions and practices but they were not explicitly examined. There is a need for more research exploring healthcare access from a health systems perspective.

**Implications for policy and future research**

Based on the findings in the review, we recommend the following points for further exploration and research and future policy making in the area:

1. Healthcare services should be funded using multi-year stable funding cycles.
2. Healthcare services for vulnerable populations should be the specific responsibility of a health system entity so it is not allowed to fall between different sectors or budget lines.
3. Healthcare for individuals experiencing homelessness should be provided in settings that do not allow stigma to dominate the culture. Trauma-informed practice and a deep understanding of the life experiences of socially excluded populations at all levels of an organisation or system are key and these should be championed by leadership and management to create a culture that is accessible to all.
4. Healthcare should be easy to navigate for patients. Pathways, procedures and communication should all be highly coordinated and designed with patients’ needs in mind. One-to-one support from key workers and peer-advocates increase navigability.
5. Courses of treatment should be planned transparently in collaboration with the patient based on his or her full set of needs and wishes as a full person.
6. Healthcare should be provided in flexible settings with flexible rules to allow for meeting patients’ life circumstances and needs where they are.
7. Healthcare system goals should be set with flexibility and complexity in mind.
8. Providers and staff should be recruited based on their motivation in working with the patient population and adequate training should be given to ensure that all staff and providers understand the needs of the population group.

These recommendations will likely benefit most patients, housed or not, and as such investing in them would pay dividends for populations beyond those experiencing homelessness. However, for homeless populations these are crucial to ensuring that an already vulnerable group does not face further social exclusion when accessing healthcare.

**Conclusion**

Access to healthcare for populations experiencing homelessness depends on adequately resourcing and training providers to meet the particular needs of patients in a welcoming and attentive setting without stigma and judgment. Services should be closely linked, and staff and providers should be empowered to take responsibility for providing flexible, responsive and opportunistic care in flexible settings. For patients, having a good experience and getting one's needs met sets a precedent for future appropriate healthcare access. The contexts in which this is possible arise in a respectful, empathetic culture which is created when managers and leaders value and champion it.

**Declarations**

**Competing interests:** None to declare

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**Authorship**

RS, CNC, SB, JF and ST developed the research project. RS, JF and CNC developed the search strategy with the help of a subject librarian. RS and JF shaped and refined formal search strategies. RS carried out screening and article selection process, applied a realist logic of analysis to the data, built CMOCs and programme theories, presented to the expert panel and drafted the article. SB screened a subset of articles and facilitated the expert panel meeting. CNC added to the refinement of CMOCs and programme theory. JF provided guidance and oversight of the realist analysis and added to the refinement of CMOCs and programme theory. CNC, SB, JF and ST provided subject matter expertise and critical revisions at multiple stages. All authors read, reviewed and approved the final manuscript.

**References**


A supplementary file was not provided with this version of the manuscript.

**Figures**

**Figure 1**

The stages of a realist review (23)

- Records identified through database searching (n=429)
- Records identified through grey literature searching (n=50)
- Records after duplicates removed (n=330)
- Database search: (n=330) Grey literature: (n=50)
- Records screened
- Database search: (n=298) Grey literature: (n=23)
- Full text articles assessed for eligibility
  - Database search: (n=37) Grey literature: (n=27)
- Full text articles excluded due to lack of rigour and/or relevance
  - Database search: (n=13) Grey literature: (n=15)
- Studies included in synthesis
  - Database search: (n=24) Grey literature: (n=12) Expert/citation tracking: (n=11) Total: (n=47)
- Records identified through expert opinion, citation tracking and targeted searching (n=11)
Figure 2
Prisma diagram

Figure 3
CMOC 1: Resourcing

Figure 4
CMOC 2: Funding stability

Figure 5
CMOC 3: Fragmentation and goals
Figure 6

CMOC 4: Care organised around the person

Figure 7

CMOC 5: Culture and leadership
Figure 8
CMOC6: Flexible healthcare delivery

Figure 9
Overarching programme theory