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# The Role of Data in Health Care Disparities in Medicaid Managed Care

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**Background:** The Affordable Care Act includes provisions to standardize the collection of data on health care quality that can be used to measure disparities. We conducted a qualitative study among leaders of Medicaid managed care plans, that currently have access to standardized quality data stratified by race and ethnicity, to learn how they use it to address disparities.

**Methods:** We conducted semi-structured interviews with 21 health plan leaders across 9 Medicaid managed care plans in California. We used purposive sampling to maximize heterogeneity in geography and plan type (e.g., non-profit, commercial). We performed a thematic analysis based on iterative coding by two investigators.

**Results:** We found 4 major themes. Improving overall quality was tightly linked to a focus on standardized metrics that are integral to meeting regulatory or financial incentives. However, reducing disparities was not driven by standardized data, but by a mix of factors. Data were frequently only examined by race and ethnicity when overall performance was low. Disparities were attributed to either individual choices or cultural and linguistic factors, with plans focusing interventions on recently immigrated groups.

**Conclusions:** While plans' efforts to address overall quality were often informed by standardized data, actions to reduce disparities were not, at least partly because there were few regulatory or financial incentives driving meaningful use of data on disparities. Standardized data, as envisaged by the Affordable Care Act, could become more useful for addressing disparities if they are combined with policies and regulations that promote health care equity.

**Keywords:** Health Policy / Politics / Law / Regulation, Medicaid, Qualitative Research, Racial / Ethnic Differences in Health and Health Care

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## INTRODUCTION

Disparities in health care remain a persistent problem. Across the US population, disparities—differences in care not attributable to preference or clinical need (Smedley, Stith, & Nelson, 2003)—exist between different racial and ethnic groups across a number of domains including receipt of preventive services and chronic disease management (Agency for Healthcare Research and Quality, 2010 Smedley et al., 2003). The reduction of health care disparities constitutes one dimension of achieving high quality care (Aaron & Clancy, 2003; Institute of Medicine, 2001).

Efforts to improve the overall quality of care have focused on the use of standardized data. The examination of similar data stratified by race and ethnicity has been suggested as one way through which efforts to address disparities could be linked to broader quality improvement (Nerenz, 2005). A central assumption of this approach is that a lack of routine measurement of disparities in care contributes to the persistence of the problem (National Research Council, 2004).

While the availability of data on patients' race and ethnicity to insurers and health systems is widely seen as important for reducing disparities (Landon et al., 2007), it does not yet function as a major component in disparities reduction efforts. Early barriers, including the absence of any data on patient race and ethnicity, have largely been supplanted by questions of data quality (Hasnain-Wynia & Baker, 2006; Ulmer et al., 2009). Policies have moved toward a standardization of data collection: under the Affordable Care Act, the collection of data by racial and ethnic groups will be standardized at the national level (Department of Health and Human Services, 2011). It remains unclear whether improvements in data quality will necessarily translate into reductions in disparities. Health care organizations' decisions on whether and how to use such data may be affected by policies, practices, and norms (Patton, 2002; Thorlby, Jorgensen, Siegel, & Ayanian, 2011).

The experiences of California's Medicaid (Medi-Cal) managed care plans may provide insight into these questions. Managed care is mandatory in 21 of the 58 counties for Medi-Cal beneficiaries who qualify as low-income children or parents of low-income children. In 7 of these counties, there is a single county operated health system that serves all Medi-Cal beneficiaries in managed care and, in the other 14, there are 2 or more competing plans.

The state requires plans to measure health plan quality using standardized metrics, including the Healthcare Effectiveness Data and Information Set (HEDIS) on an annual basis. The results of these assessments are reported to the state and serve as the basis for regulation, public reporting, and public recognition of excellence through quality awards. In counties where there are two or more plans competing for Medi-Cal beneficiaries, the state operates a quasi-financial pay-for-performance program that rewards a plan's performance on HEDIS scores by assigning them a greater proportion of beneficiaries who do not actively choose a plan (auto-assignment). Plans with better quality measures thus stand to benefit through greater numbers

of beneficiaries (California Health Care Foundation, 2009; Guthrie, Auerback, & Bindman, 2010).

Medi-Cal managed care plans have access to data on beneficiary race and ethnicity. Since 2003, the Centers for Medicare & Medicaid Services (CMS) has mandated that state Medicaid offices share data on race and ethnicity with managed care plans (CMS, 2002). Many health plans also collect this information directly from their beneficiaries. Across all Medi-Cal beneficiaries, 20% are White, 10% African American, 55% Latino, and 10% Asian (California Department of Health Care Services, 2012). Combining this information from Medi-Cal enrollment files with assessments of quality would enable California's Medi-Cal managed care plans to identify differences in health care quality among racial and ethnic subgroups of their patient population.

We conducted a qualitative study among leaders of Medi-Cal managed care plans that have access to standardized measures of quality that can be stratified by racial and ethnic groups, to learn how health plan leaders use this data and what other factors influence strategies for addressing disparities within their plans.

## METHODS

We conducted semi-structured interviews with health plan leaders at nine Medicaid managed care plans in California. We used a purposive sampling frame (Patton, 2002) to maximize heterogeneity in geography and health plan demographics (Medi-Cal Managed Care Division, 2011). We also selected at least two of each type of Medi-Cal managed care plan: county operated health systems, local initiatives (non profit Medicaid only plans), and commercial plans (Exhibit 1). We initially contacted plan leaders by email, and used snowballing to recruit subsequent leaders within plans. In order to triangulate themes, we attempted to interview multiple leaders at each plan with 21 individual participants at the nine plans. We pursued additional interviews until we reached thematic saturation. This is a standard technique in qualitative research where additional participants are interviewed until no additional themes are expressed (Bryman & Burgess, 1994). Seven plan leaders were medical directors or chief medical officers. Four were chief executive officers, five were chiefs of quality assurance, three were directors of cultural linguistic services, and two were longstanding consultants (Exhibit 1).

We developed an interview guide that addressed the following topics: measurement and response to disparities, measurement and perception of overall quality, the relationship between quality reporting and disparities, and causes of disparities. In order to assess how plan leaders would interpret data regarding potential disparities amongst their plans' beneficiaries, we presented a prompt that consisted of the actual HEDIS measured mammography rates for their respective plans in 2010, stratified by racial and ethnic beneficiary subgroups (Exhibit 2).

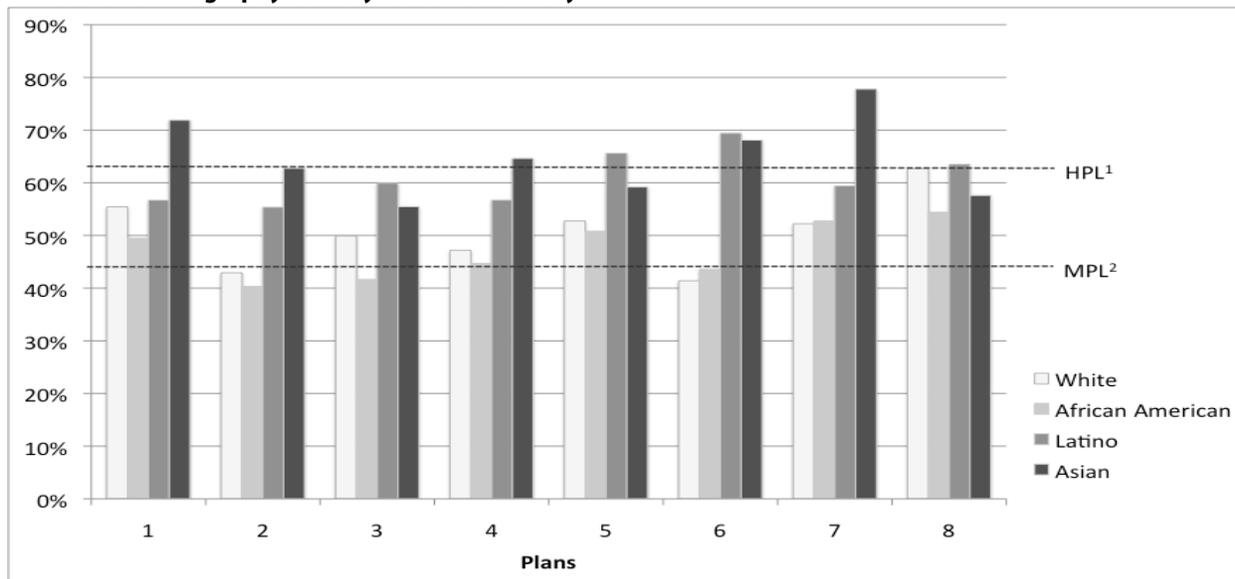
**Exhibit 1: Characteristics of plan leaders and health plans interviewed**

	Plan leaders	Health plans
<b>Plan type</b>		
Local Initiative (non profit Medicaid only)	12	5
County Operated Health System	5	2
Commercial	2	2
<b>Role in plan</b>		
Chief executive officer	4	--
Chief medical officer/medical director	7	--
Chief of quality assurance	5	--
Director of cultural linguistic services	3	--
Semi-permanent consultant	2	--

Source: Authors' analysis

Mammography rates differed by race and ethnicity across all plans interviewed for which data was available. Rates were generally lowest for African Americans and highest for Asians. Whites typically performed similarly to African Americans. We chose to present mammography rates, as opposed to other HEDIS measures, as it is one of the administratively recorded measures applicable to all eligible plan beneficiaries (all women in a plan between the ages of 40 and 69), rather than being derived from a medical record review of a sample of beneficiaries within the plan who are eligible for a measure. Health plan leaders were informed that the pattern observed by race and ethnicity for mammography in their plan was generally consistent across other HEDIS measures.

**Exhibit 2: Mammography rates by race and ethnicity**



<sup>1</sup>Performance Level for Medi-Cal based on 2009 national Medicaid 90<sup>th</sup> percentile

<sup>2</sup>Minimum Performance Level for Medi-Cal based on 2009 national Medicaid 25<sup>th</sup> percentile

Note: Data were unavailable for 1 of 9 plans interviewed

Source: Healthcare Effectiveness Data and Information Set (HEDIS) data for 2010 obtained from health plans and 2010 HEDIS Aggregate Report for the Medi-Cal Managed Care Program

After obtaining informed consent from the plan leaders, all interviews were audio-recorded. Interviews were conducted by one author (DM or BG), either in person or over the phone, and typically lasted between 40 and 60 minutes. Recordings were transcribed verbatim. We used the Atlas/ti qualitative data analysis software package for data management and analysis. We conducted a thematic analysis based on iterative coding by two authors (DM and BG). Elements of the thematic framework were derived from the interview questions and themes that emerged from coding of the interviews (Bryman & Burgess, 1994; Sofaer, 1999).

Disagreements in coding were resolved by discussion. To preserve confidentiality, we disguised some characteristics of plans in the preparation of quotes. The study was approved by the institutional review board at the University of California, San Francisco.

## RESULTS

We elicited four main themes surrounding the perceptions and actions of plan leaders in response to our inquiries and to the prompt displaying the mammography screening rates by race and ethnicity, specific to the interviewed health plan. These themes are summarized in Exhibit 3 and illustrated with direct quotes from plan leaders below.

### Exhibit 3: Main themes expressed by plan leaders

- Improving overall quality was tightly linked to focusing on standardized metrics
- Reducing disparities was not driven by standardized data, but by heterogeneous factors
- Data were frequently only examined by race and ethnicity when overall performance was low
- Disparities were attributed to either individual choices or cultural and linguistic factors, with plans focusing interventions on recently immigrated groups

Source: Authors' analysis

#### *Improving overall quality by focusing on standardized metrics*

Nearly all plan leaders described standardized data as a central component of quality improvement efforts for their plan. They described regular surveillance of HEDIS measures to identify quality metrics in which they lagged. Although plans differed in their benchmarks, themes of quality and HEDIS scores were tightly linked. For instance, one chief executive officer said:

“We have four strategic goals and one of them is the quality of care to our members, and one of the ways we decide that is having every HEDIS score in the top ten percent in the entire United States.”

Plans that were involved in the auto-assignment program that rewarded plans with higher HEDIS scores with a greater proportion of patients who did not actively choose a plan, described standardized data as driving the focus of their quality improvement efforts. One medical director said:

“...there's a connection, between your performance on certain measures and what it means for your enrollment. You want that additional

enrollment, because it's core to what the plan is about, to attract and hang onto Medi-Cal members. So it's motivating from that standpoint.”

HEDIS is the main source of standardized data on quality in California Medicaid managed care plans, and leaders of health plans appear to accept it as a measure of their performance.

*Reducing disparities not driven by standardized data*

All plans described programs designed to address disparities. Despite this, few plan leaders cited standardized data as the main driver of these interventions. For instance, one chief medical officer stated:

“It’s two very different areas of investigation, one the ... focus on HEDIS, and how that might change the plan’s action, and the second, the whole issue of disparity and how that’s being addressed. There’s not a clear connection in my mind with these two areas.”

Plan leaders offered several explanations for this. Many cited a perception of poor data quality. A director of quality improvement said:

“In general, the data has not been good ... it’s very incompletely captured in our system unless we go to [Medi-Cal] for a file.”

Similarly, many plan leaders described potential imprecision of race and ethnic-specific quality measure estimates, because of the small numbers of beneficiaries in the race/ethnic groups within the HEDIS sample. A director of quality improvement at a different plan said:

“When you end up sampling 432 members for a hybrid HEDIS measure, and then you drill down to those [who] are in a population where you want to evaluate it based on ethnicity ..., the population ends up really small.”

Others explained that information on disparities was obtained through channels other than standardized data. Underscoring the degree to which knowledge of the community drove some plans’ approach, a chief executive officer said:

“We know this community and we will address the needs of this community, because we know about it inside and out.”

Leaders of Medicaid managed care plans in California currently do not view HEDIS measures stratified by race and ethnicity as a measure of disparities within their plans.

*Data only examined by race and ethnicity when overall performance was low*

Of the plans that examined HEDIS by race and ethnicity, many only did so when overall performance on a particular quality measure was low. A director of quality improvement said:

“[Disparities in HEDIS] is not something that we’d look at on a routine basis. If we do look at it, it’s usually prompted by a low level of performance, plan wide, for a particular measure. But if we see that our

performance as a plan is in the top decile of plans nationwide, oftentimes we won't drill down to look and find whether a disparity exists or not."

Several leaders expressed a similar idea that "a rising tide floats all boats," and that by focusing on improving overall quality, disparities would secondarily be reduced. A medical director said:

"You can look at it as: 'what is this ethnic group performance versus that?' The other [way] is kind of color blind, it's like all of our patients are patients and we treat them the same and that's irrelevant."

Leaders of Medicaid managed care plans in California are not so concerned if and why there might be differences in HEDIS measures across racial and ethnic groups, unless determining whether addressing differences would improve the plan's measured overall performance.

*Disparities attributed to either individual choices or to "culture"*

Plan leaders conceptualized disparities primarily in terms of individual preferences and cultural differences. Several plan leaders described individuals' choices as responsible for poor uptake of medical services. One chief executive officer said:

"The Medi-Cal population probably needs a bit more nudging and cajoling to get them to, kind of, take a more proactive role in their own health care."

A medical director at a different plan said:

"There is not that level of trust and value of the system in the poor White and the poor Black American.... They're not connected to their own health."

Plan leaders described "culture" as a set of health beliefs that differed from mainstream Western medicine. Plan leaders predominantly attributed such cultural differences to recently immigrated individuals and groups. Accordingly, plan leaders frequently described disparities interventions targeting recent immigrants. A chief medical officer stated:

"Latino and the Asian Pacific Islanders ... [are] relatively new to this country, relatively sort of just beginning whatever it takes to get the education, the expertise, the whatever, all that kind of stuff. So in general I see that population as being quite resilient, quite bright, quite adaptable, quite ready to plug into whatever messages are out there...."

Notions that disparities predominately affected recently immigrated groups were so strong that when presented with data showing mammography rates for White beneficiaries that were notably lower than those for Asians and Latinos, one director of quality assurance attributed this to a recently immigrated Middle Eastern community that was not a plausible explanation for the results.

Language access services were the most frequently cited intervention to address disparities. This was closely related to plan leaders' notions of recently immigrated groups as

both driving disparities and potentially responsive to plans' actions. Several plan leaders related the large proportion of beneficiaries who were Spanish speaking and their plans' proficiency at providing care in Spanish as rationale for why they did not examine standardized measures for disparities. One chief executive said:

“There's really only one definite group of any significance and that's Hispanic or Spanish speaking.... And so the only threshold language we have is Spanish, everything we do is certainly in both languages.... In terms of the cultural stuff, I don't think it's really an issue. Now if we were like in San Francisco, a lot more of the Asian populations where they have different cultures and approaches to medicine, it could be more of a challenge, but I don't think we have that much of an issue with it here.”

Other plans noted that language access is one of the few disparities-related areas for which there are definite state policies. A director of quality assurance said:

“One of the state requirements that's defining for us around disparities has to do with threshold languages, and knowing the language that people speak, and our need to provide interpreters both in the provider setting and when they call into our plan. It really molds our belief about disparities.”

The primacy of language and culture as actionable causes of disparities was also reflected in discussions of organizational structure. Many plans described their cultural and linguistic services division as the sole organizational entity responsible for disparities interventions. For instance, one director of quality assurance described his unfamiliarity with disparities interventions by saying:

“There is a team of people, the cultural linguistics team, and that's what they do, that's their life.”

However, one plan articulated a view of language access as one intervention among many. They had explicitly integrated disparities interventions with broader quality improvement efforts. The chief executive stated:

“We used to have a [cultural and linguistic services] department, and I didn't like it because I thought [it] conveyed the message that our attempts to be culturally and linguistically appropriate was just the responsibility of one department. And really for these kinds of strategies, it ... takes all of those outward facing departments working together.”

Plan leaders focused disparities-reduction interventions on language access and cultural factors, attributing many differences to individuals' choices.

## DISCUSSION

We found that plans varied in whether and how they use data on quality measures available by race and ethnicity. Despite an approach to overall quality that was uniformly reliant on standardized measures, efforts to reduce disparities did not focus nearly as much on data, but instead reflected varying perspectives across health plans. Some plans did not use standardized data at all, while some used it regularly, although even in these plans measurement was less the focus for disparities than it was for overall quality improvement.

We found patterns in the HEDIS data by race and ethnicity that are contrary to assumptions surrounding disparities across the whole population, and to which plans' activities did not conform. Although Whites typically receive higher quality care across the whole population (Agency for Healthcare Research and Quality, 2010, within California Medicaid plans this is not the case. The quality of their care is more similar to African Americans than to Latinos and Asians who did better in almost every measure and almost every health plan. This suggests the importance for plans in identifying where disparities exist amongst their own enrollees and targeting improvement accordingly, rather than relying on national trends. It also illustrates some of the complexities in interpreting and acting upon data on racial and ethnic disparities within a low-income strata of the population, such as Medicaid beneficiaries. Some plan leaders believed that pursuing higher quality would naturally reduce disparities, although the quantitative data available to them and us showed the presence of disparities across plans regardless of overall quality. These findings therefore underscore the fundamental role that standardized data can play in explicating disparities that are unlikely to be identified by other means.

Despite data suggesting that the poorest quality of care is amongst English speaking African-American and White beneficiaries, we found language access programs to be the most frequently described approach for addressing disparities. This could potentially explain the higher mammography rates observed among Asian and Latino beneficiaries. As well, leaders had preconceptions about the causes of differences in the quality of care that selectively emphasized individual preference and cultural differences. The attribution of disparities to these factors is common in surveys of the U.S. general population, with low income Whites and African Americans seen as largely responsible for their economic situation (Bobo & Smith, 1994; Pew Research Center, 2007). In this regard, plan leaders reflect popular beliefs. Selectively ascribing the cause of low quality care within certain groups to individual choice is problematic as it allows plans to side step responsibility to address these differences, attributing them to preferences rather than true inequities in care.

Plan leaders tended to be more cognizant of state regulations related to language access than they were of measured differences in quality of care among plan beneficiaries. This suggests another interpretation of the focus on recent immigrant groups: that state regulation is a

significant driver of plans' actions. Cultural and linguistic standards (e.g., language access programs) are one of the few policy levers that the state has used to attempt to reduce disparities.

Although Medicaid's race and ethnicity data were widely perceived as imperfect, health plan leaders did not identify data quality as the main reason for why they were not used. Experiences in other areas of performance measurement suggest that with time, concerns about data quality give way to a focus on the quality of care. The same objections about data quality were routinely raised about overall quality indicators when they were first introduced (Jost, 1994; Mainous & Talbert, 1998). However, small sample sizes are important, and policymakers must consider the degree to which over-sampling of racial and ethnic groups will be necessary to accurately measure disparities for indicators based on chart review of a sample of beneficiaries: precision must be weighed against the cost of additional data collection. Additionally, policymakers should note the burden—perceived or real—of accessing and linking quality data to beneficiary race/ethnicity, especially in organizations with limited resources.

Several limitations in this study must be acknowledged. First, we purposively sampled to ensure heterogeneity in plan type and individual plan leaders, but the experience of leaders of Medicaid managed care plans in California may differ from those in plans serving non-Medicaid populations and Medicaid populations in other states. Second, during the interview process, we provided health plan leaders with feedback on the racial and ethnic differences using a process measure: mammography screening rates. While we informed participants that the racial and ethnic differences we observed for mammography screening rates were similar to other measured aspects of their health plan's quality, it is possible that the use of an outcome measure to summarize their plan's performance on disparities might have elicited some different reactions. It is worth noting, however, that mammography is a process measure tightly linked to outcomes (National Committee for Quality Assurance, 2009). Further, during the study period, Medi-Cal managed care plan beneficiaries were predominantly younger women and children, groups that do not have many relevant outcome measures. Third, although we deliberately interviewed more than one person in each plan to ensure that we gathered a reliable assessment of a plan's practices, there may be discrepancies between the perspectives of plan leaders and how policies are carried out in actuality.

Improved methods of the collection of race and ethnicity data have underscored the potential for quality data to reduce disparities (Weissman & Hasnain-Wynia, 2011). Policies such as those in the ACA that standardize data collection are clearly necessary to allow data to play a more central role. However, the mere availability of such data may be insufficient to promote effective strategies to address disparities.

In advancing the role of data in disparities reduction efforts, policymakers can draw on the experience of using data for overall quality improvement: the regular collection of quality data has led to significant improvements in quality. However, data collection alone hasn't been enough (Green, Tan-McGrory, Cervantes, & Betancourt, 2010; Lurie et al., 2008). Medi-Cal, for example, uses a variety of mechanisms to drive the use of data for overall quality improvement,

including public reporting, public acknowledgement of excellence, various forms of regulatory penalty or reward, and pay-for-performance. A much narrower range of tools are used by Medi-Cal managed care plans to encourage disparity reduction. If measurement is to be used to guide disparities reduction efforts, then policymakers should use tools that have proven successful in improving overall quality to improve the health of specific racial and ethnic groups.

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