



# The What, Why, and How of Collecting and Analyzing Demographic Data to Improve Equity in Child Welfare

Kanisha Brevard, Josefina Gemignani, Sarah Bardin, Elizabeth Weigensberg, and Roseana Bess February 2024  
OPRE Report #2024-020

## Overview

### Introduction

This brief summarizes practices related to collecting detailed demographic data—such as race, ethnicity, sexual orientation, gender identity, and gender expression—and other data to measure equity in child welfare. We compiled these data practices from an environmental scan of academic literature, policy documents, and other relevant sources to examine how state and local child welfare agencies and their partners determine what data they will collect, why they will collect these data, and how they will collect and use the data to measure and understand inequities.

### Primary research questions

The following research questions guided the environmental scan and development of this research brief:

- / How do state and local child welfare agencies and their partners collect and use demographic and other data to understand and advance equity in service delivery and child and family outcomes?
- / How are communities represented in data collection efforts to promote equity?

### Purpose

This brief aims to highlight how demographic and other data can be collected and used to identify and address disparities. We provide examples of current and emerging data practices and highlight factors child welfare agencies should consider when implementing these practices. This information about data practices to better understand and improve equity may be helpful for a wide audience of child welfare agency staff and their partners, including agency leadership, frontline staff, research and data staff, as well as advisory councils and community partners.

### Key findings and highlights

When using existing demographic or other data, collecting new data, or improving how data are collected to understand and improve equity, child welfare agencies should consider the following factors:

- / The *what*, *why* and *how* – *what* types of demographic and other data to use or collect, *why* use or collect the data, and *how* the data will be collected and used.
- / How to ensure data reflects the demographic makeup of the local communities and is informed by input from the community.

/ The feasibility of collecting and using disaggregated demographic data to advance equity, including the resources needed to improve the quality of data, staff training, and data collection instruments, and the management, security, storage, analysis, and reporting of data.

When using data to measure disparity and disproportionality, child welfare agencies should aim to:

- / Define the populations or groups that will be used in calculations based on the goals of the analysis.
- / Understand the different measures of disparity and disproportionality and how to perform the calculations.
- / Use multiple measures to gain a more complete understanding of the extent of the disparity.
- / Develop a plan, with input from the local community, to use the data and findings to address disparities.

## Methods

Our team identified data practices from an environmental scan of published literature and state and federal documents, conducted for the Child Welfare Study to Enhance Equity with Data (CW-SEED). We conducted the scan in four stages between February and August 2022:

1. **Search:** We identified relevant academic and grey literature, published between January 2012 and March 2022, using key search terms.
2. **Screen:** Trained screeners reviewed titles and abstracts of each document for relevancy.
3. **Review:** We conducted a detailed review of highly relevant documents using a standardized template.
4. **Synthesize:** We used thematic and descriptive analysis techniques to summarize key findings.



# The What, Why, and How of Collecting and Analyzing Demographic Data to Improve Equity in Child Welfare

Kanisha Brevard, Josefina Gemignani, Sarah Bardin, Elizabeth Weigensberg, and Roseana Bess February 2024  
OPRE Report #2024-020

## Understanding inequities in child welfare

There is general acknowledgment in the field of child welfare that inequities exist along the child welfare continuum of services (Child Welfare Information Gateway 2021; Tajima et al. 2022). These inequities include disparities and disproportionalities among children who are involved in reports, investigations, and out-of-home placements, and who receive child welfare support services (Summers 2015). Data can play an important role in identifying where inequities exist, and which children are most affected by inequities (Annie E. Casey Foundation 2016). Therefore, many public and private child welfare agencies are searching for ways to improve how they collect and use demographic and other data to identify and address inequities.

## Identifying equity-focused data practices

To help child welfare agencies and their partners understand the type and magnitude of inequities in their jurisdictions, this brief highlights several equity-focused data practices for collecting demographic and other data and measuring inequities in child welfare. We identified the data practices from an environmental scan of recently published literature and federal policy documents conducted for the [Child Welfare Study to Enhance Equity with Data](#) (CW-SEED) project. Mathematica and its partners—the Center for

### Key terms as defined for the project<sup>1</sup>

**Data practice:** All activities that involve data, including planning for data collection, and collecting, accessing, analyzing, reporting, and disseminating data.

**Disaggregated data:** Data that have been broken down into separate categories. For example, many racial or ethnic groups can be further disaggregated into more specific racial or ethnic subpopulations (OIAA 2021).

**Disparity:** The unequal outcomes of one group compared with outcomes for another group (Child Welfare Information Gateway 2021).

**Disproportionality:** The underrepresentation or overrepresentation of a particular group when compared with its percentage in the general population (Child Welfare Information Gateway 2021).

the Study of Social Policy and the University of North Carolina School of Social Work—conducted this work under a contract with the Office of Planning, Research, and Evaluation in collaboration with the Children’s Bureau within the Administration for Children and Families.

Although there are multiple dimensions of equity, we focus on two types of demographic characteristics that were the focus of many articles identified in the environmental scan and in two recent federal executive orders on advancing equity (White House 2021 2022): (1) data on race and ethnicity and (2) data on sexual orientation, gender identity, and gender expression (SOGIE).

<sup>1</sup> While the CW-SEED project has adopted these definitions of key terms, there are multiple ways to define and operationalize the terms disparity and disproportionality (McDaniel et al. 2017).

Although the CW-SEED environmental scan identified a wide variety of data practices, this brief is limited to providing a high-level overview of the data collection and measurement data practices that were identified in the environmental scan, which included peer-reviewed and grey-literature and federal policy documents published between January 2012 and March 2022. Another brief in this series, titled “Using Data to Enhance Equity in Child Welfare: Findings from an Environmental Scan,” provides a synthesis of the environmental scan findings and describes a broader array of data practices across the data life cycle. Additional details about specific data practices may also be found in the cited sources found throughout the brief.

### A framework for implementing data practices

Throughout the brief, we use a framework of key questions to guide child welfare agencies and their partners when implementing data practices related to data collection and measurement using disaggregated demographic and other data. When considering how to implement data practices, specifically for data collection and measurement, we recommend asking three key questions: **What, why, and how?** We use the framework of three questions throughout the brief to highlight data practices child welfare agencies could consider when improving how they *use* existing demographic and other data, *collect* demographic and other data from children and families, and better *measure* equity.

For example, child welfare agencies and their partner organizations could consider the following questions:



**What** demographic and other data could we use or collect to understand and enhance equity?



**Why** do we want to collect disaggregated demographic or other data or measure equity?



**How** can we improve our collection of current demographic or other data? How can we collect new data?

In addition, we highlight examples of how child welfare agencies are currently implementing data collection and measurement data practices and some important

considerations agencies could use to inform decisions about implementing these data practices. While we feature many examples of data practices and share helpful issues to consider, the efforts to implement data practices are often more nuanced than what can be conveyed in this brief. However, this overview of data practices and selected examples could be used as a starting point to prompt consideration of what might be possible among child welfare agencies and their partners.

## Collecting disaggregated data

### Using disaggregated demographic data to understand inequities

Child welfare agencies routinely collect disaggregated data (narrow, specific subcategories of data) on child and family characteristics. For example, the U.S. Office of Management and Budget’s (OMB’s) standard, broad category of Black or African American can be broken down to reflect the diversity of the Black population in the United States (for example, people from Caribbean and African countries). Disaggregated data can be used for numerous reasons, such as matching children to age-appropriate clinical services, informing continuous quality improvement efforts, and evaluating the impact of service outcomes by demographic characteristics, which can reveal disparities between specific subcategories of child and family demographic data (Child Welfare Information Gateway 2021).



**What** types of data can child welfare agencies collect or use to understand inequities?

Before making any changes to data collection practices, agencies could assess the adequacy of existing disaggregated demographic or other data and determine what types of data would help identify children, families, and communities in greatest need of services (Annie E. Casey Foundation 2016; Esposito et al. 2021; Dorsey et al. 2014; Vega Perez et al. 2022). Identifying what data are needed would enable agencies to improve data collection and uncover gaps in services and engagement that could contribute to inequitable outcomes (Child Welfare Information Gateway 2021).

## Illustrative questions regarding collecting and using demographic and other data

- What existing data can we use to understand disparities?
- What key decision points, time frames, and demographic groups should be the focus of data collection and measurement?
- Are there any limitations to our data?
- What additional data do we need to collect to better measure inequity and better understand the experiences of children and families we serve?

### Data on race and ethnicity

Data on race and ethnicity provide important information about who in the community is being reported to the child welfare agency (Luken et al. 2021). Collecting these demographic data can help child welfare agencies understand the experiences of racial and ethnic groups and identify any racial differences in service engagement and outcomes (Martin and Dean Connelly 2015; OIAA 2021).

The OMB established the following minimum standard racial and ethnic categories for use in federal reporting of child welfare data:

- / American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White (OIAA 2021)
- / Hispanic or Latino, Not Hispanic or Latino

Although an expanded set of categories to identify race and ethnicity might be beneficial to answer questions related to equity, there should be a balance between protecting the confidentiality of people within smaller subcategories and ensuring data represent the community served (OIAA 2021). Data should be detailed enough to identify patterns and inform decision making while protecting the identity of children and families. Guidelines should be developed to determine when data should be suppressed to protect the identity of children and youth.



Although existing categorizations from federal reporting guidelines might be sufficient for some agencies, others might want to expand their racial and ethnic categories to better represent the demographic

makeup of their local community (Johnson-Motoyama et al. 2018).

### Data on sexual orientation, gender identity, and expression

SOGIE data provide information about aspects of sex, gender, and sexuality, and capture important information about the identities and experiences of lesbian, gay, bisexual, transgender, queer or questioning, intersex, and other (LGBTQI+) youth and biological and foster or adoptive caregivers. Collection of SOGIE data should be considered as important as other demographic data, such as race, ethnicity, age, and disability status (National Science and Technology Council 2023). Also, SOGIE data combined with other demographic data can improve understanding of the effect of multiple identities on disparities (National Science and Technology Council 2023).



### Why collect or use disaggregated demographic data to understand inequity?

Child welfare agencies might have different reasons for collecting or using disaggregated demographic data. These reasons might vary based on mandated federal and state reporting guidelines, local child welfare context, agency needs, and desired use of the data. Also, planning what data to collect and how they will be used to meet the agency's goals can help minimize response burden on children and their caregivers (White House 2022). Thus, before data collection starts, child welfare agencies will need to carefully consider their purpose for collecting and using the data.

For example, child welfare agencies might be interested in the following:

- / Describing the people they serve in the local community more accurately and inclusively
- / Using detailed data on race, ethnicity, and SOGIE to examine trends in disparities at various points on the child welfare service continuum
- / Analyzing multiple identities and how they intersect, such as examining child welfare outcomes by race and gender identity, recognizes the importance of considering multiple dimensions of identity and how they interconnect.

When determining whether to collect new disaggregated demographic data, child welfare agencies may also want to consider the potential tradeoffs related to additional data collection. For example, new data collection may have additional costs, place more burden on staff, and lead to revised data collection policies, including provisions to ensure data privacy and security (Data Quality Campaign 2017, Gourdine 2019). However, child welfare agencies may consider how to balance these tradeoffs with the benefits that come from using these data to enhance equity.

### Illustrative questions regarding collecting demographic and other data

- Why collect more detailed or additional data on certain demographic characteristics?
- Why would collecting or using these data enhance equity in our agency?

### Why collect detailed data on race and ethnicity?

Collecting detailed racial and ethnic groups data can reveal demographic shifts over time and uncover previously hidden racial differences in outcomes between racial and ethnic subgroups. For example, over a six-year period, Washington State experienced an increase in percentage of children who identified as American Indian or Alaska Native and multiracial and Black and multiracial. In addition, disproportionality at multiple stages of the child welfare continuum were identified for these subgroups (OIAA 2021). Also, collecting and examining disaggregated data on race and ethnicity can reveal whether policy and practice changes, such as improving the availability and accessibility of culturally relevant services, are working as intended to advance equity (Child Welfare Information Gateway 2021).



### Featured example

Santa Clara County Department of Family and Children Services examined rates of foster care placement using disaggregated data on race and ethnicity and identified disparities in foster care placement rates between Black and Latino families. Community partners and the agency worked together to develop the Nia Project, which provided families with parent advocates, counseling, education, and other services. Although no formal evaluation was conducted, the program diverted slightly more than 100 families at low- to moderate-risk of out-of-home placement from formal departmental supervision within seven months of operation (Duarte and Summers 2013).

### Why collect detailed data on SOGIE data?

Although SOGIE data in child welfare are currently limited, many agencies want to collect these data, which can be used to inform service delivery decisions (GAO 2022). Moving beyond binary categories, such as male/female or gay/straight, could reveal unique experiences between children and youth with different or multiple SOGIE identities. Agencies can use detailed SOGIE data to compare safety, placement, and well-being outcomes between members of the LGBTQI+ community and between members and non-members of the LGBTQI+ community. Agencies can use SOGIE data to reduce disparities in service use and outcomes, such as by ensuring LGBTQI+ youth receive relevant services and are placed with supporting foster families instead of in group homes or with foster families unwilling to provide affirming care (GAO 2022).



### How can agencies collect demographic and other data?

Child welfare agencies can use qualitative approaches (for example, interviews, focus groups, and case notes) and quantitative approaches (for example, intake forms, surveys and questionnaires, administrative records, and other sources of numerical data) to gather demographic and other data. In the following sections, we summarize data practices agencies can use regardless of which type of data (race and ethnicity, SOGIE, or both) or approach (quantitative, qualitative, or both) is selected for improving data collection.

## Illustrative questions about how to collect demographic and other data

- How will we collect the data?
- Who will collect the data?
- When will we collect the data?
- What instruments will we use to collect the data?

**Quantitative data collection approaches or practices** can include *adding disaggregated multiracial and multiethnic categories* (OIAA 2021), such as Not Hispanic/Latino Black and White, or Not Hispanic/Latino White and American Indian. Also, agencies can collect information on parental nativity, such as “Latino with U.S.-born mother” and “Latino with foreign-born mother” (Putnam-Hornstein et al. 2013).

To collect disaggregated demographic data accurately, child welfare agencies can include *multiple response options and open text questions* on surveys or intake forms, such as providing an “other - write in” response option that the respondent defines (White House 2022).

*Disaggregated demographic data can be collected in conjunction with other data*, such as geographic data (for example, county, city, and zip code), to identify geographic patterns or trends in outcomes by demographic group at a single point in time or longitudinally. For example, using detailed data on race, ethnicity, SOGIE, and geography to generate maps would enable agencies to provide focused services in specific counties or even neighborhoods.



### Featured example

Mapping the location of Latino youth involved in juvenile detention revealed that two-thirds of youth who were arrested for probation violations or failure to show up for a court appearance were concentrated in a handful of zip codes in the same county. As a result of these maps, community partners developed strategies especially for these specific communities, leading to a 53 percent reduction in the number of Latino youth sentenced to youth detention within three years (Annie E. Casey Foundation 2016).

In addition, *ongoing data collection can capture changes in individuals’ identity over time and also create opportunities to track changes in systematic inequities over time*. At the individual-level, agencies can provide multiple opportunities for people to change their responses to questions about their racial and ethnic identity and SOGIE, as identity formation can be an ongoing process for some, and responses to these questions or the terminology used to refer to their identity might change over time (Child Welfare Information Gateway 2021; White House 2022). Regular assessment of identity can inform decision making about the appropriateness of services or a foster family for a child. At the systemic-level, continuous data collection can help agencies improve categorization of demographic data, identify trends in inequalities, and target the provision of services to help address inequities.



### Featured example

A child welfare agency representative underscored the need to collect demographic data on an ongoing basis, because it might not be possible to know whether a young person will identify as LGBTQI+ at the time of placement (GAO 2022).

**Qualitative data collection approaches or practices** involve *engaging people through interviews, focus groups, or other means to gather data about the opinions and experiences of those impacted by the child welfare agency*. Children and families served by child welfare agencies should be considered primary sources for reporting their racial and ethnic identity, SOGIE, and child welfare experiences (OIAA 2021). In addition, collecting qualitative data from children, youth, and caregivers can help agencies better understand their nuanced experiences, which are difficult to capture via administrative or survey data collection efforts. For example, input from youth can improve how workers communicate respectfully with youth, such as by asking about preferred pronouns and using inclusive language, and provide services and placements that are safe and supportive of children’s cultural identity (GAO 2022).



### Featured example

In 2007, Washington State created a statewide Racial Disproportionality Advisory Committee that included members of local tribes to serve as liaisons between tribes and federal or state governments on social service issues. The committee collected data on racial and ethnic groups, Indian Child Welfare Act (ICWA) eligibility, and geographic region, and submitted annual reports to the state legislature that included findings and strategies for reducing inequity (Martin and Connelly 2015).

To ensure data collection efforts are informed by input from the community, child welfare agencies can involve the community in (1) developing questions about race and ethnicity and SOGIE, (2) creating strategies caseworkers can use to inquire about dimensions of a child’s or family’s identity, and (3) analyzing and interpreting the data (GAO 2022). Gathering input from the community can help agencies improve the data collection process and the quality, accuracy, completeness, and interpretation of the data.

One way to involve the community is by creating community advisory groups, including those with lived experience, that reflect the demographic makeup of the local community served by the child welfare agency.



### Featured example

Researchers from Think of Us, a research and design lab, included a panel of youth with recent lived experience with the foster care system to help review findings from its Away From Home study. Based on input from the youth, the analysis and interpretation of the study’s data were changed significantly to more accurately reflect the experiences of young people in foster care (Tajima et al. 2022).

Before engaging children and youth in data collection practices, agencies can review relevant resources or gather qualitative data from older youth, researchers, and clinicians about sensitive and age-appropriate ways to inform practice guidelines on how to collect data from children and youth (GAO 2022). For example, focus groups and interviews with youth exiting foster care can be used to understand these youth’s perceptions about (1) the types of questions that are asked about race, ethnicity, and SOGIE and how,

where, and at what age to ask youth about this information, (2) what terminology to use to accurately collect this information, and (3) any differences in experiences and outcomes based on race or ethnicity, SOGIE, or both.



### Featured example

A 2022 report from the U.S. Government Accountability Office (GAO) described a proposed data practice from the Massachusetts Commission on Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning Youth. The practice would update data systems to collect information on whether foster parents are willing to provide affirming care (GAO 2022).

Also, child welfare agencies can collect qualitative and quantitative data from prospective foster parents to improve efforts to recruit foster parents and increase the number of foster parents willing to provide affirming care regardless of the racial or ethnic identity, sexual orientation, or gender identity of a child or youth.

### Important suggestions for collecting demographic and other data

/ Encourage the systematic collection and use of disaggregated demographic data to promote standardized data collection across systems and programs within the state.



### Featured example

In 2013, Oregon’s legislature mandated the standardized collection of race, ethnicity, and language data, which has supported policymaking efforts to promote racial equity. Data were used to assess compliance with the Indian Child Welfare Act and to understand the experiences of children who identify as American Indian or Alaska Native, are eligible for membership in their tribe, and are protected under the Indian Child Welfare Act (Martin and Connelly 2015).

/ Train child welfare staff on current and emerging practices for collecting accurate and reliable data (Cruz and Smith 2021; Cuccaro-Alamin et al. 2017). For example, establish standards and guidelines for obtaining detailed, high-quality data that include focusing on data consistency, completeness, and accuracy.



A key aspect to data collection is building trust with children and youth to improve the collection of sensitive demographic data (GAO 2022). One way to build trust is to share the purpose of the data collection and how the information will be handled and protected. Agencies can develop policies and guidelines to determine the types of questions to ask and at what age children can and should provide their own data.



- / Consider available resources for improving collection of demographic and other data. For example, use opportunities to support upgrades to data systems (for example, the state's Comprehensive Child Welfare Information System (CCWIS), perform data quality assessments, adapt or adopt data collection tools, and hire and train staff responsible for collecting and entering data (Nelson et al. 2020; Tajima et al. 2022).
- / Implement best practices for collecting sexual orientation and gender identity data, such as those recommended by the National Academies of Sciences, Engineering, and Medicine (2022) and the Office of the Chief Statistician of the United States ([Federal recommendations for SOGIE data collection](#); White House 2023).
- / Develop and implement privacy and data security policies to protect the sensitive nature of the data and minimize disclosure, especially for SOGIE data, to support the safety and well-being of those who identify as LGBTQI+ (National Academies of Sciences, Engineering, and Medicine 2022; Nelson et al. 2020).



### Featured example

Before Allegheny County Department of Human Services (DHS) implemented practices related to SOGIE data collection, it was required to address privacy and data security concerns about youth SOGIE data, the implications of sharing data with external entities, and the complexities and costs of updating an information technology (IT) system. In addition, DHS engaged with IT staff to ensure they knew the importance of these inclusive changes "to mitigate any harm during the design process" (Nelson et al. 2020).

- / Consider the implications of missing data. Missing or incomplete data can occur, especially when collecting sensitive demographic information. Missing data can lead to data quality issues which can limit the ability to accurately use these data for analysis (Luken et al. 2021; Russell 2015). It is important to be mindful of these vulnerabilities during data collection processes and consider how they can be reduced or contextualized (Nelson et al. 2020).

## How to use disaggregated demographic data to measure inequity

Many child welfare agencies are interested in using demographic data to understand where and to what extent differences in outcomes exist between two or more demographic groups. In this section, we discuss definitions of common metrics for measuring inequity in child welfare, examples of questions that can be answered by measuring inequity, factors to consider when choosing a measure, and how measurement choices could lead to different conclusions about disparities.



### What metric can agencies use to measure inequity?

Two common methods to measure differences between two groups of interest involve calculating disparity or disproportionality:

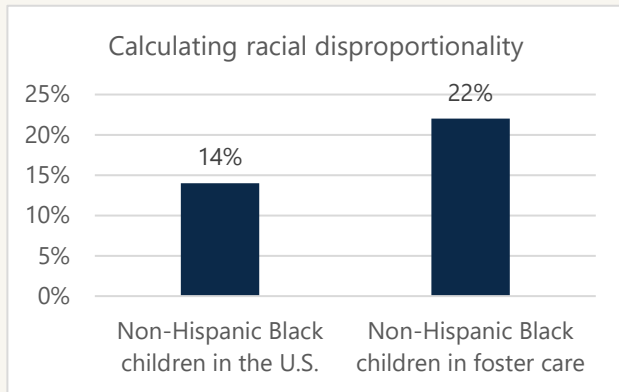
1. **Disparity** refers to the unequal outcomes of one racial, ethnic, SOGIE, or other group compared with outcomes for another racial, ethnic, or SOGIE group (Child Welfare Information Gateway 2021).
2. **Disproportionality** refers to the underrepresentation or overrepresentation of a racial, ethnic, SOGIE, or other group when compared with its percentage in the general population (Child Welfare Information Gateway 2021).



### Featured example

Calculating racial disproportionality using the disproportionality index.

This measure can be used to answer questions such as whether Black children are overrepresented in foster care compared with their representation in the general child population.



In this example, the Black disproportionality index is 1.57 (i.e.,  $22/14 = 1.57$ ; Annie E. Casey Foundation 2021), which indicates Black children are overrepresented in the foster care system.

When considering measures of inequity, it is important to remember that differences in magnitude of disparity or disproportionality across metrics can vary based on which metric is selected, the types of comparisons made (rates versus ratios), and the reference population used in the calculation (for example, general child population; Kim and Garcia 2016). Because some metrics are sensitive to small numbers and to changes over time, some researchers recommend using more than one metric to measure differences between groups to obtain a full picture of whether and to what degree disproportionality or disparity exists (Johnson-Motoyama et al. 2018).



### Featured example

A study estimated the disproportionality representation index of lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ)

youth in foster care in Los Angeles County. Using estimates of 8.3% of LGBTQ youth in the general population compared to 19.1% of foster youth who identify as LGBTQ in Los Angeles County, Wilson and Kastanis (2015) calculated the disproportionality representation index of 2.3 (i.e.,  $19.1/8.3 = 2.3$ ), indicating LGBTQ youth are highly overrepresented in foster care in Los Angeles County.

There are numerous measures available that child welfare agencies can use to measure inequity. Many child welfare agencies and their research partners calculate disparity or disproportionality using a combination of rates and ratios to measures differences between populations of interest. For example, a **disparity ratio** can be calculated by taking the rate of service use among one racial, ethnic, or SOGIE group and dividing it by the rate of service use among another racial, ethnic, or SOGIE group (Johnson-Motoyama et al. 2018; Kim and Garcia 2016). A disparity ratio of 1 indicates no disparity. A disparity ratio greater than one indicates the magnitude of the disparity. The use of risk ratios as a metric for assessing inequity is commonly used across many fields. A **disproportionality index** is the ratio of the percentage of a specific group at a decision point to the percentage of the same group in the reference population (for example, percentage of Black children in foster care/percentage of Black children in the general population; Johnson-Motoyama et al. 2018). A disproportionality index can serve as a numeric indicator of the degree of underrepresentation (less than 1.0) or overrepresentation (greater than 1.0) in a child welfare agency for a particular event or outcome.



### Why choose a measure of disparity or disproportionality?

#### Illustrative questions about choosing a measure

- Why should we choose a particular measure?
- Why should we select these demographic groups for comparison?
- Why should we examine disparity at a particular decision point?

Measuring inequity is useful for understanding what, if any, disproportionality or disparity exists at a state, regional, or county level. The selected measure of disproportionality or disparity can help child welfare leaders answer questions, such as the following:

/ **Which** demographic groups are overrepresented or underrepresented (that is, disproportionately represented)?

- / **Where** (at what key decision points) is disparity occurring in the child welfare continuum?
- / **What** is the magnitude of the disparity or disproportionality?
- / **How** does disparity or disproportionality vary over time and within the state or local community?



**How** do agencies choose the right measure?

### Choose a metric to answer questions of interest.

There are many measures of disproportionality and disparity. The first step is to select whether to measure disproportionality, disparity, or both based on the questions agencies want to answer to understand and address inequity. A measure of disproportionality can help agencies understand the extent to which a particular group may be under- or over-represented in the child welfare system compared to this group's representation in the broader population. For example, is the agency interested in learning to what extent Black children are overrepresented in the foster care population compared with their percentage in the U.S. child population, state, or county (e.g., disproportionality index)? A measure of disparity can help the child welfare agency understand whether there are inequities among key child welfare outcomes among certain groups. For example, is the agency interested in differences in the likelihood of entering foster care for Black children and White children (e.g., disparity ratio)?

### Select a reference population

When selecting a reference population for the metric, decide which reference population is most relevant to the child welfare agency for making comparisons. Three common reference populations for calculating disproportionality include the following (Johnson-Motoyama et al. 2018):

- / The total population of children
- / The total population of children living in poverty
- / The total population of children at certain points along the child welfare service continuum (such as the total number of children in foster care)


Common comparison groups for calculating disparities include the following: (1) two specific demographic groups of interest (for example, comparing service use among White children with service use among Black children), or (2) one demographic group versus all others (Johnson-Motoyama et al. 2018; Kim and Garcia 2016; Greenstein 2021).



### Featured example

In 2013, the Racial Disparity and Disproportionality work group, a multistate work group focused on monitoring and reporting racial and ethnic disparities and disproportionality in child welfare, used the American Community Survey as a reliable source of population data for measuring disproportionality and disparity (Johnson-Motoyama et al. 2018).

Important considerations when measuring inequity:

- Other criteria agencies can consider, in addition to race, ethnicity, and SOGIE, when defining populations for calculation include age range, poverty status, family structure, maltreatment type, geography, and date ranges for the data. 
- Because children can identify as more than one race, when calculating inequity, agencies must ensure there is no double counting (OIAA 2021).
- Reporting population-based rates for more detailed racial categories might be difficult because census-based population estimates are not classified in a way that breaks down the multiracial category or other subcategories of race and ethnicity (OIAA 2021).
- Measuring inequity at more than one key decision point (for example, reports, investigations, and out-of-home placements) on the child welfare continuum can reveal where disproportionalities and disparities exist, which can be helpful when determining where to focus limited resources.
- In addition, using the most advantaged subpopulation as the default reference group might suggest that outcomes among advantaged subpopulations are the norm, or should be viewed as the norm, which can be considered problematic (Nelson et al. 2020).

## Conclusion

Collecting disaggregated demographic data—such as race, ethnicity, and SOGIE—and other data to measure and understand disparities are important data practices that can inform child welfare research, policies, programs, and services.

When using existing demographic and other data, collecting new data, or improving how these data are collected, child welfare agencies should consider the following factors:

- / The *what, why* and *how* – *what* types of demographic and other data to use or collect, *why* use or collect the demographic or other data, and *how* the demographic or other data will be collected and used.
- / The data should reflect the demographic makeup of the local communities and be informed by input from the community.
- / The feasibility of collecting and using disaggregated demographic and other data to advance equity, including the resources needed to improve the quality of data, staff training, and data collection instruments, and the management, security, storage, analysis, and reporting of data.

## References

Annie E. Casey Foundation. “By The Numbers: A Race for Results Case Study.” Annie E. Casey Foundation, March 21, 2016. <https://assets.aecf.org/m/resourcedoc/aecf-ARaceForResultsCaseStudy2-2016.pdf>.

Annie E. Casey Foundation. “Children in Foster Care by Race and Hispanic Origin in United States.” Kids Count Data Center, April 2021. <https://datacenter.aecf.org/data/tables/6246-children-in-foster-care-by-race-and-hispanic-origin?loc=1&loct=1#detailed/1/any/false/2048,133,11/2638,2601,2600,2598,2603,2597,2602,1353/12993>.

Child Welfare Information Gateway. “Child Welfare Practice To Address Racial Disproportionality and Disparity.” Children’s Bureau, Administration for Children and Families, U.S. Department of Health and Human Services, 2021. <https://www.childwelfare.gov/pubs/issue-briefs/racial-disproportionality/>.

When using demographic and other data to measure disparity and disproportionality, child welfare agencies should consider the following objectives:

- / Define the populations or groups of interest that will be used in calculations; factors to consider when defining a group or population include race or ethnicity, SOGIE, age range, poverty status, maltreatment type, family structure, geography, and date ranges for the data.
- / Understand the different types of measures of disparity and disproportionality and how to perform the calculations.
- / Use multiple measures to gain a more complete understanding of the inequity and how results can vary based on method of calculation.
- / With input from the local community, develop a plan to use the data and findings to address disparities.

To learn more about other equity-focused data practices identified through the environmental scan, please see a related brief that provides a synthesis of data practices from across the data life cycle, which is available on the project web page:

<https://www.acf.hhs.gov/opre/project/child-welfare-study-enhance-equity-data-cw-seed>.

Cruz, Taylor, and Sheridan A. Smith. “Health Equity Beyond Data: Health Care Worker Perceptions of Race, Ethnicity, and Language Data Collection in Electronic Health Records.” *Medical Care*, vol. 59, no. 5, May 2021, pp. 379–385.

Cuccaro-Alamin, Stephanie, Regan Foust, Rhema Vaithianathan, and Emily Putnam-Hornstein. “Risk Assessment and Decision Making in Child Protective Services: Predictive Risk Modeling in Context.” *Children and Youth Services Review*, vol. 79, August 2017, pp. 291–298. <https://doi.org/10.1016/j.childyouth.2017.06.027>.

Data Quality Campaign and Legal Center for Foster Care & Education. “Roadmap for Foster Care and K–12 Data Linkages: Key Focus Areas to Ensure Quality Implementation,” 2017. <https://dataqualitycampaign.org/wp-content/uploads/2017/02/DQC-Foster-Care-Roadmap-02282017.pdf>.

- Dorsey, Rashida, Garth Graham, Sherry Glied, David Meyers, Carolyn Clancy, and Howard Koh. "Implementing Health Reform: Improved Data Collection and the Monitoring of Health Disparities." *Annual Review of Public Health*, vol. 35, no. 1, 2014, pp. 123–138. <https://doi.org/10.1146/annurev-publhealth-032013-182423>.
- Duarte, Crystal Soderman, and Alicia Summers. "A Three-Pronged Approach to Addressing Racial Disproportionality and Disparities in Child Welfare: The Santa Clara County Example of Leadership, Collaboration and Data-Driven Decisions." *Child and Adolescent Social Work Journal*, vol. 30, no. 1, February 2013, pp. 1–19. <https://doi.org/10.1007/s10560-012-0279-8>.
- Esposito, Andrea Mraz, Claire Smither Wulsin, Leah Pranschke, Andrew Burwick, and Rebekka Nickman. "Linking Administrative Data to Improve Understanding of Child Maltreatment Incidence and Related Risk and Protective Factors: A Feasibility Study." *Mathematica*, November 2021. <https://www.acf.hhs.gov/sites/default/files/documents/opre/OPRE-Linking-Administrative-Data-to-Improve-Understanding-Childhood-Maltreatment-Dec2021.pdf>.
- Gourdine, Ruby M. "We Treat Everybody the Same: Race Equity in Child Welfare." *Social Work in Public Health*, vol. 34, no. 1, January 2, 2019, pp. 75–85. <https://doi.org/10.1080/19371918.2018.1562400>.
- Greenstein, Nathan. "Tackling Bias in Machine Learning and Child Welfare Data." *Abt Associates. Perspectives* (blog), January 9, 2021. <https://www.abtassociates.com/insights/perspectives-blog/tackling-bias-in-machine-learning-and-child-welfare-data>.
- Johnson-Motoyama, Michelle, Terry D. Moore, Jeri L. Damman, and Kristen Rudlang-Perman. "Using Administrative Data to Monitor Racial/Ethnic Disparities and Disproportionality Within Child Welfare Agencies: Process and Preliminary Outcomes." *Journal of Public Child Welfare*, vol. 12, no. 1, January 2018, pp. 23–41.
- Kim, Minseop, and Antonio R. Garcia. "Measuring Racial/Ethnic Disparities in Mental Health Service Use Among Children Referred to the Child Welfare System." *Child Maltreatment*, vol. 21, no. 3, August 1, 2016, pp. 218–227. <https://doi.org/10.1177/1077559516656397>.
- Luken, Amanda, Reshmi Nair, and Rebecca L. Fix. "On Racial Disparities in Child Abuse Reports: Exploratory Mapping the 2018 NCANDS." *Child Maltreatment*, vol. 26, no. 3, August 1, 2021, pp. 267–281. <https://doi.org/10.1177/10775595211001926>.
- Martin, Megan, and Dana Dean Connelly. "Achieving Racial Equity: Child Welfare Policy Strategies to Improve Outcomes for Children of Color." Center for the Study of Social Policy, 2015. <https://eric.ed.gov/?id=ED582913>.
- McDaniel, Marla, Tyler Woods, Eleanor Pratt, and Margaret C. Simms. "Identifying Racial and Ethnic Disparities in Human Services: A Conceptual Framework and Literature Review." Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2017. <https://www.acf.hhs.gov/opre/report/identifying-racial-and-ethnic-disparities-human-services-conceptual-framework-and>.
- National Academies of Sciences, Engineering, and Medicine. "Measuring Sex, Gender Identity, and Sexual Orientation." The National Academies Press, 2022. <https://doi.org/10.17226/26424>.
- National Science and Technology Council. "Federal Evidence Agenda on LGBTQI+ Equity." Office of Science and Technology Policy, Executive Office of the President of the United States, January 2023. <https://www.whitehouse.gov/wp-content/uploads/2023/01/Federal-Evidence-Agenda-on-LGBTQI-Equity.pdf>.
- Nelson, A.H., D. Jenkins, S. Zanti, M. Katz, E. Berkowitz, T.C. Burnett, and D. Culhane. "A Toolkit for Centering Racial Equity Throughout Data Integration." *Actionable Intelligence for Social Policy*, University of Pennsylvania, 2020. <https://aisp.upenn.edu/centering-equity/>.
- Office of Innovation, Alignment, and Accountability (OIAA). "Using Data in DCYF to Advance Racial Equity." Washington State Department of Children, Youth & Families, May 2021. <https://www.dcyf.wa.gov/sites/default/files/pdf/reports/OIAAEquityData2021.pdf>.
- Putnam-Hornstein, Emily, Barbara Needell, Bryn King, and Michelle Johnson-Motoyama. "Racial and Ethnic Disparities: A Population-Based Examination of Risk Factors for Involvement with Child Protective Services." *Child Abuse & Neglect, Special Issue on Risk and Resilience in the Context of Child Maltreatment (Part 1)*, vol. 37, no. 1, January 2013, pp. 33–46. <https://doi.org/10.1016/j.chiabu.2012.08.005>.
- Russell, Jesse. "Predictive Analytics and Child Protection: Constraints and Opportunities." *Child Abuse & Neglect*, vol. 46, August 2015, pp. 182–89. <https://doi.org/10.1016/j.chiabu.2015.05.022>.
- Summers, Alicia. "Disproportionality Rates for Children in Foster Care." National Council of Juvenile and Family Court Judges, 2015. [https://www.ncjfcj.org/wp-content/uploads/2017/09/NCJFCJ-Disproportionality-TAB-2015\\_0.pdf](https://www.ncjfcj.org/wp-content/uploads/2017/09/NCJFCJ-Disproportionality-TAB-2015_0.pdf).

- Tajima, Emiko A., Angelique G. Day, V. Kalei Kanuha, Jessica Rodriguez-Jenkins, and Jessica A. Pryce. "What Counts as Evidence in Child Welfare Research?" *Research on Social Work Practice*, vol. 32, no. 5, January 2022. <https://doi.org/10.1177/10497315211069549>.
- U.S. Government Accountability Office (GAO). "Foster Care: Further Assistance from HHS Would Be Helpful in Supporting Youth's LGBTQI+ Identities and Religious Beliefs." April 2022. <https://www.gao.gov/products/gao-22-104688>.
- Vega Perez, Ruben D., Lyndia Hayden, Jefri Mesa, Nina Bickell, Pamela Abner, Lynne D. Richardson, and Ka Ming Ngai. "Improving Patient Race and Ethnicity Data Capture to Address Health Disparities: A Case Study From a Large Urban Health System." *Cureus*, vol. 14, no. 1, January 2022. <https://doi.org/10.7759/cureus.20973>.
- White House. "Executive Order on Advancing Equality for Lesbian, Gay, Bisexual Transgender, Queer, and Intersex Individuals." January 15, 2022. <https://www.whitehouse.gov/briefing-room/presidential-actions/2022/06/15/executive-order-on-advancing-equality-for-lesbian-gay-bisexual-transgender-queer-and-intersex-individuals/>.
- White House. "Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government." January 20, 2021. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.
- White House. "Recommendations on the Best Practices for the Collection of Sexual Orientation and Gender Identity Data on Federal Statistical Surveys." January 10, 2023. <https://www.whitehouse.gov/wp-content/uploads/2023/01/SOGI-Best-Practices.pdf>.
- Wilson, Bianca D.M., and Angeliki A. Kastanis. "Sexual and gender minority disproportionality and disparities in child welfare: A population-based study." *Children and Youth Services Review*, vol. 58, no. 1, November 2015, pp. 11–17. <https://doi.org/10.1016/j.childyouth.2015.08.016>.

**Submitted to:**

Christine Fortunato, Nicole Denmark, and Jenessa Malin  
Office of Planning, Research, and Evaluation  
Administration for Children and Families  
U.S. Department of Health and Human Services

**Contract Number:**

14D0421F0729

**Mathematica Reference Number:**

51299

**Project Director:**

Elizabeth Weigensberg, Project Director | Mathematica | 600 Alexander Park, Princeton, NJ 08540-6346 | (312) 585-3287

**Acknowledgement:** We would like to thank the following members of the CW-SEED expert group: Reiko Boyd, Sarah Fathallah, Sarah Kastelic, Nesha Jairam, Tara Linh Leaman, Ana Penman-Aguilar, Laura Radel, Rachel Thorburn, Jeanette Vega, Daniel Webster, and Bianca D.M. Wilson. The views expressed in this publication do not necessarily reflect the views of the expert group members. We would also like to thank Kathryn Kulbicki and Jennifer Haight from the Children's Bureau for their review and feedback.

**Disclaimer:** The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research, and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

This report is in the public domain. Permission to reproduce is not necessary. Suggested citation: Brevard, K., Gemignani, J., Bardin, S., Weigensberg, E. & Bess, R. (2024). The What, Why, and How of Collecting and Analyzing Data to Improve Equity in Child Welfare. OPRE Report #2024-020. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research, and Evaluation are available at <https://www.acf.hhs.gov/opre>.

[Subscribe to OPRE News and Follow OPRE on Social Media](#)



Let's Progress Together.

mathematica.org

