

**EVIDENCE CENTRE**  
TE POKAPŪ TAUNAKITANGA

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**AN APPROACH TO  
MEASURING DISPARITY AND  
DISPROPORTIONALITY**  
in the Care and Protection System

July 2020



**ORANGA  
TAMARIKI**  
Ministry for Children

# EVIDENCE CENTRE

## TE POKAPŪ TAUNAKITANGA

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The Oranga Tamariki Evidence Centre works to build the evidence base that helps us better understand wellbeing and what works to improve outcomes for New Zealand's children, young people and their whānau.

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**Published:** July 2020

**ISBN:** 978-0-9951370-2-8

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### **Citation guidance:**

This report can be referenced as Oranga Tamariki Evidence Centre.(2020). *An approach to measuring disparity and disproportionality in the Care and Protection system*, Wellington, New Zealand: Oranga Tamariki—Ministry for Children.

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# INTRODUCTION

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There are a number of different indicators used in discussions about disparity and disproportionality between children of different ethnicities in the Care and Protection system. These indicators all have merit and highlight different aspects of disparity, and trends over time, in the Care and Protection system.

None of these indicators in isolation identify the reason for a given disparity and differences between different ethnic populations. As an addition, contributing factors to disparity can also be found throughout history and across multiple facets of our society. These factors may include:

- poverty levels/income levels
- incidence of mental health issues
- incidence of addiction/substance abuse and alcoholism
- the effects of colonisation
- institutional racism in decision making
- societal racism in reporting concerns.

The purpose of this report is to present a framework for measuring disparity and disproportionality in the Care and Protection system.

# DEFINING DISPARITY AND DISPROPORTIONALITY

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There are numerous definitions in literature available for disparity and disproportionality, but many seem to have a common theme – disparity refers to unequal outcomes between ethnic groups, and disproportionality refers to the under- or over-representation of an ethnic group compared to its percentage in the total population. For ease of understanding, the following definitions from *The Child Welfare Information Gateway, Children’s Bureau in the United States*<sup>1</sup> will be used in this report:

**Disparity** as the unequal outcomes of one racial or ethnic group as compared to outcomes for another racial/ethnic group.

**Disproportionality** as the under-representation or over-representation of a racial or ethnic group compared to its percentage in the total population.

Disparity and disproportionality is complex to measure in part because ethnicity is complex.

*“...ethnicity is a social construction and is, by nature, dynamic, flexible, and dependent upon groups, contexts, situations, political climates, social relationships, interactions, and more.”<sup>2</sup>*

It is also important to note that racial and ethnic groups are not homogenous (Garcia Coll, Akerman, & Cicchetti, 2000)<sup>3</sup>. Using simplified ethnicity groups for reporting purposes, such as Māori and non-Māori<sup>4</sup> does not fully portray the multicultural reality that is New Zealand. For example, tamariki Māori represent 69% of all tamariki in care as at 31 March 2020 – 41% of these tamariki Māori also identify as having one or more additional ethnicities (14% Pacific<sup>5</sup>; 28% NZ European).

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<sup>1</sup> [https://www.childwelfare.gov/pubpdfs/racial\\_disproportionality.pdf](https://www.childwelfare.gov/pubpdfs/racial_disproportionality.pdf)

<sup>2</sup> <https://www.karger.com/Article/Fulltext/363399> *Ethnicity and Ethnic Identity in Context*, Kiang, L.

<sup>3</sup> Garcia Coll, c., Akerman, A., & Cicchetti, D. (2000). Cultural influences on developmental processes and outcomes. *Development and Psychopathology*, 12(3), 333-356. Retrieved from <https://www.aecf.org/resources/disparities-and-disproportionality-in-child-welfare/>

<sup>4</sup> Where ‘Māori’ includes all tamariki that have Māori as one of their recorded ethnicities and ‘non-Māori’ includes all other tamariki.

<sup>5</sup> Groupings are not distinct – for example, some tamariki identify as Māori, Pacific and NZ European.

# OPTIONS FOR MEASURING DISPARITY AND DISPROPORTIONALITY

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## How Oranga Tamariki has previously measured disparity and disproportionality

Up until recently, Oranga Tamariki has not explicitly set out to systematically measure disparity and disproportionality in the Care and Protection system. The recording and reporting of ethnicity does, however, allow Oranga Tamariki to view all statistics and child-related outcomes by ethnicity.

Oranga Tamariki records ethnicity in CYRAS<sup>6</sup> according to the Statistics NZ Tier 3 ethnicity categories. There is the ability to record as many ethnicities for each child as identified and practice standards note the importance of identifying all ethnicities.

For general reporting purposes, Oranga Tamariki reports distinct children and young people according to the following ethnic groups:

- **Māori** – children who identify Māori (but not Pacific) as one of their ethnicities;
- **Māori & Pacific** – children who identify both Māori and Pacific as their ethnicities;
- **Pacific** – children who identify Pacific (but not Māori) as one of their ethnicities;
- **New Zealand European & Other** – children who do not identify Māori or Pacific as any of their ethnicities. This includes New Zealand European, European, Asian, Middle Eastern/Latin American/African and other ethnicities.

Oranga Tamariki has also previously applied measures such as total counts, distinct counts and percentage ratios on an ad-hoc basis when analysing data regarding disparity and disproportionality.

## Future measurement options

Outlined below are a range of simple and complex indicators to potentially measure and understand disparity and disproportionality. While some of these measures exist today, others are still in progress or would be areas for future work.

### Simple indicators of disparity

#### *The number of children entering care and in care*

This simple indicator requires a minimum level of information, all of which is available from within Oranga Tamariki operational data. This can be extended to other decision points in the Care and Protection system – such as numbers of Reports of Concern (ROC), Further Action Required (FAR) and Family Group Conferences (FGC).

Further breakdowns such as region and the age of tamariki at the time of care entry can easily be applied for further detail.

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<sup>6</sup> Oranga Tamariki case management system.

### *The percentage of children of different ethnicities entering care or in care*

This can be calculated from the information for the first indicator described above, but instead provides results as a proportion rather than number.

### *Comparing the percentage of different ethnic groups in care to the population*

This requires using the counts of ethnic groups from Statistics New Zealand. Counts of ethnicities by age are estimated using the 2013 Census as a base.

### *The rate of entries to care or in care per thousand population*

When considering the issue of disproportionality, it is important for raw counts to be compared to the changing demographic structures of the different ethnic groups, to obtain a rate per head of population, also known as the rate or incidence (per 1,000).

This is essentially the same as the indicator above but uses one thousand as the base rather than one hundred, as in percentages. It allows us to see variations when the numbers are relatively small. This is often used in epidemiology and population studies. It is important when measuring rates that *distinct* counts of children are used, rather than totals.

## **Complex indicators of disparity**

### *Models of care which control for the factors above*

This takes a broader approach to the measures above by accounting for external factors which may also impact on disparity and disproportionality trends. For example, the IDI (the Statistics NZ database of integrated administrative data) offers the opportunity to model the association between data such as parental education and mental health experiences and participation of children in the care system.

### *The progression rate across the decision points in the Oranga Tamariki system*

This measure looks at the proportion of decision points in the care pathway that proceed to the next step, e.g. what percentage of ROCs progress to FAR. A few pieces of work undertaken by Oranga Tamariki explore this progression.

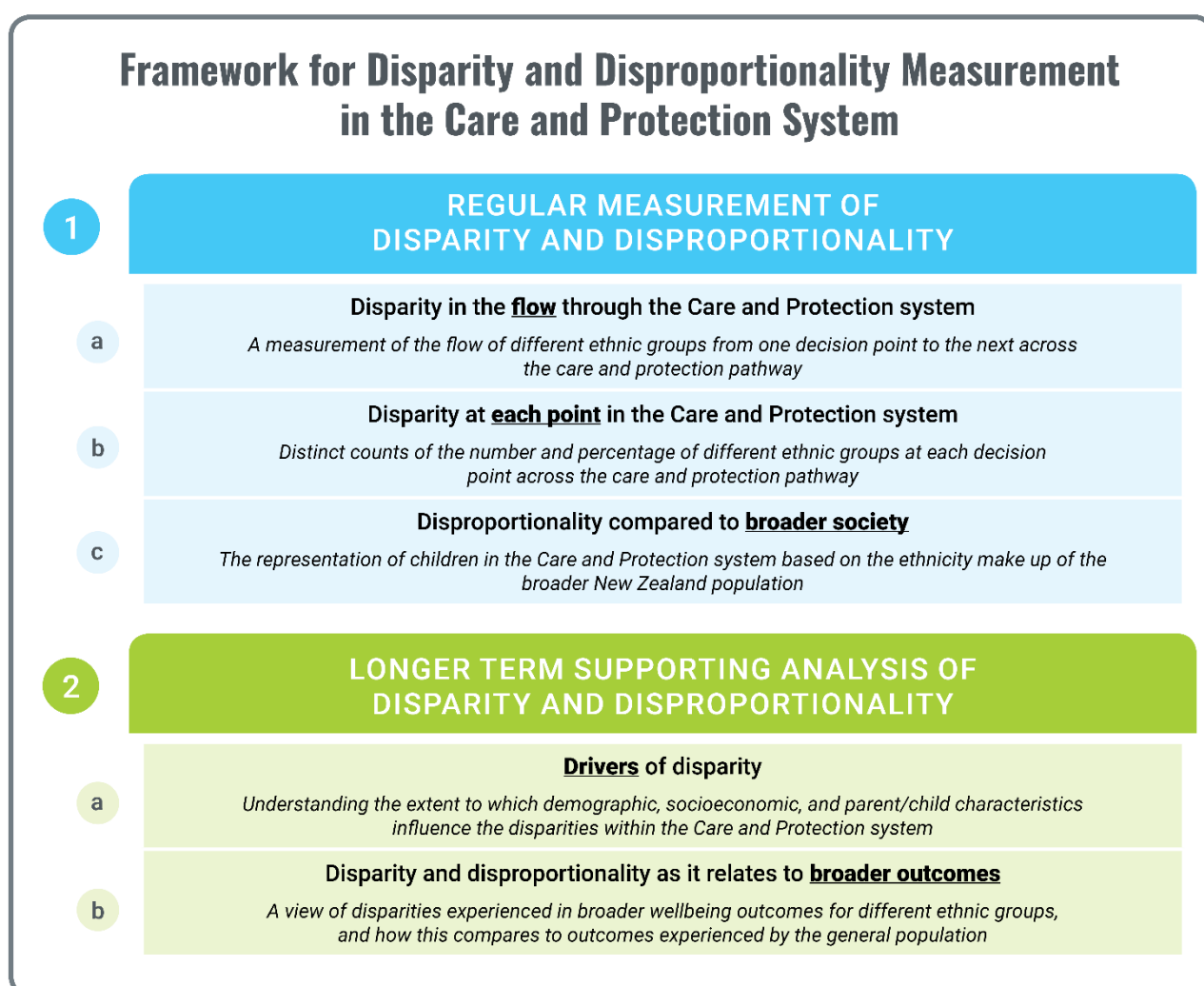
### *Case studies of decision making to examine decision making processes*

This involves the manual case-by-case review of actual decisions made for children. This is complex and time consuming and requires investment of significant resources to examine enough numbers to build a robust evidence base.

# FRAMEWORK FOR MEASURING DISPARITY AND DISPROPORTIONALITY

Oranga Tamariki and our partners have many initiatives underway to improve outcomes for the tamariki we work with. Specific measures can monitor improvements in disparity and disproportionality over time, allowing us to identify whether these programmes of work are making a positive impact by showing improvements in the disparities and disproportionality experienced by different ethnic populations.

There is no one right measure when it comes to measuring disparity and disproportionality. Consideration of a number of factors in relation to each other is required. Oranga Tamariki has developed the following framework for the ongoing measurement of disparity and disproportionality:





## Additional considerations

### Frequency of measurement

The measures outlined in part one of the framework should be produced on an annual basis. While it would be possible to do this quarterly, annual reporting allows for less fluctuation in the data so that true trends may be observed.

The supporting analysis outlined in part two of the framework can be conducted on a biennial basis. Societal shifts are often slow to occur and results are unlikely to shift by much on a regular basis due to the longer-term nature of the factors considered within the analysis.

### Distinct count vs total counts

In a given year, some children may interact with individual parts of the Care and Protection system more than once. For example, a child may be reported to Oranga Tamariki more than once, or enter into the care and protection custody of the Chief Executive more than once. We suggest measures of disparity and disproportionality use the **distinct number of children** at each point in the Care and Protection system.

Another way to measure these events is **the total number of events** which counts a child each time they experience an event, regardless of whether it is the first time or a subsequent time. Total events are important in telling us which children are presenting to Oranga Tamariki on multiple occasions so we can understand why, and this information provides a more holistic view of the experiences of children through the care system.

However, **in terms of measuring disparity, the distinct number of children should be used.** This allows us to, for example, present a picture of the individual children entering care, with total entries available as a secondary measure to identify the characteristics of children who re-enter care.

## The framework in detail

### 1) Regular measurement of disparity and disproportionality

There are several different indicators that can be used in discussions about ethnic disparity and disproportionality in the Care and Protection system. Each indicator shines light on particular aspects of disparity and the trends over time. Three core indicators have been identified as part of the framework, outlined in further detail on page 8.

### 2) Longer term supporting analysis of disparity and disproportionality

As well as regular measurement of a range of key statistics, other analysis can be used to supplement and support these results in order to provide a more holistic and considered view of disparity and disproportionality. This includes:

#### *2a) Drivers of disparity*

The measurements in part one of the framework cannot identify the underlying reasons for the disparity and disproportionality between different ethnic groups. While this analysis provides insight into the experience of different ethnic groups within the Care and Protection system, it does not address the extent to which over-representation reflects relative levels of need, wider societal factors or the impact of Oranga Tamariki practice and decision-making factors, including practitioner bias.

Analysis<sup>7</sup> completed in the IDI into factors associated with ethnic disparities in the Care and Protection system begins to unpick some of these drivers and presents an initial quantitative analysis which demonstrates the extent to which demographic, socioeconomic, and parent/child characteristics influence the disparities between different ethnic groups.

### *2b) Disparity and disproportionality as it relates to broader outcomes*

As well as measuring disparity and disproportionality within the Care and Protection system, it is also important to consider disparity and disproportionality in the wellbeing and longer term outcomes of children and young people. This could include analysis of the disparity in outcomes for children and young people with care experience, as well as how this disparity differs to any disparities in outcomes experienced by the general population of children living in New Zealand. Indicators could include, but are not limited to:

- Educational achievement
- Mental health
- Substance usage
- Income
- Correctional involvement.

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<sup>7</sup> Oranga Tamariki (2020). Factors Associated with Disparities Experienced by Tamariki Māori in the Care and Protection System, Wellington, New Zealand: Oranga Tamariki—Ministry for Children.

# CONCLUSION

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Understanding disparity and disproportionality is a complex topic. This paper provides a framework for measuring disparity and disproportionality for different ethnic groups in the Care and Protection system. A combination of regular measures can be used to reveal *where* differences exist and *how* they change over time. Additional analysis can be used to provide insight into *why* disparity and disproportionality exist.

The framework presented in this report takes a population wide view, however it is important to recognise disparity and disproportionality may also differ when broken down further, such as by region or age.