

Ministry of Health Disability Directorate

Wellbeing and service contact outcomes
for disabled people:
MidCentral region and New Zealand

August 2020

Acknowledgements

The authors would like to thank representatives from the Ministry of Health and the Advisory Group who assisted with peer review for this report, and many others who provided peer review comments on specific sections or advice supporting the analysis.

Statistics NZ disclaimer

The results in this document are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand.

The opinions, findings, recommendations, and conclusions expressed in this document are those of the author(s), not Statistics NZ.

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1. Executive summary

This report presents a quantitative analysis of outcomes for people allocated disability support services¹ (DSS) in the MidCentral DHB (MidCentral) region **prior to** the implementation of Mana Whaikaha. Mana Whaikaha is a prototype of a transformed disability support system that was introduced in the MidCentral area only, on 1 October 2018. Mana Whaikaha is based on the Enabling Good Lives (EGL) vision and principles and aims to give disabled people and their family and whānau more choice and control over their lives and the supports they receive, and to improve their wellbeing outcomes.

The analysis in this report uses administrative and survey data from Statistics NZ's Integrated Data Infrastructure (IDI) and seeks to address four key questions:

1. What outcomes were disabled people in the MidCentral area achieving before the disability support system was transformed on 1 October 2018?
2. How are these outcomes distributed by: age group, gender, disability type, support needs level and ethnicity?
3. How do these outcomes compare to disabled people in other areas of New Zealand?
4. How do these outcomes compare to non-disabled people in the MidCentral area?

Along with participant and whānau surveys and interviews, this analysis will help to inform the baseline of the Ministry's longitudinal evaluation of outcomes for Mana Whaikaha. The evaluation will focus on specific outcome areas where Mana Whaikaha is expected to achieve change over the 3 year evaluation period. These outcome areas will vary for different population groups (for example, between children, young people and adults). The Ministry and Mana Whaikaha will determine which indicators are appropriate for evaluating Mana Whaikaha's impact.

For the outcomes that are a focus of the evaluation, the baseline elements were planned to be repeated 18 months after Mana Whaikaha was implemented (the COVID-19 pandemic has affected this) and again after three years. The outcomes will be compared with baseline outcomes to provide a picture of where Mana Whaikaha is making a difference.

The Ministry of Health (the Ministry) commissioned EY to assess the feasibility of potential outcomes indicators and analysis cohorts for the outcomes framework,

¹ This includes disabled people allocated a range of disability support services including behaviour support, respite, carer support, supported living, community residential, choices in community living, community day, individualised funding, enhanced individualised funding, regional intellectual disability supported accommodation, younger people in aged care services, family funded care, home and community support. Ministry of Health funded services excluded from this analysis include child development services, Enabling Good Lives Waikato, environmental support (including equipment and modification), sensory (hearing and vision) services, hospital-based assessment, treatment and rehabilitation. This report is based on information about services *allocated* to people by Needs Assessment and Service Co-ordination organisations. It does not report on services *used*. Not included are people with long term chronic conditions aged under 65 years and older people who have services funded by their District Health Board.

and to undertake baseline analysis of administrative and population survey based indicators using the IDI.

1.1 Approach

Potential indicators were first mapped to the outcomes framework developed for Mana Whaikaha and then assessed for validity, reliability, comparability and feasibility. Some outcomes in the framework were not able to be mapped to administrative data. These tended to be for outcomes of a more subjective nature, which will be specifically addressed in the qualitative interviews and survey elements of the longitudinal evaluation.

Baseline analysis of outcomes and service contact indicators was performed for MidCentral and national populations. Indicators were summarised over a historic 3 year period (in most cases, from 1 July 2015 to 30 June 2018). While outcomes were mapped to both administrative data and population survey data, such as the Disability Survey and the General Social Survey, the survey data was excluded from analysis of the MidCentral population as there were very few MidCentral survey responses.

Outcome and service contact indicators described in this analysis include:

- ▶ Early Childhood Education participation
- ▶ B4 School Check outcomes
- ▶ School education
- ▶ Post-school education and training
- ▶ Ambulatory sensitive (avoidable) hospitalisations
- ▶ Injury related emergency department contacts and hospitalisations
- ▶ Chronic health conditions
- ▶ Mental health service contact and treatment
- ▶ Oranga Tamariki contact
- ▶ Family units and relationships
- ▶ Employment rates (parental and disabled individuals)
- ▶ Benefit receipt and additional income support
- ▶ Residential services
- ▶ Driver licence rates
- ▶ Police recorded offending and victimisation

Findings have been grouped by age groups loosely corresponding to lifecourse stages, recognising that lifecourse stages are important influences on service usage patterns and outcomes.

1.2 Key findings from analysis

Findings from **population survey data** for New Zealand DSS clients indicate that the majority of adult DSS respondents and parents / caregivers of DSS children reported moderate to high levels of life satisfaction and life worthwhileness (sense of purpose), and the majority of DSS children were rated as having good to excellent health. However, life satisfaction levels for adult DSS respondents were lower than for the broader population, and there were multiple areas where

wellbeing appears lower for DSS clients compared to the non-DSS population. In particular:

- ▶ Health
- ▶ Income adequacy and material wellbeing
- ▶ Social connectedness and relationships
- ▶ Employment (for adult DSS respondents)
- ▶ Carer health and stress (for DSS children)

A subset of respondents also described unmet support service needs around living activities and at school.

Findings from **administrative data** highlight similar areas of disparity in outcome and service contact indicators for disabled people and their families in the MidCentral area. They also highlight areas where the profile of service contact and lifecourse transitions differs significantly from that of the non-disabled population in MidCentral. Key areas of difference include:

- ▶ **More frequent health service contact**, including a significantly higher proportion of DSS children and adults with ambulatory sensitive hospitalisations (considered potentially avoidable), polypharmacy, and a higher proportion of DSS children with referrals from B4 School Checks.
- ▶ **More frequent use of income support and indicators of financial pressure.** For DSS children, a higher proportion are cared for by sole parents, parents without employment income and/or are supported by benefit and other Ministry of Social Development (MSD) income support payments. The majority of DSS young people and adults rely on benefit and other MSD income support payments.
- ▶ **Different patterns of engagement with education**, with DSS young people much more likely to remain in school post age 18 up to age 21, less likely to enrol in post-school education and with lower levels of formal school leaving qualifications than non-DSS young people in MidCentral. More than half of DSS children receive additional support while at school.
- ▶ **Higher rates of transition into residential services** for DSS young people in MidCentral compared to DSS young people in other areas of New Zealand.
- ▶ **Low levels of employment** for DSS young people and adults, both in MidCentral and nationally.
- ▶ **Higher rates of involvement in Care and Protection reports of concern and offences** for MidCentral DSS children.
- ▶ **School use of standdowns and suspensions** affecting a small but significant proportion of DSS children in MidCentral. The standdown rate for 5-14 year olds is higher than for both other MidCentral children and other DSS children outside MidCentral.

- ▶ **Lower levels of drivers licencing** for DSS adults, implying greater reliance on alternative transport options.

Further variation was observed for the MidCentral DSS population by gender, ethnicity, disability type and SPA levels.

Figure 1 highlights some key outcome and service contact indicator comparisons between MidCentral DSS clients, other people in the MidCentral region and DSS clients in the rest of New Zealand outside the MidCentral region. Further information for MidCentral DSS clients is described by age group in Section 4, with information for national DSS clients described in Appendix H.

Figure 1: Selected outcome and service contact indicators for MidCentral DSS clients, other DSS clients in New Zealand and other MidCentral people who are not DSS clients

Outcome and service contact indicator	MidCentral DSS clients	DSS clients outside MidCentral	Other MidCentral people ²
Health service contact Proportion of children aged 5-14 with Ambulatory Sensitive Hospitalisations over a 3 year period	21%	17%	4%
Family income Proportion of children aged 5-14 with parent/caregiver(s) with employment income for at least one year over a 3 year period	65%	75%	87%
Transitions to residential services Proportion of young people aged 15-24 who transitioned into residential services over a 3 year period	9%	4%	N/A
Education and employment Proportion of young people aged 15-24 in education, employment or training for some / all of the 3 year period	65%	70%	96%
Employment and income Proportion of adults aged 25-64 with employment income over \$5k for at least one year over a 3 year period	9%	12%	79%
Transport Proportion of adults aged 25-64 with a full driver licence	20%	20%	83%

² MidCentral population who are not DSS clients

1.3 A guide to this report

This report sets out the background, approach and key findings from the:

1. Feasibility assessment of potential baseline outcomes indicators and analysis cohorts
2. Baseline outcomes analysis of administrative and population survey based indicators, using Statistics NZ's Integrated Data Infrastructure (IDI)

A guide to the main sections of this report:

- ▶ **Section 2** provides further information around Mana Whaikaha, the evaluation framework and how this baseline analysis will support ongoing monitoring and evaluation.
- ▶ **Section 3** outlines the data sources and population cohorts considered for analysis, and the criteria used to assess the feasibility of potential outcome indicators.
- ▶ **Section 4** sets out high level findings around the feasibility of potential outcomes indicators.
- ▶ **Section 5** describes findings from administrative data around baseline outcomes and service contact, for people allocated DSS funding and their families in the MidCentral area.
- ▶ **Section 6** describes findings from national population surveys around wellbeing indicators.

Appendices set out findings from administrative data around baseline outcomes and service contact for the national DSS population, as well as further information on references and methodology.

1.4 Limitations and future areas for investigation

The findings set out in this report are based on quantitative data from administrative and population survey datasets in the IDI. While this includes a broad range of indicators, there are many significant aspects of the complex and dynamic lifecourse experiences of disabled people and their whānau that are not described at all (or only described to a limited extent) by this data³.

We recommend that readers consider the Mana Whaikaha baseline survey report, which explores the lived experience of disabled people and their whānau in MidCentral.

³ Other considerations around the use of administrative data are highlighted in Appendix D.

Future areas of work which are planned to be undertaken by the Ministry as part of the Mana Whaikaha outcomes evaluation include:

- ▶ Identify which outcome areas are expected to be impacted by Mana Whaikaha over the 3 year evaluation period and determine which indicators can be used to evaluate Mana Whaikaha's impact on these outcome areas.
- ▶ Collect survey and interview information from participants and their whānau midway through Mana Whaikaha's implementation and after 3 years post implementation.
- ▶ Update administrative data based indicators supporting the evaluation, midway through Mana Whaikaha's implementation and after 3 years post implementation.
- ▶ Compare outcome and service contact indicators during and/or at the end of prototype period with baseline rates and identify differences that are potentially attributable to Mana Whaikaha.

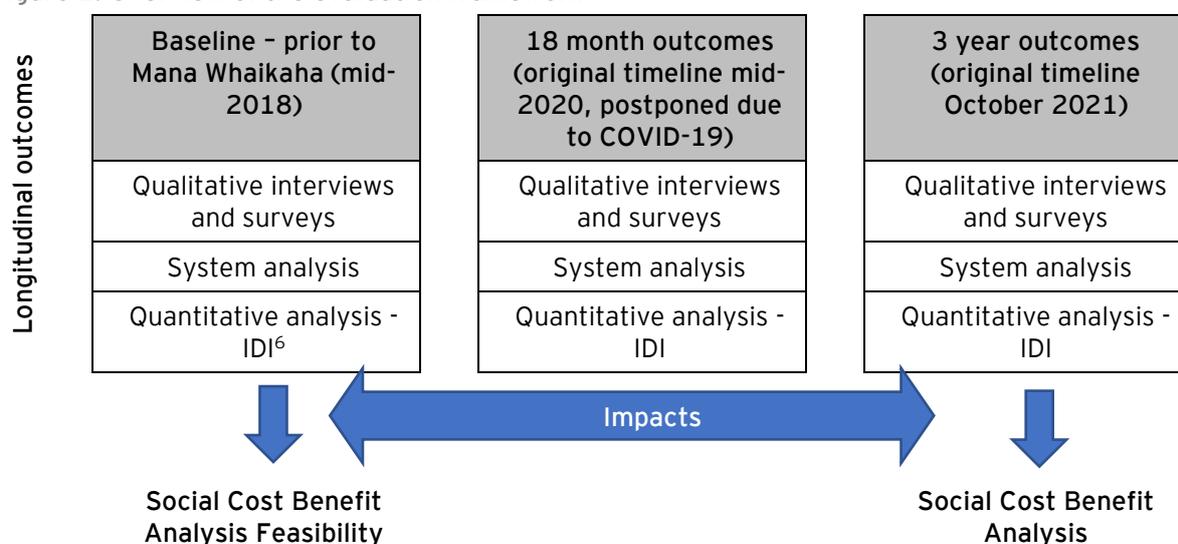
2. Introduction

2.1 Background

A prototype of a transformed disability support system, Mana Whaikaha, was introduced in one region, the MidCentral DHB region⁴ (MidCentral), on 1 October 2018 for Ministry of Health funded disability support services⁵. The transformed system is based on the Enabling Good Lives (EGL) vision and principles. It aims to give disabled people and their family/whānau more options and decision-making authority about their supports and lives, to improve their wellbeing outcomes, and to create a more cost-effective disability support system.

Mana Whaikaha requires ongoing monitoring and evaluating to help stakeholders understand if the objectives for the transformed system are being achieved, and to what extent, where improvements are needed, and if and how the approach should be adapted or expanded.

Figure 2: Overview of the evaluation framework



As described in the Figure 2 diagram above, the evaluation has two key inter-related components:

⁴ The MidCentral DHB region includes the following districts: Horowhenua, Manawatu, Palmerston North city, Tararua, and the Otaki ward of the Kapiti Coast district.

⁵ This includes disabled people allocated a range of disability support services including behaviour support, respite, carer support, supported living, community residential, choices in community living, community day, individualised funding, enhanced individualised funding, regional intellectual disability supported accommodation, younger people in aged care services, family funded care, home and community support. Ministry of Health funded services excluded from this analysis include child development services, Enabling Good Lives Waikato, environmental support (including equipment and modification), sensory (hearing and vision) services, hospital-based assessment, treatment and rehabilitation. This report is based on information about services *allocated* to people by Needs Assessment and Service Coordination organisations. It does not report on services *used*. Not included are people with long term chronic conditions aged under 65 years and older people who have services funded by their District Health Board.

⁶ The IDI stands for the Integrated Data Infrastructure. The IDI is a linked longitudinal dataset that combines unit-record administrative information from a range of agencies and organisations. The IDI is maintained by Statistics New Zealand under strict privacy and confidentiality protocols.

- ▶ Longitudinal outcomes evaluation
 - ▶ to determine what difference Mana Whaikaha is making in terms of quality of experience and wellbeing outcomes for disabled people and their whānau
 - ▶ to determine how the system is changing over time and to what effect
- ▶ Social cost benefit analysis (SCBA) to value the impact of Mana Whaikaha.

In addition, an implementation evaluation will be used to support the 'Try, Learn and Adjust' approach being adopted for Mana Whaikaha and to help drive meaningful change throughout the prototype period.

The Ministry commissioned EY to undertake the quantitative analysis component of the longitudinal outcome's baseline evaluation and the feasibility assessment of a social cost benefit analysis model. This report is limited to findings from the quantitative analysis component for the baseline evaluation.

The quantitative analysis uses linked administrative data in Statistics NZ's Integrated Data Infrastructure to describe wellbeing outcomes and service contact experienced by disabled people and their family/whānau in the MidCentral area prior to the introduction of Mana Whaikaha. Along with participant and whānau surveys and interviews, this analysis will help to inform the baseline of the Ministry's longitudinal evaluation of outcomes for Mana Whaikaha.

The evaluation will focus on specific outcome areas where Mana Whaikaha is expected to achieve change over the 3 year evaluation period. These outcome areas will vary for different population groups (for example, between children, young people and adults). The Ministry and Mana Whaikaha intend to determine which indicators are appropriate for evaluating Mana Whaikaha's impact on these outcome areas and for each population group.

These evaluation outcome indicators were planned to be measured 18 months after Mana Whaikaha was implemented (this has been affected by the COVID-19 pandemic) and again after 3 years. Participant and whānau surveys and interviews, along with administrative data (where appropriate) will be used to capture updated information. Differences that are potentially attributable to the prototype will be identified by comparing outcome and service contact indicators during and/or at the end of prototype period with outcome and service contact indicators pre-prototype commencement.

The findings presented in this report are based on information relating to people allocated Ministry funded disability support services¹ (DSS) by a Needs Assessment and Service Co-ordination organisation⁷ (NASC). The information is derived from

⁷ This includes disabled people allocated a range of disability support services including behaviour support, respite, carer support, supported living, community residential, choices in community living, community day, individualised funding, enhanced individualised funding, regional intellectual disability supported accommodation, younger people in aged care services, family funded care, home and community support. Ministry of Health funded services excluded from this analysis include child development services, Enabling Good Lives Waikato, environmental support (including equipment and modification), sensory (hearing and vision) services, hospital-based assessment, treatment and rehabilitation. This report is based on information about services allocated to people by Needs Assessment and Service Co-ordination organisations. It does not report on services used. Not included are people with long term chronic conditions aged under 65 years and older people who have services funded by their District Health Board.

the Ministry's DSS Information System which records information about the allocation of a range of services to people allocated DSS funding. It is important to note that this report is not based on information for all disabled New Zealanders, and its findings may not be representative of the experiences of the broader New Zealand disabled population.

2.2 Purpose

This report summarises findings from two work phases:

1. Feasibility assessment of potential baseline outcomes indicators and analysis cohorts
2. Baseline outcomes analysis of administrative and population survey based indicators, using Statistics NZ's Integrated Data Infrastructure (IDI)

The analysis findings will support **understanding of baseline outcomes prior to Mana Whaikaha and ongoing Ministry monitoring and evaluation**. Findings will help stakeholders understand if the objectives for the transformed system are being achieved, to what extent and where improvements are needed, and if and how the approach should be adapted or expanded.

A second purpose of the outcome indicators and baseline analysis is to **describe the characteristics and outcomes of the broader population across New Zealand**. This information will help to validate the baseline profile of Mana Whaikaha participants and can inform baseline outcome estimates for populations outside the Mana Whaikaha cohort. A greater range of data sources can be used for this purpose, since some sources (such as linked population surveys) have feasible response counts at a national level but not at the MidCentral level.

3. Data sources and assessment criteria

3.1 Data sources available

The following data sources were considered as potential sources of information on MidCentral/Mana Whaikaha and/or the broader New Zealand population supported by disability funding:

1. **Baseline (prior to Mana Whaikaha) survey data.** Survey responses were collected before Mana Whaikaha started and additional responses were planned to be collected at 18 months and after three years. The planned 18 month surveys were postponed due to the COVID-19 pandemic and timing of future surveys is still to be determined. This data provides a cross-sectional view of the profile of participants across all outcome domains. It is an important source of information on Mana Whaikaha participant outcomes in domains described by self-reported, behavioural and preference-based measures, as these cannot be described by administrative and survey datasets.
2. **Mana Whaikaha monitoring data.** Other sources of information collected through the program may also help to describe in-depth outcomes experienced by participants.
3. **Population surveys linked within the IDI,** including the Disability Survey and General Social Surveys. These cross-sectional surveys provide a reasonable number of indicators across the outcome domains. The limited number of disability support clients who responded or whose household members responded means that this data can only be used to describe the point-in-time profile of disability support clients at a national level.
4. **Census 2013 data in the IDI.** Provides a cross-sectional view of the profile of participants across some outcome domains and is a key source of information on households as at 2013, both for Mana Whaikaha participants and the national disability support client population. Census 2018 data was not yet available in the IDI when this project was undertaken.
5. **Administrative datasets in the IDI.** Provides a longitudinal view of service contact which helps to describe specific outcome domains for both Mana Whaikaha participants and the national disability support client population. Examples include employment, income and benefit support, education enrolment and attainment.
6. **Other health datasets which are not in the IDI,** such as Child Development Service and screening data, can be potentially linked with disability support client data to describe health system related characteristics of Mana Whaikaha and broader population groups. The Ministry is investigating the potential scope of this information.

The feasibility assessment considered indicators from sources 1-5, while the current state and baseline outcomes analysis focuses in this report on information

from linked administrative and population survey datasets within the IDI (sources 3-5).

3.2 Outcome indicator assessment criteria

Key criteria used to assess the potential of available data to help describe participant outcomes prior to Mana Whaikaha's commencement are listed below:

- ▶ **Validity** - does the indicator reflect the underlying outcome it is intended to measure? Is it aligned with the Mana Whaikaha outcome framework and intervention logic?
- ▶ **Acceptance** - is the indicator considered relevant, reasonable and straightforward to interpret by stakeholders, in particular for people with disabilities and their whānau?
- ▶ **Reliability/completeness** - does the supporting data provide reasonable coverage for the population groups with disabilities, in the MidCentral region and for other groups of interest? Is the data overly influenced by variations in work and/or recording practices (i.e. across different users or agency sites)?
- ▶ **Comparability** - has the underlying data been recorded in a reasonably consistent fashion over time, and will it continue to be available in the future? i.e. does the indicator reflect actual shifts in the underlying outcome of interest over a 1 to 3-year period, while not being unduly impacted by changes in policy, work and/or recording practices over time?
- ▶ **Feasibility** - is the data available in a timely manner, and can it be segmented for key subgroups (e.g. by location, gender and disability type)?
- ▶ **Equity** - can the indicator be used to highlight areas of potential inequities between population groups, and to reflect changes in equity between population groups over the evaluation period?

These criteria were developed with reference to existing Government guidance on assessing potential outcome indicators and general social sector practices in assessing population level indicators, as well as knowledge of variations in the coverage, comparability and validity of data contained in IDI administrative datasets.

3.3 Population groups of interest

The Ministry identified several population dimensions where there was interest in exploring potential variations in service contact and outcomes.

We assessed the feasibility of extracting findings for each subgroup in light of the constraints imposed by confidentiality rules applicable to IDI results, survey response counts and population sizes. Feasibility also varied by indicator, with larger groups required to support meaningful observations for less frequent events. Where possible, we focused on retaining subgroups that appear to experience substantial differences in service contact or outcomes. Confidence interval estimates have been included in our main findings to provide an indication of relative variability across key indicators and populations.

The findings section highlights differences for the following population subgroups:

- ▶ **Age** - Lifecourse stages are important influences on service usage patterns and outcomes. Findings have been grouped by age groups loosely corresponding to lifecourse stages: 0-4 (early childhood), 5-9 (middle childhood), 10-14 (teenage years), 15-19 (late teenage/early adult years), 20-24 (young adulthood), 25-44, 45-64 (middle adulthood) and 65 plus (retirement years).
- ▶ **MidCentral DHB region**- Differences between DSS clients living in the MidCentral DHB region versus other DHB regions, and between DSS clients and the general population residing in the MidCentral DHB region, were considered across all indicators and age groups.
- ▶ **Ethnicity** - Differences across Māori and non-Māori population groups were considered across all indicators, age groups and in/out of MidCentral. The relatively small MidCentral DSS client population (once split by age group) meant that further ethnicity breakdowns were not always feasible.
- ▶ **Gender**
- ▶ **Disability type** - The following categories were used, in prioritised order:
 - ▶ Intellectual
 - ▶ Sensory
 - ▶ Physical
 - ▶ Neurological
 - ▶ Autism Spectrum Disorder
 - ▶ Other

People with intellectual disabilities experience differences to other DSS clients across several health and socioeconomic indicators (as described in the Ministry's *Health indicators for New Zealanders with Intellectual Disability* report⁸). For the MidCentral DSS client population, non-intellectual disability

⁸ Refer to Appendix B for reference details.

types were grouped together due to small counts post segmentation by age group.

- ▶ **Support Package Allocation (SPA) level** - Differences across those with “High” or “Very high” versus “Medium”, “Low” or “Very low” assessed needs levels⁹ were considered across all indicators, age groups and in/out of MidCentral. Only a small proportion of DSS clients have a “low” or “very low” SPA level.

⁹ Assessed needs levels take into account whether or not there are available ‘natural supports’ to assist (such as family member support).

4. Proposed outcome and service contact indicators from feasibility assessment

The table below provides an overview of indicators from the IDI and Mana Whaikaha baseline surveys available to help inform understanding of current state outcomes and service contact for Mana Whaikaha and national DSS clients. Indicators have been mapped to the outcome domains within the draft Mana Whaikaha outcomes framework.

We assessed potentially relevant indicators against the criteria outlined in section 2.2 and have highlighted where there are considerations around the validity, reliability/completeness, comparability and/or feasibility of using these indicators to describe the population and identify changes over time. In general:

- ▶ Administrative data within the IDI provides longitudinal information and can feasibly be used for both Mana Whaikaha and broader DSS client populations. Care is required when interpreting analysis results as there can be some degree of variation introduced by differences in service provision, recording practices and coverage for different population groups. It is important to note that most indicators are based on service provision and so may relate to, but are not direct measures of, wellbeing.
- ▶ The 2013 Census within the IDI provides some additional point-in-time information for both Mana Whaikaha and broader DSS client populations. The 2018 Census, once available, will provide more recent point-in-time information prior to the start of Mana Whaikaha.
- ▶ Population surveys within the IDI, including the General Social Survey (GSS) from 2014 and 2016 and the Disability Survey (DS) from 2013 provide more direct measures of wellbeing, such as self-reported life satisfaction and health. However, they are only available as point-in-time measures and can only be used to describe DSS clients at a national level given the limited numbers of survey respondents who are also DSS clients. They cannot be used to ascertain information for the MidCentral DSS population.

Appendix E sets out our methodology for identifying potential indicators and assessing against the criteria, and Appendix I sets out further detail on our assessment findings for each indicator.

In interpreting these findings, it is important to distinguish between the use of indicators:

1. For the purpose of describing outcomes and service contact, including changes over time
2. For the purpose of evaluating the impact of Mana Whaikaha on outcomes and service contact

This assessment focuses on the feasibility of indicators for describing outcomes and service contact over time. It does not identify which indicators are appropriate for evaluating impact attributable to Mana Whaikaha. This is because additional criteria apply for this purpose, and key information required is not yet available. This will be addressed by the Ministry in the future.

Section 7 sets out further information on the criteria and information required for selecting evaluation impact indicators.

Table 1: Overview of indicators from the IDI and Mana Whaikaha baseline surveys assessed as potential outcome and service contact indicators for Mana Whaikaha and national DSS clients

Legend

	Information available
	Information available, with some caveats (for example, considerations around unknown/unmet need, or known variations in service access)
	Information not available

Wellbeing domain	Key outcomes	IND #	Key indicators	Indicator level (Individual DS client or family member, household or community)	Sources			
					Pre-Mana Whaikaha (baseline) Survey	IDI -- Census, General Social Survey, Disability Survey	IDI - Administrative data	Other internal Ministry data sources
Are safe	Are physically safe and live in a positive environment	1.1.1	Variables relating to feelings of safety and security (e.g. "Feeling of safety when at home by yourself at night", "Feeling of safety when walking alone in the neighbourhood after dark", "when using public transport at night").	Individual				
		1.1.2	Victim of a crime in the last 12 months	Individual				
		1.1.3	No neighbourhood problems reported	Individual				
		1.1.4	Variables relating to experience of family violence and child safety: Police Family Violence Centre Oranga Tamariki notifications and Oranga Tamariki interactions (ages 0 to 16)	Individual				
		1.1.5	Feel safe in their home	Individual				
		1.1.6	Feel safe and secure	Individual				
		1.1.7	Criminal offending (court charges, crime offenders, sentencing and remand)	Individual				
Are happy and well	Experience emotional / subjective wellbeing	2.1.1	Life satisfaction indicators	Individual				
		2.1.2	Can express their identity	Individual				
		2.1.3	Are happy with their lives	Individual				
		2.1.4	Trust people who are important to them	Individual				
		2.1.5	Are able to cope with life's challenges	Individual				
		2.1.6	Have a positive self-concept	Individual				
		2.1.7	Know who to ask for help, advice and support if they need it	Individual				

Wellbeing domain	Key outcomes	IND #	Key indicators	Indicator level (Individual DS client or family member, household or community)	Sources			
					Pre-Mana Whaikaha (baseline) Survey	IDI -- Census, General Social Survey, Disability Survey	IDI - Administrative data	Other internal Ministry data sources
	People with disabilities, and those who are caring for them, have the knowledge and resources to maintain and improve their physical and mental health	2.2.1	Have seen a family doctor/GP/nurse/pharmacist/other health care worker in the last 12 months	Individual				
		2.2.2	B4 School Check outcomes	Individual				
		2.2.3	Internal Ministry data on service contact, e.g.: Screening e.g. breast, cervical, bowel cancers GP consultations Child Development Services Health Survey	Individual				Further investigation by the Ministry
		2.2.4	National immunisation register PHO enrolment	Individual				
		2.2.5	IDI hospital indicators of physical and mental health wellbeing - e.g.: - Ambulatory Sensitive Hospitalisations / other indicators of hospital contact indicative of lower health - Accident or injury related hospital contact -Emergency department visits - Chronic conditions dataset (based on selected hospital diagnoses) - Cancer registrations	Individual				
		2.2.6	ACC indicators of injury related claims, incl. accidents in the home	Individual				
		2.2.7	Mortality	Individual				
		2.2.8	Self-assessed health status of individual (and informal carer in Disability Survey)	Individual				
Have What They Need	Have an adequate standard of material wellbeing	3.1.1	Income for individuals and/or their parents/caregivers or household	Individual / Household				
		3.1.2	Benefit receipt levels (in particular Supported Living payments, Disability Allowance and Jobseeker support)	Individual				

Wellbeing domain	Key outcomes	IND #	Key indicators	Indicator level (Individual DS client or family member, household or community)	Sources				
					Pre-Mana Whaikaha (baseline) Survey	IDI -- Census, General Social Survey, Disability Survey	IDI - Administrative data	Other internal Ministry data sources	
		3.1.3	Self-reported adequacy of income to meet everyday needs	Household					
		3.1.4	NZ Deprivation Index, Housing and Income domains from Index of Multiple Deprivation	Community					
		3.1.5	Priority housing register	Household					
		3.1.6	Social housing tenant	Household					
		3.1.7	Frequent address changes (as a possible proxy measure for housing insecurity)	Household					
		3.1.8	Emergency housing	Individual					
		3.1.9	Dwelling characteristics (incl. housing overcrowding)	Household					
		3.1.10	Quality of housing	Household					
		Have a network of quality, responsive supports	3.2.1	Flag for whether disabled adults receive help, and types of support received	Individual				
			3.2.2	Can access all the information they need about support services	Individual				
	3.2.3		Have enough support to achieve what they want	Individual					
	3.2.4		Believes supports respect their culture/beliefs	Individual					
	3.2.5		Believe they are understood when they communicate	Individual					
	3.2.6		Find supports are easy to access and use	Individual					
	3.2.7		Are satisfied overall with services provided	Individual					
	Have the equipment they need to go about their daily lives	3.3	Variables related to the use of and unmet need for special equipment, and types of support received	Individual					
	Have access to private and public transport	3.4.1	Difficulties accessing/using private and public transport for short/long distance travel. Specifics including different types of transport and descriptions of difficulties	Individual					
		3.4.2	Have a driver licence/Motor vehicle registration	Individual					
		3.4.3	Issues of transportation: cost, loss of ability, location, access, time	Individual	Qualitative only				

Wellbeing domain	Key outcomes	IND #	Key indicators	Indicator level (Individual DS client or family member, household or community)	Sources			
					Pre-Mana Whaikaha (baseline) Survey	IDI -- Census, General Social Survey, Disability Survey	IDI - Administrative data	Other internal Ministry data sources
		3.4.4	Indicators of relative geographic access to core services, such as the Access Domain from the Index of Multiple Deprivation	Individual				
Are Developing and Achieving	Are positively engaged with and achieving in education, training, and employment	4.1.1	Variables related to employment experiences, needs and unmet needs.	Individual				
		4.1.2	Variables related to education experiences, needs and unmet needs.					
		4.1.3	Learning support enrolment	Individual				
		4.1.4	Not disengaged with school (i.e. truant, stand-downs etc.)	Individual				
		4.1.5	NCEA level achievement Highest lifetime qualifications	Individual				
		4.1.6	Post-school education	Individual				
		4.1.7	Employment	Individual				
		Access opportunities to build their confidence and develop skills	4.2	Are supported to try new things	Individual			
	Are achieving what they want in their life	4.3	Respondent descriptions of what was most important in their lives and what they would like to achieve, do more of or start doing	Individual				
Belong, Contribute and Are Valued	Are connected to their family, whānau, community, culture, place (tūrangawaewae) and beliefs	5.1.1	Believe supports help them to strengthen their relationship with their community	Individual				
		5.1.2	Right level of extended family contact	Individual				
		5.1.3	In which language(s) could you have a conversation about a lot of everyday things?	Individual				
		5.1.4	Are you descended from a Māori (that is, did you have a Māori birth parent, grandparent or great-grandparent, etc)?	Individual				
		5.1.5	Do you know the name(s) of your iwi (tribe or tribes)?	Individual				
		5.1.6	What is your religion?	Individual				

Wellbeing domain	Key outcomes	IND #	Key indicators	Indicator level (Individual DS client or family member, household or community)	Sources			
					Pre-Mana Whaikaha (baseline) Survey	IDI -- Census, General Social Survey, Disability Survey	IDI - Administrative data	Other internal Ministry data sources
	Do everyday things and use services that are for everyone	5.2	Variables related to participation in community, leisure and recreation activities	Individual				
	Participate in social, recreational and community activities	5.3.1	Variables related to participation in community, leisure and recreation activities	Individual				
		5.3.2	Volunteer work	Individual				
		5.3.3	Are a member of a local group, club or church	Individual				
	Are valued and treated with respect and dignity	5.4.1	Variables related to discrimination	Individual				
		5.4.2	Treated unfairly or had something nasty done to you because of the group you belong to or seem to belong to	Individual				
		5.4.3	Believe people in their lives value what they can do	Individual				
5.4.4		Feel they belong in their community	Individual					
Have Positive Relationships	Have constructive relationships with family and whānau and have positive connections to friends, peers and social networks outside of where they live	6.1.1	Responses around social connectedness	Individual				
		6.1.2	Responses around social contact and loneliness	Individual				
		6.1.3	Believe they are important to their family	Individual				
	Have consensual intimate relationships (if they choose)	6.1.4	When did you last visit friends					
		6.1.5	Have friends outside of where they live					
	Have consensual intimate relationships (if they choose)	6.2.1	Are in a relationship	Individual				
		6.2.2	Live with a partner/spouse	Individual				
		6.2.3	Marriage or de facto status	Individual				
Exercise Choice and Control	Have choice and exercise decision making authority over the supports and services they need to go about their daily lives	7.1.1	Believe they have real choice about the kind of support they receive	Individual				
		7.1.2	Believe support happens at times that work for them	Individual				

Wellbeing domain	Key outcomes	IND #	Key indicators	Indicator level (Individual DS client or family member, household or community)	Sources			
					Pre-Mana Whaikaha (baseline) Survey	IDI -- Census, General Social Survey, Disability Survey	IDI - Administrative data	Other internal Ministry data sources
		7.1.3	Review their situation and make changes as they need to	Individual				
	Make age appropriate choices about their lives (day-to-day and big things) and wellbeing	7.2.1	Can choose what happens in their own life	Individual				
		7.2.2	Can choose where they live					
		7.2.3	Can choose who they live with					
		7.2.4	Can make plans based on what they want					
	7.2.5	Decide when to share their personal information	Individual					
	Pursue their interests	7.3	Variables related to participation in community, leisure and recreation activities	Individual				

5. MidCentral DSS clients - baseline outcomes and service contact

This section summarises key observations from Statistics NZ's Integrated Data Infrastructure (IDI) around lifecourse outcomes and service contact for people living in MidCentral over the period 1 July 2015 to 30 June 2018 who were allocated DSS funding over the year 1 July 2017 to 30 June 2018.

Overall demographics for MidCentral DSS clients

- ▶ Around 1,800 disabled people living in MidCentral were allocated one or more Ministry-funded disability support services over the year to 30 June 2018 ('MidCentral DSS population'). This represents around 1% of the total MidCentral population.
- ▶ People with intellectual disability make up more than half of those people allocated disability support services. Many also have a physical disability. Around half of the children and young people allocated DSS in MidCentral have autism spectrum disorder as a principal disability.
- ▶ The MidCentral region has a lower socioeconomic profile relative to the rest of New Zealand, with 14% of the total MidCentral population living in the 20% least deprived areas of New Zealand while 26% live in the 20% most deprived areas¹⁰.

Within the MidCentral region, people allocated DSS funding are more likely to live in areas with deprivation compared to other MidCentral people: 8% of the MidCentral DSS population live in the 20% least deprived areas while 33% live in the 20% most deprived areas.

Some demographic and socioeconomic characteristics are presented for each age group; refer to the Ministry's 'Demographic Report for Clients Allocated the Ministry of Health's Disability Support Services: 2018 update' for a more detailed demographic description by region and relating to specific service types and by specific disability types.¹¹

In general, differences in outcome and service contact rates that are highlighted in this section as being 'higher', 'lower' or 'significant' are statistically significant at the 95th percentile level. (That is, there is a 95% probability that the difference between the two groups is greater than zero).

Confidence intervals shown in the graphs in this section give an indication of uncertainty around the proportions calculated for MidCentral DSS clients and other groups. Generally speaking, if the confidence interval for MidCentral DSS clients

¹⁰ Deprived areas are drawn from the NZDep2013 Index of Deprivation developed by Otago University. If a region has the same deprivation profile as New Zealand overall then 20% of the population would live in the 20% least deprived areas and another 20% of the population would live in the 20% most deprived areas. Further information can be found at <https://www.otago.ac.nz/wellington/departments/publichealth/research/hirp/otago020194.html>.

¹¹ Figures may differ slightly from those presented in this report, due to the use of a different time period (1 October 2017 to 30 September 2018) and the effects of IDI matching rates and rounding on this report's figures.

does not overlap with that of another population group then there is a 95% probability that there is a difference between the two groups.

Further information on the approach to calculating these results is set out in Appendix F.

5.1 Children aged 0-4 years

Key transitions: The disabled child has a condition that is newly acquired or diagnosed. Parents and family/whānau are supporting the child. This life stage encompasses early childhood development leading up to the start of school.

At 30 June 2018 there were around 30 children aged 0-4 in MidCentral allocated DSS funding over the year to June 2018. Key demographic and socioeconomic characteristics are summarised below.

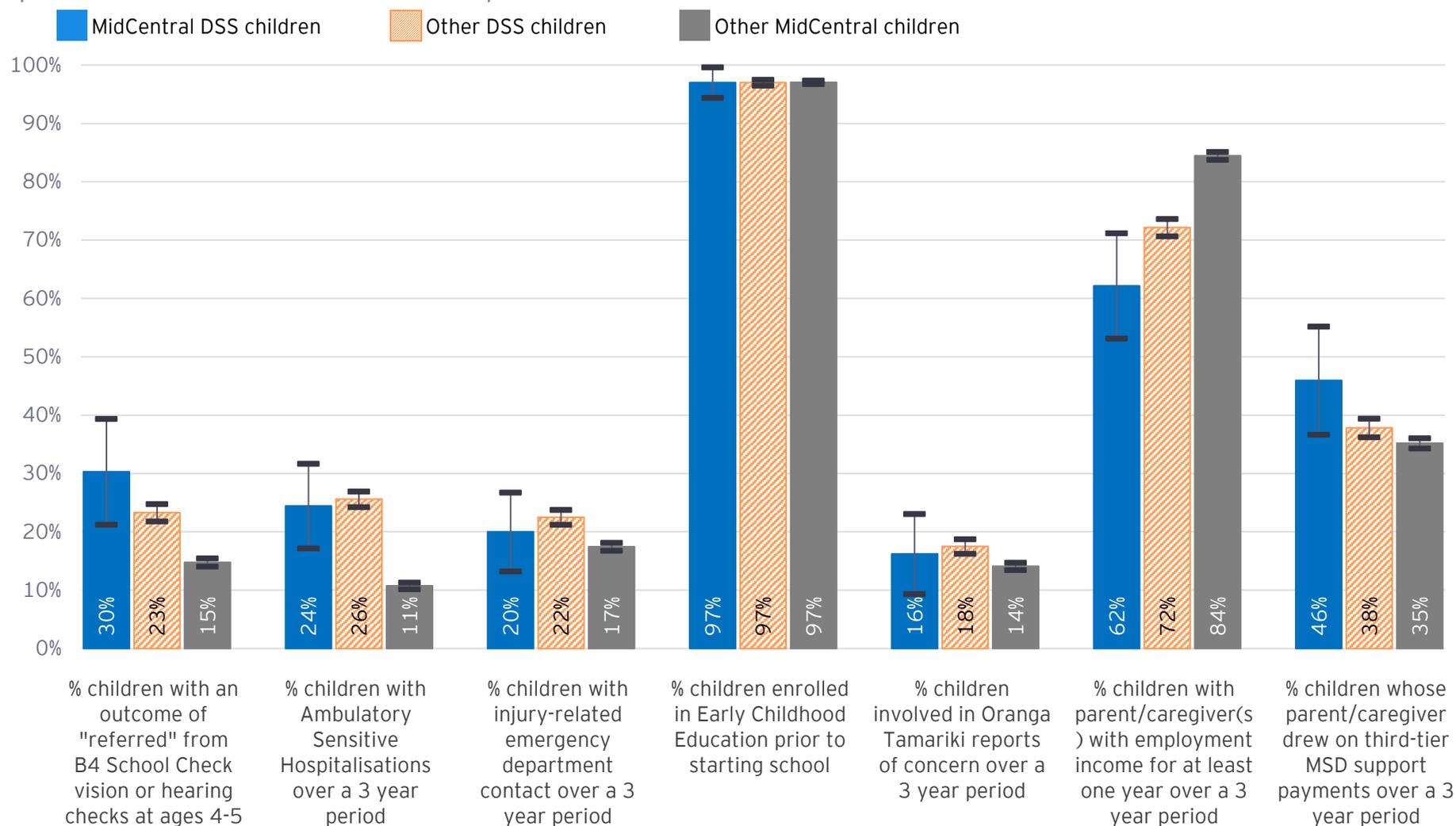
- ▶ The majority have Intellectual (40%) or Autism Spectrum Disorder (40%) as their prioritised disability. Respite (91%) and behavioural (52%) support services are the main NASC disability support service types allocated.
- ▶ Around half live with sole parents with the remaining half linked to two parents/caregivers.

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018¹² for children who were allocated DSS over the 2018 year and were aged 0-4 at the start of the 3 year period (i.e. at 1 July 2015). Note that for some children this will include time prior to them receiving DSS funding.

Note that the relatively small size of this group means that care should be taken when interpreting these observations, particularly for comparisons of subgroups within this population, and for events experienced by a small proportion of the population.

¹² Health indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Figure 3: Comparison of key indicators over the 3 year period to 30 June 2018, for children aged 0-4¹³ allocated DSS and in the MidCentral population - incl. confidence intervals at the 95th percentile level



¹³ Age is at the beginning of the time period.

Perspective	Indicators	Insights for children aged 0-4 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
Child	Early childhood education	<ul style="list-style-type: none"> ▶ Around 97% of children allocated DSS were enrolled in some form of early childhood education prior to starting school¹⁴. This rate is comparable to that of other 4 year old DSS children outside MidCentral (97%) and other MidCentral children (97%).
	B4 School Checks (B4SC)	<ul style="list-style-type: none"> ▶ 30% of children with completed B4SC vision and/or hearing checks had referrals made¹⁵, higher than the proportion of DSS children referred outside MidCentral (23%). DSS children were twice as likely to be referred as other children in MidCentral (15%). ▶ Around 10% of children with completed B4SC dental checks received scores within referral range, lower than the rate for other DSS children (16%) and non-DSS children (14%). ▶ For MidCentral DSS children, rates of referral outcomes for vision and hearing checks were higher for those with intellectual disabilities and high/very high SPA levels and were similar for Māori and non-Māori children. Māori children were twice as likely to receive dental scores within referral range as non-Māori children, reflecting similar differences in the broader Māori and non-Māori child population.
	Ambulatory sensitive (avoidable) hospitalisations	<ul style="list-style-type: none"> ▶ Around 1 in 4 children had ambulatory sensitive hospitalisations over the 3 year period. This was around 2.5 times the rate of the broader 0-4 year-old MidCentral child population.

¹⁴ Based on early childhood education enrolment information provided to the Ministry of Education by parents for children aged 6-10 at 30 June 2018. This information is not yet available for children aged 0-4 as they have not yet started school.

¹⁵ Based on B4 School Check outcomes recorded for children aged 5-9 at 30 June 2018.

Perspective	Indicators	Insights for children aged 0-4 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ For MidCentral DSS children, Māori children, those with an intellectual disability or with high/very high SPA levels were more likely to have had 2 or more ambulatory sensitive hospitalisations over the period.
	Emergency Department (ED) contacts and injury related hospitalisations	<ul style="list-style-type: none"> ▶ 27% of children aged 0-4 years had 2 or more ED contacts over the 3 year period, nearly twice the proportion of other MidCentral 0-4 year-old children (16% had 2 or more ED contacts over the same period). <p>Children aged 0-4 with an intellectual disability or with high/very high SPA levels were around twice as likely to have had 2 or more ED contacts than children allocated DSS aged 0-4 without an intellectual disability or low to medium SPA levels.</p> <ul style="list-style-type: none"> ▶ 1 in 5 had an injury-related ED contact over a 3 year period. This was similar to rates of contact by other MidCentral and DSS children aged 0-4. ▶ A small proportion (11%) had an injury-related hospital treatment over a 3 year period, slightly higher than rates experienced by other DSS children nationally and higher (2 times) than injury-related hospitalisation rates for non-DSS children in MidCentral.
	Oranga Tamariki contact	<p><i>The following observations should be treated as estimates and care taken in interpretation, due to the small number of children who experienced Oranga Tamariki contact.</i></p> <ul style="list-style-type: none"> ▶ Around 16% of children were involved in reports of concern to Oranga Tamariki over the period. This reporting rate was similar to that of other DSS children aged 0-4 (18%) and for the broader 0-4 year old child population in MidCentral (14%). ▶ A very small proportion (less than 2%) were involved in statutory Care and Protection, similar to both the non-DSS MidCentral child population and other DSS children outside MidCentral.

Perspective	Indicators	Insights for children aged 0-4 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Around 14% of children were involved in Police Family Violence Centre notifications to Oranga Tamariki over the period. This rate was higher than for other DSS children outside MidCentral (10%) and to non-DSS children in MidCentral (10%), although it is noted that this difference is not statistically significant as the number of children involved is small and notification rates for this group vary from year to year. ▶ Within the group of MidCentral DSS children aged 0-4 years, Oranga Tamariki reporting rates were higher for those with intellectual disabilities and high/very high SPA levels and generally similar for Māori and non-Māori children.
Parents / family / whānau	Family units and parental employment	<p><i>The following observations around family units should be treated as estimates and care taken in interpretation, due to limitations around the coverage of relationship records in administrative data. Refer to Appendix D for further information.</i></p> <p>For 0-4 year old DSS children in MidCentral as at June 2018:</p> <ul style="list-style-type: none"> ▶ Around half live with sole parents with the remaining half linked to two parents/caregivers. The proportion of this group supported by a sole parent/caregiver is higher than for other children in MidCentral (24%) or other DSS children outside MidCentral (31%), although it is also important to note this is a relatively small group of children - the majority of MidCentral children allocated DSS are school aged. ▶ Children in this age group supported by sole parents were much more likely to require income support for some or all of the 3 year period. ▶ <i>Refer to Appendix H for a description of household changes experienced by DSS children across New Zealand over the 3 year period to June 2018. As the MidCentral child population is relatively small we were unable to extract MidCentral specific figures but note that patterns of household changes are broadly similar to those for other DSS children.</i>

Perspective	Indicators	Insights for children aged 0-4 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
	Benefit income support, social housing and address changes	<ul style="list-style-type: none"> ▶ Just under half (49%) were supported on a main benefit at some point over the 3 year period, and 35% had a parent who received sole parent support for some/all of the period. These rates are slightly higher but broadly comparable to the proportion of other 0-4 year old DSS children outside MidCentral with some level of main benefit support/sole parenting over the same period (37% received some level of main benefit support and 24% received some level of sole parent support). ▶ Around 5% of children lived in social housing for some/all of the period, similar to other MidCentral children. ▶ 62% changed address over the 3 year period, similar to other MidCentral children. ▶ Nearly half (46%) of MidCentral DSS children aged 0-4 had parents/caregivers who drew on third-tier MSD support payments¹⁶, including special needs grants and benefit advances, at some point over a 3 year period. ▶ 89% of children were linked to Child Disability Allowance payments. The Child Disability Allowance is a fortnightly payment made to the main carer of a child or young person with a serious disability. It is paid in recognition of the extra care and attention needed for that child.¹⁷ ▶ Just over half had parents/caregivers in receipt of Accommodation Supplement and an additional 19% received Temporary Additional Support.

¹⁶ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments

¹⁷ This description and further information can be found at MSD's website (<https://www.workandincome.govt.nz/products/a-z-benefits/child-disability-allowance.html>)

5.2 Children aged 5-14 years

Key transitions: The disabled child is progressing through primary, intermediate and secondary school and developing through mid-childhood and teenage years.

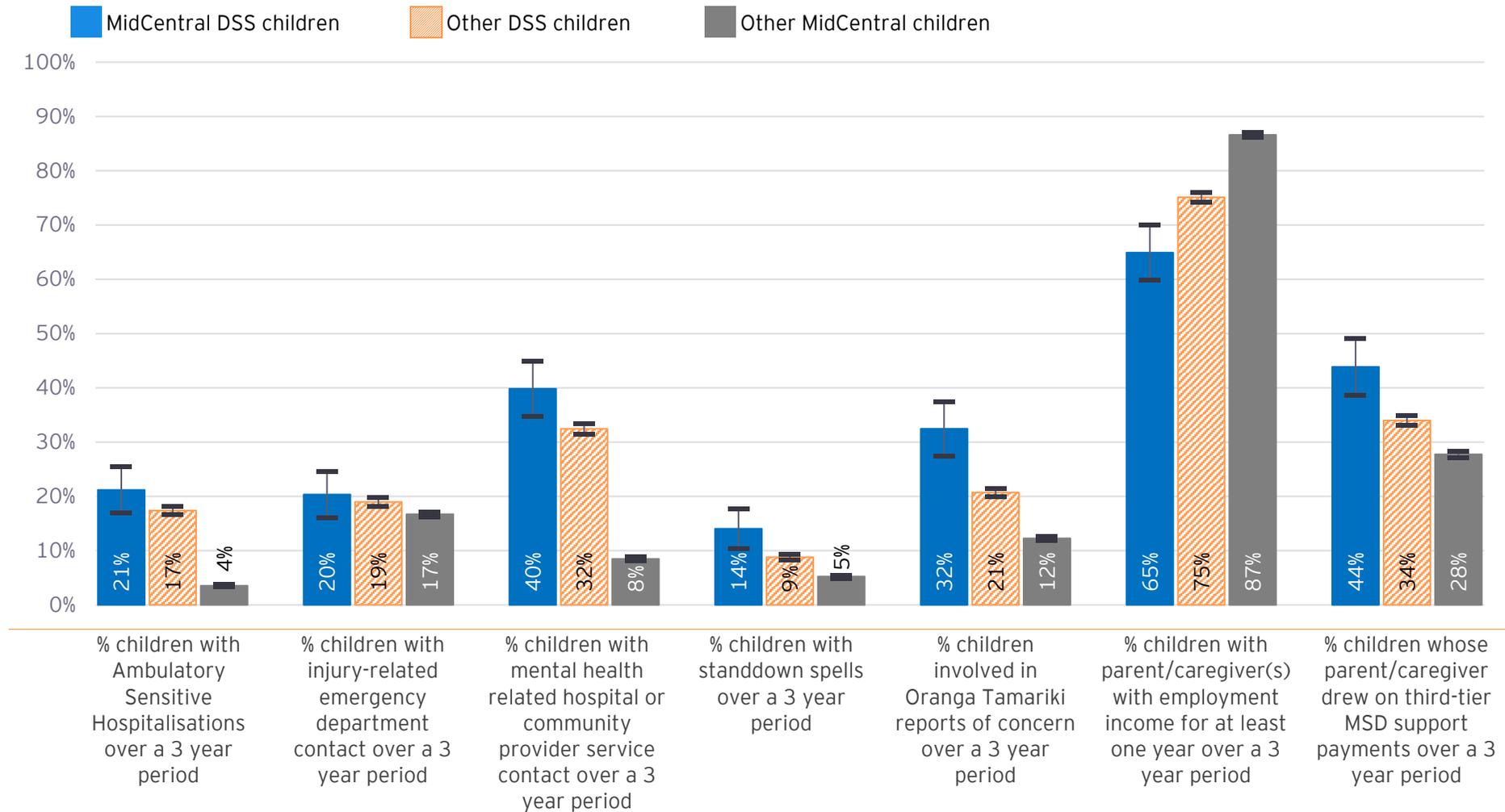
At 30 June 2018 there were around 340 children aged 5-14 in MidCentral allocated DSS funding over the year to June 2018. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have Intellectual (42%) or Autism Spectrum Disorder (53%) as their prioritised disability, followed by 5% with a physical disability. Respite (93%) and behavioural (27%) support services were the most common types allocated through the NASC.
- ▶ Around half live with two parents/caregivers and the remaining half live with sole parents.
- ▶ 8% live in the 20% least deprived areas of NZ while 34% live in the 20% most deprived areas. MidCentral DSS children are more likely to live in areas with deprivation, compared to DSS children in other regions (where 25% live in the 20% most deprived areas) and non-DSS children in MidCentral (where 27% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018¹⁸ for children who were allocated DSS over the 2018 year and were aged 5-14 at the start of the period. Note that for some children this will include time prior to them receiving DSS funding.

¹⁸ Health indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Figure 4: Comparison of key indicators over the 3 year period to 30 June 2018, for children aged 5-14¹⁹ allocated DSS and in the MidCentral population - incl. confidence intervals at the 95th percentile level



¹⁹ Age is at the beginning of the time period.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
Child	School support and disciplinary responses	<ul style="list-style-type: none"> ▶ Around half (52%) of MidCentral DSS children enrolled in school received learning support from the Ministry of Education’s Ongoing Resourcing Scheme (ORS), similar to DSS children in other areas (49%). ORS is for students who have the highest ongoing levels of need for specialist support at school. Outside the DSS child population, around 1% of the non-DSS student population receives ORS²⁰. It is important to note that actual learning support is higher than this once Ministry of Education funded services linked to schools (but not individual children) are included, e.g. funding for teacher’s aides. Schools may also provide support not funded by the Ministry of Education. For DSS children with responses in the 2013 Disability Survey, around 80% had “extra help with schoolwork because of a condition or health problem”. ▶ Around 13% changed school over the period, marginally higher than for other children of that age in MidCentral or for DSS children outside MidCentral (9%). ▶ A small but significant proportion of MidCentral DSS children showed indicators of school disciplinary responses and disengagement, including truancy²¹, standdowns and suspensions. Reflecting differences in the broader student population, male students were several times more likely to be involved in standdowns or truancy than female students. <ul style="list-style-type: none"> ▶ Around 14% of 5-14 year old MidCentral DSS children had standdown spell(s) over the period. After adjusting for gender (70% of the 5-14 year old MidCentral DSS group is male), the standdown rates are 2.6 times higher than for other children of that age in MidCentral, and 1.6 times the rate of 5-14 year old DSS children outside MidCentral (9%).

²⁰ ORS support helps students to join in and learn alongside other students at school. Any student who meets the ORS criteria is included in the scheme. Once a student is in ORS, their funding and support stays with them throughout their time at school. ORS funding and resources are considered to be a contribution to supporting a student’s schooling. This description and further information on ORS can be found at the Ministry of Education’s website (<https://www.education.govt.nz/school/student-support/special-education/ors/>).

²¹ Truancy data is sourced from the Ministry of Education’s student intervention dataset; a ‘truancy spell’ indicates where a student has been referred to the Attendance Service. These rates may differ from those reported by the Ministry of Education as these are based on more granular student attendance data covering a wider range of non-attendance modes.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ 11% of 10-14 year old MidCentral DSS children had truancy spells, similar to other 10-14 year old DSS children outside MidCentral (10%) and marginally higher than for other children of that age in MidCentral (9%). <p>Within the group of MidCentral DSS children, rates were similar across Māori/non-Māori children, SPA levels and disability type.</p>
	Ambulatory sensitive (avoidable) hospitalisations	<ul style="list-style-type: none"> ▶ 1 in 5 children (21%) had ambulatory care sensitive hospitalisations over a three year period. This was around 5 times the rate of the broader 5-14 year old MidCentral child population (4%) and marginally higher than for other similarly aged DSS children (17%). ▶ Within the group of MidCentral DSS children, children with an intellectual disability or with high/very high SPA levels were more likely to have had ambulatory sensitive hospitalisations over a three year period: <ul style="list-style-type: none"> ▶ 24% for children with intellectual disability, compared with 16% for those with other prioritised disability types ▶ 29% for children with high/very high SPA levels, compared with 15% for those with low to medium SPA levels.
	Emergency Department (ED) contacts and injury related hospitalisations	<ul style="list-style-type: none"> ▶ 41% of MidCentral DSS children attended ED at least once over a three year period, with 19% having 2 or more visits to ED over a three year period. This was similar to DSS children in other areas (38% attended ED at least once and 19% had 2 or more visits) but significantly higher than for non-DSS MidCentral children (27% attended ED at least once and around 9% had 2 or more ED contacts over the same period). The difference in ED contact rates appears to be health condition related - MidCentral DSS children had similar rates of injury-related ED contacts as other MidCentral children (around 1 in 5 MidCentral DSS children (20%) had injury-related ED contacts over a 3 year period).

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Overall ED contact rates were higher for children with intellectual disability or high needs, and similar for Māori/non-Māori and male/female children. ▶ A small proportion (3%) had injury related hospitalisations over a 3 year period, lower than rates for DSS children in other areas (6%) and non-DSS MidCentral children (4%).
	Mental health service contact and treatment	<ul style="list-style-type: none"> ▶ 40% of children had contact with mental health services from community providers or hospitals over the three year period. Service contact levels are considerably higher than for similarly aged DSS children outside MidCentral (32%) and for non-DSS children aged 5-14 in MidCentral (8%). Note that this includes some disability-specific health services as well as other mental health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures. ▶ Within the MidCentral DSS 5-14 year old group, service contact rates were higher for non-Māori children (44% compared with 35% for Māori children) and for male children (44% compared with 31% for female children). The difference by gender appears to be linked to disability type, as a higher proportion of male DSS children have ASD.
	Pharmaceuticals	<ul style="list-style-type: none"> ▶ DSS children received treatment from a wider range of pharmaceutical types than other children, with an average of 4.2 pharmaceutical products dispensed compared with 2.5 for non-DSS children over the year to 30 June 2017.
	Oranga Tamariki contact	<ul style="list-style-type: none"> ▶ 32% of DSS children were involved in reports of concern to Oranga Tamariki over the period, around 3 times the rate of similarly aged non-DSS children in MidCentral (12%) and 1.6 times higher than other 5-14 year old DSS clients outside MidCentral (21%). ▶ 8% of children were involved in statutory Care and Protection (CP) over the period, with 4% in out of home care placements at some point over the period. This was significantly higher

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<p>than for the broader 5-14 year old MidCentral child population (where 2% had statutory CP contact and 1% had out of home care placements), and higher than other similarly aged DSS children living outside MidCentral (5% were involved in statutory CP and 3% were in out of home care placements at some point over the three year period).</p> <ul style="list-style-type: none"> ▶ Around 15% of children were involved in Police Family Violence Centre notifications to Oranga Tamariki over the period, twice the rate of involvement of other MidCentral children. ▶ Within the group of MidCentral DSS children aged 5-14, those with an intellectual disability experienced higher rates of CP contact: 38% were involved in reports of concern (compared with 24% of other MidCentral DSS children) and 10% were involved in statutory CP (compared with less than 3% of other DSS children). CP contact rates were similar between Māori/non-Māori children and by SPA levels.
	Offences	<ul style="list-style-type: none"> ▶ A small proportion (11%) of MidCentral DSS children aged 10-14 were involved in Police-recorded offences over a 3 year period. Almost all were associated with low-level offences²² and were from male children. <p>These rates were higher than for other similarly aged DSS children outside MidCentral and for non-DSS children in MidCentral (5% involved in offences).</p>
Parents / family / whānau	Family units and parental employment	<p><i>The following observations around family units should be treated as estimates and care taken in interpretation, due to limitations around the coverage of relationship records in administrative data. Refer to Appendix D for further information.</i></p> <p>For 5-14 year old DSS children living in MidCentral at June 2018:</p>

²² In this report, offences are categorised as low level or high level based on the seriousness scores assigned by the Ministry of Justice. Seriousness scores are a way of quantifying the relative seriousness of offences. The majority of low level offences have a seriousness score less than 100. Further information about seriousness scores is available at <https://www.justice.govt.nz/assets/Documents/Publications/2016-FAQs-Seriousness-Scores2.pdf>.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Around half (48%) live with sole parents with the remaining half linked to two parents/caregivers. ▶ The proportion of this group supported by a sole parent/caregiver is higher than for other children in MidCentral (36%) or other DSS children outside MidCentral (42%). Children in this age group who were supported by sole parents were much more likely to require income support for some/all of the following 3 year period. ▶ Similarly to DSS children in other regions, the proportion supported by two parents/caregivers and two incomes is lower than for the non-DSS child population - 25% compared with 37% for non-DSS MidCentral children. 32% had one parent with employment income and 44% had no parents with employment income. ▶ <i>Refer to Appendix H for a description of household changes experienced by DSS children across New Zealand over the 3 year period to June 2018. As the MidCentral child population is relatively small we were unable to extract MidCentral specific figures but note that patterns of household changes are broadly similar to those for other DSS children.</i>
	Benefit income support, social housing and address changes	<ul style="list-style-type: none"> ▶ Around 44% were supported on a main benefit at some point over the 3 year period, and around 18% had a parent who received sole parent support for some/all of the period. Overall main benefit support rates were higher than for other similarly aged DSS children (33% were supported on a main benefit at some point over the 3 years) or for non-DSS children in MidCentral (26% were supported on a main benefit at some point over the 3 years). ▶ Around 10% of children lived in social housing for some/all of the period, a higher proportion than for other similarly aged MidCentral children (5%). ▶ Address changes over the period were at levels broadly similar to other MidCentral 5-14 year olds.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to June 2018 in MidCentral, compared to other children in MidCentral and other DSS children outside MidCentral - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ A significant proportion (44%) of MidCentral DSS children aged 5-14 had parents/caregivers who drew on third-tier MSD support payments²³ over a 3 year period, higher than for other MidCentral children (28%) and for DSS children in other areas (34%).% These payments are intended to be one-off payments to support families in financial hardship. A small subset (2%) were flagged as emergency housing payments. ▶ 90% of children were linked to MSD Child Disability Allowance payments, slightly higher than for DSS children outside MidCentral (84%) and significantly higher than for other children in MidCentral (8%). The Child Disability Allowance is a fortnightly payment made to the main carer of a child or young person with a serious disability. It is paid in recognition of the extra care and attention needed for that child.²⁴ ▶ 8% of DSS children were linked to Unsupported Child Benefit payments - these children are living with caregivers other than their parent(s) for a sustained period of time. This compares with 5% for DSS children living in other areas and 3% of other children living in MidCentral. ▶ Around half had parents/caregivers in receipt of Accommodation Supplement and an additional 11% received Temporary Additional Support. Rates of Accommodation Supplement receipt are higher than for DSS children in other areas (35%) and for other 5-14 year old children living in MidCentral (32%). Temporary Additional Support rates are similar across these other groups.

²³ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

²⁴ This description and further information can be found at MSD's website (<https://www.workandincome.govt.nz/products/a-z-benefits/child-disability-allowance.html>)

5.3 Young people aged 15-24 years

Key transitions: The disabled young person is progressing through secondary school/vocational training/tertiary study, progressing through teenage years and embarking on adult life. Some transition into different living situations, while others continue to live with family. Parents and family/whānau supporting young people through key development and transition years.

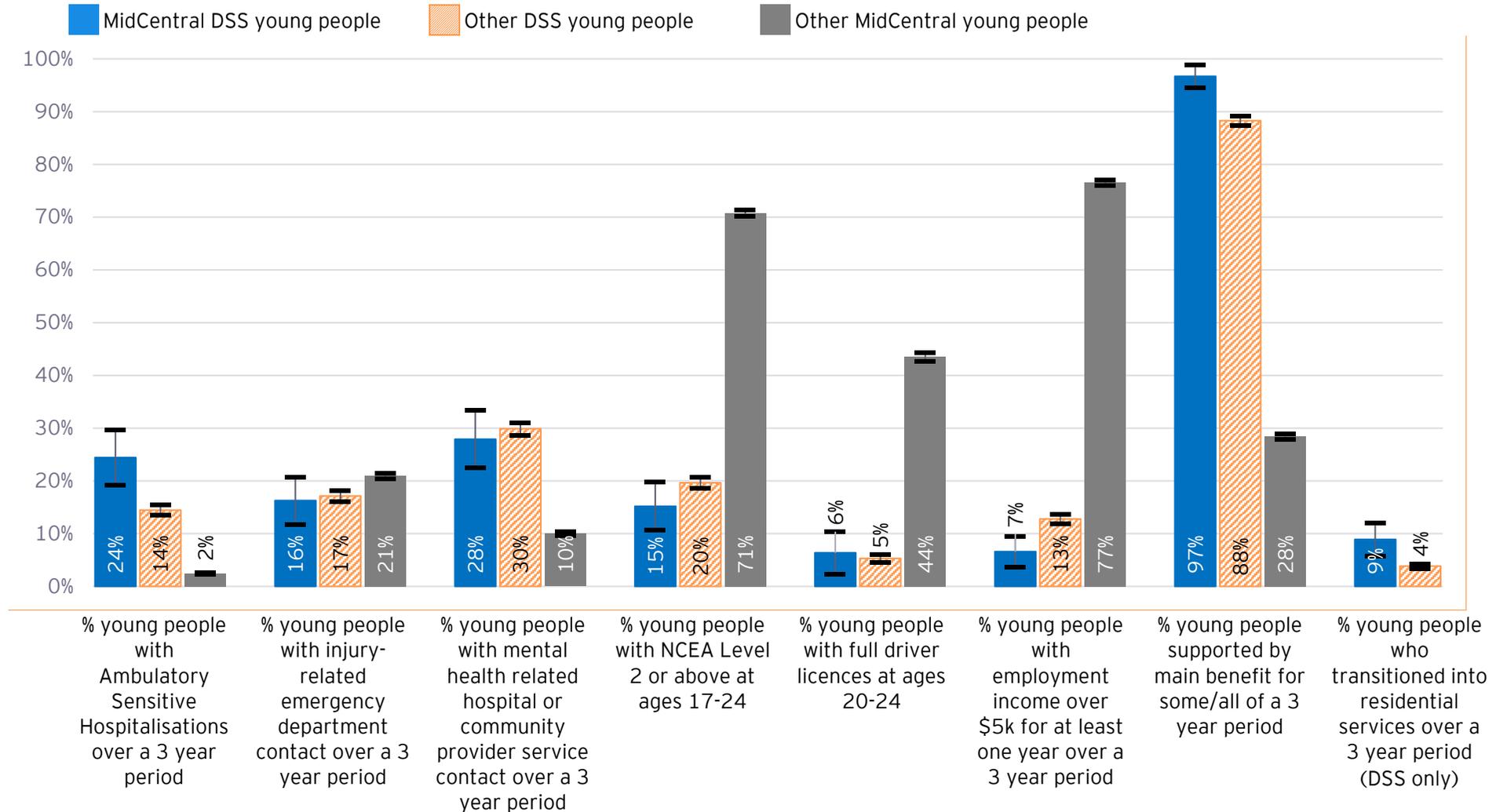
At 30 June 2018 there were around 300 young people aged 15-24 allocated DSS funding in MidCentral over the year to June 2018. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have Intellectual (65%) or Autism Spectrum Disorder (24%) as their prioritised disability, followed by 7% with a physical disability.
- ▶ Respite (78%), home and community support (39%), supported living (13%), residential services (13%) and behavioural (10%) support services were key services allocated by the NASC.
- ▶ Apart from those in residential services (13%), family members living with the young person are likely to be the main carer for most of the remaining group (as suggested by responses from DSS clients aged 15-24 to the 2013 Disability Survey).
- ▶ 12% live in the 20% least deprived areas of NZ while 33% live in the 20% most deprived areas. MidCentral DSS young people are more likely to live in areas with deprivation, compared to DSS young people in other regions (where 25% live in the 20% most deprived areas) and non-DSS young people in MidCentral (where 26% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018²⁵ for MidCentral young people who were allocated DSS over the 2018 year and were aged 15-24 at the start of the 3 year period. Note that for some young people this will include time prior to them receiving DSS funding.

²⁵ Health and tertiary education indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Figure 5: Comparison of key indicators over the 3 year period to 30 June 2018, for young people aged 15-24²⁶ allocated DSS and in the MidCentral population - incl. confidence intervals at the 95th percentile level



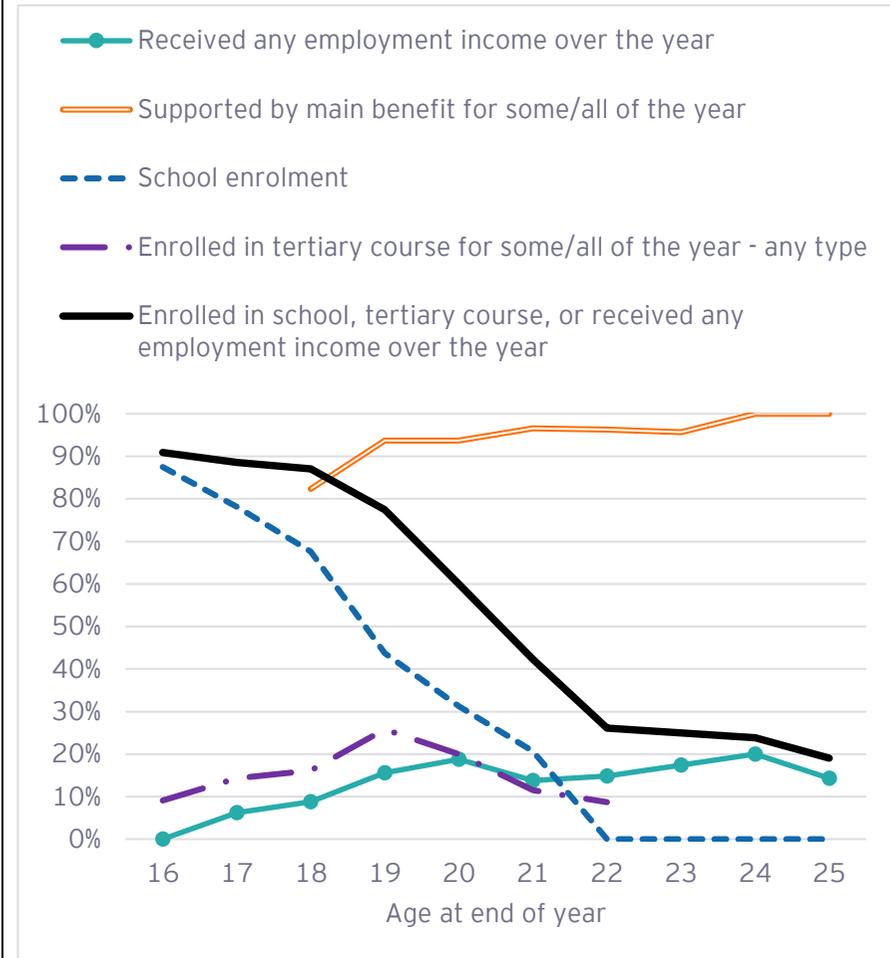
²⁶ Age is at the beginning of the time period

Figure 6 illustrates the proportion of MidCentral DSS young people in education, employment and receiving income support at various ages over the period 1 July 2014 to 30 June 2017.

The majority of MidCentral DSS young people aged 16-20 are engaged in education or employment, with most enrolled in school or tertiary courses. This proportion decreases to around 20% in education or with employment by age 25.

- ▶ Young people in MidCentral allocated DSS are more likely to remain enrolled in school for longer than their non-DSS counterparts, and complete on average an extra 1.5 years of school.
 - ▶ At age 16, around 90% of DSS young people are enrolled in school.
 - ▶ By age 19, around 45% of DSS young people remain enrolled in school. This reduces to 31% of 20 year old and 21% of 21 year old DSS young people, with students finishing by age 22.
- ▶ Around 25% of MidCentral DSS young people aged 15-19 enrolled in tertiary education for some or all of the 3 year period, e.g. colleges, polytechnics and universities. Most enrolments related to courses classed as NZQA level 1, 2 or 3, with enrolments reducing as people entered their 20s. (Note that students can enrol in some tertiary courses while attending school.)

Figure 6: Proportion of MidCentral DSS young people in education, employment and supported by benefit, by age, over the years ending 30 June 2015, 30 June 2016 and 30 June 2017^{27 28}



²⁷ The group of MidCentral DSS young people is relatively small and so the proportion involved in post-school education and employment can vary between ages and year-on-year. Comparable observations for the national population of DSS young people are set out in Appendix H. These are based on a significantly larger group so show less variability between ages and across years.

²⁸ A small proportion of MidCentral DSS young people were enrolled in tertiary education at ages 23, 24 and 25. These rates have been suppressed due to small counts.

- ▶ Most MidCentral DSS young people were partially or wholly reliant on income support once 18 years or older and able to receive adult benefit payments. Around 1 in 4 (24%) of MidCentral DSS young people aged 15-24 reported employment income for some or all of the 3 year period, however in most cases these were relatively small amounts. A smaller number (less than 10%) reported employment income of more than \$5,000 over a year.

Further information is described in the section below.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
Young people	School enrolment and school leaving qualifications	<ul style="list-style-type: none"> ▶ Young people in MidCentral allocated DSS are more likely to remain enrolled in school for longer than their non-DSS counterparts, and complete on average an extra 1.5 years of school. Figure 6 shows the proportion of MidCentral DSS young people enrolled in school for each age at 30 June 2017: <ul style="list-style-type: none"> ▶ At age 16, around 90% of all DSS and non-DSS young people are enrolled in school. ▶ After age 18 the majority of non-DSS young people have left school (around 4% remain at age 19), while just under half of DSS young people remain enrolled in school. This reduces to 31% of 20 year old and 21% of 21 year old MidCentral DSS young people. MidCentral DSS school enrolment rates are similar to those of DSS young people in other regions. ▶ Taking qualifications from schools and tertiary education providers (e.g. colleges, polytechnics) into account, around 20% of MidCentral DSS young people aged 20-24 at June 2018 had NCEA level 2 or equivalent qualifications, similar to other DSS young people and significantly lower than non-DSS young people in MidCentral (around 80% had NCEA level 2 or equivalent qualifications). ▶ It is important to note that there is considerable variation between young people, with disability type and SPA levels being two factors that are associated with differing levels of school leaving qualification. For MidCentral DSS young people aged 17-24 at June 2018, for example: <ul style="list-style-type: none"> ▶ 13% of those with intellectual disability had NCEA level 2 or equivalent qualifications, compared with 36% of other DSS young people ▶ 15% of those with high/very high SPA levels had NCEA level 2 or equivalent qualifications, compared with 36% for those with low to medium SPA levels.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<p>Careful consideration needs to be made around whether NCEA results are appropriate indicators of education achievement for all DSS young people given varying levels of support needs and education enrolment profiles, as well as each young person's own individual learning goals.</p> <ul style="list-style-type: none"> ▶ More broadly, the Ministry of Education notes that socioeconomic factors and individual school characteristics also have an impact on education achievement of young people across NZ.²⁹
	Post school education and training	<ul style="list-style-type: none"> ▶ Around 25% of MidCentral DSS young people aged 15-19 were enrolled in tertiary education and training for some/all of the three year period, e.g. colleges, polytechnics and universities. (Note that students can enrol in some tertiary courses while attending school.) This reduces as people enter their 20s, with around 9% of young people aged 20-24 enrolled in tertiary education or training at some point over the 3 year period. <ul style="list-style-type: none"> ▶ Most enrolments relate to courses classed as NZQA level 1, 2 or 3 (levels which are covered by NCEA). Approximately 3 out of 4 of the young people who undertook tertiary education enrolled in one of these courses. ▶ Overall enrolment rates for 15-19 year olds were slightly lower for women (21%), those with intellectual disability types (21%) and high/very high SPA levels (22%) and were similar between Māori and non-Māori. ▶ MidCentral enrolment rates were lower than for DSS young people in other areas, across all course types. Around 34% of 15-19 year old DSS young people outside MidCentral and 25% of 20-24 year olds were enrolled in tertiary education or training placements at some point over a 3 year period.

²⁹ 'School leavers with NCEA level 2 or above', Ministry of Education, sourced from: <https://www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1781>

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<ul style="list-style-type: none"> ▶ They were also significantly lower than for non-DSS young people in MidCentral: <ul style="list-style-type: none"> ▶ Around 70% of 15-19 year olds were enrolled in tertiary education or training placements at some point over a 3 year period, including 33% in bachelor level courses, 14% in Tertiary Education Commission (TEC) industry training placements and 20% in level 4-7 courses. ▶ Around 54% of 20-24 year olds were enrolled in tertiary education at some point over a 3 year period
	Employment rates	<p>Most MidCentral DSS young people were partially or wholly reliant on benefit income support over a 3 year period once 18 years or older and able to receive benefit support as adults. Some reported employment income, however in most cases these were relatively small amounts.</p> <ul style="list-style-type: none"> ▶ Around 1 in 4 (24%) of MidCentral DSS young people aged 15-24 reported any employment income over a three year period. Most of this group reported relatively small income amounts; a smaller number (7%) reported employment income of more than \$5,000 over at least one year in the period. Employment rates were lower for Māori, women and significantly lower for young people with high/very high SPA levels. ▶ A similar proportion of DSS 15-24 year olds outside MidCentral reported any employment income, although a higher proportion (13%) reported income of more than \$5,000 over at least one year in the period. ▶ Employment rates in the broader non-DSS population were substantially higher; in MidCentral, 87% of 15-24 year olds reported any income and 82% reported income of more than \$5,000 over at least one year over a 3 year period.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
	Driver licences	<ul style="list-style-type: none"> ▶ A small number (6%) of DSS young people aged 20-24 in MidCentral had their full driver licence at June 2018. This compares to 5% of similarly aged DSS young people outside MidCentral and is considerably lower than for non-DSS young people in MidCentral (44% have a current full licence).
	Ambulatory sensitive hospitalisations, ED contacts and injury related hospitalisations	<ul style="list-style-type: none"> ▶ Around 1 in 4 (24%) of MidCentral DSS young people had ambulatory sensitive hospitalisations (ASH) over a 3 year period, around 1.9 times more likely than for other DSS young people outside MidCentral (14%) and 12 times more likely than for non-DSS MidCentral young people (2%). ▶ ASH rates were higher for young people with an intellectual disability or high/very high SPA level (around 2-2.5 times than of those without an intellectual disability or medium SPA level). ▶ ED contact and injury related hospitalisation rates were broadly similar to those in the DSS and MidCentral populations.
	Mental health service contact and treatment	<ul style="list-style-type: none"> ▶ Just under 1 in 3 MC DSS young people (28%) had contact with mental health services from community providers or hospitals over the three year period. Mental health service contact rates are similar to those of other DSS young people outside MidCentral (30%). Mental health service provider contact for non-DSS young people in MidCentral is less frequent with 10% having at least 1 contact over the same three year period. Note that this includes some disability-specific health services as well as other mental health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<ul style="list-style-type: none"> ▶ Within the MidCentral DSS 15-24 year old group, service contact rates were broadly similar across Māori / non-Māori and by gender, disability type and SPA level. ▶ A higher proportion of young people with ASD and high/very high SPA levels had mental health related pharmaceutical treatment over the period (46% and 43% respectively, compared with 38% of young people with intellectual disability and 28% of those with low/medium SPA levels).
	Pharmaceuticals	<ul style="list-style-type: none"> ▶ DSS young people received treatment from a wider range of pharmaceutical types than other young people, with an average of 4.6 pharmaceutical products dispensed compared with 2.7 for non-DSS young people over the year to 30 June 2017.
	Offences	<ul style="list-style-type: none"> ▶ Around 10% of 15-24 year old MidCentral DSS young people were involved in Police recorded offences over a 3 year period, mostly low-seriousness offending³⁰. In contrast to under 15s, offending rates were similar to other DSS and non-DSS MidCentral young people. ▶ Offending rates were 2-3 times higher for young men, Māori young people, those with intellectual disability and low/medium SPA levels.
	Safety - victimisation	<ul style="list-style-type: none"> ▶ 12% of MidCentral DSS young people were recorded by Police as being a victim of crime over the 3 year period. This rate was similar to other MidCentral young people and DSS young people in other areas.

³⁰ In this report, offences are categorised as low level or high level based on the seriousness scores assigned by the Ministry of Justice. Seriousness scores are a way of quantifying the relative seriousness of offences. The majority of low level offences have a seriousness score less than 100. Further information about seriousness scores is available at <https://www.justice.govt.nz/assets/Documents/Publications/2016-FAQs-Seriousness-Scores2.pdf>.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
Family / whānau and household	Family units, parental employment and relationships	<p><i>The following observations around family units should be treated as estimates and care taken in interpretation, due to limitations around the coverage of relationship records in administrative data. Refer to Appendix D for further information.</i></p> <p>MidCentral DSS young people for whom we have information on parent links (ages 15-17) had similar household profiles to that of younger MidCentral DSS children:</p> <ul style="list-style-type: none"> ▶ 57% lived with sole parents and were much more likely to require some level of income support. ▶ 17% had two parents/caregivers with employment income, 36% had one parent with employment income and 48% had no parents with employment income. <p>A very small proportion of MidCentral DSS young people aged 20-24 (less than 3%) reported having children or being in a formal relationship over the 3 year period. "Formal relationships" include marriages and civil unions as well as de facto relationships reported to MSD (as part of receiving benefits) over the 3 year period.</p> <p>For the broader MidCentral population aged 20-24, 22% reported a formal relationship and 28% reported having children over the 3 year period.</p>
	Transitioning into residential services	<ul style="list-style-type: none"> ▶ Around 8% of 15-19 year old and 23% (1 in 4) of 20-24 year old MidCentral DSS young people lived in residential services for some/all of the year to June 2018. 9% transitioned into residential services for the first time during the 3 year period. They were more than twice as likely to transition than other 15-24 year old young people outside MidCentral (4% transitioned over the 3 year period).

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<ul style="list-style-type: none"> ▶ Within MidCentral, young people with intellectual disabilities and high/very high SPA levels were around 2.5 times as likely to transition into residential services. Māori and non-Māori transition rates appeared broadly similar.
	Benefit income support	<ul style="list-style-type: none"> ▶ Almost all MidCentral DSS young people aged 20-24 received a main benefit for some/all of the 3 year period, the vast majority of these being Supported Living Payments. This was similar to the broader DSS population (a small proportion, 6%, received Jobseeker payments). In comparison, 30% of MidCentral non-DSS young people aged 20-24 received a main benefit for some/all of the same period. ▶ 58% of MidCentral DSS young people aged 20-24 received Disability Allowance payments, a similar rate to other DSS young people outside MidCentral (54%) and significantly higher than non-DSS young people in MidCentral (5%). ▶ Just under 60% of MidCentral DSS young people aged 20-24 received Accommodation Supplement and 8% received Temporary Additional Support. Accommodation Supplement receipt rates are similar to those of other DSS young people outside MidCentral and nearly twice the rate for non-DSS MidCentral young people (32%), while Temporary Additional Support rates are similar to those of non-DSS MidCentral young people. ▶ Around 30% of MidCentral young people aged 20-24 also drew on third-tier MSD support payments³¹ during the 3 year period, a rate 1.4 times higher than for other MidCentral young people (22%). Māori young people were twice as likely to draw on these payments as non-Māori young people.

³¹ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to June 2018 in MidCentral, compared to other young people in MidCentral and other DSS young people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
	Address changes and social housing	<ul style="list-style-type: none"> ▶ The cohort reported fewer residential address changes than other MidCentral young people - around 45% reported no address changes over the 3 year period, compared to 31% of non-DSS MidCentral young people. Non-Māori young people were less likely to report address changes. ▶ 13% of MidCentral DSS young people aged 15-24 lived in social housing and 9% were on the public housing register as priority A or B for some or all of the 3 year period. Social housing tenancy rates are similar to those of the broader DSS population; however a higher proportion of young people were on the priority A/B waitlist compared to DSS young people in other areas (5%). Both social housing tenancy and priority waitlist rates were around 3 times higher than for non-DSS young people in MidCentral.

5.4 Adults aged 25-64 years

Key transitions: Some people in this cohort are transitioning into a new living situation, while others remain at home, with their family, residential services, or other living situation, supported by family/whānau and other key support people (e.g. carers, support workers). People progress through their middle adult years with income, employment, housing, health, relationships with family and friends and connection to community being important areas of wellbeing.

At 30 June 2018 there were around 920 adults aged 25-64 allocated DSS funding in MidCentral over the year to 30 June 2018. Of these, around 325 were aged 25-44 and around 595 were aged 45-64. Key demographic and socioeconomic characteristics are summarised below.

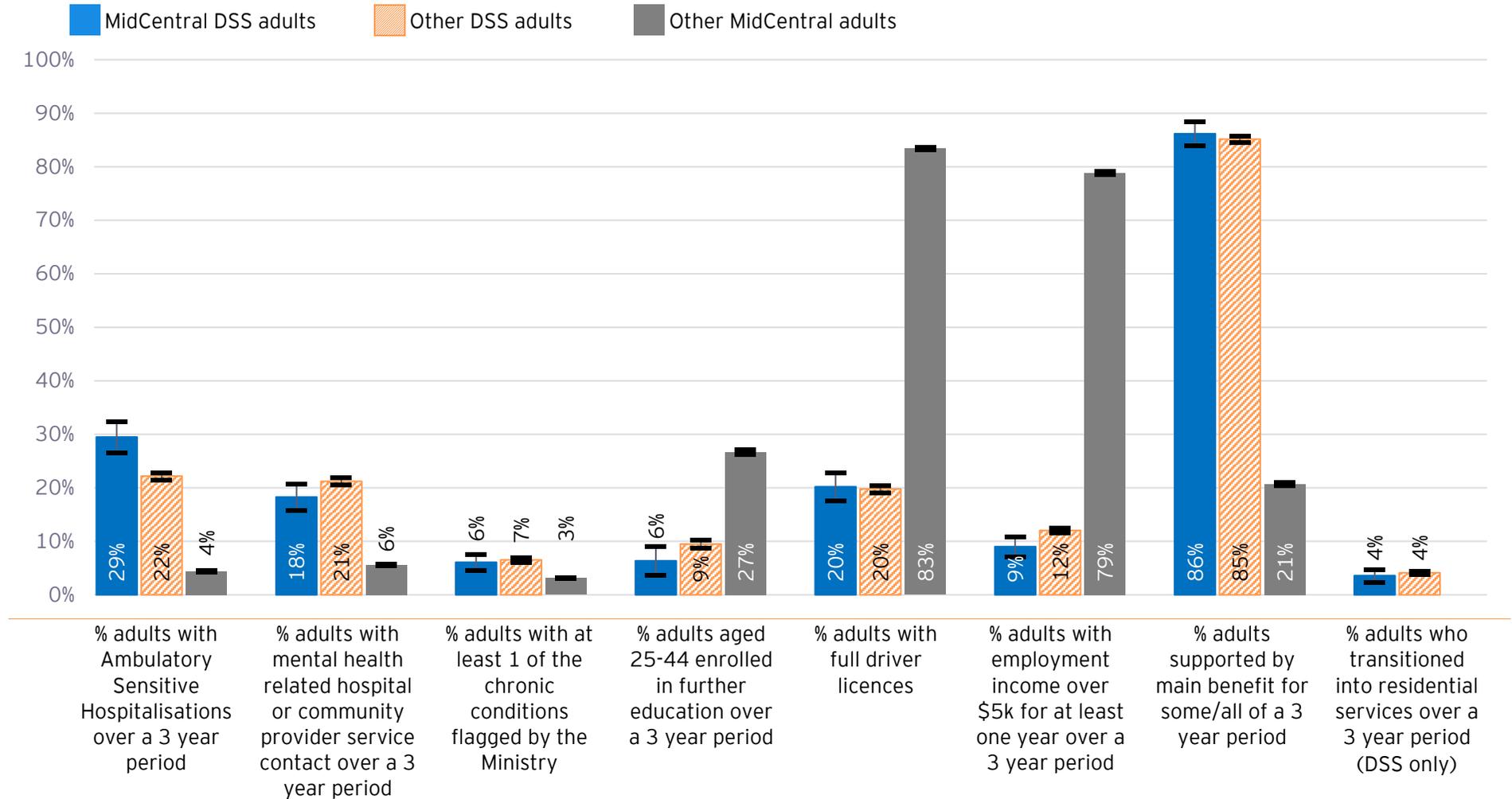
- ▶ The majority have intellectual disability (62%) or physical disability (31%) as their prioritised disability, followed by 3% with a sensory disability. Home and community support (46%), residential services (35%), respite (24%), supported living (20%) and day services (16%) were key service types allocated.
- ▶ At a national level, responses from DSS clients aged 25-64 to the 2013 Disability Survey³² suggest that family members living with the disabled person are the main carer for around half of adult DSS clients. Another 10% have family members as carers who live separately from the respondents. Around 40% are in residential services or have support provided by a non-family member.
- ▶ 8% live in the 20% least deprived areas of NZ while 33% live in the 20% most deprived areas. MidCentral DSS adults aged 25-64 are slightly more likely to live in areas with deprivation compared to DSS adults in other regions (where 30% live in the 20% most deprived areas). They are also more likely to live in areas with deprivation relative to non-DSS adults in MidCentral (where 25% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018³³ for adults who were allocated DSS over the 2018 year and were aged 25-64 at the start of the period. Note that for some people this will include time prior to them receiving DSS funding.

³² Observations from the 2013 Disability Survey for DSS clients should be treated as indicative only, rather than representative of the overall DSS population, as a relatively small number of current and previous DSS clients responded to the surveys and the profile of their demographic and disability related characteristics varies from that of the overall DSS population. Further information on sample bias is described in section 6.

³³ Health and tertiary education indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Figure 7: Comparison of key indicators over the 3 year period to 30 June 2018, for adults aged 25-64 allocated DSS and in the MidCentral population - incl. confidence intervals at the 95th percentile level



Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
Adult	Education	<p>A small proportion of MidCentral DSS adults continued with education or training during the 3 year period to 30 June 2018. The majority of courses were for NZQA levels 1-3. Rates of participation were lower than the national DSS average and significantly lower than those of other MidCentral adults.</p> <ul style="list-style-type: none"> ▶ Around 6% of MidCentral DSS adults aged 25-44 and 2% of 45-64 year olds were enrolled in tertiary education and training during the period. Enrolment rates were higher for women and Māori aged 45-64, and lower for those with intellectual disability and high/very high SPA levels. ▶ Around 9% of DSS adults aged 25-44 and 4% of 45-64 year olds outside MidCentral were enrolled in tertiary education and training during the three year period. ▶ For non-DSS MidCentral adults, 27% of 25-44 year olds and 11% of 45-64 year olds enrolled in tertiary education over the same period with a spread across courses with lower and higher NZQA levels. For example, 6% of 25-44 year olds were enrolled in courses at NZQA levels 1-3, 4% in courses at NZQA levels 5-7, 9% in bachelors level courses and 9% in industry training placements.
	Employment and income	<p>Most MidCentral DSS adults were partially or wholly reliant on benefit income support over a 3 year period. Some reported employment income, however in most cases these were relatively small amounts. Employment patterns are similar to the national DSS population, and substantially lower than the non-DSS population.</p> <ul style="list-style-type: none"> ▶ 28% of 25-44 year olds and 12% of 45-64 year olds reported any employment income over a three year period. Most of this group reported relatively small income amounts; a smaller number (14% of 25-44 year olds and 6% of 45-64 year olds) reported employment income of more than \$5,000 over at least one year in the period.

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Employment rates were lower for adults with an intellectual disability and/or high/very high SPA levels. Women aged 25-44 were less likely than men to have received employment income above \$5,000 over a year (12% compared with 18% for men). ▶ For non-DSS MidCentral adults, 88% of 25-44 year olds and 79% of 45-64 year olds reported any employment income over a 3 year period. Around 80% reported income over \$5,000 over at least one year in the 3 year period.
	Driver licences	<p>The MidCentral DSS adult population has similar driver licence rates to that of the national DSS population:</p> <ul style="list-style-type: none"> ▶ 20% of DSS adults aged 25-64 had their full driver licence at June 2018, similar to the national DSS population but significantly lower than the MidCentral population (83% with a current full licence). ▶ Within the MidCentral DSS group, licence rates are lower for those with intellectual disability (6% compared with 45% for those with physical and other disability types), high/very high SPA levels (14% have licences). Licence rates were similar across Māori and non-Māori adults.
	Offences	<ul style="list-style-type: none"> ▶ 5% of MidCentral DSS 25-64 year olds were involved in a Police recorded offence over the period, similar to offending rates for other MidCentral adults and DSS adults outside MidCentral. ▶ Within the adult MidCentral DSS group, offending rates were higher for men at younger ages and for Māori (around 3 times), consistent with differences in the national population. Rates are similar between SPA levels and disability types.

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
	Safety - victimisation	<ul style="list-style-type: none"> ▶ 8% of MidCentral DSS 25-64 year olds were recorded by Police as being victims of a crime over the 3 years to 30 June 2018. This rate was similar to both DSS adults outside MidCentral and the broader MidCentral population. ▶ Reflecting patterns for other age groups and in the national population, Māori were more likely to be victimised than non-Māori. Rates were similar across gender, intellectual/non-intellectual disability types and those with different SPA levels.
	Ambulatory sensitive hospitalisation (ASH)s, ED contacts and injury related hospitalisations	<p>29% of the 25-64 year old MidCentral DSS population had ASHs over the 3 year period (28% for 25-44 year olds and 30% for 45-64 year olds). This was higher than for the DSS population outside MidCentral (22% had ASHs over the same period) and considerably higher than the broader MidCentral adult population (4% had ASHs over the same period).</p> <ul style="list-style-type: none"> ▶ ASH rates were higher for those with intellectual disabilities (34% compared with 23% for those with physical and other disability types) and with a high/very high SPA level (37% compared with 14% with a low/medium SPA level), and similar between men/women and Māori/non-Māori. <p>Injury related ED contact and hospitalisation rates were similar to those in the national DSS population, and around 2 times the rate in the broader MidCentral adult population.</p> <ul style="list-style-type: none"> ▶ 20% of the MidCentral DSS 25-64 year old population had injury related ED contacts and 9% had injury related hospital admissions over a 3 year period. Rates were slightly higher for women and those with physical and other non-intellectual disabilities, and similar across SPA levels and Māori/non-Māori adults. <p>6% of MidCentral DSS 25-64 year olds had one of eight major chronic conditions/significant health events identified by the Ministry in the IDI (coronary heart disease, gout, chronic</p>

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<p>obstructive pulmonary disease, diabetes, cancer, stroke, traumatic brain injury and acute myocardial infarction). This reflects chronic condition rates in the national DSS population, which are 2 times the rate of chronic conditions in the non-DSS adult population for ages 25-64.</p> <ul style="list-style-type: none"> ▶ Within the MidCentral DSS group, people with physical and other non-intellectual disabilities experienced higher rates of chronic conditions (9% having one or more chronic conditions). Rates were broadly similar by gender, Māori/non-Māori and SPA level.
	Mental health related service contact and treatment	<ul style="list-style-type: none"> ▶ Around 1 in 5 (18%) of MidCentral DSS 25-64 year olds had contact with mental health services from community providers or hospitals over the three year period, similar rates to that of other DSS adults outside MidCentral. Contact rates were substantially higher than for the non-DSS MidCentral adult population, with 6% of adults aged 25-64 having mental health service provider contact over the same three year period. Note that this includes some disability-specific health services as well as other mental health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures. ▶ Within this group, service contact rates were higher for Māori (24% compared with 17% for non-Māori) and for those with high/very high SPA levels (20% compared with 15% for low/medium SPA levels). Contact rates by gender and disability type were similar. ▶ Around half of MidCentral DSS adults with high/very high SPA levels had health related pharmaceutical treatment over the period, a higher rate than for those with low/medium SPA levels (39%).
	Pharmaceuticals	<ul style="list-style-type: none"> ▶ MidCentral DSS adults received treatment from a wider range of pharmaceutical types than other MidCentral adults, with an average of 9.6 pharmaceutical products dispensed

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<p>compared with 4.1 for non-DSS adults over the year to 30 June 2017. Older adults (aged 45-64) and those with high/very high SPA levels are more likely to have had multiple pharmaceutical types.</p>
	Family and relationships	<p><i>The following observations should be treated as estimates and care taken in interpretation, as there are known limitations around the coverage of relationship records in administrative datasets, particularly for older adults and historic life events. Informal and unreported relationships are not reflected in these estimates. Refer to Appendix D for further information.</i></p> <p>For the MidCentral DSS adult population, reported partnerships and child profiles were similar to the national DSS population:</p> <ul style="list-style-type: none"> ▶ 8% of adults aged 25-44 and 15% of adults aged 45-64 reported being in a formal relationship over the three year period. "Formal relationships" include marriages and civil unions as well as de facto relationships reported to MSD (as part of benefit receipt). ▶ 16% of adults aged 25-44 and 30% of adults aged 45-64 reported ever having been in a formal relationship. ▶ 11% of 25-44 year olds and 28% of 44-65 year olds had birth children. <p>For the broader MidCentral adult population, 52% of 25-44 year olds and 52% of 45-64 year olds reported being in a formal partnership over the 3 year period, while 72% of 25-44 year olds and 78% of 45-64 year olds reported formal partnerships at some point over their lifetime. 71% of 25-44 year olds and 70% of 45-64 year olds had birth children.</p>

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
	Residential services	<ul style="list-style-type: none"> ▶ 34% of 25-44 year olds and 41% of 45-64 year old MidCentral DSS adults were allocated residential services over the year to June 2018, with a small number (4%) transitioning into residential services for the first time during the 3 years to June 2018. These rates were similar to transition rates for the national DSS population. People with intellectual disabilities and high/very high SPA levels were significantly more likely to be in residential services.
	Benefit income support	<ul style="list-style-type: none"> ▶ Almost all (94%) of MidCentral DSS adults aged 25-44 and 82% of those aged 45-64 received a main benefit for some/all of the 3 year period, the vast majority being Supported Living Payments. This is similar to the broader DSS population. Adults with an intellectual disability and adults under 40 with high/very high SPA levels had marginally higher rates of benefit support than those with physical disability or low/medium SPA levels. ▶ In comparison, 23% of MidCentral non-DSS adults aged 25-44 and 19% of MidCentral non-DSS adults aged 45-64 received a main benefit for some/all of the 3 year period with 10% receiving benefit support for more than half of the 3 year period. ▶ Just over half of MidCentral DSS adults (55%) received Disability Allowance payments. This is similar to the Disability Allowance receipt rate for other DSS adults outside MidCentral (54%). ▶ Around half (49%) of 25-44 year olds and 30% of 45-64 year olds allocated DSS in MidCentral received the Accommodation Supplement (AS) over the 3 year period. 13% received Temporary Additional Support (TAS). ▶ Just under 30% of MidCentral DSS adults aged 25-64 also drew on third-tier MSD support payments³⁴ during the 3 years to 30 June 2018.

³⁴ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Rates of receipt of AS, TAS and third-tier MSD support payments are similar to those in the national DSS population but around 2 times higher than for other MidCentral adults. Reflecting differences in the overall NZ population, women, Māori, those with physical and other non-intellectual disabilities and low/medium SPA levels were more likely to draw on these sources of support.
	Address changes and social housing	<ul style="list-style-type: none"> ▶ 9% of MidCentral DSS 25-64 year olds lived in social housing for some/all of the 3 year period and 4% were on the social housing waitlist as priority A or B. This was slightly lower than social housing tenancy rates for DSS clients outside MidCentral but around 3 times higher than the non-DSS MidCentral adult population. Within this group, Māori adults and those with a physical disability were 2 times more likely to live in social housing or be on the priority housing waitlist. Similar differences apply to the broader DSS adult population. ▶ 39% reported address changes over a 3 year period, similar to both DSS and non-DSS populations.

5.5 Adults aged 65 and older

Key transitions: Some people in this cohort are transitioning into a new living situation, while others remain at home, with their family, residential services, or other living situation, supported by family/whānau and other key support people (e.g. carers, support workers). Superannuation payments commence at age 65. Maintaining health becomes increasingly important along with material wellbeing, relationships with family and friends and connection to community.

At 30 June 2018 there were around 200 adults aged 65 and over who were allocated DSS funding over the year to 30 June 2018 in MidCentral. The majority are aged between 65 and 79. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have physical disability (56%), intellectual disability (38%) as their prioritised disability, followed by 5% with a sensory disability. Home and community support (59%), residential services (40%), respite (15%), supported living (8%) and day services (15%) were key types of services allocated by the NASC.
- ▶ 8% live in the 20% least deprived areas of NZ while 37% live in the 20% most deprived areas. MidCentral DSS adults aged 65-79 are more likely to live in areas with deprivation compared to DSS adults aged 65-79 in other regions (where 28% live in the 20% most deprived areas) and non-DSS adults aged 65-79 in MidCentral (where 26% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018³⁵ for adults who were allocated DSS over the 2018 year and were aged 65 and over at the start of the period. For some people this will include time prior to them receiving DSS funding.

Note that the relatively small size of this group meant that not all indicators were observable for MidCentral adults aged 65 and over, or some subgroups within this population.

³⁵ Health indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 years to 30 June 2018
Adult	Ambulatory sensitive hospitalisations, injury related ED contacts and hospitalisations	<p>Around 1 in 4 MidCentral DSS adults aged 65 and over (22%) had ambulatory sensitive hospitalisations (ASHs) over the 3 years to June 2018. This rate was similar to that of the national DSS population aged 65 and over, and higher than the broader MidCentral adult population aged 65 and over (15% had ASHs over the same period).</p> <ul style="list-style-type: none"> ▶ As for younger adults in MidCentral, ASH rates were higher for those with intellectual disabilities (33% compared with 26% for those with physical disability) and high/very high SPA levels (30% compared with 13% for lower SPA levels). <p>Injury related ED visits and hospitalisation rates were similar to those of middle aged MidCentral DSS adults (aged 26-64), and other adults aged 65 and over in MidCentral who are not DSS clients. They were also lower than those experienced by other DSS clients aged 65 and over outside MidCentral.</p> <ul style="list-style-type: none"> ▶ 17% of the MidCentral DSS population aged 65 and older had injury related ED visits over a 3 year period, comparing with 14% of MidCentral non-DSS adults aged 65 and over. Within the MidCentral DSS group, injury related ED contact rates were slightly higher for men (23%) and those with intellectual disability (25%). Over the same period, 23% of DSS adult aged 65 and over outside MidCentral had injury related ED contacts. ▶ 8% of the MidCentral DSS population had injury related hospital admissions over a 3 year period, a similar rate to that of MidCentral non-DSS adults aged 65 and over (8%). Over the same period, 14% of DSS adults aged 65 and over outside MidCentral had injury related hospital admissions. <p>8% of MidCentral DSS adults aged 65 and over had one of eight major chronic conditions/significant health events identified by the Ministry (coronary heart disease, gout,</p>

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 years to 30 June 2018
		<p>chronic obstructive pulmonary disease, diabetes, cancer, stroke, traumatic brain injury and acute myocardial infarction). This is similar to chronic condition rates in both the national DSS and broader non-DSS population, although it is important to note that the number of MidCentral DSS clients with chronic conditions is small and rates may vary over time. (Note this comparison is not age standardised - chronic conditions rates may differ for specific age groups post age 65.)</p> <ul style="list-style-type: none"> ▶ Within the MidCentral DSS group, women and people with physical and other non-intellectual disabilities experienced higher rates of chronic conditions (13% in both groups having one or more chronic conditions).
	Residential services	<ul style="list-style-type: none"> ▶ 39% of MidCentral DSS adults aged 65 and older were allocated residential services over the year to 30 June 2018, with 6% transitioning into residential services for the first time during the 3 years to June 2018. This was higher than the transition rate for DSS adults aged 65 plus outside MidCentral (2% transitioned into residential services over the same period). ▶ As for younger ages, people with intellectual disabilities and high/very high SPA levels were more likely to receive residential services support as those with physical disability or low/medium SPA levels.
	Driver licences	<p>The MidCentral DSS adult population has similar licence rates to that of the national DSS population:</p> <ul style="list-style-type: none"> ▶ 27% of DSS adults aged 65-79 had their full driver licence at June 2018, similar to the national DSS population but significantly lower than the MidCentral population (82% with a full licence).

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 years to 30 June 2018
		<ul style="list-style-type: none"> ▶ Within the MidCentral DSS group, licence rates are lower for those with intellectual disability (less than 5% compared with 43% for those with physical disability) and with high/very high SPA levels (8% have licences).
	Safety - victimisation	A small proportion (5%) of MidCentral DSS people aged 65 and older were recorded by Police as being victims of a crime over the 3 years to June 2018. This rate was similar to both DSS and non-DSS MidCentral populations.
	Family and relationships	<p><i>The following observations should be treated as estimates and care taken in interpretation, as there are known limitations around the coverage of relationship records in administrative datasets for older adults. The actual rate of lifetime partnership is likely to be higher. Informal and unreported relationships are not reflected in these estimates. Refer to Appendix D for further information.</i></p> <p>For the MidCentral DSS adult population aged over 65:</p> <ul style="list-style-type: none"> ▶ 14% reported being in a marriage or civil union over the 3 year period. ▶ 37% reported ever having been in a formal relationship (“formal relationships” include marriages and civil unions, as well as de facto relationships reported to MSD before age 25). Note that this is likely to be understated given limitations around the coverage of administrative information for older New Zealanders. <p>For the broader MidCentral population aged over 65, 47% reported being in a formal partnership over the 3 year period.</p> <p>We are unable to describe the proportion with adult children, given limitations around births and immigration data for this cohort.</p>

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 in MidCentral, compared to other people in MidCentral and other DSS people outside MidCentral - outcomes and service contact indicators over the 3 years to 30 June 2018
	Income and housing support	<ul style="list-style-type: none"> ▶ A small proportion of MidCentral DSS adults aged 65 and over (16%) drew on third-tier MSD support payments³⁶ during the 3 year period. This proportion was similar to that of the national DSS population, but around 2.5 times higher than for other MidCentral adults (6% received third-tier MSD support payments). Reflecting differences in the overall NZ population, those with physical disabilities and low/medium SPA levels were more likely to draw on these sources of support. ▶ 7% of MidCentral DSS adults aged 65 and over lived in social housing for some/all of the 3 year period, similar to the national DSS average and around 5 times higher than the non-DSS MidCentral adult population aged 65 and over.

³⁶ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

6. National DSS clients - wellbeing observations from population surveys

This section provides a high level description of wellbeing aspects for the national DSS population across a range of lifecourse areas, particularly those not described by administrative data. It highlights responses by people currently or previously allocated DSS funding³⁷ to selected 2013 Disability Survey, 2014 and 2016 General Social Survey questions around wellbeing, including aspects such as material wellbeing, life satisfaction, health, safety and social connectedness.

These observations are intended to provide a starting point for:

- ▶ Identifying wellbeing areas where there appear to be substantial differences between the DSS and non-DSS population
- ▶ Supporting findings from other research around areas of disparity and potential unmet need
- ▶ Supporting the Ministry's reasonableness checks of survey observations collected from the Mana Whaikaha cohort prior to the prototype's commencement

This data is subject to some key limitations:

- ▶ **These observations should be treated as indicative only, rather than representative of the overall DSS population.** This is because a relatively small number of current and previous DSS clients responded to the surveys and response weighting was not feasible.
- ▶ Population surveys cover a broader range of wellbeing areas than administrative data but do not provide detailed information on wellbeing and needs. This section focuses on selected survey questions and is not intended to be an exhaustive analysis of the population surveys.

Further information on the approach used is set out in Appendix G.

6.1 A brief introduction to the population surveys

The **2013 Disability Survey (DS)** contains responses by adults and parents/carers of children to a range of questions around impairments, wellbeing areas, service access and needs. The survey was administered by Statistics NZ following the 2013 Census. It sampled the adult population aged 15 and over and parents/carers of children aged 0-14, and was designed to provide good coverage of people who identified themselves or their child as being disabled. Some questions were applicable to both disabled and non-disabled people, while others are only applicable to disabled people.

The **General Social Survey (GSS)** contains responses by adults aged 15 and over to a range of questions around wellbeing areas. The survey is administered by

³⁷ Where DSS funding was allocated at some point over the period 1 January 2010 to 30 June 2018.

Statistics NZ every two years and is designed to cover a wide range of social and economic outcomes for different population groups. The 2014 and 2016 surveys were the most recent waves prior to 30 June 2018.

Survey respondents who had ever been allocated DSS funding were identified through Statistics NZ's IDI, which links the 2013 Disability Survey, 2014 and 2016 General Social Survey datasets with Ministry of Health DSS datasets.

Further information on the methodology, questions and findings from these surveys can be found on Statistics NZ's website.

6.2 Child DSS clients

The 2013 Disability Survey (DS) contains responses by parents, carers and household members for around 350 DSS children aged 0-14.

The 2013 Disability Survey includes two other population groups for comparison to DSS children:

- ▶ Children with impairments who have never been allocated DSS funding (around 980 children)
- ▶ Children with no impairments (around 5,200 children)

The 2014 and 2016 General Social Survey (GSS) contains responses from parent/carer/household respondents who are linked to around 160 DSS children aged 0-14, along with around 7,100 non-DSS children. This survey did not contain questions relating to children so our observations are limited to those describing parent/carer or household characteristics.

Figure 8 and Figure 9 highlight responses to some of the key wellbeing related questions. Differences between DSS respondents and non-DSS respondents are statistically significant at the 95th percentile level (unless otherwise noted).

Figure 8: Selected Disability Survey responses for children ever allocated DSS funding, compared to other children with and without impairments who have never been allocated DSS funding

Wellbeing indicators	DSS children	Non-DSS children with impairments	Non-DSS children without impairments
Child health Proportion of children whose health was described as "good" to "excellent" *	89%	86%	98%
Child contact with friends Proportion of children aged 5-14 who had visited friends in the previous four weeks	58%	79%	92%
Child contact with community Proportion of children aged 5-14 who had gone out with family or friends (e.g. shops or movies) in the previous four weeks	90%	94%	97%
Support at home Proportion of children with unmet need for respite care or carer support in the last 12 months	31%	15%	N/A
Support at school Proportion of children aged 5-14 who need help / more help at school than currently provided *	60%	50%	N/A
Carer stress Proportion of carers described as feeling stressed "often" over the previous 4 weeks	57%	41%	N/A

* Difference with non-DSS children with impairments does not appear statistically significant at the 95th percentile level. Difference with non-DSS children without impairments is significant.

Figure 9: Selected General Social Survey responses for children ever allocated DSS funding, compared to other children who have never been allocated DSS funding

Wellbeing indicators	DSS children	Non-DSS children (with and without impairments)
Parent life worthwhileness Proportion of parents / caregivers who rated the worthwhileness of their life at 7 or higher out of 10 **	 89%	 88%
Parent self-rated health Proportion of parents / caregivers who described their health as being "good" to "excellent" **	 81%	 87%

** Differences do not appear statistically significant at the 95th percentile level. Note the GSS sample size is relatively small.

Further information on survey wellbeing observations is set out below.

Perspective	Outcome domain and indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
Child	Happy and well: Health status	Disability Survey respondents for DSS children generally rated their child's health as being "good" to "excellent" (89% of respondents), with 11% being described as having "fair" or "poor" health. These responses were similar to those for other children with impairments who have never been allocated DSS. Both groups had higher health ratings than adult DSS respondents, but lower health ratings when compared to children without impairments (98% of children without impairments were described as having "good" to "excellent" health).

Perspective	Outcome domain and indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
	<p>Happy and well: Health services contact</p>	<p>The majority of DSS children had contact with primary care health workers and medical specialists over the 12 months prior to the Disability Survey³⁸. 94% saw a family doctor or GP; 68% saw a pharmacist; 81% saw a medical specialist; and 88% had been to see a dentist or oral health professional. DSS children were more likely to have seen GPs, medical specialists and dentists or oral health professionals compared to non-DSS children with impairments.</p> <p>16% of DSS children had a time in the previous 12 months when they needed to see a health professional but were unable to do so. This was a similar proportion to non-DSS children with impairments.</p>
	<p>Have what they need: Support services and equipment</p>	<p>73% of DSS children received respite care or carer support in the 12 months prior to the Disability Survey.</p> <p>Parents and carers for DSS children described areas where their child had needed support services or equipment at some point over the prior 12 months but was unable to get it:</p> <ul style="list-style-type: none"> ▶ Respite care / carer support (31%) ▶ Equipment or service needed by those with difficulty speaking or being understood (35%) ▶ Help (or extra help) with housework (28%) ▶ Help (or extra help) with the child's personal care (19%) <p>All of these proportions were higher than those reported by parents and carers for non-DSS children with impairments.</p> <p>Within the DSS child group, parents / carers with DSS children with high/very high SPA levels were more likely to describe needing help with housework and personal care.</p>

³⁸ Health services contact questions were applicable to children aged 6-14.

Perspective	Outcome domain and indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
	<p>Developing and achieving: School work Extra-curricular activities</p>	<p>Around 80% of school aged DSS children received extra help with school work (around 90% for children with intellectual disability or high/very high SPA levels).</p> <ul style="list-style-type: none"> ▶ 60% of those receiving support needed more help than they were getting (higher for children aged 9 and over at 66%) ▶ 50% of those not getting extra help (largely those with non-intellectual disability) needed extra support <p>Overall, around 60% of school aged DSS children needed more help with school work than they were getting, or were not receiving help but needed it.</p> <p>Responses around unmet need were similar to those from parents and carers of non-DSS children with impairments, although a larger proportion of DSS children receive some support at school.</p> <p>Outside school, DSS children were involved in a range of activities; for example:</p> <ul style="list-style-type: none"> ▶ Physical activities outside school (47%) ▶ Music, art or other similar lessons (31%) ▶ Outing with family or friends, e.g. to shops or movies (90%)
	<p>Have positive relationships</p>	<p>Just over half (58%) of DSS children aged 5-14 had visited friends in the 4 weeks prior to the Disability Survey. This was significantly lower than for non-DSS children with impairments (79%) and non-DSS children without impairments (92%).</p>

Perspective	Outcome domain and indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
Parent, caregiver or household respondent	Happy and well: Life satisfaction Life worthwhile Self-rated health Family wellbeing	<p>Most parents/caregivers and household respondents for DSS children described feeling that their life was worthwhile and having moderate to high levels of life satisfaction, with responses comparable to that of parents/household respondents for non-DSS children.</p> <p>Disability Survey respondents for DSS children were more likely to report often feeling stressed when compared to respondents for non-DSS children with impairments.</p> <p>Disability Survey:</p> <ul style="list-style-type: none"> ▶ 83% of carers for DSS children described their own health as being “good” to “excellent”, while 17% described it as being “fair” or “poor”. ▶ Over half (57%) said they felt stressed “often” over the prior four weeks prior to the survey. (This compares to 41% of parents and carers for non-DSS children with impairments.) <p>General Social Survey:</p> <ul style="list-style-type: none"> ▶ 87% rated their life satisfaction as being at 6 or higher (on a scale of 1-10) ▶ 89% rated their sense of life being worthwhile as being at 7 or higher (on a scale of 1-10) ▶ 81% described their own health as being “good” to “excellent”, with 19% described it as “fair” or “poor”
	Employment	<p>Around half (51%) of Disability Survey respondents for DSS children had paid jobs. This was higher for those with older DSS children (44% for those with DSS children aged 0-8, 58% for those with a DSS child aged 9-14).</p>

Perspective	Outcome domain and indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
	<p>Belong, Contribute and are Valued</p> <p>Have positive relationships</p>	<p>In the Disability Survey, 24% of parents and carers for DSS children said they had had about, or more than enough time for themselves over the 4 weeks prior to the survey. 76% said they did not have enough time for themselves; this was higher than for parents and carers for non-DSS children with impairments (57%).</p> <p>In the General Social Survey, 75% of parents and other household respondents with DSS children said they rarely or never felt lonely over the prior 4 weeks. This compared to 83% for parents and other household respondents for non-DSS children. (Note that this difference is not significant at the 95th percentile level as the DSS sample is relatively small.)</p>
Household	<p>Have what they need: Adequacy of income to meet everyday needs</p> <p>Material wellbeing</p>	<p>In the Disability Survey, 75% of parents and carers for DSS children reported having more than enough, enough or just enough money for everyday needs. A similar proportion of other respondents with children with impairments but no DSS funding provided this response (80%).</p> <p>For household respondents to the General Social Survey with DSS children, 44% reported higher levels of material wellbeing (levels 13 to 20 on a scale of 1-20), while 21% reported low material wellbeing (levels 6 or lower). Responses to this question from households with non-DSS children were similar, although note that the DSS sample is relatively small and may not represent the broader DSS population.</p>

Perspective	Outcome domain and indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
	<p>Have what they need: House condition</p>	<p>In the Disability Survey:</p> <ul style="list-style-type: none"> ▶ 31% of parents and carers for DSS children reported living in a house considered difficult to keep warm ▶ 13% of parents and carers of DSS children reported living in a house that was not considered to be large enough for them and their household <p>Similar responses were provided by parents and carers of non-DSS children with impairments. A smaller proportion of children without impairments were reported as living in houses considered difficult to keep warm (18%) and in houses not considered to be large enough (6%).</p>

6.3 Adult DSS clients

The 2013 Disability Survey (DS) contains individual responses from around 200 DSS clients aged 15 and over, along with responses from two other population groups for comparison to DSS adults:

- ▶ Adults with impairments who have never been allocated DSS funding (around 3,650)
- ▶ Adults with no impairments (around 6,750)

The 2014 and 2016 General Social Survey (GSS) waves contain individual responses from around 125 DSS clients aged 15 and over and household responses relating to around 100 DSS clients aged 15 and over. It also contains responses from around 13,500 non-DSS respondents.

The Disability Survey responses describe some characteristics of the households that respondents live in, including a profile of their main carer (if applicable):

- ▶ The majority of young people aged 18 to 24 lived with family member carers (86%), with just under 10% having a main carer who worked for a care provider.
- ▶ For adults aged 25 and over:
 - ▶ Around half (48%) lived with a family member who was also their primary carer
 - ▶ 10% had a family member as their primary carer but lived separately
 - ▶ 29% had a main carer who worked for a care provider
 - ▶ 10% had other non-family carers

Figure 10 and Figure 11 highlight responses to some of the key wellbeing related questions. Differences between DSS respondents and non-DSS respondents are statistically significant at the 95th percentile level (unless otherwise noted).

Figure 10: Selected Disability Survey responses for adults ever allocated DSS funding, compared to other adults with and without impairments who have never been allocated DSS funding

Wellbeing indicators	DSS adults	Non-DSS adults with impairments	Non-DSS adults without impairments
Self-rated health Proportion of adults who described their health as "good" to "excellent"	61%	64%	94%
Social connectedness Proportion of adults who said they never or occasionally felt lonely	66%	79%	89%
Contact with friends Proportion of adults who had face-to-face contact with friends in the previous four weeks	79%	89%	94%
Contact with community Proportion of adults who had been to a café, restaurant or pub in the previous four weeks*	68%	69%	84%
Support at home Proportion of adults with unmet need for help (or additional help) with shopping, preparing meals or housework in the last 12 months	29%	17%	N/A

* Difference with non-DSS adults with impairments does not appear statistically significant at the 95th percentile level. Difference with non-DSS adults without impairments is significant.

Figure 11: Selected General Social Survey responses for adults ever allocated DSS funding, compared to other adults never allocated DSS funding

Wellbeing indicators	DSS adults	Non-DSS adults (with and without impairments)
Life worthwhileness Proportion of adults who rated the worthwhileness of their life at 7 or higher out of 10 **	 74%	 87%
Material wellbeing Proportion of adults and household respondents who reported having enough or more than enough money to meet everyday needs	 40%	 64%

** Difference appears statistically significant at the 90th percentile level, but not the 95th percentile level.

Further information on survey wellbeing observations is set out below.

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
Safety	Self-reported feelings of safety	<p>The majority of adult DSS client survey respondents reported feeling safe in their home by themselves, however less than half felt safe out in their neighbourhood after dark.</p> <p>Compared to non-DSS respondents without impairments, DSS clients were more likely to report feeling unsafe/very unsafe at night or never being at home / out in their neighbourhood by themselves.</p> <p>General Social Survey:</p> <ul style="list-style-type: none"> ▶ 69% of adult DSS respondents reported feeling safe in their home by themselves, and 38% reported feeling safe walking through their neighbourhood. <p>These proportions were lower than for other adult respondents (85% felt safe at home and 57% reported feeling safe in their neighbourhood after dark).</p> <p>Disability Survey:</p> <ul style="list-style-type: none"> ▶ 90% of adult DSS respondents reported feeling safe in their home by themselves after dark, and 44% reported feeling safe when out in

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		<p>their neighbourhood by themselves after dark. (33% said they were never out in their neighbourhood by themselves, a response more frequent for those with intellectual and non-physical disabilities).</p> <ul style="list-style-type: none"> ▶ These proportions were lower than for non-DSS respondents without impairments, where 96% felt safe at home after dark and 79% felt safe in their neighbourhood after dark.
Happy and well	Life satisfaction Life worthwhile	<p>The majority of adult DSS survey respondents reported moderate to high levels of life satisfaction and life worthwhileness. However, overall life satisfaction responses were lower than those of the non-DSS population.</p> <p>Self-reported life satisfaction for DSS respondents in the Disability Survey was higher for respondents with intellectual disability and lower for those with physical disability, and higher for those with lower SPA need levels.</p> <p>General Social Survey:</p> <ul style="list-style-type: none"> ▶ For adult DSS respondents, 74% rated their life satisfaction at 6 or higher (out of 10), compared with 88% of non-DSS respondents. ▶ 74% of adult DSS respondents rated the worthwhileness of their life as 7 or higher out of 10. For the non-DSS adult respondents 87% rated their life worthwhileness as 7 or higher out of 10. <p>Disability Survey:</p> <ul style="list-style-type: none"> ▶ 61% of DSS respondents rated their life satisfaction as being at 7 or higher (on a scale of 1-10). This proportion was lower than for non-DSS respondents with impairments (69% rated their life satisfaction as 7 or higher) and for non-DSS respondents without impairments (88% rated their life satisfaction as 7 or higher). ▶ Responses varied by disability type, with over 80% of those with intellectual disability rating

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		their life satisfaction as being at 7 or higher (compared with 52% with physical disabilities).
	Express identity	76% of adult DSS respondents to the General Social Survey said they felt able to express their identity. This was lower than for non-DSS respondents (87%).
	Self-rated health	<p>DSS clients generally rated their health as being lower than non-DSS respondents.</p> <p>In the General Social Survey, 45% of DSS respondents described their health as “good” to “excellent” compared with 85% of non-DSS respondents.</p> <p>In the Disability Survey, 61% of DSS respondents described their health as “good” to “excellent” compared with 64% of non-DSS respondents with impairments and 94% of non-DSS respondents without impairments.</p> <p>Self-reported health status was lower for those with physical disability (compared with intellectual disability) and higher for young people aged 15-24, although the differences are not statistically significant given the small size of these groups.</p>
	Health services contact	<p>The majority of DSS respondents to the Disability Survey had contact with primary care health workers and medical specialists over the 12 months prior to the survey. 92% saw a family doctor or GP; 61% saw a dentist or oral health professional; 69% saw a pharmacist; and 56% saw a medical specialist.</p> <p>Contact rates with primary care health workers and medical specialists were broadly similar to non-DSS respondents with impairments, with some exceptions:</p> <ul style="list-style-type: none"> ▶ DSS young people (ages 15-24) were more likely to have contact with GP clinic nurses and medical specialists than non-DSS young people with impairments.

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		<ul style="list-style-type: none"> ▶ DSS clients of all ages were more likely to have seen a dentist or oral health professional than non-DSS people with impairments (41% saw a dentist in the prior year).
Have what they need	<p>Adequacy of income to meet everyday needs Material wellbeing</p>	<p>For DSS respondents and other respondents from their households to the 2014 and 2016 General Social Survey:</p> <ul style="list-style-type: none"> ▶ 40% reported having enough or more than enough money to meet everyday needs. ▶ 43% reported higher levels of material wellbeing (levels 13 to 20 on a scale of 1-20), while 22% reported low material wellbeing (levels 6 or lower) <p>These responses appeared broadly similar across disability types, SPA levels and ages. These income and material wellbeing levels were considerably lower than the non-DSS population. For non-DSS respondents and other respondents from their households, 64% reported having enough or more than enough income. Around 64% of non-DSS respondents reported higher material wellbeing (levels 13 to 20) and 10% reported low material wellbeing (levels 6 or lower).</p>
	House condition	<ul style="list-style-type: none"> ▶ 27% of DSS respondents reported their house feeling colder than they would like (General Social Survey). ▶ 27% of DSS respondents said they found their house difficult to keep warm (Disability Survey). This was a similar proportion to other respondents with impairments (27%) but higher than for non-DSS respondents without impairments (17%). ▶ 8% of DSS respondents to the General Social Survey (and other respondents from their households) reported their houses as having major mould or dampness problems, while less than 5% described having issues with overcrowding. 7% of DSS respondents to the Disability Survey said they needed one or more

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		additional bedrooms. These proportions were similar to non-DSS respondents.
	Support services and equipment	<p>Around half of DSS respondents to the Disability Survey received respite care or carer support in the 12 months prior to the survey.</p> <p>DSS respondents were around twice as likely as other respondents with an impairment to state that they had needed the following support services or equipment at some point over the prior 12 months but were unable to get it:</p> <ul style="list-style-type: none"> ▶ Respite care / carer support (18% of DSS respondents) ▶ Equipment or service needed by those with difficulty speaking or being understood (21%) ▶ Special equipment needed by those with a mobility limitation to help move about (15%) ▶ Help (or extra help) with personal care (18%) ▶ Help (or extra help) with shopping, preparing meals, or housework (29%)
	Transport	<p>Around 60% of DSS respondents used public transport in the 12 months prior to the Disability Survey. Public transport usage levels were similar to usage by non-DSS respondents with impairment, however DSS respondents were several times more likely to report challenges with usage:</p> <ul style="list-style-type: none"> ▶ 27% of those who used public transport for short distances said they had difficulty because of a condition or health problem ▶ 58% of those who did not use public transport said they would have difficulty because of a condition or health problem
Developing and achieving	Education and employment	<p>For DSS respondents to the Disability Survey:</p> <ul style="list-style-type: none"> ▶ 63% of 15-24 year olds and 6% of those aged 25 and over were enrolled in formal education or training, including school and tertiary education. ▶ 48% not currently enrolled in study would like to do study or training in the future (similar

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		<p>rates were reported across different age groups).</p> <ul style="list-style-type: none"> ▶ 20% of DSS adults had a paid job or were self-employed (18% of 15-24 year olds and 22% of adults aged 25 and over). This was lower than for non-DSS adults with impairments (57%) and non-DSS adults without impairments (77%).
Belong Contribute and are Valued Have positive relationships	Participation in community, leisure and recreation activities Volunteer activities	<p>DSS Disability Survey respondents described involvement in a range of activities in the 4 weeks prior to the survey. For example:</p> <ul style="list-style-type: none"> ▶ 27% said they did voluntary work for an organisation, community group or person not living with them ▶ 68% had been to a café, restaurant or pub ▶ 24% had been to a theatre or cinema <p>In general, the proportion of DSS respondents involved in these activities was lower than for non-DSS respondents without impairments, although differences varied depending on the activity and other characteristics (e.g. age). DSS young people (ages 15-24) had higher levels of involvement in all activities compared to ages 25 and over, reflecting similar age-related differences for non-DSS respondents. Non-DSS respondents with impairments had similar or slightly higher levels of involvement in these activities.</p>
	Discrimination	<p>32% of DSS Disability Survey respondents said they had been personally discriminated against (that is, treated unfairly or differently from other people) in the prior 12 months. This was almost twice the proportion of non-DSS respondents with impairments (18%) and 3 times the proportion of non-DSS respondents without impairments (10%) who reported discrimination.</p> <p>Similarly, 36% of DSS General Social Survey respondents said they had experienced discrimination in in the prior 12 months, including due to their disability status. This was</p>

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		<p>more than twice the proportion of non-DSS respondents who reported discrimination (16%).</p> <p>Discrimination responses appeared broadly similar across age groups, disability types and SPA levels in both surveys.</p>
<p>Have positive relationships</p>	<p>Family contact Friends contact Social connectedness</p>	<p>Around two thirds (64-66%) of DSS respondents said they had never or occasionally felt lonely in the month leading up to the survey, and the majority (over 75%) reported having contact with family, other relatives or friends over the prior month.</p> <p>General Social Survey:</p> <ul style="list-style-type: none"> ▶ Around 64% of adult DSS respondents said they rarely/never felt lonely, while 36% said they felt lonely some, most or all of the time. This proportion was higher than for non-DSS respondents, of whom 83% said they rarely/never felt lonely and 17% said they felt lonely some, most or all of the time. <p>Disability Survey:</p> <ul style="list-style-type: none"> ▶ 66% of adult DSS respondents said they never/occasionally felt lonely in the 4 weeks prior to the survey, while 34% said they had sometimes/often felt lonely. Responses to this question were broadly similar between young people and adults aged 25 and over. A higher proportion of DSS respondents reported feeling sometimes/often lonely, compared to non-DSS respondents with impairments (21%) and non-DSS respondents without impairments (11%). ▶ Over the 4 weeks prior to the survey: <ul style="list-style-type: none"> ▶ 79% of DSS adult respondents had face-to-face contact with friends ▶ 76% had face-to-face contact and 88% had other forms of contact with family or relatives not living with them <p>Responses varied across age groups, disability types and SPA levels, although small group sizes mean that differences do not appear to be significant.</p>

Outcome domain	Indicators	Insights for individual and household respondents allocated DSS, compared to other individual and household respondents
		<p>These rates are lower than those reported by non-DSS respondents without impairments: 94% had had contact with friends, 81% had face-to-face contact and 94% had other contact with family or relatives over the same period.</p> <p>Non-DSS respondents with impairments had broadly similar levels of contact with family and relatives, and higher levels of contact with friends.</p> <ul style="list-style-type: none"> ▶ 73% felt they had about the right amount of contact with family and 71% felt they had about the right amount of contact with friends.

7. Future areas for investigation

Future areas of work which are planned to be undertaken by the Ministry as part of the Mana Whaikaha outcomes evaluation include:

- ▶ Identify which outcome areas are expected to be impacted by Mana Whaikaha over the 3 year evaluation period and determine which indicators can be used to evaluate Mana Whaikaha's impact on these outcome areas.
- ▶ Collect survey and interview information from participants and their whānau midway through Mana Whaikaha's implementation (planned to be undertaken at 18 months, but delayed due to COVID-19) and after 3 years post implementation. Information will also be collected from other sources which help to inform understanding around what, and how, Mana Whaikaha has effected change (for example, staff interviews).
- ▶ Update administrative data based indicators supporting the evaluation, midway through Mana Whaikaha's implementation (planned to be undertaken at 18 months, but delayed due to COVID-19) and after 3 years post implementation.
- ▶ Compare outcome and service contact indicators during and/or at the end of prototype period with baseline rates, and identify differences that are potentially attributable to Mana Whaikaha.

7.1 Evaluation indicator assessment criteria

An important area of work for the Ministry in the near future is to:

- ▶ Identify which outcome areas are expected to be impacted by Mana Whaikaha over the 3 year evaluation period, and
- ▶ Determine which indicators will be used to evaluate Mana Whaikaha's impact on these outcome areas

This output is required to support other evaluation activities (for example, the development of a social cost benefit analysis).

The criteria used to assess the suitability of indicators for evaluating Mana Whaikaha's impact include those outlined in section 3.2, plus the following:

- ▶ **Alignment with outcome areas that are a focus of Mana Whaikaha over the evaluation period.** This is relevant where specific outcome areas have been prioritised by Mana Whaikaha.
- ▶ **Impacts from Mana Whaikaha are expected to be observable over the evaluation period.** Outcome and service contact areas that are expected to show an impact over the evaluation period if Mana Whaikaha succeeds are straightforward to include. On the other hand, longer term outcomes (such as improvements to mortality rates) are not feasible for use in evaluating impact

over a 3 year period as changes will not yet be observable. “Intermediate” outcome indicators which show changes over a shorter period of time can be used instead, provided there is research evidence of a link between the intermediate and longer term outcome. There will be additional uncertainty around these impacts.

- ▶ **Evidence base supporting links between “intermediate” outcomes and longer term outcomes.** The strength of the evidence base and likelihood of longer term outcomes being realised are key considerations when determining whether an intermediate outcome should be included in the impact evaluation.
- ▶ **Relative ease/difficulty of attributing impact to the programme.** To what extent are outcomes likely to vary for DSS clients over time as a result of factors independent of the program, or as a result of natural variation between individuals in a relatively small cohort? Changes in outcomes with greater variability are more challenging to attribute to the programme.
- ▶ **Expected impact size on the outcome of interest.** This is a key factor determining whether impacts are likely to be discernible from random variation (statistical significance tests are often used for this purpose). To what extent is the programme expected to shift the outcome of interest over the 3 year evaluation period? How many participants are expected to experience the improvement in outcomes? Are there external factors (for example, microeconomic conditions, community attitudes and market conditions) which may constrain the ability of the programme to contribute to measurable change over the evaluation period?

Appendix A Reliances, limitations and disclaimer

Our final report has been provided to Ministry of Health pursuant to the terms of our engagement dated 29 March 2019 and should not be used or relied on for any other purpose or distributed to any other party without Ernst & Young's prior written consent.

In carrying out our work and preparing this report, Ernst & Young has worked solely on the instructions of the Client, and has not taken into account the interests of any party other than the Client. The report has been constructed based on information available in the Integrated Data Infrastructure in the September 2018 refresh and other information current as of 6 December 2019 which has been provided by the Client. Since this date, material events may have occurred since completion which are not reflected in the report.

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The results in this document are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand.

The opinions, findings, recommendations, and conclusions expressed in this document are those of the author(s), not Statistics NZ.

Access to the anonymised data used in this study was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business, or organisation, and the results in this document have been confidentialised to protect these groups from identification.

Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

The results are based in part on tax data supplied by Inland Revenue to Statistics NZ under the Tax Administration Act 1994. This tax data must be used only for statistical purposes, and no individual information may be published or disclosed in any other form, or provided to Inland Revenue for administrative or regulatory purposes.

Any person who has had access to the unit record data has certified that they have been shown, have read, and have understood section 81 of the Tax Administration Act 1994, which relates to secrecy. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

Appendix B References

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Appendix C Glossary

Abbreviations

Abbreviation	Full term
ASD	Autism Spectrum Disorder
ASH	Ambulatory Sensitive Hospitalisation
B4SC	B4 School Check
CP	Care & Protection
DS	Disability Survey 2013 (administered by Statistics New Zealand)
DSS	Disability Support Services
ECE	Early Childhood Education
ED	Emergency Department
EGL	Enabling Good Lives
GSS	General Social Survey 2014 and 2016 (administered by Statistics New Zealand)
IDI	Integrated Data Infrastructure (maintained by Statistics New Zealand)
MSD	Ministry of Social Development
NASC	Needs Assessment and Service Co-ordination organisation
NCEA	National Certificate of Educational Achievement
NZQA	New Zealand Qualifications Authority
ORS	Ongoing Resourcing Scheme
PHO	Primary Health Organisation
SPA	Support Package Allocation

Glossary

Term	Definition
<i>Ministry of Health terms</i>	
Disability Support Services	Disability Support Services (DSS) are funded by the Ministry of Health and allocated to people by a Needs Assessment and Service Co-ordination organisation (NASC). The range of disability support services includes: <ul style="list-style-type: none"> ▶ behaviour support ▶ respite ▶ carer support ▶ supported living

Term	Definition
	<ul style="list-style-type: none"> ▶ community residential ▶ choices in community living ▶ community day ▶ individualised funding ▶ enhanced individualised funding ▶ regional intellectual disability supported accommodation ▶ younger people in aged care services ▶ family funded care ▶ home and community support <p>Ministry of Health funded services excluded from this analysis include:</p> <ul style="list-style-type: none"> ▶ child development services ▶ Enabling Good Lives Waikato ▶ environmental support (including equipment and modification) ▶ sensory (hearing and vision) services ▶ Contracts with DHBs to deliver assessment, treatment and rehabilitation for disabled people <p>This report is based on information about services allocated to people by NASCs. It does not report on services used. Not included are people with long term chronic conditions and older people who have services funded by their District Health Board.</p>
Needs Assessment and Service Co-ordination	<p>Needs Assessment and Service Co-ordination organisations (NASCs) are organisations contracted by the Ministry to work with disabled people and their family, whānau, aiga, or carers, to:</p> <ul style="list-style-type: none"> ▶ identify their strengths and support needs ▶ outline what disability support services are available ▶ determine their eligibility for Ministry-funded support services <p>NASCs allocate Ministry-funded disability support services and help with accessing other supports. These services are then delivered by their respective service providers.</p>
Principal disability	<p>Principal disabilities are recorded for each DSS client. There are six principal disability classes: intellectual, sensory, physical, neurological, Autism Spectrum Disorder (ASD), and other.</p>
Prioritised disability	<p>Prioritised disability is selected for each client based on the Ministry's principal disability type prioritisation list. Where a client is recorded as having more than one</p>

Term	Definition
	<p>principal disability, or where a principal disability falls into more than one disability type, a prioritised disability is selected based on this list. The list of disability types in the table below shows the order of prioritisation.</p> <ul style="list-style-type: none"> ▶ Intellectual ▶ Sensory ▶ Physical ▶ Neurological ▶ Autism Spectrum Disorder ▶ Other
<p>Support Package Allocation</p>	<p>Support Package Allocation (SPA) refers to the funding or range of disability support services allocated to a disabled client to address their disability support needs, as identified by a NASC. Support package allocations are categorised by level, from 'very low' to 'very high'. Assessed needs levels take into account whether or not there are available 'natural supports' to assist (such as family member support).</p>
<p>Ministry of Social Development terms</p>	
<p>Main benefits</p>	<p>Main benefits (first tier payments) include:</p> <ul style="list-style-type: none"> ▶ Supported Living Payments (a weekly payment for people or carers of people with a health condition, injury or disability that permanently and severely restricts their capacity to work, or who are totally blind) ▶ Jobseeker payments ▶ Sole Parent Support payments ▶ Other types, such as Emergency Benefit and Youth Payment
<p>Third-tier MSD support payments</p>	<p>Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.</p>
<p>Child Disability Allowance</p>	<p>Child Disability Allowance is a fortnightly payment made to the main carer of a child or young person with a serious disability. It is paid in recognition of the extra care and attention needed for that child.</p>
<p>Disability Allowance</p>	<p>Disability Allowance is a weekly payment for people who have regular, ongoing costs because of a disability, such as visits to the doctor or hospital, medicines, extra clothing or travel.</p>

Term	Definition
Accommodation Supplement	Accommodation Supplement is a weekly payment which supports people with their rent, board or the cost of owning a home.
Temporary Additional Support	Temporary Additional Support is a weekly payment which supports people who do not have enough money to cover essential living costs, such as housing-related costs, utilities and food.
Unsupported Child Benefit	Unsupported Child Benefit is a fortnightly payment made to the main carer of a child or young person who is not their parent and is expected to be the primary caregiver for a sustained period of time.
Other terms	
Ambulatory sensitive hospitalisations	Ambulatory sensitive hospitalisations (ASHs) are mostly acute admissions to hospital that are considered potentially reducible through appropriate interventions and care deliverable in a primary care setting. Examples include hospitalisations relating to conditions such as angina, cellulitis/skin infections, asthma, gastroenteritis, chronic obstructive pulmonary disease (COPD), congestive heart failure, diabetes and pneumonia.
B4 School Check	The B4 School Check (B4SC) is a free health and development check for all 4 year olds which is typically completed prior to children commencing school. Key areas included in the check are vision, hearing and dental health, height and weight, along with questions around learning and development, strengths and difficulties.
Chronic conditions	Chronic conditions described in this report refer to eight major chronic conditions/significant health events identified by the Ministry: coronary heart disease, gout, chronic obstructive pulmonary disease, diabetes, cancer, stroke, traumatic brain injury and acute myocardial infarction.
Integrated Data Infrastructure	Statistics NZ's Integrated Data Infrastructure (IDI) is a linked longitudinal dataset that combines unit-record administrative information from a range of agencies and organisations. The IDI is maintained by Statistics New Zealand under strict privacy and confidentiality protocols.
MidCentral	MidCentral DHB region, which includes the following districts: Horowhenua, Manawatu, Palmerston North city, Tararua, and the Otaki ward of the Kapiti Coast district.
MidCentral DSS people	People living in the MidCentral area who are DSS clients.

Term	Definition
Ongoing Resourcing Scheme	Ministry of Education's Ongoing Resourcing Scheme (ORS) funding is for students who have the highest ongoing levels of need for specialist support at school. ORS support helps students to join in and learn alongside other students at school. Any student who meets the ORS criteria is included in the scheme. Once a student is in ORS, their funding and support stays with them throughout their time at school. ORS funding and resources are considered to be a contribution to supporting a student's schooling.
Other DSS people	People living outside the MidCentral area (rest of New Zealand) who are DSS clients.
Other MidCentral people	People living in the MidCentral area who are not DSS clients.

Appendix D Considerations with the use of administrative data

DSS clients and the disabled population

This report has focused on service usage and outcomes indicators for people currently or previously allocated DSS funding. It is important to acknowledge that there are different definitions of disability in use by agencies, organisations and communities and across population surveys, and that the disabled population in New Zealand is broader than the population of current and previous DSS clients. The findings in this report should be interpreted as being specific to DSS clients rather than the broader NZ disabled population, who have different characteristics and needs profiles and who may not access services to the same extent as the DSS client group.

Child to parent/caregiver links and partner relationships

Administrative data on child to parent/caregiver links and partner relationships is subject to known limitations around the reliability and coverage of relationship records, as well as providing only a limited representation of the complex and dynamic reality of family/household relationships. Census 2013 data has also been used to identify relationships; however this will not capture more recent changes in family units. As a result observations should be treated as estimates and care taken in interpretation. Considerations include:

- ▶ Informal and unreported relationships may not be reflected in administrative data. For example, people who are recorded as not having a partner may be in relationships.
- ▶ Conversely, children can be supported by a sole parent/caregiver who is not in receipt of sole parent benefit (e.g. due to income eligibility criteria) and so may appear as being linked to two parents/caregivers in administrative data.
- ▶ Children can also be supported by caregivers in living arrangements that differ to what is formally reported (for example, children who primarily reside with relatives such as grandparent(s) while being linked to another parent/caregiver).
- ▶ Information around historic life events for older adults is only partially available.

Service variations and other considerations with the use of administrative data

The description of service usage in this report will be subject to bias and variations in service provision and should be interpreted as highlighting areas of potential higher need - not as complete estimates of underlying population need. For example, the number of people with financial stress may be higher than the number accessing third-tier MSD support payments (which are generally only provided to those in financial hardship), reflecting varying service capacity as well as other factors such as stigma, access and affordability.

Administrative data is affected by changes in reporting and recording practices over time (for example, changes to how enrolment in early childhood education is recorded). Other variations to consider include:

- ▶ Regional variations in practice, reporting and/or recording
- ▶ Impact of Statistics NZ's ID matching process - service usage indicators are more likely to be visible for people interacting with multiple agencies, but less visible for those who are more transient or have fewer/no agency interactions (for example, middle or older aged DSS clients)

Refer to Appendix E 'Detailed findings from feasibility assessment' for further detail on considerations around administrative data relating to specific indicators and data sources.

Appendix E Further information on approach for feasibility assessment

Introduction

This appendix provides more detail on the approach taken to perform the activities in workstream 3, “Feasibility assessment of potential outcomes indicators and analysis cohorts”:

- ▶ Develop draft options for outcome indicators for Mana Whaikaha’s outcomes framework.
- ▶ Assess potential outcome indicators against the criteria agreed with the Ministry, to determine if feasible as measures of current state wellbeing and benefits over time.

Approach

We performed the following work tasks:

1. **Confirmed key criteria for determining indicator suitability.** We drew on existing NZ Government guidance on assessing potential outcome indicators and general social sector practices in assessing population level indicators, as well as experience analysing proposed indicators from administrative data as part of the development of the Oranga Tamariki wellbeing model.

Our key research questions are set out below:

- ▶ **Validity** - does the indicator reflects the underlying outcome it is intended to measure? Is it aligned with the Mana Whaikaha outcome framework and intervention logic?
- ▶ **Acceptance** -is the indicator considered relevant, reasonable and straightforward to interpret by stakeholders, in particular for people with disabilities and their whānau?
- ▶ **Reliability/completeness** - does the supporting data provides reasonable coverage for the population groups with disabilities, in the MidCentral region and for other groups of interest? Is the data overly influenced by variations in work and/or recording practices (i.e. across different users or agency sites)?
- ▶ **Comparability** - has the underlying data been recorded in a reasonably consistent fashion over time? i.e. does the indicator reflects actual shifts in the underlying outcome of interest over a 1 to 3-year period, while not being unduly impacted by changes in policy, work and/or recording practices over time?
- ▶ **Feasibility** - is the data available in a timely manner, and can it be segmented for key subgroups (e.g. by location, gender and disability type)?

- ▶ **Equity** - can the indicator be used to highlight areas of potential inequities between population groups, and to reflect changes in equity between population groups over the evaluation period?

A list of key guidance documents referred to is included in the References section.

2. Scanned data and research to identify data sources which could potentially inform the outcome domains, the range of indicator definitions and indicator-to-domain allocations in use:

a. Reviewed Government wellbeing and outcomes monitoring frameworks, and research studies around wellbeing outcomes for people interacting with the disability sector. We focused on identifying administrative and survey data sources which:

- ▶ are available in the IDI or to the Ministry for use in this project
- ▶ have been collected in recent years (ideally 2015 or later, since this would support descriptive analysis covering a 3 year timeframe to provide robust estimates and align with the evaluation period)
- ▶ have undergone some level of consultation and were considered to provide a reasonable description of aspects of people's wellbeing and/or outcomes

Key references included program documents and the studies listed in the Reference section.

b. Scanned the latest information available from administrative and survey datasets in the IDI to identify those potentially relevant to the outcome domains. Many of the potential data sources and indicators identified in this step were similar or the same to those used in the agency frameworks and studies reviewed. In cases where we identified additional potential data sources and/or indicators (for example, Oranga Tamariki reports of concern or school disengagement indicators) these tended to be specific to particular population subgroups, relatively new additions to the IDI or indicators which require care when interpreting due to variability in service provision or data recording.

Detail on each of these indicators was sourced from IDI data dictionaries available on Statistics NZ's website.

An important observation is that Census and administrative data sources describe both national and MidCentral historic outcome baselines for people with a disability. Survey data sources (such as GSS and the disability survey) are only able to support national outcome baselines for disabled people, as the number of MidCentral survey respondents who are also included in SOCRATES is too small to provide statistically significant results (i.e. counts of less than 20, and sometimes less than 10).

- 3. Developed draft options for indicators and allocation to the domains identified in the Mana Whaikaha outcomes framework**, referring to the data and research scan findings (above) and experience supporting the draft Oranga Tamariki child wellbeing / outcomes framework.

There was broad agreement across different outcomes frameworks around the data sources, indicators and domain mappings available to describe some lifecourse areas, particularly outcomes around material wellbeing and engagement with employment and education/training where information is available from both administrative and survey datasets. GSS and DS self-reported responses mapping to outcomes around life satisfaction, health status, feelings of safety, trust and social connectedness were also comparable across multiple studies.

For other outcomes, we performed a subjective process of reviewing each description and selecting indicators that potentially help to describe that outcome. Some of the indicators available could feasibly map to multiple outcomes which are closely interlinked (e.g. 'have access to all places, services and information', 'have access to health services and information', 'have access to opportunities to build confidence and develop skills', 'do everyday things', 'participate in social, recreational and community activities', 'pursue their interests'). Where this was the case, we made subjective allocation decisions based on our view of which outcome the indicator appeared to be most closely related to. Care was taken in making these decisions, however alternative views are also feasible and these should be noted when interpreting results.

Some outcomes were mapped to administrative and survey IDI data that could only describe some aspects, were limited to specific population subgroups or were notably impacted by service provision or reporting bias. For example, the outcome "physically safe and live in a positive environment" would ideally be described by an objective measure of individual and community safety. In practice the information available is limited to reported crime and child Care and Protection reports of concern (both understood to be subject to underreporting), and for survey respondents feelings of safety. This is one example commonly acknowledged to be difficult to measure at a population level.

It is important to note that options were limited to available data - there are several domains which have limited or no visibility provided by administrative and survey IDI data (for example: positive relationships, emotional wellbeing, belonging and contributing to community, choice and control). Additional information collected for Mana Whaikaha participants (for example, via the survey or in individual plans) may help to better describe these outcomes for the program evaluation.

- 4. Assessed potential outcome indicators against the criteria**, and identified areas where information is limited or not available for consideration for future data collection. Worksteps included:

- ▶ Identifying gaps between definition of indicators and outcomes, constraints around time lags, date ranges or other coverage issues.
- ▶ Descriptive analysis of the proposed indicators, including identifying variations by year, across gender, age groups, ethnicity groups, region, socioeconomic decile and (where applicable) family type, and observations counts for those with SOCRATES records and/or in MidCentral. For national level population surveys, changes to data collection in future survey rounds, sample sizes and relatively high sampling errors are also important considerations.
- ▶ Scan of IDI data dictionaries and research studies which developed findings from these sources or validated these sources against other measures. In addition to the studies examined as part of our data and research scan, we referred to several Statistics NZ studies comparing Census and other survey information with administrative data sources as part of their Census Transformation project. These are listed in the Reference section.
- ▶ Drawing on our experience interpreting and testing findings drawn from these administrative datasets with agency representatives; for example, knowledge of policy, practice and recording variations underlying child Care and Protection, Police and Education intervention datasets.

Advisory Group feedback was sought to help inform answers for two criteria in particular, acceptance and equity.

Appendix F Further information on approach for baseline indicator analysis

This appendix sets out the approach used to calculate baseline outcome and service contact indicators described in this report.

Data sources

Data presented in this report for people allocated Ministry of Health disability support services is sourced from the Ministry's Socrates database. The Socrates database includes all clients who have ever been assessed by Needs Assessment Service Coordination organisations (NASCs) for eligibility to access Ministry-funded disability support services. There are 15 NASCs across New Zealand and National Intellectual Disability Care Agencies (NIDCA).

For the analysis of outcomes and service contact indicators based on administrative data, people were categorised as DSS clients if they were allocated DSS funding over the year to 30 June 2018.

The counts of DSS people by prioritised disability and NASC allocated disability support service type were provided by the Ministry using updated Socrates datasets and definitions outside the IDI, and have not been subject to Statistics NZ's confidentialisation process.

All other figures in the analysis of administrative data were sourced from the IDI and have been subject to Statistics NZ's confidentialisation process.

Time periods

Outcomes and service contact indicators are summarised:

- a. over the 3 year time period 1 July 2015 to 30 June 2018 (for activities / events that take place over a period of time, such as hospitalisations) or
- b. as at 30 June 2018 (for indicators that describe a person's status at a point in time, e.g. household profile)

The following exceptions apply:

- ▶ Hospital, health community provider, pharmaceutical and tertiary education indicators are summarised over the 3 year time period 1 July 2014 to 30 June 2017 or as at 30 June 2017, due to limited data being available for the 2017-18 year at the time of analysis.
- ▶ Polypharmaceutical indicators are summarised over the year to 30 June 2017, as these indicators are defined on an annual basis.

Client and population count

Each client or person is counted once during the time period covered by the indicator. People who were not considered resident in New Zealand for at least one of the years in the time period have been excluded.

The residential status for each person is an estimate based on the approach developed by Statistics NZ with some minor adjustments. This approach estimates residential status for each year using a number of point-in-time observations from administrative data (e.g. Primary Health Organisation enrolments or Inland Revenue records) and a tolerance range over which this is taken to indicate residency. Note that as a result, our analysis may include some time periods for which some people were not resident in NZ and/or exclude some time periods for which other people were resident in NZ but not present in the data.

Ethnicity

All people identified as having Māori ethnicity are classified as Māori. Ethnicity information for analysis of IDI administrative data is sourced from Statistics NZ's IDI source ranked ethnicity dataset, which is derived from multiple agency datasets and prioritises sources according to reliability. Further information can be found on Statistics NZ's website.

Location

DSS clients in MidCentral are defined as clients who were allocated disability support services by Enable New Zealand NASC. Enable New Zealand was the NASC in the area before Mana Whaikaha was implemented.

MidCentral location flags for each non-DSS person in that region have been derived from the most recent residential address information available at 30 June 2018. Address information is sourced from Statistics NZ's IDI address notifications dataset, which is derived from multiple agency datasets and prioritises sources based on a set of business rules. Statistics NZ's meshblock to DHB region concordance tables are used to identify addresses within the MidCentral DHB region.

Age

For outcomes and service contact indicators summarised over a 3 year time period, people have been grouped according to their age at the start of the period.

For outcome and service contact indicators summarised as at 30 June 2018, people have been grouped according to their age at 30 June 2018.

Disability type, SPA level and services allocated

Disability type, SPA level and allocated service categories are based on information from each DSS client's most recent NASC assessment as at 30 June 2018.

Child to parent/caregiver and partner relationships

Children are linked to parents/caregivers over each analysis year using births, immigration, Census 2013 and benefits data (including where the parent/caregiver is a partner of the main benefit recipient).

Adults are identified as having a formal partner relationship over each analysis year using marriages, civil unions, immigration, Census 2013 and benefits data.

Where relationships have changed over time, the most recent observation up to the analysis year has been used.

Observations around family units and partner relationships should be treated as estimates and care taken in interpretation, as there are known limitations around their coverage in administrative data. Refer to Appendix D for further information.

Indicator rates

Outcomes and service contact indicators have been calculated as crude rates. Crude rates are:

- ▶ the number of people in the population group of interest who experienced the outcome or had at least one service contact over the analysis period

divided by

- ▶ the number of people in the population group of interest

For example, if there are 100 people in a population group defined by age and disability type, and 40 people had at least one emergency department contact over a 3 year period, then 40% of this group has had emergency department contact over the analysis period.

Crude rates accurately describe the observations for each population. However, crude rates do not take into account differences in the distribution of age, gender, socioeconomic status or other characteristics between two comparison groups. The majority of the rates presented in this report are split by age group and an additional characteristic (such as disability type) which addresses some of the potential differences. When comparing rates between two groups, consideration should be taken as to whether there are other differences in the population groups that may contribute to variation in outcomes and service contact.

In general, differences in outcome and service contact rates that are highlighted as being 'higher', 'lower' or 'significant' in Section 5 and Appendix H are statistically significant at the 95th percentile level. (That is, there is a 95% probability that the difference between the two groups is greater than zero).

Confidence intervals

A confidence interval gives an indication of uncertainty around an outcome or service contact rate. The confidence intervals presented in the graphs are

calculated at the 95th percentile level (that is, each confidence interval has a 95% probability of enclosing the true rate).

The confidence interval is influenced by the size of each population group. Smaller population groups have fewer observations and so there is less certainty about the rate. As a result, MidCentral DSS population groups have wider confidence intervals when compared to the equivalent national DSS population group.

Appendix G Further information on approach for population survey analysis

This appendix sets out the approach used to analyse 2013 Disability Survey, 2014 and 2016 General Social Survey responses for the DSS and non-DSS population in this report.

Data sources

For the analysis of population survey data, people have been categorised as DSS clients if they were ever allocated DSS funding over the years 1 January 2010 to 30 June 2018. (This broader definition of 'DSS client' was applied to maximise the size of the group with survey responses. Funding allocation prior to 2010 was excluded for data quality reasons.)

Survey respondents who had ever been allocated DSS funding were identified through Statistics NZ's IDI, which links the 2013 Disability Survey, 2014 and 2016 General Social Survey datasets with Ministry of Health DSS datasets.

Age

Age is determined based on the period over which the survey was completed.

Disability type and SPA level

Disability type and SPA level categories are based on information from each DSS client's most recent NASC assessment prior to 30 June 2018.

Child to parent/caregiver and partner relationships

The 2013 Disability Survey contains responses provided by parents/carers on behalf of their child. Data on links between children and parents/carers is included in the dataset.

The 2014 and 2016 General Social Survey contains responses provided by adults aged 15 and over. Children linked to parents/caregivers who responded to the survey, and adults in a formal relationship with people who responded to the survey, were identified using administrative and Census data. Refer to Appendix F for a description of the approach used to identify these relationships.

Survey subgroups and non-responses

A relatively small number of DSS clients responded to the surveys. Some questions were only applicable to a subset of respondents (for example, by age or impairment type). Individual questions were also subject to varying response rates (i.e. the proportion of people who responded to the question and who did not select answers such as 'don't know', 'not available' or 'not applicable').

Calculation approach

All proportions have been calculated as:

- ▶ the number of people in each population group who provided a specific response

divided by

- ▶ the number of people in each population group who provided a valid response (i.e. excluding responses such as 'don't know', 'not available', 'not applicable' and people who did not respond to the question)

The proportions set out in this report are based on survey data without weights applied. Survey weighting is an approach often used to adjust responses so that they more closely describe the whole population. Response weighting for the DSS population was not feasible due to the low number of response counts once stratified by key demographic characteristics (such as age, ethnicity, disability type and SPA level). These characteristics are associated with differences across areas such as health, education and income support (refer to Section 5 and Appendix H). As a result, the DSS survey response observations may not be fully representative of the overall DSS population.

Key variations between the profile of those who responded or were in households that responded to the surveys versus the broader DSS population, include a lower proportion with high/very high SPA levels and a higher proportion with physical disability compared to intellectual disability or ASD.

The proportions shown for non-DSS comparison groups are also based on unweighted data, so as to be consistent with the approach used for the DSS population. These figures may be different to figures reported by other research studies using weighted Disability Survey or General Social Survey data, although the difference between weighted and unweighted rates is not large for the questions covered in this report (less than 5 percentage points).

Confidence intervals

In general, differences between DSS and non-DSS respondent groups are highlighted in section 6 as being 'higher' or 'lower' where estimated to be statistically significant at the 95th percentile level, unless otherwise noted.

For the purpose of significance testing, weighted proportions for DSS and non-DSS groups were calculated using Statistics NZ's individual (person) weights and sampling errors were estimated using Statistics NZ's replicate weights for individuals in each survey.

It is important to note that individual and replicate weights are based on the profile of the overall New Zealand population, rather than the DSS population. Findings around statistical significance should be interpreted with care.

In most cases the size of the DSS response group is not large enough to identify differences between subgroups within the DSS population (e.g. by age) with statistical significance at the 95th percentile level. We have commented on some

comparison areas where the difference is 10 percentage points or more in size and the number of responses for each subgroup is at least 40.

Appendix H National DSS clients - baseline outcomes and service contact

This section summarises key observations around lifecourse outcomes and service contact for DSS clients living across New Zealand over the period 1 July 2015 to 30 June 2018 who were allocated DSS funding over the year to 30 June 2018.

Overall demographics for national DSS clients

- ▶ Around 38,500 disabled people in New Zealand were allocated one or more Ministry-funded disability support services at 30 June 2018. This represents around 0.8% of the total New Zealand population.
- ▶ People with intellectual disability make up more than half of those people allocated disability support services. Many also have a physical disability.
Around half of the children and young people allocated DSS have autism spectrum disorder as a principal disability.
- ▶ People allocated DSS funding are more likely to live in areas with deprivation compared to other people across New Zealand: 15% of DSS clients live in the 20% least deprived areas while 27% live in the 20% most deprived areas³⁹.
This varies by age group. DSS children and young people have broadly similar socioeconomic profiles to other children and young people, while DSS adults are more likely to live in areas with deprivation when compared to non-DSS adults in the same age group.

Some demographic and socioeconomic characteristics are presented for each age group; refer to the Ministry's 'Demographic Report for Clients Allocated the Ministry of Health's Disability Support Services: 2018 update' for a more detailed demographic description by region and relating to specific service types and by specific disability types.⁴⁰

³⁹ Deprived areas are drawn from the NZDep2013 Index of Deprivation developed by Otago University. If the DSS population had the same deprivation profile as New Zealand overall then 20% of the population would live in the 20% least deprived areas and another 20% of the population would live in the 20% most deprived areas. Further information can be found at <https://www.otago.ac.nz/wellington/departments/publichealth/research/hirp/otago020194.html>.

⁴⁰ Figures may differ slightly from those presented in this report, due to the use of a different time period (1 October 2017 to 30 September 2018) and the effects of IDI matching rates and rounding on this report's figures.

In general, differences in outcome and service contact rates that are highlighted as being 'higher', 'lower' or 'significant' in this section are statistically significant at the 95th percentile level. (That is, there is a 95% probability that the difference between the two groups is greater than zero).

Further information on the approach to calculating these results is set out in Appendix F.

H.1 Children aged 0-4 years

Key transitions: The disabled child has a condition that is newly acquired or diagnosed. Parents and family/whānau are supporting the child. This life stage encompasses early childhood development leading up to the start of school.

At 30 June 2018 there were around 1,260 children aged 0-4 across New Zealand who were allocated DSS funding over the year to 30 June 2018. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have Intellectual (46%) or Autism Spectrum Disorder (42%) as their prioritised disability, followed by Physical (7%).
Respite (93%), behavioural (25%) and home and community (20%) support services are the main service types allocated through the NASC.
- ▶ Around 1 in 3 (32%) live with sole parents with the remaining 67% linked to two parents/caregivers.
- ▶ 15% live in the 20% least deprived areas of NZ while 27% live in the 20% most deprived areas. This is a broadly similar socioeconomic profile to non-DSS children aged 0-4 (where 25% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 years to 30 June 2018⁴¹ for children aged 0-4 at the start of the period who were allocated DSS funding over the year to June 2018. Note that for some children this will include periods prior to them receiving DSS funding.

⁴¹ Health indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Perspective	Indicators	Insights for children aged 0-4 across New Zealand allocated DSS over the year to June 2018, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
Child	Early childhood education	<ul style="list-style-type: none"> ▶ Around 97% of children were enrolled in some form of early childhood education prior to starting school⁴², similar to enrolment rates for non-DSS children.
	B4 School Checks	<ul style="list-style-type: none"> ▶ 24% of DSS children in New Zealand with completed B4SC vision and/or hearing checks had referrals made⁴³, around 2 times the referral rate for non-DSS children (12%). ▶ Around 16% of children with completed B4SC dental checks received scores within referral range, slightly higher than the 14% of non-DSS children with referral range scores. ▶ For DSS children, rates of referral outcomes for vision and hearing checks were higher for those with intellectual disabilities and high/very high SPA levels and were similar across Māori and non-Māori children. Māori children were almost twice as likely to receive dental scores within referral range as non-Māori children, reflecting differences in the broader Māori and non-Māori child population.
	Ambulatory sensitive (avoidable) hospitalisations	<ul style="list-style-type: none"> ▶ Around 1 in 4 children (26%) had ambulatory sensitive hospitalisations (ASH) over a 3 year period. This was around 2.6 times the rate of the broader 0-4 year-old national child population (10% had ASHs over the same 3 year period.). ▶ For DSS children, Māori children, those with an intellectual disability or with high/very high SPA levels were more likely to have had 2 or more ambulatory sensitive hospitalisations over the period.

⁴² Based on early childhood education enrolment information provided to the Ministry of Education by parents for children aged 6-10 at 30 June 2018. This information is not yet available for children aged 0-4 as they have not yet started school.

⁴³ Based on B4 School Check outcomes recorded for children aged 5-9 at 30 June 2018.

Perspective	Indicators	Insights for children aged 0-4 across New Zealand allocated DSS over the year to June 2018, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
	Emergency Department contacts and injury related hospitalisations	<ul style="list-style-type: none"> ▶ 32% of DSS children aged 0-4 years had 2 or more ED visits over the 3 year period, considerably higher than the proportion of other 0-4 year-old children who had 2 or more ED contacts over the same period (19%). Children aged 0-4 years with an intellectual disability and/or with high SPA levels were more likely to have had 2 or more ED visits over the period than children with ASD or other disabilities or with lower SPA levels (around 1.6-1.8 times more likely). ▶ Around 1 in 5 (22%) DSS children aged 0-4 had an injury-related ED contact over the 3 year period, higher than rates of injury related ED contact by other New Zealand children aged 0-4 (18%). ▶ A small proportion of DSS children aged 0-4 (8%) had an injury-related hospital treatment over a 3 year period. This was a higher proportion than for non-DSS children (5% had injury related hospitalisations over the same period).
	Oranga Tamariki contact	<ul style="list-style-type: none"> ▶ 18% of DSS children were involved in reports of concern to Oranga Tamariki over the 3 year period. This reporting rate was considerably higher than the rate of the broader 0-4 year old child population (11% over the same 3 year period). Within the group of DSS children aged 0-4, reporting rates were significantly higher for Māori children (27% compared to 14% for other ethnicities), those with intellectual disabilities (23%) and high/very high SPA levels (21%). ▶ A small proportion (3%, or approximately 110 children) were involved in statutory Care and Protection over the 3 year period. Although relatively small, this rate is significantly higher than the rate of statutory Care and Protection involvement in the broader non-DSS child population (1.8%).

Perspective	Indicators	Insights for children aged 0-4 across New Zealand allocated DSS over the year to June 2018, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Around 10% of children were involved in Police Family Violence Centre notifications to Oranga Tamariki over the period. This was higher than levels of Police Family Violence Centre notifications to Oranga Tamariki for other children across New Zealand (7%).
Parents / family / whānau	Family units and parental employment	<p><i>The following observations around family units should be treated as estimates and care taken in interpretation, due to limitations around the coverage of relationship records in administrative data. Refer to Appendix D for further information.</i></p> <p>For 0-4 year old DSS children as at June 2018:</p> <ul style="list-style-type: none"> ▶ Around 1 in 3 (32%) live with sole parents with the remaining 67% linked to two parents/caregivers. The proportion of this group supported by a sole parent/caregiver is higher than for other children in New Zealand (21%). Within the group of 0-4 year old DSS children, Māori children were more likely to be linked to sole parents (53% compared with 23% for non-Māori). ▶ Similarly, DSS children aged 0-4 are less likely to be supported by two parent incomes than other 0-4 year old children: 25% had two parents/caregivers with employment income, 43% had one parent with employment income and 31% had no parents with employment income. In comparison, 40% of non-DSS children aged 0-4 had two parents/caregivers with employment income, 38% had one parent with employment income and 21% had no parents with employment income. <p>Examining household transitions over the 3 year period from June 2015 to June 2018, for children aged 0-4 at June 2015:</p> <ul style="list-style-type: none"> ▶ DSS children supported by a sole parent with no employment income were more likely to remain in the same circumstances. For sole parents without employment income caring for

Perspective	Indicators	Insights for children aged 0-4 across New Zealand allocated DSS over the year to June 2018, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<p>DSS children aged 0-4, 85% were still in the same circumstances after 3 years, compared with 70% of other sole parents of children aged 0-4.</p> <ul style="list-style-type: none"> ▶ DSS children linked to two parents/caregivers with one parent having employment income were more likely to continue to be supported by one parent's income at the end of the period (66% compared to 58% for non-DSS children). In other words, full time caring parents were less likely to return to employment over the period. ▶ Similarly, DSS children linked to two parents/caregivers both with employment income at the start of the period were more likely to transition to two parent/caregiver, one income households over the 3 years - 25% of DSS children made this transition compared to 20% of non-DSS children.
	Benefit income support, social housing and address changes	<ul style="list-style-type: none"> ▶ 37% of DSS children aged 0-4 were supported on a main benefit at some point over the 3 year period, and 25% had a parent who received sole parent support for some/all of the period. These benefit rates were higher than for non-DSS children aged 0-4, of whom 28% were supported by a main benefit at some point over the 3 year period including 23% with sole parent support for some of this period. ▶ 38% of DSS children aged 0-4 had parents/caregivers who drew on third-tier MSD support payments⁴⁴, including special needs grants and benefit advances, at some point over the 3 years to June 2018. ▶ 88% of DSS children were linked to MSD Child Disability Allowance payments. The Child Disability Allowance is a fortnightly payment made to the main carer of a child or young person with a serious disability. It is paid in recognition of the extra care and attention needed for that child.⁴⁵

⁴⁴ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

⁴⁵ This description and further information can be found at MSD's website (<https://www.workandincome.govt.nz/products/a-z-benefits/child-disability-allowance.html>)

Perspective	Indicators	Insights for children aged 0-4 across New Zealand allocated DSS over the year to June 2018, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ A small proportion (3%) of DSS children were linked to MSD Unsupported Child Benefit payments ▶ 41% had parents/caregivers in receipt of Accommodation Supplement and an additional 17% received Temporary Additional Support. ▶ A small proportion (2%) of DSS children were in families that engaged with Family Start over the 3 year period. This was a larger proportion than for other children under 5 (less than 1%). ▶ 12% of DSS children lived in social housing for some/all of the period and 8% were 'priority A' or 'B' on the social housing register, more so for those living in metropolitan areas. This was a larger proportion than the non-DSS child population (8% in social housing and 5% on the priority social housing register). ▶ 55% of DSS children changed address over the 3 year period, similar to other children across New Zealand.

H.2 Children aged 5-14 years

Key transitions: The disabled child is progressing through primary and intermediate school and developing through mid-childhood and teenage years.

At 30 June 2018 there were around 9,900 children aged 5-14 allocated DSS funding over the year to 30 June 2018 across New Zealand. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have Intellectual (42%) or Autism Spectrum Disorder (50%) as their prioritised disability, followed by 6% with a physical disability. Respite (97%), behavioural (20%) and home and community (23%) support services were the most common types allocated by the NASC.
- ▶ Just under 60% live with two parents/caregivers; 42% live with sole parents.
- ▶ 18% live in the 20% least deprived areas of NZ while 26% live in the 20% most deprived areas. DSS children aged 5-14 are slightly more likely to live in areas with deprivation, compared to non-DSS children aged 5-14 (where 23% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 years to 30 June 2018⁴⁶, for children who were aged 5-14 at the start of the period and who were allocated DSS funding over the year to 30 June 2018. For some children this will include periods prior to them being allocated DSS.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
Child	School support and disciplinary responses	▶ Around half (49%) of DSS children received support from the Ministry of Education's Ongoing Resourcing Scheme (ORS). ORS is for students who have the highest ongoing levels of need for specialist support at school. Outside the DSS child population, around 1% of the non-DSS student population receives ORS ⁴⁷ .

⁴⁶ Health indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

⁴⁷ ORS support helps students to join in and learn alongside other students at school. Any student who meets the ORS criteria is included in the scheme. Once a student is in ORS, their funding and support stays with them throughout their time at school. ORS funding and resources are considered to be a contribution to supporting a student's schooling. This description and further information on ORS can be found at the Ministry of Education's website (<https://www.education.govt.nz/school/student-support/special-education/ors/>).

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<p>It is important to note that actual learning support is higher than this once Ministry of Education funded services linked to schools (but not individual children) are included, e.g. funding for teacher's aides. Schools may also provide support not funded by the Ministry of Education. For DSS children with responses in the 2013 Disability Survey, around 80% had "extra help with school work because of a condition or health problem".</p> <ul style="list-style-type: none"> ▶ Around 9% changed school over the period, marginally higher than for other non-DSS children (7%). ▶ A small but significant proportion of DSS children showed indicators of school disciplinary responses, including truancy⁴⁸, standdowns and suspensions. Reflecting differences in the broader student population, male students were several times more likely to be involved in standdowns or truancy than female students. <ul style="list-style-type: none"> ▶ Around 10% of 5-14 year old DSS children had standdown spell(s) over the period. This was 3 times higher than for other NZ children aged 5-9 and 1.3 times higher than for other NZ children aged 10-14 after adjusting for gender (70% of DSS children aged 5-14 are male). ▶ 10% of 10-14 year old DSS children had truancy spells, marginally higher than for other children of that age (8%). Rates were similar across ethnicity, disability type and SPA levels. <p>Within the group of DSS children, standdown and truancy rates were higher for Māori children and those with high/very high SPA levels.</p>
	Ambulatory sensitive	<ul style="list-style-type: none"> ▶ 18% of DSS children had ambulatory sensitive hospitalisations over the 3 year period. This was around 6 times the rate of the broader 5-14 year old child population (3%). Within the

⁴⁸ Truancy data is sourced from the Ministry of Education's student intervention dataset; a 'truancy spell' indicates where a student has been referred to the Attendance Service. These rates may differ from those reported by the Ministry of Education as these are based on more granular student attendance data covering a wider range of non-attendance modes.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
	(avoidable) hospitalisations	<p>group of DSS children, children with an intellectual disability or with high/very high SPA levels were more likely to have had ambulatory sensitive hospitalisations over a three year period:</p> <ul style="list-style-type: none"> ▶ 21% of children with intellectual disability, compared with 15% of those with other disabilities ▶ 22% of children with high SPA levels, compared with 11% of those with low to medium SPA levels
	Emergency Department contacts and injury related hospitalisations	<ul style="list-style-type: none"> ▶ 19% of DSS children aged 5-14 had 2 or more ED visits over the three year period, 1.7 times higher than the proportion of other 5-14 year old children with 2 or more ED visits (around 11%). The difference in ED contact rates appears to be health condition related as injury related ED contact rates are similar to the national average for 5-14 year olds (18% over the 3 year period). ▶ Overall ED contact rates were higher for children with intellectual disability or high/very high SPA levels, and similar for Māori/non-Māori and male/female children. ▶ A small proportion (6%) had injury related hospitalisations over the 3 year period, similar to rates for other children.
	Mental health service contact and treatment	<ul style="list-style-type: none"> ▶ 1 in 3 (33%) of children had contact with mental health services from community providers or hospitals over the three year period, compared with 8% of similarly aged non-DSS children in New Zealand. <p>Note that this includes some disability-specific health services as well as other mental health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures.</p>

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ Within the group of 5-14 year olds allocated DSS funding, service contact rates were higher for male children (34% compared with 28% for female children), children with ASD as their prioritised disability (36% compared with 28% for children with intellectual disability) and for children with high/very high SPA levels (35% compared with 30% for those with low/medium SPA levels). The difference by gender appears to be linked to disability type, as a higher proportion of male children have ASD. Contact rates were similar between Māori and non-Māori.
	Pharmaceuticals	<ul style="list-style-type: none"> ▶ DSS children received treatment from a wider range of pharmaceutical types than other children, with an average of 4.3 pharmaceutical products dispensed compared with 2.6 for non-DSS children over the year to 30 June 2017.
	Oranga Tamariki contact	<ul style="list-style-type: none"> ▶ Around 20% of DSS children aged 5-14 were involved in reports of concern to Oranga Tamariki over the 3 years to June 2018. This was twice the rate of similarly aged non-DSS children in New Zealand (10%). ▶ 5% of children (around 490) were involved in statutory Care and Protection (CP) over the 3 year period, with 3% in out of home care placements at some point. Although this was a small proportion of the DSS population, this was significantly higher than for the broader 5-14 year old child population (where less than 2% had statutory CP contact and less than 1% had out of home care placements). ▶ 12% of children were involved in Police Family Violence Centre notifications to Oranga Tamariki over the period, a rate around 1.5 times higher than for other 5-14 year olds in New Zealand (7%). ▶ Within the group of DSS children aged 5-14, those with an intellectual disability or high/very high SPA levels experienced higher rates of CP contact:

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ 27% of children with intellectual disability and 24% of children with high/very high SPA levels were involved in reports of concern ▶ 7% of children with intellectual disability and 6% of children with high/very high SPA levels were involved in statutory CP (compared with 3% of other DSS children) <p>Māori children also experienced higher rates of CP contact, reflecting differences in the broader NZ population: 30% were involved in reports of concern and 8% were involved in statutory CP over a 3 year period.</p>
	Offences	<ul style="list-style-type: none"> ▶ 6% of DSS children aged 10-14 were involved in offences recorded by Police over the 3 year period, with 3% of DSS children aged 10-14 involved in high-seriousness offending⁴⁹. This was higher than for non-DSS children, where 4% were involved in offending over the same period and 2% were involved in high-seriousness offending. Most children with offences were male (80%), reflecting similar differences in offending involvement by gender in the broader population. ▶ Within the DSS child population, offending rates were higher for those with intellectual disability (8%, compared with 4% for those with other disabilities) and slightly higher for those with high/very high SPA levels (7%, compared with 5% for those with low/medium SPA levels). Reflecting similar differences within the national population of children and young people, offending rates were higher for Māori children (10% compared with 5% for non-Māori children).

⁴⁹ In this report, offences are categorised as low level or high level based on the seriousness scores assigned by the Ministry of Justice. Seriousness scores are a way of quantifying the relative seriousness of offences. The majority of high level offences have a seriousness score greater than 100. Further information about seriousness scores is available at <https://www.justice.govt.nz/assets/Documents/Publications/2016-FAQs-Seriousness-Scores2.pdf>.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
Parents / family / whānau	Family units and parental employment	<p><i>The following observations around family units should be treated as estimates and care taken in interpretation, due to limitations around the coverage of relationship records in administrative data. Refer to Appendix D for further information.</i></p> <p>For 5-14 year old DSS children at June 2018:</p> <ul style="list-style-type: none"> ▶ Just under 60% live with two parents/caregivers; 42% live with sole parents. The proportion of this group supported by a sole parent/caregiver is higher than for non-DSS 5-14 year old children (around 30%). Children in this age group supported by sole parents were much more likely to require income support for some/all of the 3 year period. ▶ The proportion of DSS children supported by two parents/caregivers and two incomes is lower than for the non-DSS child population - 27% compared with 39% for the broader non-DSS child population. 39% of DSS children had one parent with employment income (compared to 40% of non-DSS children) and 34% had no parents with employment income (compared with 21% of non-DSS children). <p>Examining household transitions over a 3 year period from June 2015 to June 2018, for children aged 5-14 at June 2015:</p> <ul style="list-style-type: none"> ▶ DSS children supported by a sole parent with no employment income were more likely to remain in the same circumstances over time. For sole parents without employment income caring for disabled children aged 5-14, 84% were still in the same circumstances after 3 years, compared with 70% of other sole parents of similarly aged children. ▶ DSS children linked to two parents/caregivers with one parent having employment income were more likely to continue to be supported by one parent's income at the end of the period (66% compared to 58% for non-DSS children). In other words, full time caring parents were less likely to return to employment over the period.

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ In contrast to younger children, 5-14 year olds supported by two parent/caregiver incomes had a similar likelihood of remaining with two parent incomes at the end of the period as non-DSS children.
	Benefit income support, social housing and address changes	<ul style="list-style-type: none"> ▶ Around 1 in 3 were supported on a main benefit at some point over the 3 year period, and 17% had a parent who received sole parent support for some/all of the period. Overall benefit support rates were higher than for other similarly aged children in New Zealand (where around 23% were supported on a main benefit at some point over the 3 years). ▶ 13% of children lived in social housing for some/all of the period while 6% were 'priority A' or 'B' on the social housing register. These rates were higher than for the non-DSS child population (8% in social housing, 3% on the priority social housing register). ▶ Address changes over the period were at rates broadly similar to other 5-14 year olds in New Zealand (43% changed address over a 3 year period, with 18% reporting 3 or more address changes) ▶ A significant proportion (35%) of DSS children aged 5-14 had parents/caregivers who drew on third-tier MSD support payments⁵⁰ over the 3 year period, higher than for other 5-14 year old children (24%). ▶ 84% of DSS children were linked to MSD Child Disability Allowance payments. The Child Disability Allowance is a fortnightly payment made to the main carer of a child or young person with a serious disability. It is paid in recognition of the extra care and attention needed for that child.⁵¹

⁵⁰ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

⁵¹ This description and further information can be found at MSD's website (<https://www.workandincome.govt.nz/products/a-z-benefits/child-disability-allowance.html>)

Perspective	Indicators	Insights for children aged 5-14 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other similarly aged children - outcome and service contact indicators over the 3 year period to 30 June 2018
		<ul style="list-style-type: none"> ▶ 6% of DSS children were linked to MSD Unsupported Child Benefit payments - these children are living with caregivers other than their parent(s) for a sustained period of time. The national average for children aged 5-14 was 2%. ▶ 36% of DSS children had parents/caregivers in receipt of Accommodation Supplement and 14% received Temporary Additional Support.

H.3 Young people aged 15-24 years

Key transitions: The disabled young person is progressing through high school/vocational training, progressing through teenage years and embarking on adult life. Some transition into different living situations, while others continue to live with family. Parents and family/whānau supporting young people through key development and transition years.

At 30 June 2018 there were around 7,500 young people aged 15-24 allocated DSS funding over the year to 30 June 2018 in New Zealand. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have Intellectual (55%) or Autism Spectrum Disorder (33%) as their prioritised disability, followed by 9% with a physical disability.
- ▶ Respite (85%), home and community support (36%), behavioural (7%), supported living (8%) and residential services (8%) were key types of NASC allocated services.
- ▶ Apart from those in residential services (8%), family members living with the young person are likely to be the main carer for most of the remaining group (as suggested by responses from DSS clients aged 15-24 to the 2013 Disability Survey).
- ▶ 18% live in the 20% least deprived areas of NZ while 25% live in the 20% most deprived areas. This is a broadly similar socioeconomic profile to non-DSS young people aged 15-24 (where 24% live in the 20% most deprived areas).

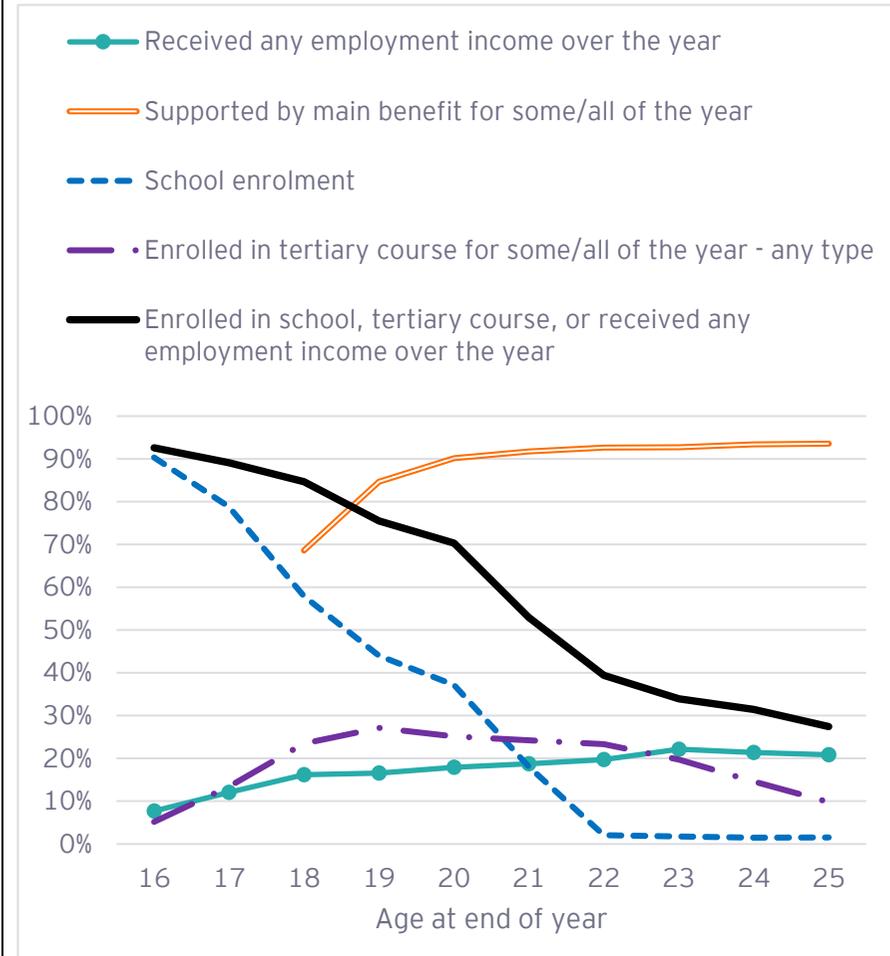
This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018⁵² for young people who were allocated DSS funding over the year to June 2018 and were aged 15-24 at the start of the period. For some young people this will include time prior to them receiving DSS funding.

⁵² Health and tertiary education indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

The graph to the right (Figure 12) illustrates the proportion of DSS young people across New Zealand in education, employment and receiving income support at various ages over the period 1 July 2014 to 30 June 2017. In summary, **the majority of DSS young people aged 16-21 are engaged in education or employment, with most enrolled in school or tertiary courses.** This proportion decreases to around 30% in education or with employment by age 25.

- ▶ Young people allocated DSS are more likely to remain enrolled in school for longer than their non-DSS counterparts, and complete on average an extra year of school.
 - ▶ At age 16, around 90% of DSS young people are enrolled in school.
 - ▶ By age 19, around 45% of DSS young people remain enrolled in school. This reduces to 18% of 21 year old DSS young people, with students finishing by age 22.
- ▶ Around 34% of DSS young people aged 15-19 enrolled in tertiary education for some or all of the 3 year period, e.g. colleges, polytechnics and universities. Most enrolments related to courses classed as NZQA level 1, 2 or 3, with enrolments reducing after age 22. (Note that students can enrol in some tertiary courses while attending school.)
- ▶ Most DSS young people were partially or wholly reliant on income support once 18 years or older and able to receive adult benefit payments. Around 26% of DSS young people aged 15-24 reported employment income for some or all of the 3 year period, however in most cases these were

Figure 12: Proportion of DSS young people in education, employment and supported by benefit, by age, over the years ending 30 June 2015, 30 June 2016 and 30 June 2017



relatively small amounts. A smaller number (13%) reported employment income of more than \$5,000 over at least one year in the 3 year period.

Further information is described in the section below.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
Young people	School enrolment and school leaving qualifications	<ul style="list-style-type: none"> ▶ Young people allocated DSS are more likely to remain enrolled in school for longer than their non-DSS counterparts, and complete on average an extra year of school. Figure 12 shows the proportion of DSS young people enrolled in school for each age at 30 June 2017: <ul style="list-style-type: none"> ▶ At age 16, around 90% of both DSS and non-DSS young people are enrolled in school. ▶ At age 19 the majority of non-DSS children have left school (around 5% remain), while half of DSS children remain enrolled in school. This reduces to 18% of 21 year olds, the last age at which young people remain enrolled. ▶ Around 23% of DSS young people aged 17-24 at June 2018 had achieved at least NCEA level 2 or equivalent. For non-DSS young people aged 17-24 at June 2018, around 70% had received at least NCEA level 2 or equivalent.⁵³ ▶ It is important to note that there is considerable variation between young people, with disability type and SPA levels being two factors that are associated with differing levels of school leaving qualification. For DSS young people aged 17-24 at June 2018, for example:

⁵³ Note that the Ministry of Education reports that almost 80% of school leavers achieve at least NCEA level 2 or equivalent; the figure reported here is lower as it includes young people resident in New Zealand at June 2018 who completed their education overseas, e.g. recent migrants. Refer to <https://www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1781>

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<ul style="list-style-type: none"> ▶ 10% of those with intellectual disability received an NCEA level 2 or higher, compared with 32% of other DSS young people ▶ 12% of those with high/very high SPA levels received an NCEA level 2 or higher, compared with 31% for those with low to medium SPA levels <p>Careful consideration needs to be made around whether NCEA results are appropriate indicators of education achievement for all DSS young people given varying levels of support needs and education enrolment profiles, as well as each young person's own individual learning goals.</p> <ul style="list-style-type: none"> ▶ More broadly, the Ministry of Education notes that socioeconomic factors and individual school characteristics also have an impact on education achievement of young people across NZ.⁵⁴
	Post school education and training	<ul style="list-style-type: none"> ▶ Around 34% of DSS young people aged 15-19 and 24% of young people aged 20-24 were enrolled in tertiary education and training for some/all of the three year period, such as colleges, polytechnics and universities. (Note that students can enrol in some tertiary courses while attending school.) ▶ Most enrolments relate to courses classed as NZQA level 1, 2 or 3 (levels which are covered by NCEA). Approximately 2 out of 3 of the young people who undertook tertiary education enrolled in one of these courses ▶ 4% of young people aged 20-24 enrolled in a bachelor level course (1 in 6 of those who enrolled over the period). A small proportion enrolled in Tertiary Education Commission (TEC) industry training courses (1%) over the 3 year period. <p>Enrolment in tertiary education and training for 15-19 year olds were lower for those with intellectual disability (30% compared with 39% for those with other disability types) and high/very high SPA levels (26% compared with 46% for those with low/medium SPA levels).</p>

⁵⁴ 'School leavers with NCEA level 2 or above', Ministry of Education, sourced from: <https://www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1781>

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<p>Māori young people had slightly lower enrolment rates (31% compared with 35% for non-Māori young people). Men and women had similar rates of enrolment.</p> <ul style="list-style-type: none"> ▶ For non-DSS young people across New Zealand: <ul style="list-style-type: none"> ▶ Around 66% of 15-19 year olds were enrolled in tertiary education at some point over the 3 year period, including 35% in bachelor level courses, 10% in TEC industry training, 20% in level 4-7 courses and 19% in level 1 to 3 courses. ▶ Around 48% of 20-24 year olds were enrolled in tertiary education at some point over the 3 year period
	Employment rates	<p>Most DSS young people were partially or wholly reliant on benefit income support over the 3 year period to June 2018. Some reported employment income, however in most cases these were relatively small amounts.</p> <ul style="list-style-type: none"> ▶ 28% of DSS young people aged 20-24 reported any employment income over a three year period. Most of this group reported relatively small income amounts; a smaller number (14%) reported employment income of more than \$5,000 over at least one year in the period. <p>Employment rates were lower for Māori young people, women, those with intellectual disability and high/very high SPA levels.</p> <ul style="list-style-type: none"> ▶ Employment rates in the broader non-DSS population were substantially higher; 91% of 20-24 year olds reported any income and 85% reported income of more than \$5,000 over at least one year over the 3 year period.
	Driver licences	<ul style="list-style-type: none"> ▶ 5% of DSS young people aged 20-24 had their full driver licence at June 2018. For non-DSS young people aged 20-24, 36% had a current full licence. ▶ Within the DSS young person group, licence rates are lower for those with intellectual disability (2% compared with 10% for those with other disability types), high/very high SPA levels (4% have licences) and for Māori young people (4% have licences).

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
	Ambulatory sensitive hospitalisations, ED contacts and injury related hospitalisations	<ul style="list-style-type: none"> ▶ 15% of 15-24 year old DSS young people had ambulatory sensitive hospitalisations (ASH) over the 3 year period, around 7 times higher than the ASH rate for other young people (2%). ▶ ASH rates were significantly higher for DSS young people with high/very high SPA levels (2.5 times that of DSS young people with low/medium SPA levels). Māori young people, women and those with intellectual disability experienced slightly higher ASH rates (differences of around 1-2 percentage points). ▶ Injury related ED contact and hospitalisation rates were broadly similar to those for other young people.
	Mental health service contact and treatment	<ul style="list-style-type: none"> ▶ Just under 1 in 3 DSS young people (30%) had contact with mental health services from community providers or hospitals over the three year period. This compares to 8% of non-DSS young people across New Zealand. Note that this includes some disability-specific health services as well as other mental health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures. ▶ Within the DSS 15-24 year old group, mental health service contact rates were higher for Māori (34% compared with 29% for non-Māori) and men (31% compared with 29% for women), and similar across disability types and SPA levels. This reflects higher mental health service contact rates for Māori young people outside the DSS population (13% had provider contact over the three year period compared with 7% for non-Māori young people). One difference is that in the non-DSS population aged 15-24, women are more likely than men to have mental health service provider contact (9% had provider contact over the three year period compared with 7% of men).

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		<ul style="list-style-type: none"> ▶ A higher proportion of young people with ASD and high/very high SPA levels had mental health related pharmaceutical treatment over the period (42% and 39% respectively, compared with 33% of young people with intellectual disability and 32% of those with low/medium SPA levels).
	Pharmaceuticals	<ul style="list-style-type: none"> ▶ DSS young people received treatment from a wider range of pharmaceutical types than other young people, with an average of 4.3 pharmaceutical products dispensed compared with 2.4 for non-DSS young people over the year to 30 June 2017.
	Offences	<ul style="list-style-type: none"> ▶ 9% of 15-24 year old DSS young people were involved in Police recorded offences over the 3 year period. Overall offending rates were lower than for non-DSS young people (11% over the same 3 year period), however the proportion of DSS young people with high-level offences⁵⁵ was slightly higher (4% had high-level offences over the period, compared with 3% for non-DSS young people). ▶ Offending rates were higher for men, Māori young people and those with intellectual disability. These reflect the profile of the broader population, although differences by gender and for Māori/non-Māori were smaller for DSS clients than for non-DSS young people.
	Safety - victimisation	<ul style="list-style-type: none"> ▶ 10% of DSS young people were recorded by Police as being a victim of crime over the 3 year period to June 2018, similar to the national average for this age group. Māori young adults and those with intellectual disability were more likely to have recorded victimisations (12% of Māori young people compared with 9% of non-Māori young people,

⁵⁵ In this report, offences are categorised as low level or high level based on the seriousness scores assigned by the Ministry of Justice. Seriousness scores are a way of quantifying the relative seriousness of offences. The majority of high level offences have a seriousness score greater than 100. Further information about seriousness scores is available at <https://www.justice.govt.nz/assets/Documents/Publications/2016-FAQs-Seriousness-Scores2.pdf>.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		and 11% of young people with intellectual disability compared with 7% of those with ASD and physical disability).
Family / whānau and household	Family units, parental employment and relationships	<p><i>The following observations around family units should be treated as estimates and care taken in interpretation, due to limitations around the coverage of relationship records in administrative data. Refer to Appendix D for further information.</i></p> <p>DSS young people for whom we have information on parent links (ages 15-17) had similar household profiles to that of other child cohorts:</p> <ul style="list-style-type: none"> ▶ 43% lived with sole parents, and 57% were linked to two parents/caregivers ▶ 27% had two parents/caregivers with employment income, 40% had one parent with employment income and 33% had no parents with employment income. <p>A small proportion of DSS young people aged 20-24 (3%) reported being in a formal relationship over the 3 year period. "Formal relationships" include marriages and civil unions, and de facto relationships reported to MSD (as part of receiving benefits). A similar proportion had children.</p> <p>For the broader non-DSS population aged 20-24, 16% reported formal relationships and 19% reported having children over the 3 year period.</p>
	Transitioning into residential services	<ul style="list-style-type: none"> ▶ Around 4% of 15-19 year old and 16% of 20-24 year old DSS young people lived in residential services at June 2018; 4% of 15-24 year olds transitioned into residential services for the first time during the 3 year period. ▶ Young people with intellectual disabilities were around 2.7 times as likely to transition into residential services, while young people with high/very high SPA levels were around 5.5 times as likely to transition into residential services. Māori and non-Māori transition rates appeared broadly similar.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
	Benefit income support	<ul style="list-style-type: none"> ▶ Almost all DSS young people received a main benefit for some/all of the 3 year period (84% of 15-19 year olds and 95% of 20-24 year olds); the majority received Supported Living Payments with a minority receiving Jobseeker type payments. Young people with an intellectual disability or high/very high SPA levels experienced marginally higher rates of benefit support. In comparison, around 1 in 5 (21%) non-DSS young people aged 20-24 received a main benefit for some/all of the same period. ▶ 54% of DSS young people aged 20-24 received Disability Allowance payments. Just over half (58%) received Accommodation Supplement and 13% received Temporary Additional Support. ▶ 30% of young people aged 20-24 also drew on third-tier MSD support payments⁵⁶ during the 3 year period, a rate twice that of other 20-24 year olds (15%). Māori young people and those with low/medium SPA levels were 1.5-2.5 times more likely to draw on these payments as other DSS young people.
	Address changes and social housing	<ul style="list-style-type: none"> ▶ The cohort reported fewer residential address changes than other young people - around 54% reported no address changes over the 3 year period, compared to 39% of non-DSS young people. Non-Māori young people were less likely to report address changes. ▶ 14% of DSS young people aged 15-24 lived in social housing and 5% were on the public housing register as priority A or B for some or all of the 3 year period. Social housing tenancy rates are around 2.5 times higher than for non-DSS young people across New Zealand. Within this group, Māori young people were twice as likely to live in or be on the priority

⁵⁶ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

Perspective	Indicators	Insights for young people aged 15-24 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other young people - outcomes and service contact indicators over the 3 year period to 30 June 2018 and lifetime educational outcomes
		waitlist for social housing, reflecting the profile of the broader population. Young people with intellectual disability were 1.5 times more likely to be living in social housing.

H.4 Adults aged 25-64 years

Key transitions: Some people in this cohort are transitioning into a new living situation, while others remain at home, with their family, in residential services or other living situations, supported by family/whānau and other key support people (e.g. carers, support workers). People progress through their middle adult years with income, housing, health, relationships with family and friends and connection to community important areas of wellbeing.

At 30 June 2018 there were around 16,500 adults aged 25-64 across New Zealand who were allocated DSS funding over the year to 30 June 2018. Of these, around 7,100 were aged 25-44 and around 9,400 were aged 45-64. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have intellectual disability (57%) or physical disability (32%) as their prioritised disability, followed by 6% with Autism Spectrum Disorder and 4% with a sensory disability. Home and community support (44%), residential services (36%), respite (28%), supported living (20%) and day services (7%) were key types of NASC allocated services.
- ▶ At a national level, responses from DSS clients aged 25-64 to the 2013 Disability Survey⁵⁷ suggest that family members living with the disabled person are the main carer for around half of adult DSS clients. Another 10% have family members as carers who live separately from the respondents. Around 40% are in residential services or have support provided by a non-family member.
- ▶ 11% live in the 20% least deprived areas of NZ while 30% live in the 20% most deprived areas. DSS adults aged 25-64 are more likely to live in areas with deprivation, compared to non-DSS adults aged 25-64 across New Zealand (where 19% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed for the 3 year period to 30 June 2018⁵⁸ for adults who were aged 25-64 at the start of the period and who were allocated DSS funding over the year to 30 June 2018. For some people this will include time prior to being allocated DSS funding.

⁵⁷ Observations from the 2013 Disability Survey for DSS clients should be treated as indicative only, rather than representative of the overall DSS population, as a relatively small number of current and previous DSS clients responded to the surveys and the profile of their demographic and disability related characteristics varies from that of the overall DSS population. Further information on sample bias is described in section 6.

⁵⁸ Health and tertiary education indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other adults aged 25-64 - outcomes and service contact indicators over the 3 year period to 30 June 2018
Adult	Education	<p>A small proportion of DSS adults continued with education or training during a 3 year period:</p> <ul style="list-style-type: none"> ▶ Around 9% of DSS adults aged 25-44 and 4% of 45-64 year olds were enrolled in tertiary education and training during the three year period. Enrolment rates were higher for women and Māori, and lower for those with intellectual disability and high/very high SPA levels. ▶ For non-DSS adults, 23% of 25-44 year olds and 10% of 45-64 year olds enrolled in a tertiary education and training course over the same period.
	Employment and income	<p>Most DSS adults were partially or wholly reliant on benefit income support over a 3 year period. Some reported employment income, however in most cases these were relatively small amounts. Employment rates are substantially lower than the non-DSS population:</p> <ul style="list-style-type: none"> ▶ 24% of 25-44 year olds and 17% of 45-64 year olds reported any employment income over a three year period. Most of this group reported relatively small income amounts; a smaller number (13% of 25-44 year olds and 11% of 45-64 year olds) reported employment income of more than \$5,000 over at least one year in the period. <p>Within the DSS adult population, employment rates were marginally lower for Māori adults and considerably lower for adults with an intellectual disability and/or high/very high SPA levels, compared to those with other disability types or low/medium SPA levels.</p> <ul style="list-style-type: none"> ▶ For non-DSS adults, 90% of 25-44 year olds and 80% of 45-64 year olds reported any employment income over a 3 year period. 82% of 25-64 year olds reported income over \$5,000 over at least one year in the 3 year period.
	Driver licences	<ul style="list-style-type: none"> ▶ 20% of DSS adults aged 25-64 had their full driver licence at June 2018. For the broader 25-64 year old population, around 80% had a current full licence at June 2018. ▶ Within the DSS group, licence rates are lower for those with intellectual disability (7% compared with 36% for those with physical and other disability types) and high/very high

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other adults aged 25-64 - outcomes and service contact indicators over the 3 year period to 30 June 2018
		SPA levels (14% have licences). Licence rates were similar across Māori and non-Māori adults.
	Offences	<ul style="list-style-type: none"> ▶ 4% of DSS 25-64 year olds were involved in a Police recorded offence over a 3 year period, similar to the national average offending rate for other 25-64 year olds over the same period (5%). ▶ Within the adult DSS group, offending rates were higher for men aged 25-44 (approximately twice as likely to offend as men aged 45-64 and 2.6 times as likely to offend as similarly aged women) and for Māori (1.8 times as likely to have a recorded offence as non-Māori), consistent with differences in the national population. Rates were slightly higher for those with low/medium SPA levels.
	Safety - victimisation	<ul style="list-style-type: none"> ▶ 7% of DSS 25-64 year olds were recorded by Police as being victims of a crime over the 3 year period. This rate was similar to that of the broader adult population. ▶ Reflecting patterns in the broader population, Māori DSS adults were marginally more likely to be victimised than non-Māori DSS adults (the difference is smaller than for the non-DSS population). Adults with low/medium SPA levels were also more likely to be victimised (9% over the period). Rates were similar across gender and disability types.
	Ambulatory sensitive (avoidable) hospitalisations, ED contacts and injury related hospitalisations	<p>Around 1 in 5 DSS adults had ambulatory sensitive hospitalisations (ASHs) over the 3 year period.</p> <ul style="list-style-type: none"> ▶ 23% of the 25-64 year old DSS adult population had ASHs over the 3 year period. This was considerably higher than the broader adult population (4% had ASHs over the same period). ▶ ASH rates were higher for those with physical and other non-intellectual disability types (25% compared with 20% for those with intellectual disability), people with a high/very high SPA level (25% compared with 15% with a low/medium SPA level), and for older Māori

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other adults aged 25-64 - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<p>adults aged 45-64 (28% compared with 24% for similarly aged non-Māori). Male and female ASH rates were similar.</p> <p>Injury related ED contact and hospitalisation rates were around 2-2.7 times the rates for the broader adult population.</p> <ul style="list-style-type: none"> ▶ 21% of the DSS 25-64 year old population had injury related ED contacts and 10% had injury related hospital admissions over the 3 year period. Rates were slightly higher for those with physical and other non-intellectual disabilities, and broadly similar across SPA levels, genders and Māori/non-Māori adults. <p>7% of DSS 25-64 year olds had one of eight major chronic conditions/significant health events identified by the Ministry (coronary heart disease, gout, chronic obstructive pulmonary disease, diabetes, cancer, stroke, traumatic brain injury and acute myocardial infarction). These chronic condition rates were 2 times the rate of chronic conditions in the non-DSS adult population.</p>
	Mental health service contact and treatment	<ul style="list-style-type: none"> ▶ Around 1 in 5 (21%) of DSS 25-64 year olds had contact with mental health services from community providers or hospitals over the three year period. Note that this includes some disability-specific health services as well as other mental health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures. ▶ Within this group, service contact rates were higher for Māori (24% compared with 20% for non-Māori) and for those with high/very high SPA levels (22% compared with 19% for low/medium SPA levels). Contact rates by gender and disability type were similar.
	Pharmaceuticals	<ul style="list-style-type: none"> ▶ DSS adults received treatment from a wider range of pharmaceutical types than other adults, with an average of 8.9 pharmaceutical products dispensed compared with 3.9 for non-DSS adults over the year to 30 June 2017. Older DSS adults (aged 45-64) and those

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other adults aged 25-64 - outcomes and service contact indicators over the 3 year period to 30 June 2018
		with high/very high SPA levels were more likely to have had multiple pharmaceutical types and mental health related pharmaceuticals.
	Family and relationships	<p><i>The following observations should be treated as estimates and care taken in interpretation, as there are known limitations around the coverage of relationship records in administrative datasets, particularly for older adults and historic life events. Informal and unreported relationships are not reflected in these estimates. Refer to Appendix D for further information.</i></p> <p>For the DSS adult population:</p> <ul style="list-style-type: none"> ▶ 9% of adults aged 25-44 and 17% of adults aged 45-64 reported being in a marriage, civil union or (as part of benefit receipt) a partner relationship over the 3 year period. ▶ 17% of adults aged 25-44 and 35% of adults aged 45-64 reported ever having been in a marriage, civil union or (as part of receiving benefits) a partner relationship. ▶ 13% of 25-44 year olds and 32% of 45-64 year olds had birth children. <p>For the broader adult population, 51% reported being in a formal partnership over the 3 year period and 71% reported partnerships at some point over their lifetime. 66% had birth children.</p>
	Residential services	<ul style="list-style-type: none"> ▶ 33% of 25-44 year olds and 40% of 45-64 year old DSS adults received residential services over the year to June 2018, with around 4% transitioning into residential services during the 3 year period. <p>People with intellectual disabilities and high/very high SPA levels were significantly more likely to be residential services clients.</p>

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other adults aged 25-64 - outcomes and service contact indicators over the 3 year period to 30 June 2018
	Benefit income support	<ul style="list-style-type: none"> ▶ 92% of DSS adults aged 25-44 and 80% of those aged 45-64 received a main benefit for some/all of the 3 year period, the vast majority being Supported Living Payments. Around 70% were supported by a main benefit for more than half of the 3 year period. Adults with an intellectual disability or high/very high SPA levels had higher levels of benefit support than those with physical disability or low/medium SPA levels. In comparison, 17% of non-DSS adults aged 25-44 and 16% of non-DSS adults aged 45-64 received a main benefit for some/all of the 3 year period and 9% received benefit support for more than half of the 3 year period. ▶ Just over half (54%) of DSS adults received Disability Allowance payments. ▶ 45% of 25-44 year olds and 30% of 45-64 year olds allocated DSS received the Accommodation Supplement (AS) over the 3 year period, while 14% received Temporary Additional Support (TAS). ▶ Just under 1 in 3 (30%) of DSS adults aged 25-64 also drew on third-tier MSD support payments⁵⁹ during the 3 year period. ▶ Rates of receipt of AS, TAS and third-tier MSD support payments are around 2 times higher than for other adults in the population. Reflecting differences in the overall NZ population, women, Māori, those with physical and other non-intellectual disabilities and low/medium SPA levels were more likely to draw on these sources of support.
	Address changes and social housing	<ul style="list-style-type: none"> ▶ 12% of DSS 25-64 year olds lived in social housing for some/all of the 3 year period while 5% were on the public housing register as priority A or B. The proportions in social housing or on the priority housing waitlist were 3-4 times higher than for the non-DSS adult population.

⁵⁹ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

Perspective	Indicators	Insights for adults aged 25-64 allocated DSS over the year to 30 June 2018 across New Zealand, compared to other adults aged 25-64 - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<p>Within this group, Māori adults and those with a physical disability were 2-2.8 times more likely to live in social housing or on the priority housing waitlist, while those with high/very high SPA levels were around 1.5-2 times more likely to be in social housing or on the priority waitlist.</p> <ul style="list-style-type: none"> ▶ 41% reported address changes over the 3 year period, similar to the broader adult population (44%).

H.5 Adults aged 65 and older

Key transitions: Some people in this cohort are transitioning into a new living situation, while others remain at home, with their family, in community residential homes or other living situation, supported by family/whānau and other key support people (e.g. carers, support workers). Superannuation payments commence at age 65. Maintaining health becomes increasingly important along with material wellbeing, relationships with family and friends and connection to community.

At 30 June 2018 there were around 3,600 adults aged 65 and over who were allocated DSS funding over the year to 30 June 2018 across New Zealand. Key demographic and socioeconomic characteristics are summarised below.

- ▶ The majority have physical disability (60%), intellectual disability (32%) as their prioritised disability, followed by 4% with a sensory disability. Home and community support (62%), residential services (31%), respite (20%), supported living (8%) and day services (8%) were key types of NASC allocated services.
- ▶ 11% live in the 20% least deprived areas of NZ while 28% live in the 20% most deprived areas. DSS adults aged 65 and over are more likely to live in areas with deprivation, compared to non-DSS adults aged 65 and over (where 16% live in the 20% most deprived areas).

This section summarises some of the lifecourse outcomes and service contact indicators observed over the 3 year period to 30 June 2018⁶⁰ for adults who were allocated DSS over the 2018 year and were aged 65 and over at the start of the period. For some people this will include time prior to them receiving DSS funding. Note that the relatively small size of this group meant that not all indicators were observable for some subgroups.

⁶⁰ Health indicators were taken from the 3 year period to 30 June 2017 due to limited data being available for the 2017-18 year at the time of analysis.

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 across New Zealand, compared to other people aged 65 and older - outcomes and service contact indicators over the 3 year period to 30 June 2018
Adult	Ambulatory sensitive hospitalisations, injury related ED contacts and hospitalisations	<p>1 in 4 DSS adults aged 65 and over (25%) had ambulatory sensitive hospitalisations (ASHs) over a 3 year period. This rate is higher than the broader adult population aged 65 and over (15% had ASHs over the same period).</p> <ul style="list-style-type: none"> ▶ ASH rates were higher for those with high/very high SPA levels (29% compared with 17% for low or medium SPA levels), Māori (31% compared with 24% for non-Māori adults) and men (27% compared with 23% for women) but were similar across disability types. <p>ED contact and injury related hospitalisation rates were similar to those of DSS middle aged adults and were around 1.6 times higher than the rates observed for the non-DSS population aged 65 and over.</p> <ul style="list-style-type: none"> ▶ 23% of the DSS population aged 65 and older had injury related ED contacts and 14% had injury related hospital admissions over the 3 year period. Rates were higher for women (25% had injury related ED contact and 16% had injury related hospitalisations over the period), and were broadly similar across disability types, SPA levels and for Māori/non-Māori. <p>7% of DSS adults aged 65 and over had one of eight major chronic conditions/significant health events identified by the Ministry (coronary heart disease, gout, chronic obstructive pulmonary disease, diabetes, cancer, stroke, traumatic brain injury and acute myocardial infarction), similar to chronic condition rates in the broader non-DSS population. (Note this comparison is not age standardised - chronic conditions rates may differ for specific age groups post age 65.)</p>
	Mental health service contact and treatment	<ul style="list-style-type: none"> ▶ Around 12% of DSS adults aged 65 and older had contact with mental health services from community providers or hospitals over the three year period. This compares to 5% of non-DSS adults aged 65 and older. <p>Note that this includes some disability-specific health services as well as other mental</p>

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 across New Zealand, compared to other people aged 65 and older - outcomes and service contact indicators over the 3 year period to 30 June 2018
		<p>health services, as the data does not explicitly identify which contacts are specifically related to disability. The exception is Intellectual Disability teams which has been excluded from the above figures.</p> <ul style="list-style-type: none"> ▶ Within this group, service contact rates were higher for those with high/very high SPA levels (15% compared with 10% for low/medium SPA levels) and intellectual disability (15% compared with 12% for physical and other disability types). Contact rates by gender and ethnicity were similar.
	Pharmaceuticals	<p>DSS adults received treatment from a wider range of pharmaceutical types than other adults aged 65 and over, with an average of 13.5 pharmaceutical products dispensed compared with 7.8 for non-DSS adults over the year to 30 June 2017. Those with high/very high SPA levels were more likely to have had multiple pharmaceutical types and mental health related pharmaceuticals.</p>
	Residential services	<ul style="list-style-type: none"> ▶ 31% of DSS adults aged 65 and older received residential services at June 2018, with a small number (2%) transitioning into residential services during the 3 year period. As for younger ages, people with intellectual disabilities and high/very high SPA levels were more likely to receive residential services support as those with physical disability or low/medium SPA levels.
	Driver licences	<ul style="list-style-type: none"> ▶ 27% of DSS adults aged 65-79 had their full driver licence at June 2018, significantly lower than the non-DSS adult population aged 65-79 (around 80% had a full licence). ▶ For the DSS adult population aged 65-79, licence rates were lower for those with intellectual disability (6% compared with 36% for those with physical disability) and with high/very high SPA levels (15% have licences, compared with 49% for adults with low/medium SPA levels). The proportion of Māori adults aged 65 and older with licences is slightly lower than for non-Māori (23%).

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 across New Zealand, compared to other people aged 65 and older - outcomes and service contact indicators over the 3 year period to 30 June 2018
	Safety - victimisation	3% of DSS adults aged 65 and over were recorded by Police as being victims of a crime over the 3 year period. This rate was similar to the non-DSS population aged 65 and older.
	Family and relationships	<p><i>The following observations should be treated as estimates and care taken in interpretation, as there are known limitations around the coverage of relationship records in administrative datasets for older adults. The actual rate of lifetime partnership is likely to be higher. Informal and unreported relationships are not reflected in these estimates. Refer to Appendix D for further information.</i></p> <p>For the DSS adult population aged 65 and over:</p> <ul style="list-style-type: none"> ▶ 16% reported being in a marriage or civil union over the 3 year period. ▶ 38% reported ever having been in a marriage, civil union or (as part of receiving benefits) a partner relationship. <p>For the broader adult population aged 65 and over, 48% reported being in a formal partnership over the 3 year period.</p>
	Income and housing support	<ul style="list-style-type: none"> ▶ A small proportion of DSS adults aged 65 and over (16%) drew on third-tier MSD support payments⁶¹ during the 3 year period. This proportion was around 3 times higher than for other non-DSS adults aged 65 and older. Reflecting differences in the overall population aged 65 and older and for middle aged DSS adults, Māori, women, those with physical disabilities and low/medium SPA levels were more likely to draw on these sources of support. ▶ 9% of DSS adults aged 65 and over lived in social housing for some/all of the 3 year period, around 3 times higher than the non-DSS adult population. People with a physical disability were several times as likely to be living in social housing as those with intellectual

⁶¹ Third-tier MSD support payments are intended to be one-off support payments, including Special Needs Grants, Benefit advances, Recoverable Assistance Program and Home Help payments.

Perspective	Indicators	Insights for adults aged 65 and older allocated DSS over the year to 30 June 2018 across New Zealand, compared to other people aged 65 and older - outcomes and service contact indicators over the 3 year period to 30 June 2018
		disability, and those with high/very high SPA levels were also more likely to be in social housing.

Appendix I Detailed findings from feasibility assessment

A separate document containing detailed findings from the feasibility assessment is available on request.

Appendix J Detailed observations from administrative datasets

A separate document containing detailed summary statistics is available on request.

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