Understanding client needs: The FACSIAR Economics Need Model

This Snapshot provides an overview of the FACSIAR Economics Need Model, or Need Model, and how it can be used to support Department of Communities and Justice (DCJ) policy and program design.

The Need Model can estimate how many people in NSW have certain needs, the characteristics of these people, and the area they live in. In many instances it is the presence of complex and overlapping needs in someone's life which means they need assistance from DCJ. The Need Model can help to guide decision-making around how to respond to complex client needs and will better enable DCJ to effectively allocate and design services to support clients.

What is the FACSIAR Economics Need Model?

The Need Model helps us understand the complex and overlapping needs or risk factors of NSW people and households. It guides us to design and deliver services that meet the long-term needs and wants of our clients by:

- estimating the number and profile of people and households who experience various risk factors
- estimating the number of people in specific geographical areas who may need DCJ services

The Need Model can help answer questions like:

What are risk factors?

Needs or risk factors are attributes or conditions that can contribute to a person being vulnerable, e.g., disability, unemployment or mental health issues. They may increase the probability that someone will have poor outcomes in the future.

How many people in NSW have a particular risk factor (e.g disability, child abuse/neglect, not employed)?

Where are they demographically (i.e. what is their age, sex, income level)?

Where are they located (i.e. in what region or district)?

Why was the FACSIAR Economics Need Model developed?

In the past, DCJ could not reliably estimate how many people need our services. Single sources of data, such as ABS surveys or the Census, are limited in the information they can provide because they only relate to specific areas (e.g. health, income or safety). Administrative data is also limited as it only provides information about existing clients.

The Need Model addresses this problem by merging information from many different survey datasets on to the Census dataset. This gives us a holistic view of people and households with complex needs.

How can the FACSIAR Economics Need Model be used?

DCJ clients tend to have complex needs, that is, they are affected by more than one risk factor. Figure 1 shows conceptually how different risk factors can intersect and overlap.

The Need Model can estimate how many people are affected by specific risk factors or by a combination of risk factors and the district they live in.

Figure 2 shows an estimate of how many people experience child abuse and neglect or mental illness, and how many people experience both these risk factors. This is just one example of the type of information the Need Model can estimate. Understanding how many people in NSW have multiple risk factors helps us identify how many people are likely to require our services.

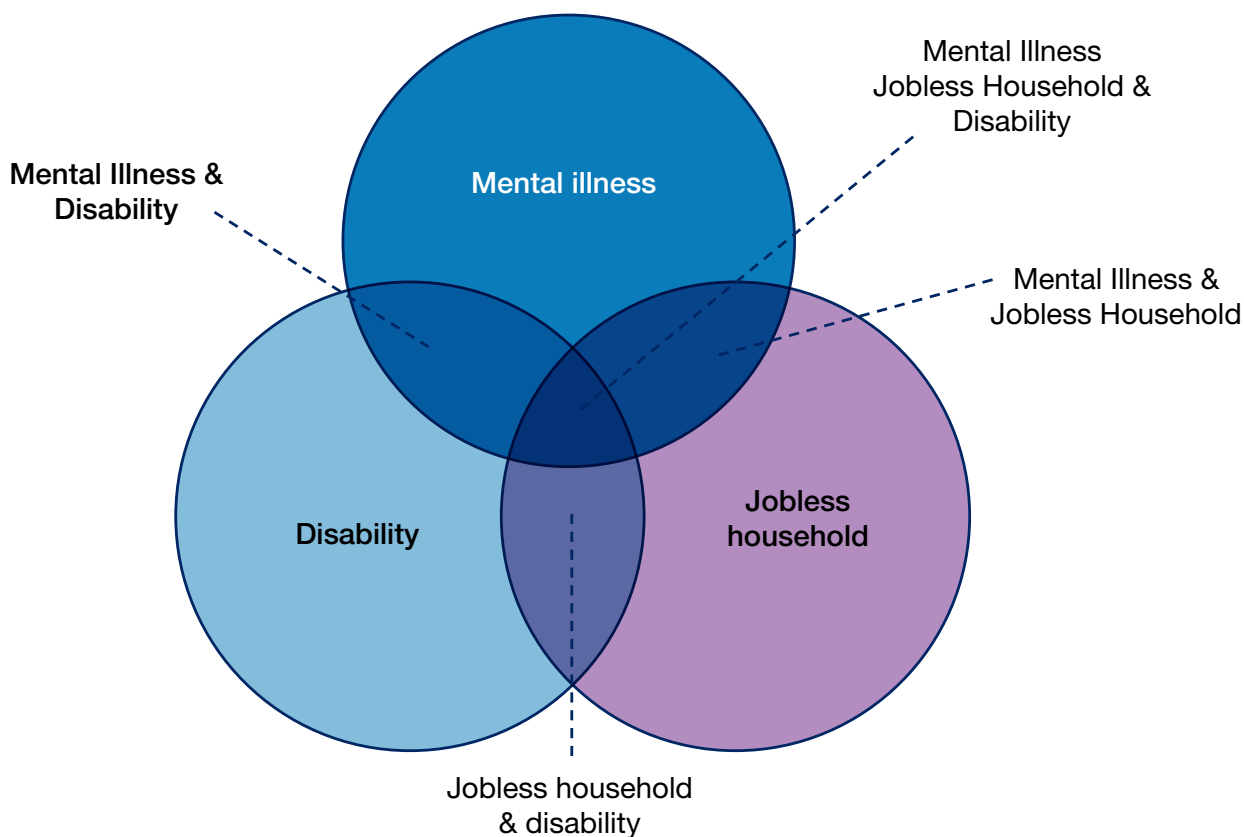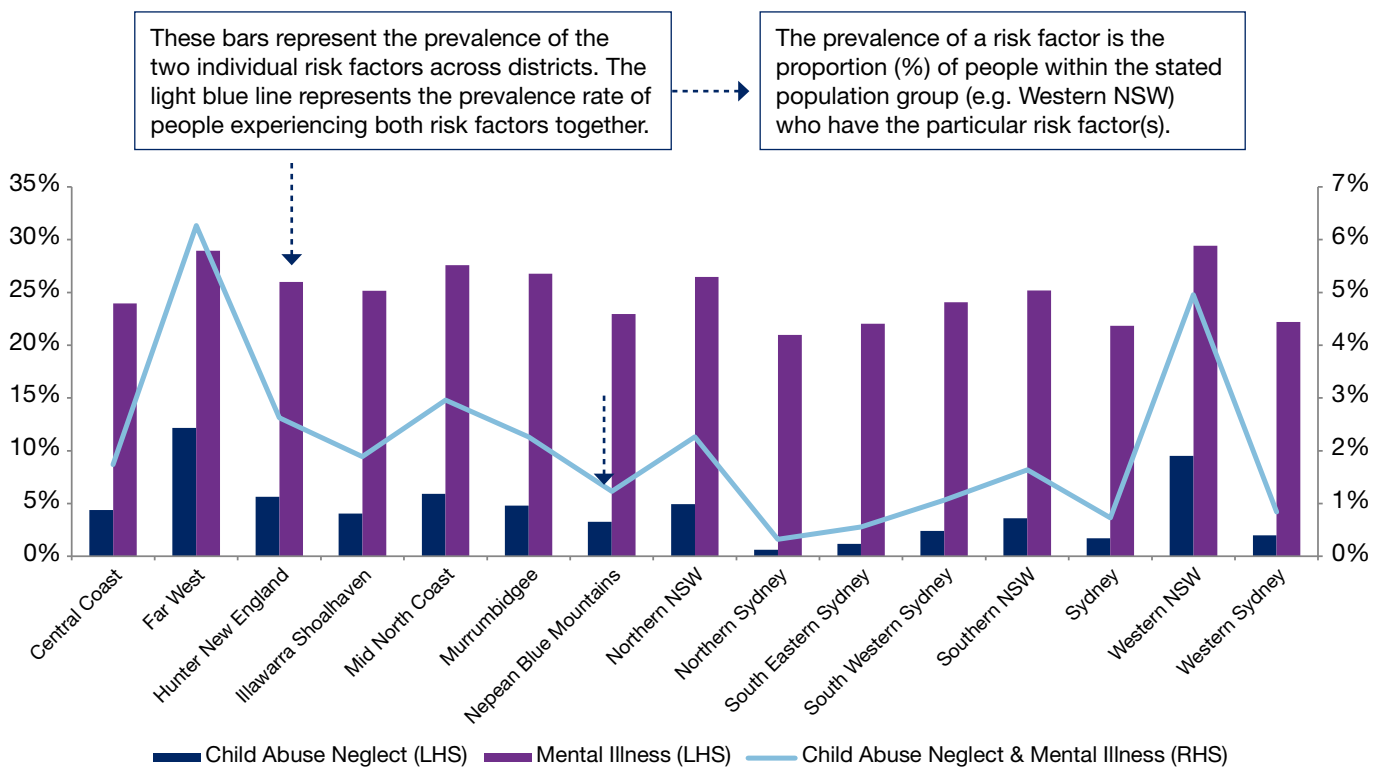**Figure 1. Example of multiple risk factors**

Figure 2. Experience of child/abuse neglect and mental illness by FACS District (all households)

The Need Model helps us to compare risk factors and combinations of risk factors across Districts (see Figure 2). This enables us to have a better understanding of where DCJ services are needed.

The Need Model also allows us to segment risk factors by the personal and household characteristics available in the Census data. This means we can estimate the prevalence groups and sub-groups in the NSW population who may require DCJ services.

What are the benefits of the FACSIAR Economics Need Model?

The Need Model enables us to understand the extent and nature of need in the NSW community. This can lead to more effective decision-making about how to respond to people's needs.
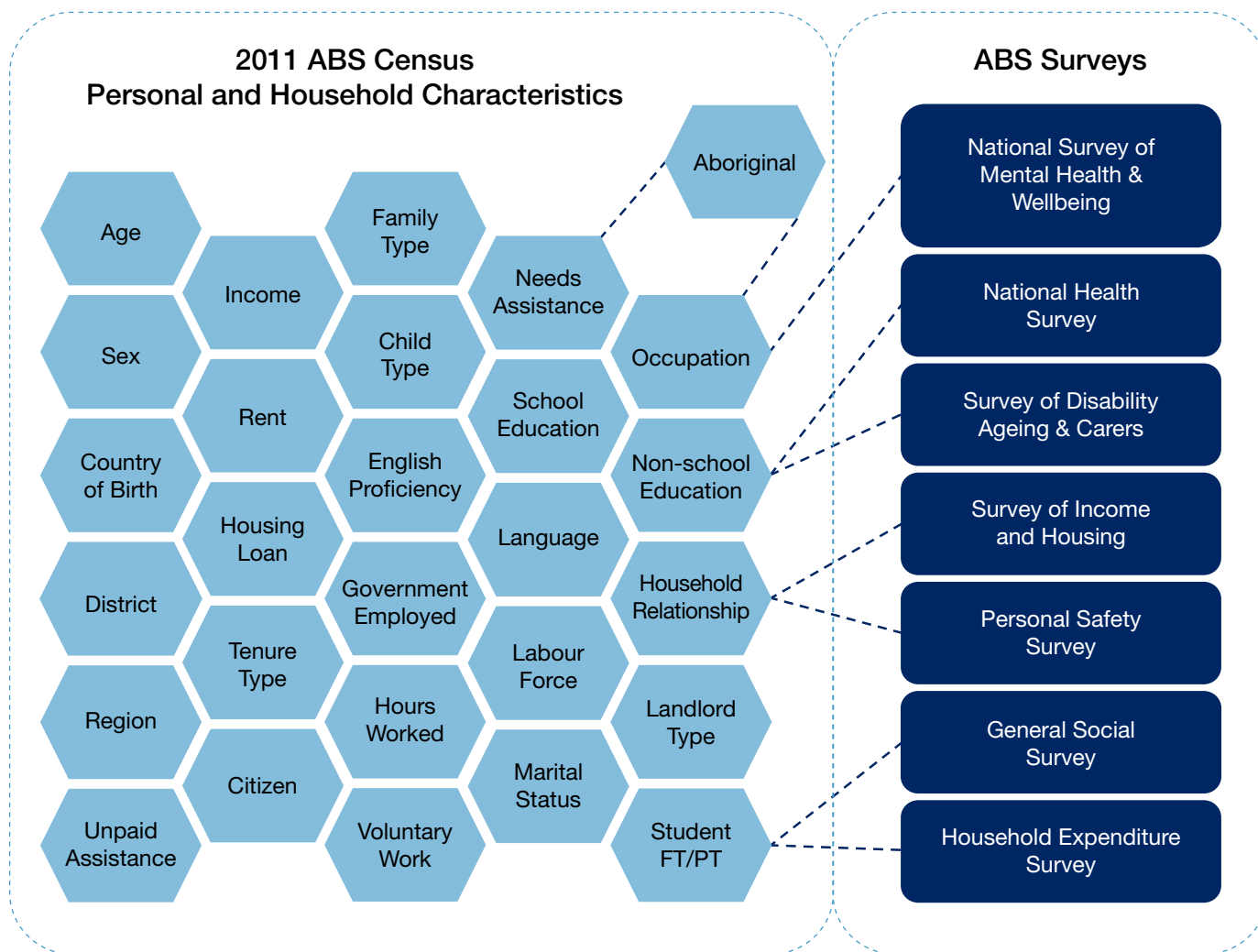
The Need Model supports DCJ to:

- understand the personal and household characteristics and risk profile of the NSW community so we can better respond to people's needs

- better understand who our clients and potential clients are so we can tailor services to them

- compare population characteristics across districts so we have a better understanding of where DCJ services are needed

- understand current trends and forecast future trends in the need for services so we can more effectively allocate limited resources

- understand gaps in service provision

- inform budgeting over the medium and long-term so we can ensure there are sufficient resources for people who will need services in the future

How was the FACSIAR Economics Need Model built?

The Need Model was built by merging ABS Census data with different ABS Surveys (see Figure 3). We used the personal and household characteristics of a 1% sample of the 2011 Census to make up the base data file. Data from ABS Surveys was then used to define risk factors. The prevalence of these risk factors was merged onto the Census data and applied to the population counts. This enables us to estimate the number of people or households with any given risk factor or combination of risk factors.

Figure 3. Building the FACSIAR Economics Need Model

What's next for the FACSIAR Economics Need Model?

The Need Model will be updated using 2016 Census data. The next version of the model will contain more detailed information about geographical areas and Aboriginal people and households. This future update will be built inside the ABS DataLab.

The current version of the Need Model has 18 geographical regions across NSW. The next version will have 36 geographical areas, which will each combine around 3 or 4 Local Government Areas. This will better enable DCJ to target programs and services to smaller areas.

The current version of the model includes external information for Aboriginal people and households. This is because the Census and survey datasets used to build the model did not contain information on Aboriginal identification. The next version will include better quality information for Aboriginal people and households. This information will enable us to provide more reliable estimates of the characteristics, needs and risk factors of Aboriginal people and households in NSW.

More information

To find out more about the Need Model and how you can use it in your work, please contact FACSIAR:
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