

A SIGNAL OF SUPPORT

Exploring Medi-Cal
Managed Care
Plans' Perspectives
on a Proposed
Rate Adjustment

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Executive Summary

The expansion of Medicaid in California resulted in dramatic increases to Medi-Cal's membership. People who have complex needs, such as housing insecurity, mental health conditions, and substance use disorders, represent a considerable portion of this newly eligible Medi-Cal beneficiary population. Medicaid managed care plans (MCPs) have begun implementing strategies to address these beneficiaries' complex needs — both medical and nonmedical. One common approach these plans have taken is to make social determinants-focused investments. However, such investments are not currently factored into the Medi-Cal rate-setting process, and plans cannot guarantee that they will recoup any portion of their investments as a result. The implementation of a rate adjustment for plans is a promising approach that would improve the sustainability of these types of investments, as well as encourage additional ones.

In 2018, the California Health Care Foundation released [*Intended Consequences: Modernizing Medi-Cal Rate Setting to Improve Health and Manage Costs*](#), which details a rate adjustment designed to encourage health plan investments that fall outside of traditional Medicaid benefits. This brief describes findings from interviews conducted with MCP leaders across California, exploring their thoughts on this rate-adjustment approach and its potential to encourage social determinants-focused investments.

Key Takeaways

- Plans are committed to making social determinants-focused investments.
- California is poised to be a national leader in innovation. A clear signal that the state

supports social determinants-focused investments would be a powerful lever to realize this potential.

- Plans support the concept of a rate adjustment to protect and encourage investments while sharing risk — preferably split evenly between plans and the state.
- Receiving some credit for investments is essential.
- Up-front risk sharing is as important as back-end shared savings — and more administratively efficient.
- Quality metrics are a necessary component of any rate-adjustment approach.

Overall, plan leaders thought their plans can best serve their communities by maintaining flexibility in what they can invest in, and they preferred the state approve an expansive list of health-related investments that would be eligible for a rate adjustment. However, there was relative consensus that were the state to approve a short list, it should prioritize interventions related to housing availability and supports for medically complex members, long-term care alternatives, behavioral health services and integration, and food security. Leaders also appreciated the need to start simple, evaluate and learn, and modify any rate-adjustment approach that is pursued.

Plan leaders encouraged the state to start with a signal of its support for social determinants-focused investments, both for the health of their members and for the Medi-Cal program's bottom line. State action to acknowledge the importance of these kinds of investments can solidify California's role as a national leader in Medicaid innovation that drives improved outcomes.



Introduction

Fifty-five million Americans are enrolled in Medicaid managed care plans (MCPs). Twenty percent of them, or 10.8 million enrollees, live in California.^{1,2} In the managed care model, state Medicaid agencies contract with managed care plans that accept a per member per month capitation payment to arrange for the delivery of Medicaid benefits and services.³ MCPs then contract with local providers who agree to deliver services to members under capitation and fee-for-service contracts.⁴ Managed care is the dominant model for the delivery of Medi-Cal benefits in California, where 81% of all Medi-Cal beneficiaries are enrolled in MCPs.⁵

Expansion of Medicaid in California resulted in dramatic increases to Medi-Cal membership. As of 2018, the size of Medi-Cal's membership has grown by 45% since expansion began (13.2 million beneficiaries compared to 9.1 million in 2013).⁶ The composition of Medi-Cal membership has also changed through the new coverage of people who were previously uninsured and who have complex needs, such as housing insecurity, mental health conditions, and substance use disorders.⁷ The inclusion of this group of individuals with complex needs — many of which are nonmedical needs — has required MCPs to expand their operations and provider networks to adequately care for this population, driving up overall costs.⁸ Concurrently, expansion has boosted MCPs' financial health by generating growth in reserves over historical levels.⁹

As MCPs strive to meet the goals of the Medi-Cal program — including enhancing access, improving health outcomes, and lowering total costs — they are increasingly pursuing innovative ways to address their members' whole-person needs.¹⁰ Research has consistently shown that social determinants of health, “the conditions in which people are born, grow, work, live, and age,” play a larger role in determining health outcomes than health care access and services.^{11,12,13} MCPs are responding to adverse effects of social determinants of health by investing in strategies that address individual social needs and/or improve community conditions (referred to in the remainder of this paper as “social determinants-focused investments”).^{14,15}

However, such investments are not currently reflected in the Medi-Cal rate-setting process, creating uncertainty as to whether plans will be able to recoup any of their investments. Plans are at risk of a phenomenon known as “premium slide.”¹⁶ Premium slide results from setting future rates based on lower utilization patterns without accounting for all of the investments that drove those lower utilization patterns. This undermines plans' ability to sustain effective social determinants-focused investments in ways that improve members' health and reduce health care utilization and costs. One promising approach to encouraging these types of investments is for the state to implement a rate adjustment for MCPs. This report summarizes research conducted with MCP leaders regarding their thoughts on a rate-adjustment strategy.



Background

In 2018, Blue Shield of California Foundation engaged JSI Research & Training Institute, Inc. (JSI) to better understand the perspectives of California's MCPs (herein referred to simply as "plans") on social determinants. As part of this work, JSI designed and delivered a survey exploring questions around plans' social determinants-focused investments and coordinated follow-up interviews with local public plans and commercial plans across the state. A complete synthesis of survey and interview findings is available in [*Moving Toward Value: Medi-Cal Managed Care Plans and the Social Determinants of Health*](#).

In March 2018, the California Health Care Foundation (CHCF) released the report [*Intended Consequences: Modernizing Medi-Cal Rate Setting to Improve Health and Manage Costs*](#) based on a workgroup led by Manatt Health and Optumas Healthcare. The workgroup was comprised of six Medi-Cal plan leaders, and guided by advice and insights from the state's Medicaid director. *Intended Consequences* outlines a novel health plan rate-adjustment strategy designed to incentivize "health-related investments" (HRIs), specifically those that seek to address the conditions that affect member health and/or support delivery system reform efforts but fall outside of traditional Medicaid benefits — such as social determinants-focused investments.¹⁷ Setting cost neutrality as a parameter, the rate-adjustment approach would allow plans and the state to "share savings" associated with effective HRIs, thus mitigating premium slide associated with these types of investments.

JSI and CHCF recognized the opportunity to efficiently use the JSI interviews with plans to gauge interest and to get input on the elements of the proposed rate-adjustment design. With CHCF support, JSI included an additional set of questions specific to the proposed rate adjustment in interviews with plan leaders.



Methodology

Nineteen out of a possible 23 MCPs participated in JSI's survey; 14 agreed to be interviewed. Prior to conducting interviews, JSI provided all interviewees with a background packet of information that included *Intended Consequences* and visual depictions of some of the rate-adjustment proposal's main concepts.

JSI conducted approximately hour-long, phone-based interviews with 26 people representing 14 plans. Interview questions explored the social determinants-focused investments that plans have already made at the individual and/or community level, the decision-making processes behind such investments, and the challenges and opportunities plans see regarding future investments. The interviews also included dedicated questions focused on understanding plan opinions around two of the three rate-adjustment components outlined in *Intended Consequences*: the features of the shared-savings split and requirements around potential HRIs. CHCF examined the proposal's third component (quality outcomes) through separate research, summarized in the report [*Paying Medi-Cal Managed Care Plans for Value*](#) by Bailit Health.

Interviewees had varying levels of familiarity with rate-setting processes, shared-savings

mechanisms, and the rate adjustment proposed in *Intended Consequences*. As such, they differed in their ability to respond to some of the questions around the specifics of the proposal. Most interviewees expressed willingness to receive these questions electronically to allow them more time to consider their responses or to seek input from other plan representatives, such as chief financial officers (CFOs). JSI wrote follow-up emails to all plans that included the rate-adjustment questions and a synthesis of the rate-adjustment proposal that interviewees could share with other plan representatives. JSI received an additional three responses to these follow-up emails.

For a complete list of interviewees, see page 12.



Our philosophy is that health is no longer just the doctor. ”

—PLAN LEADER



Findings

Across conversations with plan leaders, several common themes emerged regarding current social determinants-focused investments and opportunities for the state.

Contextual Considerations

Plans are committed to making social determinants-focused investments

All 19 plans that participated in JSI's survey indicated that they are currently making investments in their members' social and economic needs. Plan leaders clarified that while all plans are currently making social determinants-focused investments, it is challenging to receive credit in the rate-setting process for these investments. Interviewees described incorporating some of their investments into their administrative or care coordination budgets when possible, largely for investments that impacted their workforce. Additionally, approximately half of surveyed plans reported using “value-added or in-lieu-of services,”¹⁸ while just under half reported relying on quality improvement activities as strategies to fund their work (53% and 42%, respectively).

However, all plans are relying on their reserves to fund the bulk of their efforts to address their members' adverse health outcomes associated with social determinants. Despite not currently receiving full credit (or promise thereof), all leaders explained that their plans are committed to continuing these investments as long as they have the resources to do so. Many interviewees identified tension between what the state actuaries acknowledge in

the rate-setting process and the growing recognition that Medi-Cal has both financial and mission-related reasons to make social determinants-focused investments. While leaders acknowledged that “these efforts outpace the government’s ability to recognize the costs,” they also identified these types of investments as “innate to serving [their] members well” and imperative to moving the needle on health outcomes overall.

California is poised for leadership

Recently, California’s MCPs have accumulated historically large levels of financial reserves following Medicaid expansion. Plans have used these reserves to make a myriad of social determinants-focused investments and would like to continue this work. While plans are currently experiencing a period of financial health, interviewees — especially those who have spent many years in the business — cautioned that this period will inevitably give way to more difficult financial times. Factors on the horizon include the decline in enhanced matching rates and a healthier adult population increasingly gaining health coverage outside of Medi-Cal. Plan leaders view this current period of financial health and flexibility as a key opportunity to use reserves innovatively to build the infrastructure, partnerships, and practices necessary to effectively address outcomes associated with social determinants.

Interviewees overwhelmingly stated that it is important that the California Department of Health Care Services (DHCS) provide plans with a “signal” that acknowledges the risk that plans are currently undertaking and expresses commitment to finding solutions to

help plans sustain work that bends the cost curve and improves health and well-being. A common signal interviewees mentioned was for DHCS to engage in further conversation about sharing in some of the risk of these investments.



While plans have definitely shown the willingness to make investments, I think you would certainly see that willingness increase pretty significantly if there was a financial incentive.”

—PLAN LEADER

A rate adjustment is broadly supported

When asked to prioritize potential state-level policy changes that would encourage greater social determinants-focused investments, two-thirds of plans identified implementing a rate adjustment as a high-priority opportunity. Accordingly, nearly all interviewees expressed support for a rate-adjustment approach that would prevent some of the current risk of premium slide when innovations work while also encouraging greater and continued social determinants-focused investments. Even interviewees who were not familiar with the specifics of the rate-adjustment approach proposed in *Intended Consequences* understood its importance. They expressed commitment to continuing social determinants-focused investments but emphasized that bearing the risk of these investments alone is unsustainable. Plans are, however, willing to share the risk with the state, which also potentially benefits from plans’ social

determinants-focused investments that lower utilization and contain costs. Sharing in the risk of these investments would signal to plans a support for innovation.



Health plans are investing their reserves into community initiatives, and it has not been built into the rate-development process. This new approach would benefit the state as well as the health plans.”

—PLAN LEADER

Design Considerations

In addition to generally supporting this approach, many interviewees shared similar priorities and preferences regarding each component of the proposed rate adjustment detailed below.

Receiving some credit is essential

Plans are currently not receiving credit in the rate-setting process for a majority of their social determinants-focused investments. Interviewees described their plans taking on considerable risk to expand the menu of benefits they can offer their members through these types of investments, which are usually rooted in community needs that plans have observed. Interviewees expressed the importance of including at least some HRI costs in either the medical or nonmedical load when setting future rates. That said, representatives of smaller plans that rely on smaller revenues and reserve pools emphasized that it is important to count costs in the medical load as much as possible.



The core message is, if a plan is willing to make investments and [these investments are resulting in] a reasonable level of quality, they should get credit for this if it changes the cost curve.”

—PLAN LEADER

Up-front risk sharing is as important as back-end shared savings

Overall, plans want to receive DHCS recognition for investments that are meeting Medi-Cal program goals of improving outcomes and containing costs.¹⁹ Interviewees were receptive to a rate-adjustment approach that could generate greater savings for both them and the state. However, it is important for the state to articulate clearly that the rate-setting process will reduce some of the risks that plans take up-front (plans would need to work with DHCS to ensure that any up-front risk sharing still fits within the DHCS parameter of being cost neutral in the long term). Some interviewees went as far as to say that they would take a smaller share of credit from the state in rate setting over a larger share of savings that was time lagged by a number of years.

Up-front risk sharing between plans and the state would also acknowledge that social determinants-focused investments can produce significant impacts that are not realized during a one- to two-year time horizon. Finally, including at least some costs when setting rates was viewed as an administratively easier and more prompt way to share savings associated with interventions.



I think it is important that we get credit for part of the up-front investments. I would rather take less reward on the back end for less risk on the front end. ”

—PLAN LEADER

Opinions on an investment threshold varied widely

Overall, interviewees agreed that the rate-adjustment proposal should include an investment threshold, but there was wide variation regarding what the threshold should be. There was moderate agreement that a percentage of capitation dollars would be preferable, with some interviewees saying that 1% would be a reasonable threshold. Other interviewees suggested that the threshold should be a dollar amount, but the suggested amounts varied from \$100,000 a year to \$1 million a year. Many interviewees suggested that additional conversations with a technical workgroup of plan financial leaders, such as CFOs, would be important in determining a reasonable, tenable, and fair approach.

Quality measurement is a necessary component

While JSI's interviews did not focus on quality outcomes and metrics — CHCF funded research on that aspect of the rate-adjustment proposal separately — plan leaders consistently acknowledged the importance of maintaining or elevating quality while striving to achieve savings. Multiple interviewees also acknowledged the potential complications of incorporating quality measurement into a rate-adjustment approach and offered a few potential strategies to mitigate the

challenges. For example, quality measures could be incorporated into the eligibility criteria to receive a rate adjustment. Another proposed strategy called for phasing in quality measurement only after plans and the state have had time to adjust to the new savings approach. One plan leader pointed out that a quality measurement strategy that included demonstrable improvement on indicators — rather than just meeting a standard — would be fairer given the variation in member populations across different plans' regions.



I feel that quality has to be a minimum goal. You have to meet quality to qualify for shared savings. ”

—PLAN LEADER

Start simple, learn, adjust

Some plan leaders foresaw a complex implementation phase for any rate-adjustment approach. For example, while many interviewees were supportive of incorporating quality measures into the design, there was concern that measures should not affect details such as what savings are being split and how. The notion of setting a minimum savings rate was another area where it was clear that there is broad support but a lack of clarity about details. The consensus message was to start simple and provide time and process for refinement.

Leaders from one plan drew on previous experience with the Whole Person Care initiative and proposed that the state pursue a Plan-Do-Study-Act approach that integrates a technical workgroup to explore features that require additional consideration.

Evaluation is essential

There was a near-universal agreement on the need to maintain accountability and to implement sound evaluations to determine which investments work. While maximizing the simplicity of the rate-adjustment approach emerged as an important goal for plans, especially during an implementation phase, interviewees consistently emphasized the unique and evolving challenges that exist in their regions. Interviewees acknowledged that, while they prefer a longer list of HRIs, the state may feel more comfortable and be more likely to support a rate adjustment if it started with a shorter list. However, incorporating evaluation as a feature of this proposal may encourage the state to continue adjusting and expanding the list of HRIs it accepts as time passes and all parties become more comfortable with a shared-savings approach.

Investment Considerations

Four areas emerged as priorities

There was a strong convergence across the 26 interviewees on four main areas of member needs and interventions that should be counted in a rate-adjustment proposal:

- Housing availability and supports (including recuperative and respite care)
- Long-term care alternatives
- Behavioral health services and integration
- Food security

As important complementary strategies to support HRI investments, plan leaders also voiced interest in incorporating the Assisted Living Waiver program into health plans' menu

of benefits, increasing plan capacity to deliver substance use treatment recovery services to members, and “carving in” behavioral health services.

Flexibility enables direct response to community needs

Almost all interviewees opposed the idea of the state prioritizing certain HRIs over others. The process of implementing a new savings program would already be complicated and avoiding additional barriers to qualifying for a rate adjustment would be preferable. Interviewees also preferred to let priorities arise organically based on member and community needs, which they felt their plans were best suited to understand. One plan leader reasoned that prioritizing certain HRIs over others may incentivize plans to pursue strategies that are tied to state dollars, thereby diverting funding from addressing community needs and stymying place-based innovation.



I wouldn't want [the state] to incentivize [certain initiatives over others], and then we drop the initiative that fits our community to chase state dollars. ”

—PLAN LEADER

Eligible HRIs should balance flexibility and consistency

Plans value the ability to maintain as much flexibility as possible related to what they invest in. Given this, interviewees were most interested in the state approving an expansive list of HRIs eligible for a rate adjustment rather than a narrower list. They did, however, acknowledge why the state might prefer

implementing a narrower list; they also saw that foregoing some flexibility in the form of a shorter approved HRI list could be important to moving this approach forward and to the expediency with which it is implemented. To strike a balance, one common potential solution that interviewees proposed was for the state to publish a broader list within limited categories and then allow plans flexibility to choose specific HRIs within those categories. Interviewees reasoned that this approach would recognize both state limits and the unique mix of community needs across California's diverse regions.

The Shared-Savings Split

50/50 is a fair breakdown

A majority of interviewees hypothesized that the state would need to receive a sizeable share of any generated savings if it were to approve of and participate in the rate adjustment. Simultaneously, interviewees wanted any savings arrangement to reflect the initial investment and risk that plans are already taking on and would continue to take on under this process. Therefore, they perceived an even split of generated savings between the state and plans as a fair and simple initial approach that would encourage participation.

The shared-savings split should shift over time

While interviewees identified an initial 50/50 split as a fair breakdown of shared savings, they also wanted the option to receive larger shares of savings as their investments continued. Savings would arguably become more difficult to achieve over time as care utilization fell among members who historically were frequent users of services. Relying on a 10-year time horizon, one plan leader suggested maintaining a 50/50 split through year 6 and switching to a 75/25 (plan/state) split between years 7 and 10.



Conclusion

Most important is a signal of support from the state for social determinants-focused investments

All 19 plans that JSI engaged through this work indicated that they have been making social determinants-focused investments in some shape or form, despite the associated financial costs and risks. Plans understand that these types of investments are critical for creating better health outcomes for their members and are committed to continuing their investments as long as they are financially able to do so. While many plan leaders JSI spoke with were unfamiliar with the rate-adjustment proposal from CHCF and its specifics prior to the interview, nearly all recognized that this approach presents an exciting opportunity for protection from current financial risks and encouragement for future innovation. Implementing a rate adjustment that is simple, includes some up-front risk sharing, and splits time-lagged savings fairly would be a key way DHCS could signal support for innovative investments that focus on social determinants of health and bolster California's role as a leader in Medicaid innovation.

ADDITIONAL STATE STRATEGIES TO ENCOURAGE SOCIAL DETERMINANTS-FOCUSED INVESTMENTS

This document includes just a few of many suggestions for potential policy levers the state can consider leveraging to support and strengthen social determinants-focused investments. The following resources offer additional suggestions for consideration:

- JSI Research & Training, Inc. and Center for Health Care Strategies. [*Discussion Paper: Opportunities for Medi-Cal to Support Community Health Initiatives*](#). May 2018.
- Center for Health Care Strategies. [*Addressing Social Determinants of Health via Medicaid Managed Care Contracts and Section 1115 Demonstrations*](#). December 2018.
- The Commonwealth Fund. [*Enabling Sustainable Investment in Social Interventions: A Review of Medicaid Managed Care Rate-Setting Tools*](#). January 31, 2018.

JSI Research & Training Institute, Inc. is a research and consulting organization dedicated to advancing the health of individuals and communities. JSI works across a full range of public and community health areas, strengthening health systems to improve services—and ultimately—people's health.

Interviewees

The authors are grateful to the interviewees listed below who contributed their expertise and insights. In addition, the Local Health Plans of California and the California Association of Health Plans provided essential support and review.

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Endnotes

- 1 Mathematica Policy Institute. *Medicaid Managed Care Enrollment and Program Characteristics* 2016. Centers for Medicare & Medicaid Services. Spring 2018. <https://www.medicaid.gov/medicaid/managed-care/downloads/enrollment/2016-medicaid-managed-care-enrollment-report.pdf>
- 2 California Department of Health Care Services. *Medi-Cal Managed Care*. Accessed December 2018. <https://www.dhcs.ca.gov/services/pages/medi-calmanagedcare.aspx>
- 3 Centers for Medicare & Medicaid Services. *Managed Care*. Accessed December 2018. <https://www.medicaid.gov/medicaid/managed-care/index.html>
- 4 Garfield R, et al. *Medicaid Managed Care Plans and Access to Care*. Kaiser Family Foundation. March 2018. <http://files.kff.org/attachment/Report-Medicaid-Managed-Care-March-Plans-and-Access-to-Care>
- 5 Manatt Health and Optumas Healthcare. *Intended Consequences: Modernizing Medi-Cal Rate Setting to Improve Health and Manage Costs*. California Health Care Foundation. March 2018. <https://www.chcf.org/wp-content/uploads/2018/03/IntendedConsequencesMediCalRateSetting.pdf>
- 6 Norris L. *California and the ACA's Medicaid Expansion*. healthinsurance.org. November 29, 2018. <https://www.healthinsurance.org/california-medicaid/>
- 7 Winkelman T, et al., *The Affordable Care Act, Insurance Coverage, and Health Care Utilization of Previously Incarcerated Young Men: 2008-2015*. American Journal of Public Health. March 21, 2017. https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2017.303703?rfr_dat=cr_pub%3Dpubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&journalCode=ajph&
- 8 Tatar M, Paradise J, and Garfield R. *Medi-Cal Managed Care: An Overview and Key Issues*. Kaiser Family Foundation, March 2, 2016. <http://files.kff.org/attachment/issue-brief-medi-cal-managed-care-an-overview-and-key-issues>
- 9 Dutt P, et al. *Financial Summary of Medi-Cal Managed Care Health Plans: Quarter Ending December 31, 2017*. Department of Managed Health Care. April 12, 2018. https://www.dmhca.gov/Portals/0/Docs/DO/FSSB%20April2018/Agenda%20Item%207_Financial%20Summary%20of%20Medi-Cal%20Managed%20Care%20Plans%20Report.pdf
- 10 Artiga S and Hinton E. *Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity*. Kaiser Family Foundation. May 10, 2018. <https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>
- 11 World Health Organization. *About Social Determinants of Health*. Accessed January 2019. https://www.who.int/social_determinants/sdh_definition/en/
- 12 Hood C, et al. *County Health Rankings: Relationships Between Determinant Factors and Health Outcomes*. American Journal of Preventive Medicine, Volume 50, Issue 2, 129-135. February 2016. [https://www.ajpmonline.org/article/S0749-3797\(15\)00514-0/pdf](https://www.ajpmonline.org/article/S0749-3797(15)00514-0/pdf)
- 13 Braveman P, Egerter S, and Williams D. *The Social Determinants of Health: Coming of Age*. Annual Review of Public Health, Volume 32, 381-398. April 2011. https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-031210-101218?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed
- 14 JSI Research & Training Institute, Inc. and Center for Health Care Strategies. *Opportunities for Medi-Cal to Support Community Health Initiatives*. May 2018. https://www.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=21605&lid=3
- 15 Bachrach D, et al. *Enabling Sustainable Investments in Social Interventions: A Review of Medicaid Managed Care Rate-Setting Tools*. The Commonwealth Fund. January 31, 2018. https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_fund_report_2018_jan_bachrach_investment_social_interventions_medicaid_rate_setting.pdf
- 16 Manatt Health and Optumas Healthcare. March 2018.
- 17 Ibid.
- 18 JSI Research & Training Institute, Inc. and Center for Health Care Strategies. May 2018.
- 19 California Department of Health Care Services. *DHCS Strategy for Quality Improvement in Health Care*. March 2018. https://www.dhcs.ca.gov/services/Documents/DHCS_Quality_Strategy_2018.PDF