A Shared Outcome Framework for the Housing and Homelessness Sectors

Guide for data collection

Centre for Social Impact

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PURPOSE

High quality data that is accessible, accurate and reliable is essential for outcome measurement, evaluation and decision making.

This resource has been developed to assist homelessness services to think about the different options available for data collection. This guide includes an overview of different approaches for sampling, data collection methods and mechanisms. We recommend using this guide in conjunction with the other resources for shared outcome measurement for the housing and homelessness sector.

This guide aims to:

- Improve your knowledge of data collection

- Improve the accuracy and reliability of the data collection process

- Reduce risks around collection, storage and management

- Identify skill, capability and resource gaps

Remember, there is no one best approach for data collection. Each has different advantages and disadvantages that need to be considered within the context in which you operate, the people you work with and the groups you support.

OTHER RESOURCES IN THIS SERIES

For more information on the Shared Outcome Framework for the Housing and Homelessness Sectors project, please visit the project website

http://www.csi.edu.au/research/project/developing-shared-outcomes-housing-and-homelessness-sectors-project/

Overview report	Data collection guide	Indicator list
Learn more about: • Project background • Shared outcome framework • Prioritised indicators	Learn more about: • Considerations for data collection • Methods and approaches • Situations and context	Learn more about: • Full list of indicators and measures • Prioritised indicators • Reference sources for information

KEY CONSIDERATIONS

Best practice data collection planning involves engaging stakeholders to understand the needs and requirements for data collection, what resources and skills are available and to develop a plan to guide data collection, data management and privacy and ethics. When deciding on different methods and approaches there are a few important things to consider:

- What do you need to know?

- What resources do you have available?

- What data do you already collect?

- What is the setting for data collection and who will be responsible for collecting the data?

- What are the ethical and privacy considerations?

What do you need to know?

What are the questions that you are looking to answer? The answer to this question will help to inform and guide what approaches for data collection will be more appropriate, as different data collection approaches are suited to different needs[1].

Examples of questions are:

- What outcomes were produced by the service?

- How have the outcomes changed over time?

- What factors led to change in outcomes?

- To what extent did the program contribute to the change?

Consulting with your stakeholders is a great way to identify and clarify the different types of questions you may have. A good practice approach to do this is through a theory of change or logic model process. These processes will help to explore and unpack the program goals, expected outcome, the planned activities and what evidence and information is required and relevant. The resources below can help you with this process:

- The Compass: your guide to social impact measurement

- NPC's Creating your theory of change

- W.K. Kellogg Foundation Logic Model Development Guide

A theory of change or logic model that aligns with Shared Outcome Framework for the Housing and Homelessness Sectors will help you to identify the different ways to measure and collect data for your outcomes and indicators.

What resources do you have available?

Collecting and analysing data requires resources. It's important to consider what resources you have available and if these are appropriate for your proposed measurement approach as your resources provide a boundary for what's feasible. Resources are not limited to money, and can also include:

- Time to collect, analyse and report data

- Skills and capacity of staff and volunteers

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[1] Matthews P, Carter N and Smith K. (1996) Using data to measure outcomes. Healthcare information management 10: 3-16. p4

- Systems and tools to collect, store and manage the data

What data do you already collect?

Before you start collecting data, it's important to review what data you already have. This could include looking at existing administrative or case work data, existing reporting (for example government or compliance reporting) or existing local data (Australian Bureau of Statistics or Australian Institute of Health and Welfare).

Are you able to use this data to answer your questions or will you need to collect additional information?

This process is also useful for thinking about the systems you already have in place and how they could be used or adapted for future collection.

What is the setting for data collection and who will be responsible for collecting the data?

Integrating outcome measurement into your practice will influence the situation and people who are involved. It is important to consider how data collection will be implemented and what resources could be put in place to support this process.

What are the ethical and privacy considerations?

When collecting primary data from people there are a range of ethical and privacy issues that should be addressed, such as consent, voluntary participation, that participants are protected from harm and discomfort, and information is confidential and stored in an appropriate way. Consider the steps that you will l you need to take to ensure the data is collected and stored in an appropriate way and meets ethical requirements.

OPTIONS FOR DATA COLLECTION

The next step is to decide how to collect the data. It is important to understand the different options available to you, the different skills, resources and tools required for each and the different roles and responsibilities for collecting, analysing, reporting and storing the information.

When planning your approach for data collection it is important to discuss the considerations and options available to you with your stakeholders to ensure that your plan is useful, appropriate and feasible to undertake. The following tables present a high-level summary of the different options for sampling, methods and mechanisms for data collection.

- **Approaches for sampling:**
    - Sampling is the process to identify and select individuals to participate in your data collection. These provide different information to make conclusions about the whole population.

- **Methods** for data collection**:**
    - Methods are the approaches that can produce qualitative (descriptive) and quantitative (numeric) data.

- **Mechanisms** for data collection**:**
    - Instruments are how data is collected.

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Approaches for sampling[2]

Approach	Description	Advantage	Disadvantage	Scenarios	Think about
Population	A population is a well-defined group of people. For example: • The Australian population is all the residents of Australia. • The population for a program would be all the participants. Population sampling gathers information from all members of the group.	• Everyone can participate • Able to draw conclusions about the whole population • Provides a true measure of the population (no sampling error) • Detailed information about small sub-groups within the population is more likely to be available	• Can be difficult to gather information from everyone within a population • Higher costs in time and resources to collect • Takes longer to collect than a sample	• Collecting data for all participants of a service, for example on entry.	• How big is the population or group? • How often do you intend to collect the information? • Is it feasible to collect data for all participants?
Sample	A sample survey looks at a subset of a population. Information from the sample is used to estimate the characteristics for the entire population of interest. There are different sampling methods: • Random from a population or from relevant subgroups through stratified sampling • Non-random, where respondents are chosen based on ease of access, appropriateness, quotas, or self-selection	• The costs are generally lower than a population survey • Results may be available in less time • If good sampling techniques are used, the results can be very representative of the actual population	• May not be representative of the population, particularly where the sample size is small • Often not suitable for producing benchmark data (are you comparing the same groups over time?) • Results may be subject to 'sampling' error • Decreased number of responses will reduce the detailed information available about sub-groups within a population	• Selecting participants at random to participate in your data collection • Selecting participants at a given time or place to participate in the data collection, e.g. participants at a service location or site • Dividing participants into groups based on different characteristics (e.g. gender, location, ethnicity) and selecting participants within those groups. • Selecting participants based on a quota of a characteristic	• What information do you already know about your population? • Do you have the resources, skills and expertise to design and undertake a sampling approach? • What are the advantages and limitations of the sampling approach selected? How will the limitations be addressed/minimised?

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[2] Australian Bureau of Statistics (2013) http://www.abs.gov.au/websitedbs/a3121120.nsf/home/statistical+language+-+census+and+sample

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Methods for data collection

Methods	Description	Advantages	Disadvantages	Scenarios	Think about
Survey	A survey is a method of gathering information from people. They can be administered in different ways, such as face-to-face, post, telephone or online. There are many different types and approaches: • Open ended, for example a written response • Closed ended, for example "yes" or "no" response • Scaled responses, for example 5-point scale from very unsatisfied (1) to very satisfied (5).	• An efficient way to collect information from many people • Can be representative and generalisable • Can be reliable (if questions and instrument are reliable) • Can be easily repeated depending on the mechanism for collecting the data • Lower burden on the respondent	• Can have a high cost to administer if you want to reach a large group • Accuracy / non-response bias; people who don't respond may have different outcomes to those that do • May have low response rates • Limited opportunity to understand depth and context around a response • Questions cannot be explained to respondents and could be misinterpreted	• Conducting a pre/post-survey when a person uses a service • Collecting data from a large group, such as surveying a local community to identify needs • Depending on the mechanism a survey might not be appropriate if there is ambiguity around how a response could be interpreted	• Resources to fund data collection, recruitment (any incentives/reimbursement)
Direct observation	Observation involves collecting information by watching the subject in their environment. Depending on the design of the observation they can have different levels of structure if a guide has been developed to identify data that may be relevant.	• Access to people in real life situations • Access to situations where other methods are inappropriate • See what is happening in people's lives	• Resource intensive to collect • Potential for bias • Possible conflict of interest • Observation and analysis is subjective • The act of observation can influence a change in behaviour • Issues with reliability when repeating the observation	• Appropriate where other methods are inappropriate to use, such as when it would be culturally inappropriate to survey or interview people Observing participants in a workshop or program to see: • How activity is being implemented • How participants behave during an activity, e.g. are people using the resources provided or interacting with the environment	• Need to develop an observation guide to identify data that may be relevant • Appropriate when a respondent may not be able to completely describe their situation • Privacy and ethics, especially when observing a vulnerable group

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Methods	Description	Advantages	Disadvantages	Scenarios	Think about
Interviews	Interviews are a method of data collection that involves having a conversation with a person to find out information. There are different types that relate to the level of structure: • Highly structured have pre-set questions and prompts for response. • Semi-structured have a list of questions that don't need to be followed in an order • Unstructured start with a general question and allow the respondent to talk and share their views	• Ability to clarify, probe and understand responses with the participant • Quick data collection • Identify other areas for exploration	• Medium burden on the person collecting the data, to organise, collect and interpret the information • Needs a skilled interviewer • Limited generalizability to a broader group	• Having conversations with participants as part of a case work process or after the service has been provided • Not appropriate when trying to understand the prevalence of an outcome or issue across a large population or group	• Is there a conflict of interest between interviewer and interviewee; how does this impact on the relationship and responses?
Focus groups	Focus groups are structured discussions with a group of people that respond to open ended questions in their own words.	• Explore the outcomes in depth • Probe and clarify responses • Capture information quickly • Lower cost	• Challenges in repeating the focus groups • Cost to assemble and host a focus group • Groupthink • Biases/influence others	• Useful when trying to identify outcomes or results from an activity • Not appropriate when trying to understand the prevalence of an outcome or issue across a large population or group	• Where are you going to host the focus groups? How many people will you invite?
Admin / secondary data	Admin or secondary data involves using existing organisational/program records or data from an external source such as the Australian Bureau of Statistics or Australian Institute of Health and Welfare.	• Can be cheaper if the information already exists • Unobtrusive to people	• Costs to find, access and clean the data • Potentially unknown quality of data • Data may not be complete or out of date	• Using existing administration /case data • Using population data from the Australian Bureau of Statistics to look at outcomes across the community	• What existing data do you already have? • What external data at a population or community level could you access? • Who can help facilitate access to data

Mechanisms for data collection

Mechanism	Description	Advantage	Disadvantage	Scenarios	Think about
Online	Surveys conducted online over the internet.	• Quick to administer • Able to reach a large number of people in a short amount of time • Relatively low distribution cost • Real-time data collection • Ability to include other media in the survey (e.g. sound or video) • Lower interviewee apprehension • Supports survey logic, validation and data collection • Manage and track reminders and responses	• Requires survey software • Technical skills to design and administer the survey • Risk of technical errors - e.g. people not able to respond • Exclude marginal groups / those that don't have access to technology • Data security and management	• Appropriate when data needs to be collected quickly or on an ongoing basis • Online survey sent to participants before and after attending an event or program	• Do respondents have access to technology to complete the survey • Has the survey been optimised for different formats (desktop or mobile)?
Telephone	Interviews or surveys conducted over the phone, with scripted questions or prompts.	• Fast way to collect information • Ability to use specialised interview software to help navigate the survey such as computer-assisted interview software (CATI) • Can assist respondents with unfamiliar words or questions • Good for sensitive information • Easier to reach small segments of the population • Less prone to non-response bias	• High fixed costs • Need to train interviewers • Respondents require phone access • Need up-to-date phone numbers • If using computer-assisted technology, will need technical knowledge • Cannot capture non-verbal cues	• Telephone survey to participants of a program or event	• How large is the population or sample you want to telephone? This can increase the cost • How long is the interview of survey? A long survey with complex questions can take longer to complete and adds burden on staff and the interviewee
Face to face	In person data collection.	• Capture verbal and nonverbal cues • Accurate screening	• Manual data entry by interviewer • Cost and time to collect the data – can be expensive	• Interview or survey with participants after attending a program as part of the case management process	• Does the survey ask questions of a sensitive nature? If so, could they be self-administered? • What training has been provided to the interviewer?

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Mechanism	Description	Advantage	Disadvantage	Scenarios	Think about
Post	Surveys conducted via post. Responses are posted back by the respondents.	• Reach a large geographical area • Reduced respondent apprehension	• Cost to administer • Printing, postage • Need up-to-date address information • Low response rate • Inability to clarify questions	• Appropriate if the respondents are spread out geographically • Respondents are not accessible via other methods (online)	• What is the expected response rate? How many surveys will you need to send out?
SMS message	Information collected using SMS message.	• High response rates • Fast responses • High data quality • Cost effective	• Tedious to answer multiple questions • If a smartphone survey, then need to ensure compatibility • Technical issues • Can exclude marginalised groups who don't have access to technology • Limited information on a page • Validation and quality control	• When you have a very short survey that is looking at closed questions • Appropriate when you need a need fast response	• How many questions you are considering asking? • Do you have up to date contact information?