

## FACS Entity Database

**Do you need to understand client pathways and interactions across two or more FACS service streams including Child Protection, Homelessness and Housing?**

### Snapshot

- FACS Insights, Analysis & Research has developed a tool that links over 50 FACS datasets, providing client pathway information on 4.4 million clients.
- The Entity Database contains common identifying information on all FACS clients. It can be used to match client and service level information across FACS service streams.
- It enables extensive pathway analysis to better understand how FACS clients interact with different services and programs over time.
- To date, the Entity Database has been used to investigate links between the different FACS services accessed by homeless clients to better understand FACS client housing pathways, to model FACS liability and inform an investment approach to service provision.
- The tool will be updated annually to support data-driven decision-making in policy and practice. Please contact FACSIAR for further information.

### Introduction

There is increasing emphasis on understanding client pathways through the service system to improve interventions and client outcomes. The ability to link clients across multiple service streams can be used to provide vital evidence to inform decisions around policy and service delivery. The FACS Entity Database has been created as a readily available tool to support this.

The Entity Database is a current, reliable resource that can be used for any FACS data linkage project. It will produce efficiency gains for FACS by addressing a broad range of linkage requests, reducing duplication of linkage activities and providing consistency across projects.

This Evidence to Action note introduces the FACS Entity Database, how it was created, what it includes and how it can be used by FACS and our partners.

## What is the Entity Database and how was it created?

The Entity Database is a lookup table of common identifying information on all FACS clients that can be used to match client and service level information across FACS service streams. Records with common identifying information such as name, date of birth and person reference number are grouped together by assigning a common Entity ID. Three key rules are used to match identifying information from FACS datasets to the same person or 'entity':

- the person reference number (e.g. Community Services KIDS child identifier or Housing NSW person reference number) is the same.
- the statistical linkage key (SLK)<sup>1</sup> is the same.
- a combination of the full name and date of birth is the same.

FACS Insights, Analysis & Research (FACSIAR) worked closely with an external contractor with expertise in best practice data linkage methods to develop the Entity Database. External quality assurance and a wide range of quality controls were used to ensure the reliability of results. These include cleaning key data variables such as the client's name, ensuring the format of variables was consistent across datasets and excluding statistical linkage keys that were of poor quality due to missing data or where the date of birth had been estimated.

The Entity Database links a total of 53 datasets with over 51 million records spanning up to 2015/16. After removing duplicate and unreliable records, it contains 10.6 million records related to 4.4 million unique clients.

### FACS Entity Database



<sup>1</sup> The SLK is a unique code created using a combination of the client's date of birth, name and gender.

## What datasets are included?

Administrative data from a range of FACS services are currently included in the Entity Database.

- **Ageing, Disability and Home Care**  
Includes administrative data provided by service providers.
- **Specialist Homelessness Services**  
Includes service level data provided by homelessness service providers.
- **Social Housing**  
Includes data on Public, Aboriginal and Community Housing, Private Rental Assistance and the Household Appeals Committee.
- **Child Protection**  
Includes data on out-of-home care (OOHC), child concern and risk of significant harm (ROSH) reports, safety and risk assessments (SARA) and Brighter Futures service level data.

Other datasets will be added as required.

## Uses for the Entity Database

The Entity Database can be used to better understand client interactions with the service system by linking data from two or more FACS service streams, as long as the records contain reliable identifying information. A key benefit of the database is that it can be used to develop a pathway analysis that tracks clients' use of services and programs over time. This may include analyses to identify critical points of intervention to improve client outcomes.

The Entity Database has been used to analyse the pathways of FACS clients who accessed Specialist Homelessness Services (SHS) during 2014/15 to 2015/16. The analysis systematically identified client pathways through the SHS system, as well as housing and child protection service streams, to inform policy and service planning. The Entity ID was important in the identification of unique clients and as a counting unit for the analysis.

FACS has also used the Entity Database to link 12 years of service level data (2004/05 to 2015/16) from key FACS client datasets across Ageing, Disability and Home Care and Housing and Community Services. The linked dataset provides a longitudinal view of FACS client cohorts service use, including the volume, frequency, type, and cost. The dataset is being used to model FACS liability and inform an Investment approach to service provision.

## Update of the Entity Database

The Entity Database will be updated annually to ensure that it is an ongoing and up-to-date resource for FACS. It is anticipated that the database will be used for analysis and research on a regular basis.

## More information

If you would like to know more about the Entity Database and how you can use it for your project, please contact the Statistical Analysis and Modelling Team within FACS Insights, Analysis and Research.

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