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PERSPECTIVES FROM THE FIELD

Rachel Davis Consulting
Center for Health Care Strategies

Equity in CalAIM: How to Identify the Patients Who Will Benefit Most

California's recently launched CalAIM (California Advancing and Innovating Medi-Cal) initiative is an ambitious effort to transform the state's Medicaid program (Medi-Cal) with a focus on equity, quality, and whole-person care. With most enrollees now receiving benefits through managed care, the Department of Health Care Services (DHCS) enlisted managed care plans (MCPs) to carry out much of this work, including providing a range of care management and supportive services for people with complex needs. DHCS has developed initial eligibility

guidelines for these programs and services; however, to ensure that these services and programs equitably reach those who would most benefit from them, MCPs and DHCS will likely need to innovate, refine, and adapt strategies throughout the course of CalAIM.

This perspective explores the equity implications and unintended consequences of one commonly used approach for identifying people with high needs — relying on utilization and cost data from inpatient and emergency department (ED) visits. DHCS has included utilization in eligibility criteria for Enhanced Care Management (ECM) services in only a few instances and has given MCPs additional discretion to offer services to people based on criteria beyond those identified by DHCS. As MCPs refine their approaches for determining eligibility, it is helpful to look to the field for lessons on how to do so in equitable ways. To develop this brief, a team from the Center for Health Care Strategies spoke to national and local experts about their experiences pursuing high-need identification strategies, and reviewed the small amount of relevant published literature available (see Appendix

CalAIM and Population Health

CalAIM seeks to improve Californians' health outcomes and reduce health care inequities through several key components:

- ▶ A **Population Health Management framework** that aligns tools for addressing care needs, including managed care requirements, data sharing and analytics, primary care services, and continuum of care management services for people with more complex health and social needs, such as **Enhanced Care Management**, Complex Care Management, basic population health management, and transitional care services.¹
- ▶ The **Population Health Management Service**, which aims to centralize data from across the Medi-Cal program. Managed care plans (MCPs) will use it to better understand their members' needs to inform which services they should be connected to, including Enhanced Care Management and Community Supports.²
- ▶ **Community Supports**, including 14 preapproved services that MCPs can optionally offer to people with health-related social needs.³

About the Perspective from the Field Series

As California's Department of Health Care Services administers changes to the Medi-Cal program, especially those that are part of the **CalAIM initiative**, CHCF is intermittently publishing short reports that highlight the perspectives of those in the field who are implementing the changes. These "Perspectives from the Field" seek to inform policymakers and other health care leaders about insights and experiences from people on the ground who work directly with patients.

A for a complete list of interviewees). This paper highlights important considerations for DHCS and MCPs as they refine their eligibility criteria for new services, and offers insights for ensuring that these services are provided in a way that is both equitable and impactful.

Risks of Relying on Utilization Data to Identify People with High Needs

Many care management programs traditionally use health care utilization — typically, ED visits and inpatient admissions — and related costs to identify people with high needs.⁴ Yet studies show that Black, Latino/x, American Indian and Alaska Native, and other members of underserved groups may not access health care as much as they need to due to factors such as mistrust of health care providers and lack of available health care services in under-resourced communities.⁵ This concern, as well as several others described below, highlights why relying on utilization data alone may perpetuate inequities and overlook key populations. The following sections outline three risks of relying on health care utilization to identify people with high needs.

Organizations Will Miss Some People with High Needs

Interviewees noted that using utilization data as an identification tool assumes that people use health care services at rates that accurately reflect their needs, something that in their experience is not always the case. CareOregon, for example, initially relied heavily on inpatient and ED utilization to identify candidates for its intensive care management programs. Over time, it realized that it was overlooking members who had lower ED and inpatient utilization but had other indicators of complex needs, such as large numbers of prescriptions or certain behavioral health and/or chronic physical health conditions.⁶

“We’ve learned over the years that utilization is one tiny data point among many to help you get to the right population that will benefit from a program like ECM. But [if you rely only on utilization] you are going to miss people who are actually complex and need a lot of care, but they’re not utilizing services for all sorts of reasons.”

— Jonathan Weedman,
Vice President of Population Health, CareOregon

Similarly, in a study analyzing mortality rates for people experiencing homelessness, researchers from UCSF found that many of those who died were not high utilizers of health care services. In the year prior to their death, only a third of them were among the top 5% of San Francisco’s highest users of urgent or emergency health services, 10% had not used any health care or social services, and a quarter had no health care use at all.⁷

Setting utilization thresholds at very high levels may also exclude people who have complex needs or who are on a trajectory to develop them soon (sometimes referred to as “rising risk”). These groups might potentially benefit from care management services but are not recognized as having high needs simply because they are not yet utilizing at extreme levels. Denver Health, for example, found that it served a group of people who were experiencing homelessness but using few health care services. When relying solely on cost and utilization data to identify high-risk patients, it overlooked these people. But the organization agreed that being unhoused put this group at significant future risk for poor health outcomes. This recognition helped spur a collaboration with the Colorado Coalition for the Homeless, a local housing and health care partner, to provide tailored resources and supports to stabilize this group’s health and housing needs before they worsened.⁸

Organizations May Overlook People of Color

A 2019 study highlighted how strategies to assess risk can unintentionally perpetuate racial bias. It analyzed a commercial algorithm that was widely used to identify patients for high-risk care management programs and found that its reliance on cost to indicate need underestimated the number of qualifying Black patients by 28%.⁹ This bias arose because Black patients utilized services at lower rates than White patients. Black patients encounter more barriers to accessing health care and trust their providers less, which makes them less likely to seek the care they need.¹⁰ While this study looked at Medicare and commercially insured populations, it highlights a key equity risk of relying on cost and utilization data for identifying high needs.

CareOregon similarly found that relying on ED and inpatient utilization data seemed to lead to disproportionately identifying White members as having high needs.¹¹ To address this bias, it expanded the types of data it used to include sources such as primary care visits, health outcomes, medication adherence patterns, and diagnoses of multiple chronic conditions.

An exploratory Denver Health analysis raised similar questions. Recognizing that it wanted a more nuanced way to capture risk (including rising risk), Denver Health evolved its identification approach to include clinical risk factors in addition to utilization data. To understand how adding these data impacted its identification algorithm, it compared the differences between patients identified as high-risk based on utilization alone, those identified as high-risk based solely on clinical diagnoses, and patients who met both criteria. The high-risk group identified only by clinical diagnoses had a higher proportion of patients of color.¹² While Denver Health's analysis did not explicitly explore these disparities, it could suggest that inclusion of diagnosis codes may be a more robust method for patient identification, especially among underrepresented groups, who often face access barriers.

In contrast, to identify high-need Medicaid enrollees for its Health Home Program, Washington State developed a predictive algorithm that did not include utilization data. The state's Research and Data Analysis Division (RDA) has found that the algorithm does not appear to have a racial or ethnic bias; and David Mancuso, director of the RDA, speculated that this may in part be because it does not use cost or utilization data to identify eligibility.¹³

"We know that there are substantial disparities in access to care and quality of care related to race and ethnicity, and the disparities are more often negative for Black and American Indian or Alaskan Native beneficiaries. Any algorithmic approach to prioritizing services needs to work in that context."

— David Mancuso,
Director, Research and Data Analysis Division, Washington State

Organizations May Not Identify the People Who Would Most Benefit from Care Management Services

To prioritize limited resources, providers must be able to identify who would most benefit from care management services. However, many interviewees highlighted that understanding who would most benefit is not necessarily the same as understanding who has complex needs. Relying on utilization data may conflate these questions and lead to challenges such as the following:

- **Identifying patients with high utilization levels who are already well supported.** By definition, patients with complex needs often require — and are receiving — a substantial amount of care. High levels of utilization, therefore, are not always a sign that patients need additional supports. CareOregon, for example, found that a subset of its members had an average of 30

outpatient visits a year; but given their conditions (rheumatoid arthritis and cancer were two of the most common within this group), this utilization was actually a sign that they were being well managed.¹⁴

- ▶ **Identifying patients whose needs cannot be addressed by the interventions you are able to offer.** High utilization thresholds can lead to identifying patients whose care needs are not well supported but who require different interventions than those offered in a care management program. For example, CareOregon noted that when it relied on high utilization levels to determine care management eligibility, it sometimes identified people whose conditions were so advanced that hospice care was the best intervention.

“There is a risk of engaging populations whose utilization can’t be significantly changed with the resources [that programs] have.”

– Clemens Hong, Director of Community Programs, Los Angeles County Department of Health Services

Addressing the Challenges: Promising Approaches from the Field

These insights from the field highlight several possible approaches for identifying patients with high needs in more equitable and nuanced ways, as described in the following sections.

Use an Equity Lens to Develop, Assess, and Refine Your Identification Approach

Continually assessing who is being identified as eligible for services and who is receiving them with an eye toward inequities and bias can help ensure that key groups are not overlooked. Regularly analyzing

who is getting these services, stratifying data by race and ethnicity, and transparently sharing results are a few strategies suggested by interviewees.

“As part of our practice, we are now working to make sure that data pulled includes information on race, ethnicity, and language. Before, we weren’t tracking the unintended consequences of disparities, and our data weren’t providing the full picture.”

– Jonathan Weedman, Vice President of Population Health, CareOregon

Develop More Robust and Nuanced Approaches to Identifying Need

Strategies for gaining a more complete picture of who has high needs include the following:

- ▶ **Look at underutilization, not just overutilization.** While high levels of utilization may signal that a person’s needs are not being met, so too can certain types of underutilization. CareOregon, for example, has begun exploring what other data points might be useful indicators of need, including missed prescription refills or primary care, behavioral health, and postpartum appointments, among others.¹⁵ Other types of underutilization that may indicate high need could include patients lacking a connection to a specialist or medically indicated prescriptions for certain conditions.
- ▶ **Set a long enough “look back” period.** Several experts mentioned the value of looking at patients’ utilization patterns over a longer period of time — 12 months at a minimum, and ideally at least 24 months — to provide a more accurate portrait of need.¹⁶ For example, Denver Health found that fewer than 50% of its high utilizers remained that way after seven months, and that only 28% remained that way after 12 months.¹⁷

“Some people are persistently high risk, and some people are more episodically high risk, and we don’t really have great data systems to capture when they’re escalating, or noticing that they’ve escalated.”

– Tracy Johnson,
Former Director of Health Care Reform Initiatives, Denver Health

- ▶ **Include data from multiple sources.** Using data from as many sources as possible — including outside of health care (e.g., jails, housing) — can provide a more multifaceted picture of need. For example, Washington’s Health Home Program algorithm uses fully integrated physical and mental health data, as well as data from other state agencies.¹⁸ Health-related social needs data are also critical. Recognizing this, CareOregon has begun working with community partners to share these data, and has also started to look at geographic factors such as heat domes and air quality as additional indicators of risk.¹⁹
- ▶ **Align interventions and desired outcomes with population identification strategies.** To ensure that programs are using resources effectively and realistically, population identification strategies should tightly align with programs’ sense of what they can offer and what they want to accomplish. For example, Denver Health’s strong partnership with Colorado Coalition for the Homeless positioned it well to offer additional supports for people experiencing homelessness. This partnership drove the health system’s efforts to refine its identification approach to find these people, since Denver Health knew it had available services to offer them.²⁰

“It’s really about identifying the population that you want to impact, and then mapping that to a set of interventions that you are really well equipped to deliver that can improve outcomes for that population. Then, deciding over what time frame you need to achieve those outcomes. If you structure a program with very tight organization across those dimensions, then you have a high likelihood of success.”

– Clemens Hong, Director of Community Programs,
Los Angeles County Department of Health Services

Use a Data-Driven Approach, but Also Allow For Feedback from Those Who Know Patients Best

In addition to using an algorithmic approach to identifying high-need patients, several interviewees found that frontline staff and providers contributed additional valuable context that improved modeling efforts. For example, a multidisciplinary team developed Denver Health’s identification algorithm, including providers, pharmacists, and other frontline staff. This work led the health system to conclude that “population segmentation approaches that integrate clinical perspectives with predictive modeling results can better identify high-opportunity patients amenable to medical home-based, enhanced care team interventions.”²¹ Similarly, recognizing that care team members have an understanding of people’s needs in ways that are not always captured in the data, CareOregon evolved its identification approach to allow care team members to refer people to care management programs based on their clinical judgment.²² Integrating provider referral pathways doesn’t eliminate the need to regularly stratify data by race and ethnicity across all identification methods, as provider referral pathways can also be subject to racial bias.

“We have just started saying to our providers and care coordinators, if you think someone would benefit from intensive services like this, just refer them to us and we’ll find a place for them.”

– Jonathan Weedman, Vice President of Population Health, CareOregon

Action Steps for Consideration: Opportunities for CalAIM

The insights from these discussions and the related literature review can help DHCS and MCPs further develop equitable and impactful approaches to providing CalAIM care management services and supports to members. Accordingly, MCPs are encouraged to:

- ▶ **Take advantage of flexibilities to go beyond utilization requirements.** With the flexibilities provided by DHCS, MCPs should explore more expansive eligibility definitions with their health and social service provider partners to actively seek to eliminate bias and close equity gaps. This will be especially valuable for people who are connected to systems that disproportionately involve Black, Latino/x, and American Indian and Alaska Native Californians — including criminal legal, homeless services, and child welfare — given that these groups may underutilize health care services.²³ Many of CalAIM’s predecessor programs, including Whole Person Care and Health Homes, used broader eligibility criteria. CalAIM’s more narrow criteria create a valuable opportunity to understand how this changes who is getting services through an equity lens.
- ▶ **Improve data feeds, over and above the Population Health Management (PHM) Service, and keep iterating to get them right.** The PHM Service is an ambitious undertaking and will likely

take time and continuous improvement to get right. Both MCPs and DHCS would benefit from conducting ongoing analyses exploring who is being reached and who is being left out, and iterating based on these learnings. It will also be important to experiment with new types of data. For example, California’s recently launched [Homeless Data Integration System \(HDIS\)](#) offers an invaluable opportunity to more comprehensively understand Medi-Cal beneficiaries’ health and social needs.²⁴ If MCPs are not able to access HDIS data, they might consider negotiating access to county-level Homeless Management Information System data for these purposes through memorandums of understanding or data-use agreements, similar to those executed with county departments of public health or behavioral health.

Conclusion

CalAIM outlines an ambitious vision for assessing the needs of all Medi-Cal beneficiaries and developing a continuum of services to address them. As DHCS and MCPs continue to refine strategies for providing ECM and Community Supports, it will be important to develop nuanced and inclusive approaches for defining and identifying needs. Recognizing where bias may exist, developing strategies to counteract it, monitoring efforts with a particular focus on racial equity, and using a wide range of data will help achieve this goal. Doing so will better position the Medi-Cal system to offer these critical services to the full range of members who would benefit from them most.

About the Authors

This perspective was written by Rachel Davis, MPA, principal, Rachel Davis Consulting; and Allison Hamblin, MSPH, president and chief executive officer, and Logan Kelly, MPH, senior program officer, Center for Health Care Strategies. Rachel Davis Consulting supports health care organizations, policymakers, and community partners in designing policies, programs, and services to support people with complex health and social needs. The [Center for Health Care Strategies](#) is a national policy design and implementation partner devoted to improving outcomes for people enrolled in Medicaid.

About the Foundation

The [California Health Care Foundation](#) is an independent, nonprofit philanthropy that works to improve the health care system so that all Californians have the care they need. We focus especially on making sure the system works for Californians with low incomes and for communities who have traditionally faced the greatest barriers to care. We partner with leaders across the health care safety net to ensure they have the data and resources to make care more just and to drive improvement in a complex system. CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with change-makers to create a more responsive, patient-centered health care system.

Appendix A. List of Interviewees and Contributors

The experts interviewed include representatives from **CareOregon**, a managed care plan serving Medicaid and Medicare Advantage beneficiaries across Oregon; **Denver Health**, an integrated safety-net system consisting of a public hospital, Federally Qualified Health Centers, school-based clinics, and correctional care, among other components, in Colorado; **Washington State’s Research and Data Analysis Division (RDA)**, which provides data, analytics, and data support tools to the state’s Department of Social and Health Services; and the **Los Angeles County Department of Health Services**, the second-largest local health system in the nation. The following people graciously shared their time and insights for this perspective piece:

- ▶ Clemens Hong, MD, MPH, Director of Community Programs, LA County DHS
- ▶ Tracy Johnson, PhD, Former Director of Health Care Reform Initiatives, Denver Health
- ▶ David Mancuso, PhD, Director, RDA, Washington State
- ▶ Deborah Reinhardt, PhD Associate Research Scientist, Denver Health
- ▶ Jonathan Weedman, MA, LPC Vice President of Population Health, CareOregon

Endnotes

1. [CalAIM Enhanced Care Management Policy Guide](#) (PDF), California Department of Health Care Services (DHCS), updated December 2022; [Population Health Management \(PHM\) Strategy and Roadmap](#) (PDF), DHCS, July 2022; and Diana Crumley, “CalAIM Policy Cheat Sheet: Population Health Management” [internal memo for the California Health Care Foundation], Center for Health Care Strategies, August 2022.
2. [PHM Strategy and Roadmap](#), DHCS.
3. [Medi-Cal Community Supports, or In Lieu of Services \(ILOS\), Policy Guide](#) (PDF), California Department of Health Care Services (DHCS), January 2023.
4. Anna C. Davis et al., “[Identifying Populations with Complex Needs: Variation in Approaches Used to Select Complex Patient Populations](#),” *Population Health Management* 24, no. 3 (June 2021): 393–402.
5. Mohsen Bazargan, Sharon Cobb, and Shervin Assari, “[Discrimination and Medical Mistrust in a Racially and Ethnically Diverse Sample of California Adults](#),” *Annals of Family Medicine* 19, no. 1 (Jan. 2021): 4–15; [2019 National Healthcare Quality and Disparities Report](#), Agency for Healthcare Research and Quality (AHRQ), content last reviewed June 2021; and Jennifer Tsui et al., “[Patterns in Geographic Access to Health Care Facilities Across Neighborhoods in the United States Based on Data from the National Establishment Time-Series Between 2000 and 2014](#),” *JAMA Network Open* 3, no. 5 (May 15, 2020): e205105.
6. “[Using Population Identification Strategies to Tailor Care for Individuals with Complex Needs](#)” (webinar), The Better Care Playbook, May 2021; and Jonathan Weedman (vice president of population health, CareOregon), in discussion with the authors, August 18, 2022.
7. Caroline L. Cawley et al., “[Mortality Among People Experiencing Homelessness in San Francisco 2016-2018](#),” *Journal of General Internal Medicine* 37, no. 4 (Mar. 2022): 990–91.
8. Audrey Nuamah and Rachel Davis, “[Identifying ‘Rising Risk’ Populations: Early Lessons from the Complex Care Innovation Lab](#),” *CHCS Blog*, August 20, 2020.
9. Ziad Obermeyer et al., “[Dissecting Racial Bias in an Algorithm Used to Manage the Health of Populations](#),” *Science* 366, no. 6464 (Oct. 25, 2019): 447–53.
10. Obermeyer et al., “Dissecting Racial Bias in an Algorithm.”
11. Jonathan Weedman, in discussion with the authors.
12. D. Rinehart et al., “Identifying Future High Opportunity Patients in an Urban Safety-Net: Predictive Modeling Techniques Versus Frequent Service Utilization” (2015 AcademyHealth Annual Research Meeting, Minneapolis, Minnesota, June 14–16, 2015).
13. David Mancuso (director, Research and Data Analysis Division, Washington State), in discussion with the authors, August 3, 2022.
14. “Using Population Identification Strategies to Tailor Care,” The Better Care Playbook.
15. Jonathan Weedman, in discussion with the authors.
16. Jonathan Weedman, in discussion with the authors.
17. Tracy L. Johnson et al., “[For Many Patients Who Use Large Amounts of Health Care Services, the Need Is Intense yet Temporary](#),” *Health Affairs (Millwood)* 34, no. 8 (Aug. 2015): 1312–19.
18. Lauren Moran and Rachel Yard, “[The Exponential Value of Integrating Cross-Agency Data: Lessons from Washington State’s David Mancuso](#),” *CHCS Blog*, March 10, 2020.
19. Jonathan Weedman, in discussion with the authors.
20. Nuamah and Davis, “Identifying ‘Rising Risk’ Populations.”
21. Tracy L. Johnson et al., “[Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation](#),” *eGEMs (Wash DC)* 3, no. 1 (2015): 1181.
22. Jonathan Weedman, in discussion with the authors.
23. Scott Graves, “[Despite Reforms, Racial Disparities in California’s Prisons Remain Large](#),” California Budget & Policy Center (CBPC), June 2021; [Initial Analysis and Key Questions: Racial Disproportionalities and Disparities in California’s Child Welfare System](#) (PDF), Legislative Analyst’s Office, Presented to Assembly Budget Subcommittee No. 1 on Health and Human Services, March 9, 2022; and “[Homeless Data Integration System: A Snapshot of Homelessness in CA](#),” California Business, Consumer Services and Housing Agency (BCSH), accessed April 20, 2023.
24. “Homeless Data Integration System (HDIS),” BCSH.