

Homelessness and the response to COVID-19: learning from lockdown

Data and data sharing

Final report

February 2021

Document control

Document Title	Homelessness and the response to COVID-19: learning from lockdown. Data and data sharing: Final report
Prepared by	Rachel Caswell, Fraser Battye
Checked by	Fraser Battye, Mike Woodall
Date	1 February 2021

Contents

1.	Introduction	3
1.1	Methodology	3
1.2	Report structure.....	4
2.	The importance of good data.....	5
2.1	Why do we need data showing health and care needs?.....	5
2.2	Approaches to measuring homelessness.....	6
2.3	Which organisations hold data about people who are experiencing homelessness?.....	8
2.4	Data sharing and data linkage	10
2.5	Using data in local planning: Joint Strategic Needs Assessment and Population Health Management.....	12
2.6	Measuring outcomes	12
3.	Problems with current practice	13
3.1	Data collection	13
3.2	Data sharing	15
3.3	Data linkage	17
3.4	Stakeholder survey and interview responses around data sharing	18
4.	Approaches to improving current practice.....	20
4.1	Data collection	20
4.2	Data linkage	23
5.	Recommendations for improving practice	26
	Glossary of terms.....	29
	References	30

1. Introduction

This report is for anyone who wants to improve data and data sharing between organisations to improve the health and care needs assessment of people experiencing homelessness. It has been produced by the Strategy Unit and was commissioned by NHSE/I.

There is a lack of standardised data collection and coding to record information about people who are experiencing homelessness. Before the COVID-19 pandemic there was a recognised need to gain a better understanding of what data was held and how it was shared. The pandemic has provided a sharper focus; it has “...*laid bare our longstanding social, economic and political inequalities...*” (BMJ, 2020). Part of this has been to expose basic gaps in available information.

To address some of these gaps, NHSE/I commissioned the Strategy Unit to recommend ways of improving data relating to the health and care needs of people who experience homelessness. In doing so, a further aim was to take account of any positive changes made during the response to COVID-19. The impetus here was the housing of people sleeping rough during the pandemic. This highlighted gaps in data and – anecdotally at least – spurred changes in data sharing practice.

The research was therefore exploratory in nature. Its objectives were to:

- map the key organisations who hold data showing health and care needs of people experiencing homelessness;
- describe the benefits and barriers of linking data between organisations;
- give examples of linked datasets and of databases of people experiencing homelessness;
- give recommendations on how to improve data around people experiencing homelessness.

This project was accompanied by a related assignment investigating innovations in service provision under lockdown (report available on the Strategy Unit website). While having separate aims, these projects were run together and benefited from shared sources of information.

1.1 Methodology

To address the above aims and objectives, we collected evidence through desk-based research, semi-structured interviews and responses from a survey conducted for the related project noted above. A data mapping exercise was conducted to show the organisations which typically provide direct support - or who provide services used by people experiencing homelessness (such as hospitals and GPs). Rather than rehearse abstract guidance on data linkage theory, we focused on gathering practical and illustrative examples. We consulted stakeholders from:

- National homelessness charities
- Academic institutions, thinktanks and advisors
- NHSE/I
- Office for National Statistics

- Public Health England
- Welsh Government
- Scottish Government
- Local government
- Local homelessness services
- General practice
- Pharmacies
- An NHS acute trust.

This report's main focus is on data linkage between organisations, but data sharing in a broader sense is covered.

1.2 Report structure

The report begins by describing the importance of data sharing and linkage in understanding the needs of people experiencing homelessness. It then moves on, in section 3, to set out problems with current practice. Section 4 then provides a bridge. It sets out examples and approaches to improving current practice; this includes a brief survey of changes during the pandemic. Finally, section 5 concludes the report. It provides recommendations, drawing from current good practice, as to how data collection and use can be improved.

2. The importance of good data

To prevent homelessness or reduce its impact, we need good information about a person's risk factors and about their health and care needs. Yet there is currently very little data about the health and care needs of people experiencing homelessness or at risk of it.

Linked data is essential given the different services involved. Yet combining data from different organisations is not a straightforward process. There are often many barriers which must be overcome before the benefits of joint datasets can be realised. These issues are elaborated below.

2.1 Why do we need data showing health and care needs?

Many people who experience homelessness have complex and multiple health and care needs. They have poor outcomes, with an average age at death nearly half that of the general population (ONS, 2020). It is a complex service landscape with numerous different organisations providing support. These include GPs, homeless charities, local authorities, the police, hospital and community healthcare, drug and alcohol and mental health services. Some of the services specialise in supporting people experiencing homelessness, others are general or 'mainstream'.

Figure 1: Main services involved in meeting the needs of people sleeping rough



Source: The Kings Fund, Key services involved in meeting the health needs of people sleeping rough, 2020

To provide appropriate support, these organisations need to know about the needs of the people they serve. This is true both at a strategic level (for service planning/resource allocation) and at an operational level (for service delivery).

Many people experiencing homelessness will need support from several different services at once. No single organisation will hold all the necessary information. But if organisations link their data there can be a much more complete picture of health and care needs. Coherent provision therefore requires integrated systems for data capture and sharing.

2.2 Approaches to measuring homelessness

Homelessness comes in many forms; this definitional challenge is revealed in the data.

Homelessness is also difficult to accurately count. There are official statistics, which show those who are homeless using the statutory definition of homelessness - but this excludes 'hidden' homeless groups. The net effect is to greatly underestimate the actual numbers.

In 2019, Shelter published a review of data showing the relative scale of different types of homelessness. They used six categories of homelessness:

- People who are living in temporary accommodation (TA) arranged by the council
- People who are in self-arranged TA or are homeless at home (HAH)
- People who are rough sleeping
- People who are owed a relief of duty but not accommodated by the council
- People living in a homeless hostel
- People living in TA arranged by social services

Figure 2 below shows the relative scale of these different types. It shows that by far the largest group is those living in TA arranged by the council; the more publicly visible rough sleeping is a relatively small group (while still accounting for a lot of people).

Figure 2: Relative scale of different types of homelessness in England (2019).



Source: Adapted from Shelter (2019)

Published statistics on homelessness concentrate on the statutorily homeless. These are households which meet specific criteria of priority need set out in legislation, and to whom a ‘homelessness duty’ has been accepted by a local authority. These households are rarely homeless in the literal sense of being without a roof over their heads; they are more likely to be threatened with the loss of, or are unable to continue to live in, their current accommodation.

Household level data is collected via the statutory Homelessness Case Level Information Classification (H-CLIC). Data sharing agreements were needed with each lower tier local authority to satisfy the conditions of the Data Protection Act. H-CLIC’s aims are to:

- track cases across local authority boundaries and the country;
- follow families/individuals in their journeys over time; and
- identify and track individuals who have been offered assistance as part of other homelessness research projects, such as the evaluation of Housing First.

There are plans to link H-CLIC data to administrative data held by other government departments, for example benefits, offending, health, education, and child safeguarding.

H-CLIC replaced the P1E as the method for local authorities to provide updates on their activities undertaken under their statutory homelessness responsibilities from April 2018. H-CLIC records information about the households that approach local authorities for assistance and the help they receive. The process has been amended to also capture cases where temporary accommodation was provided under HA 96 discretionary powers. These are sometimes used to secure temporary accommodation for people sleeping rough who are not eligible for an interim accommodation duty; this was particularly relevant during the COVID-19 pandemic when authorities were required to bring 'Everyone In' during the Government's directive to accommodate all people sleeping rough.

The resulting data does not provide the definitive number of people or households affected by homelessness in England. It excludes:

- anyone who has not approached their local authority for assistance who would otherwise be considered homeless;
- anyone who has approached their authority but whose threat of homelessness falls outside the legal 56 day prevention duty, who may have been offered some assistance; and
- some individuals who may be living in overcrowded, insecure or uninhabitable conditions.

These missing household groups, which includes, 'sofa surfers' are often referred to as the hidden homeless.

2.3 Which organisations hold data about people who are experiencing homelessness?

Many organisations hold data on people experiencing homelessness. Those that are key in the provision of services and support to people experiencing homelessness are: specialist charities, housing authorities, GPs, mental health services, alcohol and drug services, pharmacies, dentists, probation, ambulance and A&E but there are many other organisations who also provide support and who also collect data. Table 1 shows these organisations with the most important ones in relation to people experiencing homelessness at the top.

Most organisations collect data at the individual level. Hospitals, for example, record hundreds of pieces of information when someone receives care. This information is used by the hospital clinicians and managers to provide direct care to the individual. Hospital data is also used for commissioning and for research and planning purposes: as part of an assessment of a population's health and care needs, contributing to a Joint Strategic Needs Assessment, for example.

Although there are a significant number of organisations recording data there is no systematic and consistent way of recording the housing status of people experiencing homelessness across different datasets. This prevents accurate measuring and monitoring of health and care needs and doesn't help the process of ensuring that people experiencing homelessness or at risk of homelessness are appropriately referred.

The table below shows the key organisations who hold data about people experiencing homelessness and Figure 1 shows the key services involved in meeting the health needs of people sleeping rough.

Table 1: Organisations holding data on people experiencing homelessness

Type of organisation / service	Broad area	Estimated importance for people experiencing homelessness 1 = low, 5 = high	Support mainly to people experiencing homelessness?
Police	Community safety	5	No
Prison	Community safety	5	No
Probation service	Community safety	5	No
Youth offending	Community safety	5	No
Ambulance	Health and care	5	No
Drug and alcohol services	Health and care	5	No
Emergency department	Health and care	5	No
GP practices	Health and care	5	No
Mental health services	Health and care	5	No
Pharmacies	Health and care	5	No
Social care (adults, children)	Health and care	5	No
Specialist GP practices	Health and care	5	Yes
Hospital outpatient	Health and care	5	No
Hostels	Housing	5	No
Hotels & B&Bs	Housing	5	No
Housing and homeless teams	Housing	5	No
Housing authorities	Housing	5	No
Asylum seekers charities	Voluntary organisations	5	No
Domestic abuse victims charities	Voluntary organisations	5	No
Homeless charities	Voluntary organisations	5	Yes
Sex workers charities	Voluntary organisations	5	No

Type of organisation / service	Broad area	Estimated importance for people experiencing homelessness 1 = low, 5 = high	Support mainly to people experiencing homelessness?
Community health and care services	Health and care	4	No
Dentists	Health and care	4	No
Hospital inpatient and daycase	Health and care	4	No
Day centres	Local authority	4	No
NHS 111	Health and care	3	No
Educational establishments	Local authority	3	No
Libraries	Local authority	3	No
Local authority	Local authority	3	No
Places of worship	Other	3	No
Healthwatch	Health and care	2	No
Job centres	Local authority	2	No
Community groups	Other	2	No

2.4 Data sharing and data linkage

The data described above is most useful when it is shared and linked. Data sharing and data linkage refer to two distinct processes:

- Data sharing involves information moving from one organisation or department to another. It is governed by legislation and an increasingly codified set of practices. The Data Protection Act 2018 provides a framework to ensure that personal information about living individuals is shared appropriately. Data sharing agreements demonstrate compliance; they need to be in place before sharing or linking personal data between organisations.
- Data linkage is: *"the bringing together from two or more different sources, data that relate to the same individual, family, place or event"* (Holman et al, 2008). There are different methods to link data, but all will need to have some form of individual unique identifier.

The focus of this report is record-level data-linkage, but we touch upon data and information sharing as a precursor.

2.4.1 What can be achieved through data linkage?

Electronic data systems have the potential to revolutionise service delivery and there are more and more examples of where this is happening. Conversely, not sharing data can lead to missed opportunities or even harm (Committee on Strategies for Responsible Sharing of Clinical Trial Data, 2015).

Linking administrative data across government departments is gaining momentum to maximise the value of the data and discover new insights or for programme evaluation such as in the case of the ‘Troubled Families’ programme (DCLG, 2016). Linking administrative data enables planners, researchers, and programme evaluators to examine service use on a population basis, longitudinally giving a more comprehensive view. The two key uses of linked data – service delivery and research, planning and evaluation – are shown in the table below:

Table 2: Example benefits of linked data

Service delivery	Research, planning, evaluation
Identify people who frequently use multiple services/systems and target appropriate housing and care interventions	Follow people over time and monitor longer term outcomes to evaluate the impact of different services or programmes (MHCLG, 2019)
Improve collaboration and coordination of housing, healthcare and other services such as criminal justice for seamless multi-agency service provision and person-centred support	Create new insights from combined datasets to better understand the health and care needs as well as risk factors for becoming homeless (Waugh, 2018)
Improve efficiency and effectiveness through the active linkage of existing health and social care services supported by linked data	Many examples of using linked data including an exploratory output linking the homelessness data to education outputs (Welsh Government, 2020) or the national project currently underway to link data to evaluate homelessness policy (MHCLG, 2019)

NHS Digital produces several linked datasets to support health and care delivery and research. The creation of analytical datasets for use by organisations in health and social care planning and resourcing, and for researchers conducting longitudinal studies is invaluable. In the future, developments within NHS Digital, such as providing a Master Patient Service (MPS), will reduce the need to undertake specific linkages between datasets on a person level and greatly simplify the process (NHS Digital, 2018).

2.5 Using data in local planning: Joint Strategic Needs Assessment and Population Health Management

At a local level, the NHS and upper-tier local authorities have had a statutory duty to produce an annual Joint Strategic Needs Assessment (JSNA) since 2007. JSNAs are part of a strategic planning process and are not designed to provide information to support day-to-day service delivery. Their purpose is to identify population health and care needs and reduce health inequalities.

Having a good evidence base around the health of people experiencing homelessness and the services they use is vital to achieving these aims and many areas have developed JSNAs specifically about people experiencing homelessness. These (and all JSNAs) vary in terms of how useful they are in informing service planning and in having a positive impact on outcomes (Hutchinson et al, 2014).

Remedying this lack of use is, in part, an aim of Population Health Management (PHM). This approach, which is emphasised in the development of Integrated Care Systems (ICS), includes *"...segmenting and stratifying population using local and national data to understand needs of key groups and resource use"* (NHS England, 2019). Given its focus on addressing the wider determinants of health, the data required for PHM often demands the use of linked datasets.

2.6 Measuring outcomes

There has been increasing focus on generating data on outcomes. As an important area of 'inclusion health' indicators about people experiencing homelessness are included in the NHS Long Term Plan, Public Health Outcomes Framework, Adult Social Care Outcomes Framework and local authority/housing targets. Different approaches have emerged which focus on people experiencing homelessness:

- The 'Homeless star for people with housing and other needs', for example, is a framework which was developed in 2003 and redesigned in 2006 and covers ten key outcome areas.
- The Centre for Homelessness Impact have developed an outcomes framework called 'SHARE' that 'sets out principles to inform how preventing and ending homelessness should be framed and assessed.'
- The Ministry of Housing, Communities and Local Government (MHCLG) are developing a national outcomes framework for homelessness in England.

3. Problems with current practice

Data collection in relation to health and homelessness is fragmented. It uses many different definitions, data is often not collected at all and there is a lack of accurate and consistent data on all forms of homelessness (Crisis, 2020).

The pandemic has highlighted existing deficiencies. There is a heightened need to monitor and support the 15,000 people who were housed in temporary accommodation as part of the 'Everyone In' initiative. Data systems to capture information are important to make sure there is ongoing support where needed and to assess the impact of interventions as part of the pandemic response. Moreover, increased homelessness is a likely outcome from the lockdown induced economic shock.

The Centre for Homelessness Impact cites three steps to improve the data system around people experiencing homelessness:

1. **Data collection:** collecting high quality data at a local level.
2. **Data sharing:** making case (record) level data more widely available.
3. **Data linkage:** connecting data across outcomes.

Some of the key issues with each of these are described below.

3.1 Data collection

The focus here is the identification of people who experience homelessness in a selection of key data sources.

3.1.1 Coding - identifying people experiencing homelessness

Consistent coding is essential to accurately describe and monitor peoples' use of services and support. Without consistent coding systems in place opportunities to provide support to people with high needs could be missed and it is impossible to generate standard, comparable data on the level of health needs relating to homelessness. Yet currently: *"Socially excluded groups are often invisible in national data sets"* (Pathway, 2018).

The number of people experiencing homelessness and people sleeping rough is small relative to the population in any given area, but their care needs are high. It is important to be able to identify them in all the services they use and reflect this accurately and consistently in how this is recorded in their data. If appropriate, service users who may be experiencing homelessness or threatened with homelessness, should be referred to local authority homelessness/housing options teams. This 'duty to refer' was introduced in the Homelessness Reduction Act 2017 and applies to a range of authorities to try and ensure that people leaving institutions or services do not return to living on the streets.

Coding in hospital

Poor coding will also hinder the NHS and partner organisations from developing integrated responses to address health and homelessness. Given high use of hospital services, the greater likelihood of being admitted as emergency admissions, and significantly longer length of stays, this is a key area.

Recording of homelessness in, for example, the Hospital Episode Statistics (hospital day case and inpatient data) is limited. People experiencing homelessness can be identified by using the postcode 'ZZ99 3VZ', which is the 'no fixed abode' code. But this is problematic if, for example, the postcode of a hostel or a friend is given.

There is also a diagnosis code that can be used – table 3 shows that ICD 10 code 'Z59.0' denotes homelessness. There are options to describe other 'problems related to housing and economic circumstances' which could be useful to identify those at risk of homelessness. Housing status is already recorded in several national healthcare data sets – mental health, community, and emergency care, but there is no consistency.

Table 3: ICD 10 Codes that can be used to identify people who are admitted to hospital who are experiencing homelessness or other problems relating to housing or income

ICD 10 code	Description
Z59	Problems related to housing and economic circumstances
Z59.0	Homelessness
Z59.1	Inadequate housing
Z59.2	Discord with neighbours, lodgers and landlord
Z59.3	Problems related to living in residential institution
Z59.4	Lack of adequate food and safe drinking water
Z59.5	Extreme poverty
Z59.6	Low income
Z59.7	Insufficient social insurance and welfare support
Z59.8	Other problems related to housing and economic circumstances

Coding in GP systems

There are numerous codes available on GP systems to record housing status. These [READ](#) or [SNOMED](#) CT codes cover a wide range of options to describe a person's housing situation but there is no clear evidence about how consistently these are being used. Some areas have specialised GPs to provide care for people experiencing homelessness; the quality of coding in these practices should be far higher.

Coding people's housing status can be problematic because they don't always choose to share this information. A stakeholder (GP) interviewee talked about the difficulties of getting to know who the people experiencing homelessness were within their practice.

Coding in police data

Homelessness is associated with crime victimisation, which is a leading cause of death, exacerbates health problems, and increases the risk of violence. People experiencing homelessness are also sometimes perpetrators of crime. In response to a recent Freedom of Information request to determine the number of arrests, people experiencing homelessness were identified by the detainee address information containing any of the following; 'NFA', 'no fixed abode', 'homeless', 'vagrant' or 'not known' (Metropolitan Police, 2018) – it is unclear though if this approach would capture all those experiencing homelessness.

3.1.2 Data quality in local databases of people experiencing homelessness

Many local authorities hold data about people experiencing homelessness in their area – the Combined Homelessness and Information Network (CHAIN) in London, for example. But these local databases are all different. *"Routine data is generally insufficient to understand local needs, plan and co-ordinate support, or monitor progress and outcomes"* (The King's Fund, 2020) and these databases do not normally align with statutory datasets to allow for benchmarking.

3.2 Data sharing

'Data sharing' means different things to different people. There is often confusion as to whether data or information can be legally shared. There are therefore many reasons why attempts to establish data sharing agreements are unsuccessful. The perceived complicated process of ensuring that information governance is adequately addressed, for example, is a common reason for not starting, or failing to achieve, successful data sharing arrangements.

The Information Commissioner's Office provided some responses to commonly held perceptions about data sharing agreements in relation to the Data Protection Act (Table 4). Much of the resistance is cultural and falls outside legislation. This shows the importance of trusting relationships and understanding the mutual benefits.

Table 4: Common concerns about data sharing in relation to data protection

Perception	Reality
Data protection prevents us from sharing data.	Data protection does not prevent data sharing, as long as you approach it in a sensible and proportionate way.
The GDPR presents additional barriers to sharing data.	If you were able to share data lawfully before GDPR it is likely that you are able to continue to do so.
There is little benefit to be gained from data sharing.	Data sharing can bring significant benefits to organisations, individuals and society at large.
We can only share data with people's consent	You can usually share without consent if you have a good reason to do so.

Source: adapted from *Data Sharing Code of Practice, Information Commissioner's Office, 2018*

Attempts have been made to better understand the barriers to data sharing. Reasons can be broadly grouped into six categories: technical, motivational, economic, political, legal and ethical and it is likely to be a combination of these (Van Panhuis et al, 2014). Several of these examples were raised during the research and have been explored in more detail below.

Table 5: Barriers to data sharing

Type of barrier	Examples
Technical	No common unique identifier Inadequate data collection Varying data quality Technical infrastructure not suitable Insufficient skills and knowledge
Motivational	No or limited incentives No joint objective / purpose Lack of trust / immature relationships Negative prior experiences
Economic	Lack of resources
Political	Lack of trust Competing organisational objectives
Legal	Insufficient knowledge about IG rules
Ethical	Lack of proportionality Lack of reciprocity

Source: Adapted from - Van Panhuis, W.G., Paul, P., Emerson, C. et al. *A systematic review of barriers to data sharing in public health. BMC Public Health 14, 1144 (2014). <https://doi.org/10.1186/1471-2458-14-1144>*

Stakeholder interviews showed that during the response to COVID-19 there were examples where data wasn't readily shared when needed to provide support for people sleeping rough who were temporarily housed. For example, health and care frontline staff needed to stay connected with their clients but when they were relocated by housing authorities there was often resistance to sharing the details of the new location.

In a stakeholder interview a GP commented:

"Practices like mine serve lots of homeless people without realising - for example we have sofa surfers, people who are too embarrassed, understandably, to say they are homeless and of course we rely on our patients to tell us they are homeless for us to add a READ code into their records... There is no real data sharing amongst agencies at all ...".

Data sharing can also be used to describe the process of giving researchers and others (legal) access to data allowing more people to benefit from deriving new insights and greatly increasing the value of the data. Several stakeholders suggested there was insufficient access to existing data collections to a wider audience and that new or modified data collections were often not designed in a way to maximise the number and type of people and organisations who could use them.

3.3 Data linkage

There are a number of common barriers to linking data to bring together information from the different services involved in homelessness.

3.3.1 Technical - unique identifier

There are different methods that can be used to link datasets together and there is extensive information about these different approaches (Shlomo, 2019) but a key element of successful data linkage is the availability of a code to uniquely identify an individual that can be used to accurately link data from different datasets together.

One challenge here is that different organisations have different unique identifiers. Most health and care organisations use the NHS number, for example, but housing authorities and others have their own case or person identifiers, and it is currently illegal for them to use the NHS number. So, there is an immediate challenge when trying to link data across sectors.

3.3.2 Information governance – interpreting the rules

Homeless Link studied information sharing and supporting offenders. Over half of respondents reported difficulties in getting the right information from other agencies. However, where it worked it made a real difference to cross-sector working. A hostel manager said:

“We get the watered-down version. If there is an agreement about what can be shared it’s easier, but anything outside of this can be difficult, we get Data Protection thrown at us.”

This is a common situation. During the first COVID-19 lockdown there were tensions when some housing authorities didn’t share certain information about the hotels where people sleeping rough had been accommodated – it was felt by one interviewee that they were being too risk averse.

3.4 Stakeholder survey and interview responses around data sharing

As noted in the introduction, this project was undertaken alongside a related assignment looking at service changes during lockdown. As part of this assignment, the Strategy Unit conducted an online survey and stakeholder interviews. Data sharing was a common theme in both sources. The main findings are summarised in Table 6 below.

Table 6: stakeholder responses in relation to data sharing

Theme	Comments made by stakeholder interviewees and survey responders
General	Lots of barriers!
	At present there is no real data sharing amongst agencies at all
Relationships	Divide between housing and health – e.g., not readily sharing non-personal data and information
	People get funny sometimes – about sharing data – new rules have been very helpful though
	Need local authorities to share more data / information
Risk aversion	Aversion to sharing data – even when data sharing permissions were not necessarily needed [in relation to housing authorities]
	So we effectively lost 6 weeks due to data sharing concerns
Technical challenges	Different footprints and different services in different areas
	Some IG professionals will say that the only reason to share data if it’s life threatening – if without direct consent
IG rules interpretation	Even assumed consent is interpreted differently
	As hotels have closed down and clients either moved into accommodation or into new hotels this has been challenging trying to ensure linkages with services are not lost or knowing where clients are
	Support providers at times were reluctant to share information for fear of “breaking any data sharing rules”.
	Huge variation in how IG rules are interpreted and applied
	Data sharing from the housing support providers side was a huge problem despite the reassurance from health and social care sides and delayed our health needs assessments for over a month.

Theme	Comments made by stakeholder interviewees and survey responders
Linking data	<p>Recommendation to discuss and agree nationally</p> <p>Share data between local authority, CHAIN and primary care; using unified records between mental health and primary care</p>

The survey collected the views of people involved in delivering health and care services for people experiencing homelessness. Of the 162 responses, 22 (14%) said data sharing was an issue - just under a quarter (23%) of NHS provider staff had concerns around data sharing.

4. Approaches to improving current practice

Previous sections have shown that good data is important, but that current practice is poor. This section begins to suggest ways of improving this situation. It gives examples of approaches to using data to improve support for people experiencing homelessness.

The aim is to learn from others: both in terms of what works *and* what doesn't. This section therefore sets out examples of both in relation to data collection and data sharing.

4.1 Data collection

4.1.1 Coding – identifying people who are experiencing homelessness

There have been attempts to introduce a standardised method of recording homelessness across different NHS organisations. For example, Pathway, a well-established homeless healthcare charity, has worked with other stakeholders to design a possible approach to recording housing status to capture more detailed information than most of the current systems for recording homelessness. It would also allow for better information about the risk of homelessness presenting an opportunity to avoid homelessness.

This approach could also be adapted to record information about other health inclusion groups, such as travellers and sex workers. Much of this work has already been completed with support from NHS Digital, NHS England and Public Health England but has so far not had the necessary government support to be implemented.

4.1.2 Databases of people experiencing homelessness

One of the most well-established data collections is the Combined Homelessness and Information Network (CHAIN). CHAIN is a multi-agency, operational database which records information about people sleeping rough in London. This system is commissioned and funded by the Mayor of London and managed by St Mungo's. It is considered the UK's most comprehensive source of information and is often quoted as being one of the best examples of live databases of people sleeping rough.

Data flows of people sleeping rough are collected to tell outreach teams and services if someone is new to the street, a returner or a long-term rough sleeper. Demographic information is collected as well as details about support needs, reason for homelessness and if they have previously been placed in homelessness services.

The CHAIN database does have drawbacks:

- It does not link to statutory data sets.

- It is only fully accessible to commissioned services in London.
- Non-commissioned services have limited access to the database, leading to criticisms that those who are more hidden or ineligible for services are not recorded.
- The data does not always show if someone has approached their local authority for assistance before experiencing rough sleeping.
- While some short and long-term accommodation projects record outcomes on the CHAIN database, this is incomplete. It does not present a complete picture of what happens once people stop rough sleeping.

There are several other examples of data collections on people experiencing homelessness, including:

- H-CLIC is a data collection that aggregates local authority homelessness data in England to monitor the impact of the Homelessness Reduction Act 2017.
- The SHIN data collection in Wales is primarily an outreach-based, multi-agency database and network of organisations that supports and records information on people sleeping rough.
- The MainStay system in Liverpool aims to prevent homelessness, reduce repeat homelessness and reduce evictions and abandonments through the provision of an online system that allows services to access a common assessment and related matching facility.
- GMThink in Greater Manchester is a multiagency database for individuals with multiple complex needs and allows for shared case management between outreach teams, engagement workers, peer mentors and other specialist services.

There are suggestions that, within appropriate IG frameworks, it would be very beneficial if databases on people experiencing homelessness were made more widely available, both to relevant practitioners, planners and to the research community.

4.1.3 Health and care needs data collection during the COVID-19 response

As people experiencing homelessness were relocated into hotels in their thousands in March 2020, local areas needed to get organised to respond to their health and care needs. Many COVID-19 specific data collection systems were set up in response. These local data collection systems varied significantly, but still created a one-off opportunity to gather data.

Insights derived from this data were used to help find suitable permanent accommodation and to inform the design of health and care services and support. Those involved wanted some way of

keeping track of people, particularly of those who were most vulnerable, to ensure they received support and to monitor their outcomes.

In London, for example, the opportunity was taken to gather comprehensive information about health and care needs of those accommodated temporarily. The COVID-19 Homeless Rapid Integrated Screening Protocol (CHRISP) tool is a clinician administered survey developed by the Healthy London Partnership (HLP).

The primary aims of the assessments were to:

- inform housing needs according to a health assessment;
- identify individual needs (physical health, mental health, drug and alcohol issues, frailty, cognitive impairment and vulnerabilities);
- act as an advocacy tool; and
- inform service planning.

By August 2020, 4,754 CHRISP assessments had been completed. Data from this exercise has provided the HLP with information about the health and care needs of people sleeping rough and about how many of them were previously registered with a GP. For example, around 30% reported having mental health problems and around 20% were not registered with a GP. Results were shared with the relevant multi-disciplinary teams in London to organise care and support where required, including working with clients as they are moved on from hotels and hostels to other accommodation.

CHRISP assessments were also carried out in Bournemouth by local GPs and funded by Public Health to generate evidence to encourage the local CCG to provide more support for health services for this population.

The team behind the CHRISP assessment tool have produced a modified (shorter) version of the survey designed to be used beyond COVID-19.

4.1.4 Monitoring the long-term outcomes of people who were temporarily housed during the pandemic

The MHCLG are planning to build on this better understanding of health and care needs and will monitor the long-term outcomes of people who experience rough sleeping and were housed temporarily. Data, which is collected via H-CLIC, will show who has been found accommodation and will also be used to show the long-term health, justice and housing outcomes of this group (MHCLG, 2019).

4.2 Data linkage

4.2.1 Examples of data linkage

There are many examples of different approaches to data linkage. The examples in table 7 below cover a range of geographies and purposes. Some have proved successful; others have failed. All provide lessons.

4.2.2 Coding – unique identifier

The most successful examples of data linkage happen when there is a consistent unique identifier. In health and care datasets this is almost always the NHS number, but there are legal restrictions on non-health and care organisations using this. Other organisations, such as housing authorities, have their own ways of uniquely identifying people with case reference numbers, for example. It would be helpful if the legal use of the NHS number were extended to non-NHS organisations.

Table 7: Examples data linkage for different functions

Geography	Organisation	Function	Purpose / aim	Status:	Key points / learning
Local	Birmingham and Solihull CCG and partners	Research and planning	A Population Health Management approach to homelessness in a CCG locality using linked data from various organisations (2020)	Progress made / stalled	<ul style="list-style-type: none"> No common unique person identifier between datasets Provisional approval from NHS Digital to develop a "Joint Controller" DARS agreement with public health
Local	Suffolk County Council	Service delivery	A linked data solution to support people experiencing homelessness between districts and boroughs, two GP practices, drug and alcohol support (outreach) and a community trust	Good progress made	<ul style="list-style-type: none"> All parties have signed the data sharing agreement which was written in a way that different agencies could be added as and when needed The joint database is shared with all partners weekly
Local	Bristol	Service delivery	Partnership with homelessness support services, and other agencies who interact with the city's homeless population, to develop a shared data sharing platform for a complete picture of the service interactions of clients pooling information from medical, psychiatric, social agencies, criminal justice and housing services	Successful	<ul style="list-style-type: none"> Showing positive impacts Plans to extend to include a broader range of services
National	Welsh Government	Research and planning	The Secure Anonymised Information Linkage (SAIL) databank has been established using disparate datasets, and over 500 million records from multiple health and social care service providers Research-ready platform for record-linkage studies	Successful	<ul style="list-style-type: none"> Committed to working with researchers NHS and other health-related stakeholders to conduct projects that lead to enhanced patient care, public benefit and improvements in health and well-being Person-based population data available for genuine research purposes only where there is a potential for benefit
National	Scottish Government	Research and planning	This study links homelessness and health datasets for the first time at a national level, to explore the relationship between homelessness and health in Scotland (2018)	Successful	<ul style="list-style-type: none"> A big undertaking A lot of new insights Very resource-intensive
National	MHCLG, programme (England only)	Research and planning	To evaluate the Troubled Families Programme (TFP) in England which is administered by the Ministry of Housing, Communities and Local Government (MHCLG).	Successful	<ul style="list-style-type: none"> National evaluation of the Troubled Families Programme 2015 to 2020 Datasets from different parts of the programme were linked and analysed Successful but costly

Some of these are good examples of what can be achieved through linking data, and others highlight barriers which we can learn from. The PHM approach to homelessness in Birmingham and Solihull, for example, was an attempt to bring together data from several organisations covering health and non-health. There was good leadership and a lot of support and enthusiasm but specific issues regarding information governance caused this project to stall. However, they are pursuing the approval from NHS Digital to develop a 'Joint Controller' Data Access Request Service (DARS) agreement with public health to allow public health teams to access data currently held by clinical commissioning groups through NHS Digital Data Services for Commissioners. Whilst this will only establish sharing between public health and clinical commissioners, they are seeking to find a solution to include NHS providers within the data sharing model. This will allow them to continue with the project and will have benefits for others attempting something similar including the design of data sharing frameworks to support integrated care commissioning.

The Scottish Government study linked homelessness and health datasets for the first time and gained new insights to inform strategies to reduce homelessness – this project was considered a great success for the insights it provided but was very resource intensive leading to the suggestion that smaller data linkage projects are more manageable and more likely to succeed. This is shown in the example summarised in Table 7 where Suffolk County Council achieved data sharing arrangements with several stakeholders involved with providing services to people experiencing rough sleeping - they attribute at least some of this success to the amplification of existing good relationships because of the response to COVID-19.

5. Recommendations for improving practice

This report has explored the benefits of, and barriers to, linking data between organisations to provide a more complete information set about the health and care needs of people experiencing homelessness. This final section makes recommendations based on the evidence presented.

These recommendations should be shared at the highest level of NHSE/I, NHS Digital, Public Health England, police authorities and MHCLG, as well as voluntary sector organisations and researchers. Action plans should be put in place to enact them where they are agreed.

From the evidence gathered, we offer the following recommendations.

RECOMMENDATION 1: NHSE/I should work to enable local data systems to link data.

Our research has shown that successful data sharing agreements are based on a foundation of good and trusting relationships, good leadership and a clear, joint purpose. Successful programmes are often focussed and small, at least to begin with. These characteristics tend to be common in services that provide for people experiencing homelessness. A national database of people experiencing homelessness is not needed. The clear role here is to support local action.

NHSE/I should therefore concentrate its actions on enabling local systems to link data across organisations providing services and support to people who are experiencing homelessness.

NHSE/I should put support and guidance in place to enable local systems to share data successfully. This includes providing examples of good practice, for example sample Data Protection Impact Assessments (DPIAs) and Data Sharing Agreements (DSAs) that have been developed to support data linkage around homelessness. Where resources are already available, they need to be made more accessible. NHSE/I should highlight, share and support good local practice – helping other areas along the same route.

The NHSE/I should look to adopt local ‘tough cases’ where local attempts have been made to link data for the benefit of people experiencing homelessness, but have hit seemingly irresolvable blocks, perhaps on information governance, for example. Local areas can go so far by themselves, but lack national resources (and power). For example, resolving the issues for these cases such as in Birmingham and Solihull CCG would promote a step change in successful data linkage programmes to support local integrated systems. The aim here should be to create and spread useful precedent.

But critically, what is also needed is a change in the information governance rules to allow for there to be a ‘unique person identifier’, in particular the NHS Number, to be held by all organisations.

This would help establish a legal basis for non-NHS organisations to share data with NHS organisations and vice versa.

RECOMMENDATION 2: NHSE/I should create a new data standard for recording housing status.

Consistent and systematic coding of housing status is essential in relevant public and voluntary sector organisations' data.

Currently there is no nationally agreed standard across the NHS or with partner organisations for the way an individual's housing status is recorded. People experiencing homelessness are often not identified by the services that they interact with. Being able to identify people experiencing homelessness, or at risk of, will improve our understanding of the services that are used and will add to our understanding of health, care and wider needs to inform the development of integrated responses to address health and homelessness.

There should be the development of clear ways to identify people experiencing homelessness in health and non-health data. This should be broadened to develop national standards for the accurate recording of those experiencing homelessness and the broader range of inclusion health categories.

We recommend that NHSE/I take Pathway's approach and use this as the basis for creating a new standard for recording the housing status of patients within the NHS initially, but to be extended to relevant partners who provide services to people experiencing homelessness. Pathway and partners have done a lot of work to develop an approach to describing and recording housing status.

Improvements to data collection are often related to contract incentives, for example the Quality Outcomes Framework (QOF), or national reporting requirements. The adoption of Pathway's approach could be incentivised through new and existing contract mechanisms, such as the Primary Care Network (PCN) contract, to ensure NHS organisations capture housing status for all contacts.

Developing a specific homelessness outcome metric that uses the Pathway definition would ensure local systems capture this data for their reporting. Any new metric should be added to one of the existing outcome frameworks, such as the Public Health Outcomes Framework. This is likely to take two years to develop and implement and therefore is not a short-term solution but would require local systems to develop better data collection at the same time.

RECOMMENDATION 3: STPs and ICSs should maximise the value of the improved data to achieve better outcomes for people experiencing homelessness.

Improved data collection on homelessness is only part of the solution. To achieve better outcomes, we also need to use data in an insightful way to commission and design services for people experiencing homelessness. This is best done at a local level and therefore STPs and ICSs should:

- ensure that Recommendation 2 is implemented locally to improve the data on people experiencing homelessness;
- promote the use of housing status, with local organisations, in supporting the overall aim of STPs and ICSs to improve the health and care of their whole population;
- ensure homelessness is embedded in their approach to Population Health Management. This involves working with voluntary organisations, local authorities, the police and others to gain a greater understanding of the wider influences of people experiencing homelessness and how they interact with services. This will provide a holistic picture of their pathways through services and identify areas for joint working; and
- take the responsibility to develop analytics and use insightful analyses to underpin good quality decisions to prevent and reduce the number of people experiencing homelessness.

RECOMMENDATION 4: Data on people experiencing homelessness should be made available for wider use (research, planning and evaluation) where possible to increase its value.

- For existing data collections, Data Controllers should extend their use for wider utility where possible within the information governance arrangements.
- For new or modified data collections, ensure the information governance design, informed by stakeholders, allows for the data to be made available as widely as possible for research, planning and evaluation.

Glossary of terms

CCG	Clinical Commissioning Group
DHSC	Department of Health and Social Care
EHIH	The Equality and Health Inequalities Hub
GLA	Greater London Authority
HLP	Health London Partnership
H-CLIC	Homelessness case level collection
ICS	Integrated Care System
MHCLG	Ministry of Housing, Communities & Local Government
MLGH	Minister for Local Government and Homelessness
NHSE/I	National Health Service England & Improvement
NICE	National Institute for Health and Care Excellence
ONS	Office for National Statistics
PHE	Public Health England
PHM	Population Health Management
STP	Sustainability and Transformation Partnership

References

Crisis, (2018). *'The plan to end homelessness.'* Crisis. Available at <https://www.crisis.org.uk/ending-homelessness/the-plan-to-end-homelessness-full-version/executive-summary/> [Accessed 20 Nov 2020].

Crane, M. et al. (2018). *Mapping of specialist primary health care services in England for people who are homeless.* King's College London.

Department of Communities and Local Government (2016). *'National evaluation of the Troubled Families Programme 2015 - 2020: family outcomes – national and local datasets: part 1.'* Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605185/Family_outcomes_-_national_and_local_datasets.pdf [Accessed 15 Nov 2020].

Holman, C. D., Bass, A. J., Rosman, D. L., Smith, M. B., Semmens, J. B., Glasson, E. J., Brook, E. L., Trutwein, B., Rouse, I. L., Watson, C. R., de Klerk, N. H., & Stanley, F. J. (2008). *'A decade of data linkage in Western Australia: strategic design, applications and benefits of the WA data linkage system.'* Australian health review: a publication of the Australian Hospital Association, 32(4), 766–777. <https://doi.org/10.1071/ah080766>. Available at <https://pubmed.ncbi.nlm.nih.gov/18980573/> [Accessed 20 Nov 2020].

Homeless link. (online) *'Spotlight on information sharing'* Available at <https://www.homeless.org.uk/sites/default/files/site-attachments/4.Better%20Together%20-%20spotlight%20on%20information%20sharing.pdf> [Accessed 10 Nov 2020].

Homelessness Reduction Act 2017, c. 13. Available at <https://www.legislation.gov.uk/ukpga/2017/13/contents>. [Accessed 30 Oct 2020].

Hutchinson, S., Alcott, L. and Albanese, F. (2014). *'Needs to know. Including single homelessness in Joint Strategic Needs Assessments.'* Published by St Mungo's Broadway and Homeless Link. Available at https://www.homeless.org.uk/sites/default/files/site-attachments/20141009%20Needs_to_Know_Report_2014_Final.pdf [Accessed Sep 10 2020].

Metropolitan Police, (2018). *'Freedom of Information Request: Vagrancy Act 1824 arrests regarding homeless people for the date range 2013 – 2017.'* Available at https://www.met.police.uk/SysSiteAssets/foi-media/metropolitan-police/disclosure_2018/april_2018/information-rights-unit---homeless-people-and-rough-sleepers-who-have-been-arrested-under-the-vagrancy-act-1824-in-the-last-five-calendar-years [Accessed 10 Nov 2020].

MHCLG (2019). *'Guidance for reporting rough sleepers accommodated under a S189 power on H-CLIC.'* Available at <https://gss.civilservice.gov.uk/wp-content/uploads/2020/10/h-clic-rough-sleepers-guidance-local-authorities.pdf> [Accessed 24 Oct 2020].

NHS Digital (2018). *'Delivering linked datasets to support health and care delivery and research.'* Available at <https://digital.nhs.uk/services/data-access-request-service-dars/linked-datasets-supporting-health-and-care-delivery-and-research> [Accessed 6 Oct 2020].

NHS England (2019). *'Designing integrated care systems (ICSs) in England. An overview on the arrangements needed to build strong health and care systems across the country.'* Available at <https://www.england.nhs.uk/wp-content/uploads/2019/06/designing-integrated-care-systems-in-england.pdf> [Accessed 7 Oct 2020].

ONS (2020). *'Deaths of homeless people in England and Wales: 2019 registrations. Experimental Statistics of the number of deaths of homeless people in England and Wales. Figures are given for deaths registered in the years 2013 to 2019'*. Available at <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsofhomelesspeopleinenglandandwales/2019registrations>. [Accessed 20 Nov 2020].

ONS and MLCHG (2019). *'Homelessness Data England: Linking local authority data to evaluate homelessness policy.'* [online] <https://www.adruk.org/> Available at <https://www.adruk.org/our-work/browse-all-projects/homelessness-data-england-linking-local-authority-data-to-evaluate-homelessness-policy-267/> [Accessed 15 Nov 2020].

Pathway, (2018). *'Homeless and Inclusion Health standards for commissioners and service providers.'* Available at <https://www.pathway.org.uk/wp-content/uploads/Version-3.1-Standards-2018-Final-1.pdf> [Accessed 7 Oct 2020].

Shlomo N. (2019) *'Overview of Data Linkage Methods for Policy Design and Evaluation.'* In: Crato N., Paruolo P. (eds) *Data-Driven Policy Impact Evaluation*. Springer, Cham. https://doi.org/10.1007/978-3-319-78461-8_4

The Kings Fund (2020). *'Delivering health and care for people who sleep rough: going above and beyond.'* Available at <https://www.kingsfund.org.uk/publications/delivering-health-care-people-sleep-rough> [Accessed 30 Jul 2020].

Van Panhuis, W.G., Paul, P., Emerson, C. et al. (2014). *'A systematic review of barriers to data sharing in public health.'* *BMC Public Health* 14, 1144 (2014). Available at <https://doi.org/10.1186/1471-2458-14-1144> [Accessed 10 Nov 2020].

Waugh, A. (2018). *'Health and homelessness in Scotland: research. Study exploring the relationship between homelessness and health.'* ISBN: 9781788519076. Available at <https://www.gov.scot/publications/health-homelessness-scotland/> [Accessed 6 Oct 2020].

Welsh Government (2020). *'Exploratory analysis of education outcomes of children and young people living in homeless households'*. Available at <https://gov.wales/sites/default/files/pdf->

[versions/2021/1/3/1610565006/exploratory-analysis-education-outcomes-children-and-young-people-living-homeless-households.pdf](#) [Accessed 10 Oct 2020).

The
Strategy
Unit.

The Strategy Unit

Tel: 0121 612 1538

Email: strategy.unit@nhs.net

Web: www.strategyunitwm.nhs.uk

Twitter: [@strategy_unit](https://twitter.com/strategy_unit)



Midlands and Lancashire
Commissioning Support Unit