Abstract

Child welfare administrative data is increasingly used to identify racial/ethnic disproportionality and disparities at various levels of aggregation. However, child welfare agencies typically face challenges in harnessing administrative data to examine racial/ethnic disproportionality and disparities at meaningful levels of analysis due to limited resources and/or tools for reporting. This paper describes the process through which a multi-state workgroup designed and developed management reports to monitor racial/ethnic disparities and disproportionality using a web-based child welfare administrative data reporting system. The article provides an overview of the process, outcome, and challenges of the group’s work with the goal of offering a starting point for discussion to others who may be seeking to monitor racial/ethnic disparities and disproportionality, regardless of their reporting system.
A growing number of studies have documented racial/ethnic disproportionality and disparities among children involved with the child welfare system (Bowman, Hofer, O’Rourke & Read, 2009; Carter, 2010; CSSP, 2011; Cheng & Lo 2012; Drake, et al., 2011; Font, 2013; Kim, Chenot, Ji, 2011; Knott & Donovan, 2010; Putnam-Hornstein, Needell, King & Johnson-Motoyama, 2013; Summers, 2015). Broadly speaking, disproportionality refers to the underrepresentation or overrepresentation of a racial or ethnic group when compared to its percentage in the general population; whereas disparity refers to the unequal outcomes of one racial or ethnic group as compared when compared to outcomes for another racial or ethnic group (U.S.D.H.H.S., 2016). For example, a recent national study of the cumulative prevalence of confirmed child maltreatment by the age of 18 years found that at 2011 rates, Black (20.9%), Native American (14.5%), and Hispanic (13.0%) children had higher risks for confirmed maltreatment than white (10.7%) or Asian/Pacific Islander (3.8%) children (Wildeman et al., 2014). Significant variation in racial/ethnic disproportionality and disparities in child welfare has been observed at multiple decision points along the child welfare continuum as well as at the state and county levels and in urban vs. rural areas (Fluke, Harden, Jenkins, & Ruehrdanz, 2011; Maguire-Jack, Lanier, Johnson-Motoyama, Welch & Dineen, 2015). To better understand these dynamics and determine strategies to address them, child welfare agencies are tasked with identifying the groups for whom disproportionality and disparities are occurring, at what decision points in the child welfare system, and in which localities.

Child welfare administrative data are increasingly used to identify and understand racial/ethnic disproportionality and disparities. A survey conducted by the Center for the Study of Social Policy and the Alliance for Racial Equity in Child Welfare (Miller & Esenstad, 2015) highlighted the use of data as a core strategy among multiple states to promote racial equity.
While the development and analysis of data to monitor patterns and trends varies across states, it has become more sophisticated to inform planning in child welfare agencies and systems (Martin & Connelly, 2015). Yet child welfare agencies typically face challenges in harnessing data at meaningful levels of analysis (such as the county, agency, or unit) due to limited resources and/or tools for reporting (Miller & Esenstad, 2015).

This article describes the process and key decisions made by a multi-state workgroup in designing and developing up-to-date management reports to monitor racial/ethnic disparities and disproportionality. The goal of this paper is not to provide an exhaustive review of the literature on disproportionality and disparities in child welfare. Rather, we draw from the literature to provide a starting point for discussions in jurisdictions that are undertaking the important tasks of measuring, reporting, and using data to identify and address disproportionality and disparity. This effort was an initiative of Results Oriented Management (ROM), which delivers a web-based child welfare administrative data reporting system. The workgroup was comprised of 10 member states and county jurisdictions that use the system; however, the concerns that members confronted in this process have relevance for child welfare agencies regardless of the reporting system used.

Approaches to Measuring Disproportionality and Disparities

Three methods are commonly used for measuring racial disproportionality and disparities: Decision Point Analysis, Disproportionality Index, and Disproportionality Ratio (Shaw, Putnam-Hornstein, Magruder, & Needell, 2008; 2011). Decision Point Analysis (DPA) provides the building blocks of data used for calculating disproportionality by comparing the proportion of race/ethnicity groups represented at various child welfare decision points with the representation of race/ethnicity groups in a base population such as the general child population,
the population of children in poverty, or the children in a prior decision point. Figure 1 provides an example of a DPA report that shows a set of decision points using test data.

The Disproportionality Index (DI) measurement method uses the percentage of a racial/ethnic group in a base population as the denominator and the percentage of the racial/ethnic group in the decision point as the numerator. For example, in Figure 2, the DI for Black children is 20.1% (decision point) divided by 9.2% (base population), which is 2.2. Simply stated in this example, the percent of Black children entering foster care is 2.2 times higher than the representation of Black children in the base population. DI scores of less than one reflect underrepresentation, while scores greater than one reflect overrepresentation.

The Disproportionality Ratio (DR) uses the DI scores to calculate a ratio between one race group’s disproportionality to that of another group. For example, in Figure 3, the Black vs. White DR is 2.2 (DI for Black) divided by 0.8 (DI for White), which equals a Disparity Ratio of 2.8. In other words, Black children in this example were 2.8 times more likely to enter foster care than White children. Taken together, these methods reflect a sequential series of calculations: the percentage of each race group at a decision point used in the DPA is needed for calculating the DI, and the DI is necessary for calculating the DR.

**Administrative Data and Racial/Ethnic Disproportionality and Disparities Monitoring**

Administrative data sets have long played a critical role in child welfare, from collecting and analyzing data to meet federal guidelines to improving practice and management. At the core of these administrative data sets is a state’s case management system, which is formally referred to as the Statewide Automated Child Welfare Information System (SACWIS) in most states. SACWIS is a voluntary, federally funded “record hub” for all children and families who receive some type of child welfare support that allows for standard public reporting (State & Tribal
Information Systems, 2015). From SACWIS or other case management systems, states routinely submit case-level data to populate two key national data sets that collect data in a standardized manner: 1) the National Child Abuse and Neglect Data System (NCANDS) and 2) the Adoption and Foster Care Analysis and Reporting System (AFCARS). Both NCANDS and AFCARS play a significant role in periodic reviews of state child welfare systems that are conducted by the federal Children’s Bureau, formally known as the Child and Family Services Reviews (CFSRs).

Over the years, states, counties, and national organizations have recognized the value of using administrative data as a tool to assess racial/ethnic disproportionality and disparities in child welfare. To date, two organizations have created tools for local jurisdictions to use for monitoring racial/ethnic disproportionality and disparities. The California Child Welfare Indicators Project (CCWIP) began over a decade ago, and has provided online disparity reports and a modifiable disparity matrix tool for California counties since 2005 (CCWIP, n.d.). The Center for the Study of Social Policy’s Alliance for Racial Equity in Child Welfare created the Racial Equity Child Welfare Data Analysis Tool, which is available to states and counties upon request. This tool provides disproportionality and disparity calculations through an Excel based spreadsheet for NCANDS and AFCARS data entry.

The ROM System

The ROM reporting system provides up-to-date data that supports continuous quality improvement activity and organizational learning in states around the country. This interactive web-based reporting application was designed by university research staff with expertise in child welfare, and developed by independent software developers in 2004. The system uses data captured in existing child welfare data systems (e.g., SACWIS) and uses a longitudinal database structure for generating reports. Many of the data fields used are consistent with definitions
provided in AFCARS and NCANDS. In the early stages of implementation, the project team works with agencies to “map” and validate agency data with the system data fields. Secure access to the system is controlled through approved users managed at the agency level. In some states, data has also been made available through the creation of public access sites to achieve performance transparency (see Colorado’s public site at http://www.cdhsdatamatters.org/).

The system provides reports on a range of national (e.g., CFSRs) and local performance indicators using data refreshed daily or weekly. Data are presented on the three major service areas of public child welfare: child protection, in-home services, and foster care. A core set of reports available to all sites provide data that are descriptive (e.g., case counts, placement level of care), process oriented (e.g., monthly caseworker visits, timely completion of investigations), and outcome focused (e.g., timely permanency, safety, and well-being). Custom reports are also developed based on site specific needs. The system is informed by the principles of learning organizations (Poertner & Rapp, 2007) and addresses a need among child welfare agencies for improved access to existing data by providing useable formats that enable agencies to better organize and visualize their data at multiple levels.

Data in the system are presented in graphs and tables, and users can “drill down” to retrieve case specific data from report tables, and save datasets for further analysis and data validation. The application enables users to view trends over time, set parameters (e.g., management unit, time period), compare management units (e.g., regions, offices, supervisors, caseworkers), and cross tabulate data by a range of state-selected independent variables (e.g., child characteristics, judicial districts, removal reasons, providers). Filtering is provided on a wide range of variables when there is a need to focus on specific sub-populations. The
development of new reports or report functionality is conducted in collaboration with member jurisdictions (i.e., state, county) to best meet their reporting needs.

The Racial Disparities and Disproportionality Work Group

The project team convened the Racial Disparity and Disproportionality (RDD) work group in May 2013 in response to growing concerns raised about disproportionality by the system’s Leadership Council, a group comprised of representatives of all participating states that meets on a quarterly basis to discuss common needs and further system developments. The RDD work group was tasked with guiding the development of new reports that would provide states with the ability to analyze their own data to identify disproportionality or disparities at various decision points throughout the child welfare system.

The RDD workgroup was comprised of 18 representatives from 10 child welfare agencies (9 state and 1 county) that had implemented ROM reports as their reporting tool at that time. The representatives included state or county staff with responsibilities for data systems, data analysis, and/or continuous quality improvement efforts in their jurisdiction. Several of the workgroup members or their jurisdictions had some experience with developing reports on racial disproportionality and disparity within their own jurisdiction. Some of these ten agencies also had organized efforts to focus attention on disproportionality and other race related issues.

The project staff facilitated the workgroup, and individuals from Casey Family Programs and the University of Kansas School of Social Welfare contributed their expertise on racial/ethnic disparities and disproportionality in child welfare. The effort was partially funded by Casey Family Programs.

The RDD Work Group and Key Considerations and Decisions
Early on, the workgroup established the goals of defining and designing a set of reports that would lead to a better understanding of racial disproportionality and disparity dynamics; developing a reporting model that could be implemented across states accounting for jurisdictional preferences; and identifying strategies for addressing disproportionality and disparities once the reports were developed and disseminated. The workgroup held five two-hour meetings in May and June of 2013 to discuss theory, research, and measurement methods and to determine the content and design of the RDD reports.

Theories of Racial/Ethnic Disproportionality and Disparities

To frame the group’s work, members first discussed theories of disproportionality and disparities that sought to address the “why” question of what accounts for disproportionality and disparities. Is it bias? Or do other factors explain these dynamics? To address this question, the workgroup was provided with an overview of theory and related empirical research regarding (1) disproportional poverty, child maltreatment risk factors, and need among overrepresented racial and ethnic groups; (2) racial bias or other inconsistencies in practice that potentially manufacture differences in decision making and child welfare outcomes; and (3) organizational and institutional conditions and features that produce and/or exacerbate disproportionality. These theories are presented here briefly.¹

Disproportional poverty, child maltreatment risk, and need. Although poverty does not cause maltreatment, per se, considerable evidence suggests that maltreatment occurs disproportionately among families experiencing poverty. For example, findings from the Fourth National Incidence Study of Child Abuse and Neglect (NIS-4) indicate that children in

¹ Note that workgroup members were provided with an annotated bibliography on disproportionality that was generated through a systematic search. This resource is available at [http://childrenandfamilies.ku.edu/ROM/RDD-Report.pdf](http://childrenandfamilies.ku.edu/ROM/RDD-Report.pdf).
households of low income experience maltreatment at a rate of more than 5 times the rate of other children (Sedlak et al., 2010). Moreover, research suggests that the disproportionate experience of poverty may explain racial/ethnic disparities in child welfare services involvement (e.g., Maguire-Jack et al., 2015; Putnam-Hornstein, Needell, King, & Johnson-Motoyama, 2013).

A growing body of research also links neighborhood poverty to child maltreatment. For example, a recent study demonstrated the salient role that community poverty plays in child neglect among African Americans when compared to whites after taking individual level income into consideration, suggesting that children reported for the same forms of neglect may face very different challenges in their community based on race such as resource availability, as well as the disproportional experience of crime and neighborhood violence (e.g., Jonson-Reid, Drake & Zhou, 2013). Therefore, according to the theory of disproportional poverty or need, certain groups of children may be reported and processed through the child welfare system at different rates due to maltreatment risks associated with greater individual needs as well as fewer community resources.

Yet, other studies have demonstrated that racial/ethnic differences may be more important in influencing decisions to act despite assessments of poverty (e.g., Dettlaff et al., 2011). This finding raises an important question of what race/ethnicity represents to the decision maker.

**Racial bias and inconsistencies in practice.** Racial bias has been one of the most hotly debated explanations for disproportionality in child welfare (e.g., Bartholet, 2009; Drake et al., 2011). However, from a research perspective, this dynamic has been difficult to isolate and findings have been mixed. For example, studies of mandated reporters suggest that race/ethnicity is a significant factor in maltreatment reporting in some studies (e.g., Cort, Cerulli, & He, 2010)
but not others after accounting for poverty (e.g., Drake, Lee & Jonson-Reid, 2009). The few studies that have examined the role of race/ethnicity in caseworker decisions have also yielded mixed findings. For example, an Illinois study found no evidence that white workers substantiated cases involving African Americans at higher rates than those involving whites (Rolock & Testa, 2005). Yet race/ethnicity (Dettlaff et al., 2011) and caregiver birthplace (Johnson-Motoyama, Dettlaff, & Finno, 2012) have been found to be relevant factors in substantiation decisions after accounting for poverty. Further, qualitative studies that have incorporated questions about bias suggest a small but cumulative effect of race throughout the service system (e.g., Chibnall et al., 2013).

Organizational and institutional conditions. A third theory suggests that system level factors such as agency infrastructure, resource availability, and leadership influence organizational culture, which differentially affects the structure and delivery of child welfare services to racial/ethnic minority families. For example, the Center for the Study of Social Policy (CSSP) found a number of institutional conditions and features to contribute to the outcomes experienced by African American families and children including high caseloads, an organizational culture of fear that was inhibiting workers from family centered practice, rules and regulations that were deterring relative placement (often for reasons of poverty), and a lack of meaningful infrastructure to support the child welfare agency in providing parents with ‘reasonable efforts’ to reunify. In scrolling through the list of specific institutional features that were found to be problematic for African American families, one might argue that these features are likely problematic for all families. However, a noteworthy feature of the analysis was its description of the complex challenges faced by African Americans as a result of the disinvestment in their communities, including the struggle of African Americans to find adequate
housing and jobs, healthy and affordable food, safe and academically challenging schools, and clean, secure parks and neighborhoods in communities that were described as having poor services, particularly prevention services.

Workgroup participants agreed that each theory likely holds some degree of relevance and power to explain disparities and disproportionality, and that the relative contribution of each theory was likely to vary by jurisdiction. The discussion promoted a shared understanding of relevant theories and informed the development of RDD reports by underscoring the importance of accounting for poverty in reporting.

**Measurement Methods**

As a next step, the workgroup was presented with information on measurement methods and terminology used from different reporting systems and published articles including content on decision points, base populations and population data sources for use in calculations, classifications of child race/ethnicity, and methods of calculating disproportionality and disparities. The considerations that were discussed and the consensus decisions that emerged are presented in turn.

**Decision points.** Research suggests that disproportionality and disparities occur at nearly every point in the child welfare system, but that the presence and magnitude of disproportionality may vary from group to group, and point to point. Movement of a child from one status point in the system to another (e.g., investigation to substantiation) typically results from a decision; therefore, these points are commonly referred to as “decision points.” The workgroup considered a wide range of decision points for use in the reports and ultimately prioritized a subset using a tiered approach (Figure 4). In addition to these decision points, seven states had implemented Alternative (Differential) Response and later expressed interest in showing both alternative
response and investigations by race decision points in ROM. With regard to reporting periods, the workgroup determined that all decision points except “In Foster Care” would be provided as floating 12-month (annualized) data points, thus providing a more stable sample for smaller administrative units (i.e., counties). For example, the number of accepted reports shown for June 2013 would be those accepted from July 1, 2012 – June 2013. The number of children “In Foster Care” would include all children in an open federal removal episode on the last day of a report period.

Discussion of each of the decision points helped to shape the final determination of data views needed to facilitate a better understanding of racial disproportionality and disparities. However, the discussion also raised concerns inherent to disproportionality measurement. For example, the workgroup wrestled with conceptual distinctions between decision points, stages, and outcomes, and discussed potential difficulties in the interpretation of disproportionality and disparities given that some decision points are considered negative child outcomes (e.g., victimization), whereas others are considered to be positive (e.g., achieving permanency). The workgroup decided to develop an initial set of reports based on the 1st Tier decision points (see Figure 3) to keep the development work at a manageable level, with the option of including additional decision points at a later point.

**Race classification.** The classification of race has historically been a difficult and sensitive topic with imperfect solutions. Methodologically speaking, the calculation of disproportionality and disparity is dependent upon having a single race variable. NCANDS and AFCARS race categories include American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or Other Pacific Islander; and White. Hispanic is recorded as an ethnicity. A child can also be recorded in one or more race categories. Child welfare agencies
that categorize racial/ethnic data differently will need to be thoughtful about how they compare
child welfare data to the general child population or the general population of children living in
poverty by racial/ethnic group. The American Community Survey (ACS), published by the U.S.
Census, collects data similarly to NCANDS and AFCARS in accordance with federal standards
that mandate two distinct questions regarding race: first, a question is asked about Hispanic-
origin, and second, a question is asked about race. For example, non-Hispanic children with one
race noted (e.g., Black) are categorized as Black. Non-Hispanic children with more than one race
field are classified as two or more races. In addition, care must be taken to minimize the potential
overlap between the Hispanic origin and racial categories as it is possible to extract data as single
race (race alone) or in combination with other race(s). An important consideration for
developing reports on racial disproportionality and disparities is to treat race classifications as
consistently as possible throughout the reports and with the “base population” data source,
whether that be general population data or data from prior child welfare decision points.
Notably, workgroup members pointed out that racial/ethnic data are sometimes not captured due
to the choice of the child or family member or because it is unknown. This is particularly
problematic in initial child protective services (CPS) reports where the information is often not
recorded, which may limit the meaningful examination of racial disproportionality at this early
stage of child welfare involvement. The determination of race/ethnicity may also be made by the
caseworker instead of the child or family member, leading to error. Further, the self-
identification of race/ethnicity may change over time (U.S.D.H.H.S., 2016). Therefore, agencies
are advised to clarify the process through which child race/ethnicity is determined in their

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2 For more detail, readers are encouraged to visit “A Compass for Understanding and Using the American
Community Survey Data: What Researchers Need to Know”
jurisdictions and the points at which it is collected to better assess the validity of their race/ethnicity data.

**Base population selection.** The selection of a “base population” is a fundamental component of the calculation of disproportionality and disparities. The workgroup discussed three base population options that reflected available data on race composition: children in the general population, children in the general population living in poverty, and the population of children in prior child welfare decision points. The workgroup discussed several considerations in the selection of these base populations, which are presented here in turn.

**General population data.** Some workgroup members use private sources for general population estimates (e.g., Claritas) while others use publicly available Census data. The ACS is considered the best source of data on detailed demographic, social, economic and housing characteristics. As such, it has several advantages that were appealing to this project, such as yearly population estimates by racial/ethnic and age groupings at the county level, as well as data on children living in poverty. However, several considerations are important to note when using this data. First, ACS data represent estimates of community characteristics rather than individual counts (as in Census data). Second, ACS releases data in three formats. The choice of format requires states to weigh the need for data on particular geographies with the timeliness and reliability of the data. Relatedly, data should not be compared for overlapping periods. This is an important consideration when choosing between the one, three and five-year estimates and determining how frequently the data will need to be updated.

**Poverty population.** A major disadvantage of using the general population data in disproportionality calculations stems from the fact that not every child in the general population is at risk of maltreatment, whereas children with specific demographic characteristics in the
general population, specifically children with limited resources, are more likely to come to the attention of CPS. Given the high correlation between poverty and child maltreatment in past research, workgroup members agreed that using child poverty population data yields useful comparisons with general child population data. With regard to the population of children living in poverty, the U.S. Census Bureau produces a number of data sources that include estimates of an area’s population living below the poverty threshold. ACS is one such source. Differences exist in the methodologies for estimating poverty across these sources, so the choice of source should be carefully considered.

**Population of prior decision points.** Past research suggests that racial/ethnic differences exist at several points in the child welfare decision making continuum, even after controlling for a variety of a child and family risk factors (Fluke et al., 2011). Therefore, using the population of children in prior child welfare decision points (i.e., chaining) offers the clear advantage of the more precise identification of disproportionality and disparities when compared to other methods (Morton, Ocasio, & Simmel, 2011). For example, the calculation of disproportionality or disparity at the point of entry into foster care might rely on accepted reports as the base population (i.e., denominator). By isolating specific decision points, agencies are positioned to explore potential sources of disproportionality or disparity that may be occurring within the child welfare system.

Given the range of what workgroup members desired to use as the base population in the calculations for their agency’s report, ROM enabled each state jurisdiction to select from the three base populations discussed for each decision point using the system’s administrative tools. A flexible chaining approach was built into the report system so that agencies could make their
own decisions on what prior decision point they wanted to use in the calculation of disproportionality and disparity for each report.

**Measurement Methods**

The workgroup discussed the three commonly used for measuring racial disproportionality: DPA (i.e., Decision Point Analysis), DI (i.e., Disproportionality Index), and DR (i.e., Disproportionality Ratio; Shaw, Putnam-Hornstein, Magruder, & Needell, 2008; 2011). As mentioned earlier, the DPA compares the proportion of race/ethnicity groups represented at various child welfare decision points with the representation of race/ethnicity groups in a base population (Figure 1). DPA offers some measurement advantage in that it shows a set of decision points together in relation to base population data (i.e., general, poverty, and prior decision point populations). However, a disadvantage is the point-in-time nature of the report, which does not demonstrate trends. However, it is possible to generate trends in disproportionality and disparity at decision points over time in specific reports, and to make comparisons at the regional or county level. In its application of the DPA measure, the workgroup concluded that the reports should be designed so that state or local agencies could determine what decision points they wanted to include in the DPA report since data availability was not consistent across jurisdictions and the preferences of workgroup members varied.

The DI measurement method uses the percentage of a race group in a base population as the denominator and the percent of the race group in the decision point as the numerator (Figure 2). An advantage of the DI reports is that they are fairly easy to interpret with some help (or good labeling), and provide a good comparison across racial/ethnic groups. The DR uses the DI scores to calculate a ratio between one race group’s disproportionality to that of another group (Figure
3). While the DR calculation is more complicated to calculate, several workgroup members cited it as easier to use with stakeholders.

In the end, the workgroup decided to include all three of the measurement methods. Both trend and unit (e.g., statewide, region, etc. for those unit levels defined by geographic county) views are provided in the reports for each type of measurement method. Such reports are available for each decision point using the base population selected by the jurisdiction.

**RDD Report Design**

The workgroup strived to achieve four goals in designing a set of RDD reports: (1) maintain a consistent report focus on the effect of race on case decision making and program services design; (2) develop as few reports as possible to tell the story that leads to appropriate action as more reports and additional data can overwhelm users and lead to inaction; (3) present data in a way that is as familiar and easily understood as possible; and (4) increase analytic capacity to support users in assessing historic trends, comparing geographically defined administrative units (i.e., county and larger), and to the extent possible, enabling cross tabulation of the data to address more in-depth questions. Another factor affecting report design was the desire to minimize the cost of both coding and development.

The designing of the reports was envisaged in two phases. A fairly comprehensive set of reports were developed in the first phase including a set of disproportionality and disparity reports for each of the six 1st Tier decision points. In addition, a summary report was created that demonstrated outcomes and key process indicators by race. A second phase of the report development process was outlined to capture additional decision points (e.g., alternative response), enable other crosstab functionalities (e.g., by race and age), and refine the data display to further summarize data.
Implementation

Workgroup participants were interviewed after the implementation of the reports during September and October of 2015 to gain a better understanding of state and local implementation experiences and to assist staff in their use of the data. Of the 18 representatives from 10 jurisdictions (nine states and one county) that participated in the RDD workgroup, the lead person identified for each jurisdiction was asked to participate in a one-hour, semi-structured telephone interview. These individuals were considered to be information rich by the research team’s staff based on their level of RDD workgroup participation and experience in system implementation. Of 10 lead people identified, seven participated in the interviews. Of the three individuals who were not interviewed, two no longer worked for the agency and one was with an agency still in the developmental stages of implementing the larger reporting infrastructure. A doctoral student with no prior involvement with the project conducted the interviews using a semi-structured guide (available upon request). The doctoral student recorded the interviews and analyzed the transcripts thematically. Findings were presented to the Leadership Council and addressed the workgroup process, RDD reports product, agency environmental factors, implementation status, and implementation decisions.

Overall, the workgroup process of report development was viewed very positively. Workgroup members reported enjoying the opportunity to work in collaboration with their peers in other states and to exchange ideas. Participants appreciated the expertise and resources provided at the meetings, and commented on the helpfulness of the research review provided.

At the time of the interviews, states were at various stages of RDD report implementation ranging from system testing to training end users. Beyond the common challenges that states reported, such as limited human resources, the most prevalent theme that emerged from the
interviews was the complexity and sensitivity of the topic of disproportionality, from measurement and reporting to addressing the dynamics reflected in the data.

Challenges also emerged with regard to report selection. With six 1st Tier decision points (see Figure 4), two measurement methods (Disproportionality Index and Disparity Ratio), Decision Point Analysis, and the summary of major outcomes reports, 14 reports were possible. To address this complexity, agencies were encouraged to initially display either the DI or the DR reports based on the agency’s preferred reporting approach. While the two measurement methods are different, there is overlap given that the DI is used to compute the DR (see Figure 2). Some agencies also chose to simplify their approach by using fewer decision points from Figure 4.

Another layer of complexity involved decisions about which base population to use for each of the decision point calculations and how to inform users of its meaning. While using the general child population has the advantage of easy explanation, it fails to consider that not every child in the general population is at risk of maltreatment. Using the base population of children in poverty accounts for the inordinate risk these children have of child welfare services involvement; however, it is unable to isolate decision points where disproportionality or disparity may be occurring in the child welfare system, knowledge that holds potential for targeting solutions within the system. Therefore, agencies were encouraged to use the chaining method with the selection of decision points left to each unique policy and program environment.

To begin to address these measurement and reporting challenges, as well as the important work of developing strategies to address disproportionality, some states embarked on efforts to engage internal and external stakeholders to support this work. For example, across the regional offices of one state, Diversity Action Teams review RDD data and develop action plans with oversight from a state level workgroup overseen by a Multicultural Affairs Director. Another
state established an effective regional group that works in partnership with a local university to monitor data and generate ideas to improve policy and practice. A third state adopted a community-based approach by operating a community-wide workgroup comprised of child protective services, service providers, judges, and community members. A fourth state prioritized public access to the RDD data as an initial step to guide the prioritization of concerns and related responses.

Conclusion

Recommended strategies to monitor racial/ethnic disproportionality and disparities include the collection of “nuanced” longitudinal data that is publicly accessible (Martin & Connelly, 2015). Further, a recent study of state initiatives to address racial disproportionality and disparities in child welfare concluded that data needs to be available at multiple levels, at key decision points, and in user-friendly formats for regular review (Miller & Esenstad, 2015). The 10 state workgroup identified similar considerations in their development of the RDD reports and designed a customizable reporting model that uses up-to-date administrative data to monitor disproportionality and disparities by providing detailed data on trends over time with options that take child poverty and prior decision points into consideration.

Developing these reports in ROM provided several advantages including the automatic generation of reports using up-to-date data; the co-location of RDD reports alongside other key performance indicators; and the ability to use other features of the reporting system to enable views of historical trends and comparisons of management units. Further, the prior ability to crosstab outcomes and other key performance indicators by race/ethnicity supplemented the RDD reports. At the same time, having the RDD reports become a part of the existing
comprehensive reporting system offered advantages over reporting methods previously undertaken by focusing on disproportionality and disparities at specific decision points.

The multi-state RDD report development process, which included content on disproportionality theory, research, and measurement, was essential in preparing members to consider the possible sources of racial/ethnic disproportionality and disparities in their jurisdictions including the disproportional needs of children occurring outside of the child welfare system, as well as internal dynamics within the system. Building this foundation was central to the design and implementation of the reporting models. However, current implementation efforts highlight promise but also challenge in introducing RDD data analysis and use in child welfare agencies.

Our recommendations for next steps recognize the complexity and sensitivity of RDD data, especially given the emotive topic of race coupled with the often involuntary context of child welfare involvement for families. First, promoting the understanding and interpretation of the complex report information is essential, including sufficient training for users in both the measures and context. Second, user training should focus on how the data can be applied to reviews of policies and practices that are meaningful to multiple stakeholders. Therefore, review processes and related decisions should be as transparent as possible and include relevant stakeholders, particularly community members. Finally, in addition to local collaboration, the work presented highlights the value of a multi-state collaboration given shared challenges in the implementation of reports, interpretation of the data, and the development of strategies to better identify and address sources of disproportionality and disparities at the local level. As such, local structures may benefit from developing research partnerships and cross-jurisdiction collaborations.
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doi:http://dx.doi.org/10.1016/j.chiabu.2012.08.005


Figure 1. Decision Point Analysis in ROM

![Decision Point Analysis in ROM](image)

<table>
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<th>Decision Point</th>
<th>Child Population</th>
<th>Child Poverty Population</th>
<th>All Child Reports last 12 mos.</th>
<th>Accepted Reports last 12 mos.</th>
<th>Child Visitors last 12 mos.</th>
<th>Entered Foster Care last 12 mos.</th>
<th>In Foster Care last day in open period</th>
<th>Exited Foster Care last 12 mos.</th>
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<tbody>
<tr>
<td>Total Children with Identified Race</td>
<td>400752</td>
<td>83172</td>
<td>40365</td>
<td>72408</td>
<td>3649</td>
<td>1751</td>
<td>1322</td>
<td>1700</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>763</td>
<td>6.16%</td>
<td>8.15%</td>
<td>64</td>
<td>0.16%</td>
<td>11</td>
<td>0.01%</td>
<td>2</td>
</tr>
<tr>
<td>Black or African Americans</td>
<td>25153</td>
<td>5.09%</td>
<td>6.16%</td>
<td>571</td>
<td>0.28%</td>
<td>141</td>
<td>8.95%</td>
<td>16</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>14675</td>
<td>3.14%</td>
<td>1.68%</td>
<td>414</td>
<td>0.93%</td>
<td>34</td>
<td>0.19%</td>
<td>21</td>
</tr>
<tr>
<td>Asian</td>
<td>28146</td>
<td>6.01%</td>
<td>7.09%</td>
<td>2005</td>
<td>0.91%</td>
<td>215</td>
<td>0.12%</td>
<td>44</td>
</tr>
<tr>
<td>White</td>
<td>245298</td>
<td>52.79%</td>
<td>24.94%</td>
<td>54.04%</td>
<td>54.02%</td>
<td>2031</td>
<td>54.82%</td>
<td>637</td>
</tr>
<tr>
<td>Hispanic</td>
<td>19657</td>
<td>3.10%</td>
<td>5.19%</td>
<td>32.13%</td>
<td>31.07%</td>
<td>3340</td>
<td>31.41%</td>
<td>583</td>
</tr>
<tr>
<td>Multi-race</td>
<td>20526</td>
<td>4.00%</td>
<td>5.55%</td>
<td>415</td>
<td>0.65%</td>
<td>75</td>
<td>2.56%</td>
<td>35</td>
</tr>
<tr>
<td>Children Unable to Determine Race</td>
<td>1150</td>
<td>18.00%</td>
<td>18.00%</td>
<td>20435</td>
<td>100.00%</td>
<td>10643</td>
<td>100.00%</td>
<td>690</td>
</tr>
</tbody>
</table>

Note: The table shows the count and percentage for different demographic categories across various decision points in the Foster Care system.
Figure 2. Calculating the Disproportionality Index and the Disparity Ratio

**Disproportionality and Disparity Calculation Example**

<table>
<thead>
<tr>
<th>Race</th>
<th>Base Population</th>
<th>Decision Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Race</td>
<td>8.2%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>20.1%</td>
<td>17.8%</td>
</tr>
<tr>
<td>White</td>
<td>56.1%</td>
<td>47.3%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>1.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>9.2%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>4.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1.3%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

**Disproportionality Index**
- Black: \( \frac{20.1\%}{9.2\%} = 2.2 \)
- White: \( \frac{56.1\%}{47.3\%} = 0.8 \)

**Disparity Ratio**
- Black vs. White: \( \frac{2.2}{0.8} = 2.8 \)
Figure 3. Disparity Ratio in ROM

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count</strong></td>
<td><strong>%</strong></td>
<td><strong>Count</strong></td>
<td><strong>%</strong></td>
<td><strong>Count</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td><strong>Total Children with Identified Race</strong></td>
<td>1756</td>
<td>00%</td>
<td>1728</td>
<td>00%</td>
<td>1751</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>11</td>
<td>0.63%</td>
<td>16</td>
<td>0.93%</td>
<td>15</td>
</tr>
<tr>
<td>Asian</td>
<td>26</td>
<td>1.42%</td>
<td>25</td>
<td>1.44%</td>
<td>23</td>
</tr>
<tr>
<td>Black or African American</td>
<td>163</td>
<td>9.29%</td>
<td>152</td>
<td>8.80%</td>
<td>141</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>2</td>
<td>0.11%</td>
<td>2</td>
<td>0.12%</td>
<td>5</td>
</tr>
<tr>
<td>White</td>
<td>979</td>
<td>55.78%</td>
<td>954</td>
<td>55.21%</td>
<td>957</td>
</tr>
<tr>
<td>Hispanic</td>
<td>542</td>
<td>30.88%</td>
<td>550</td>
<td>31.63%</td>
<td>583</td>
</tr>
<tr>
<td>Multi-race</td>
<td>33</td>
<td>1.88%</td>
<td>26</td>
<td>1.50%</td>
<td>27</td>
</tr>
<tr>
<td>Children Unable to Determine race</td>
<td>743</td>
<td>00%</td>
<td>678</td>
<td>00%</td>
<td>691</td>
</tr>
</tbody>
</table>
### Figure 4. Prioritization of Decision Points for RDD Reporting

<table>
<thead>
<tr>
<th>Tier</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1st Tier | CPS Reports (referrals)  
Accepted reports (screened in referrals)  
Victim (substantiated/indicated or founded abuse neglect)  
Entered foster care  
Exiting foster care  
In foster care (point in time) |
| 2nd Tier | State Involved (ongoing, either in-home or foster care)  
Started in-home Intact  
Began State Involvement episode (ongoing, in-home or foster care)  
Assigned for investigation  
Assigned to alternative response  
In foster care 17+ months (point-in-time) |
| 3rd Tier | Receiving in-home intact  
Exiting in-home entering foster care  
Ended State Involvement  
Exiting foster care to permanency |