California
HealthCare
Foundation

# Monitoring Medi-Cal:
## Recommendations for Measuring the Performance of California's Medicaid Program

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# **Monitoring Medi-Cal:** Recommendations for Measuring the Performance of California's Medicaid Program

*Prepared for*
California HealthCare Foundation

*by*
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## About the Author

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## About the Foundation

The **California HealthCare Foundation** works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit us online at www.chcf.org.

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# I. Executive Summary

With Medi-Cal on the verge of a dramatic expansion and a major restructuring of the way care is financed, the need to monitor the performance of the nation's largest Medicaid program has never been more evident than it is today. Under federal health reform, Medi-Cal enrollment is expected to grow to as many as 10 million beneficiaries. As part of California's latest 1115 Medicaid waiver, Medi-Cal will require nearly 400,000 low-income, mostly high-cost seniors and people with disabilities to enroll in managed care plans. On top of these coming changes, the past several years of record-setting budget deficits have forced state lawmakers to reduce by billions of dollars or eliminate entirely some Medi-Cal programs, without sufficient information about their performance or a baseline against which to measure the impact of the changes. These and other events have created new opportunities and growing demands for measuring and monitoring the performance of Medi-Cal.

Beginning in 2007, the California HealthCare Foundation (CHCF), working in tandem with leadership of the California Department of Health Care Services (DHCS), undertook a project to investigate the potential usefulness of a Medi-Cal performance dashboard. CHCF and DHCS approached the project with the following objectives:

1. Identify and prioritize a set of metrics that could be used by DHCS and others to regularly assess the performance of the Medi-Cal program, develop improvement goals, and assess how well those goals are being met.
2. Inform and help focus future Medi-Cal funding decisions that will be made by federal, state, and local policymakers, and by private funders such as CHCF.

CHCF engaged Bailit Health Purchasing to facilitate this effort. This report presents the study's findings and recommendations for the dashboard's framework and for specific measures that would be useful for comparing Medi-Cal's performance to a benchmark or goal.

## Opportunities and Challenges

Extensive research and stakeholder input on the potential for a Medi-Cal performance dashboard identified many positive factors:

- There is broad stakeholder interest in a Medi-Cal performance dashboard.
- There is a large and growing number of nationally recognized health care performance measures.
- DHCS has a data warehouse that provides a rich repository of Medi-Cal eligibility, claims, and encounter data.
- There are many useful examples of performance measurement in other states.
- The state, through the Legislature and DHCS, is increasingly focused on accountability and quality within its programs. Specifically, California's new 1115 waiver will increase accountability within the Medi-Cal program, including improving health care quality and outcomes.

- The Affordable Care Act (ACA) requires the development of a national quality strategy that includes priorities to improve the delivery of health care services, patient outcomes, and population health. On December 30, 2010, the Centers for Medicare & Medicaid Services (CMS) submitted for public comment a set of core quality measures for the adult Medicaid population.

Several challenges were also identified:

- Given the size and breadth of the Medi-Cal program, both in terms of populations served and services provided, it will be difficult to develop a dashboard that provides a comprehensive view of the program's performance without being too lengthy to be effective or too resource-intensive to produce.
- Although there are hundreds of nationally accepted performance measures, there are few that reflect long term care services and support for the elderly and people with disabilities.
- A number of barriers make it difficult to efficiently and effectively compile Medi-Cal data that can be used for dashboard measures. These barriers are reduced somewhat by the recent enhancement by DHCS of its data warehouse, but challenges remain nonetheless.
- Creating and sustaining a performance dashboard will require DHCS to commit staff resources and funding to the collection of measures not available through administrative data, and to produce reports on a routine basis. Yet resources are scarce because of the state's economic woes.

## Recommended Goals and Framework

CHCF and DHCS approached the concept of a Medi-Cal performance dashboard with the overall goal of developing a dashboard that accomplishes the following:

- Reflects how well Medi-Cal serves its beneficiaries and California taxpayers, as well as the integral role it plays in the overall health care delivery system;
- Balances the interests of program officials, policymakers, and stakeholders by providing a clear summary of program performance without sacrificing depth; and
- Applies measures to the different population groups, services, and programs that are able to reflect the importance of each of these performance categories.

Specific recommendations for the framework of a Medi-Cal performance dashboard include the following:

1. The dashboard should include both descriptive and evaluative information.
2. The evaluative information should be quantitative and provide "scores" as a means of judging performance.
3. The dashboard should include a combination of population-specific measures and program-wide measures:
    - Population measures should focus on children, pregnant women, parents, seniors, and people with disabilities. They should also reflect the four major service domains—preventive care, acute and chronic care, behavioral health care, and long term care—and patient experience.

- Program-wide measures should reflect administrative performance, access measures, and measures that reflect Medi-Cal's role in the larger California health care system.

4. The dashboard should reflect a targeted set of priority measures.
5. These measures should be phased in over time:
   - The initial dashboard should include a limited set of measures that rely on existing administrative data (e.g., enrollment, claims, and encounter data).
   - Over time, when resources permit, the dashboard should incorporate additional measures, including some that use medical record review and use of new provider and member surveys.
6. The dashboard should be produced annually.
7. The dashboard should be available online in both static and dynamic formats.

## Recommended Measures

Two types of measures are recommended for the initial dashboard: population measures and program-wide measures. These measures are further divided into two groups given resource constraints that were identified at the time this work was conducted: an initial, limited set of measures, and a second, more robust set of measures that the state could pursue as additional resources become available.

### Population Measures

The recommended population measures to be initially reported within the dashboard are either already reported for the Medi-Cal managed care population, or have underlying data that is currently collected and can, without significant additional resources, be used to calculate measures for inclusion in a dashboard report. These measures should be derived primarily from the Healthcare Effectiveness Data and Information Set (HEDIS) that is maintained by the National Committee for Quality Assurance (NCQA). Patient experience measures should initially be limited to those already collected for the Medi-Cal managed care population.

Table 1 lists the recommended population measures for the initial performance dashboard. These measures collectively address each major population served by Medi-Cal.

An open question is whether any of these HEDIS or Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures currently reported for managed care enrollees should also be collected and reported for fee-for-service (FFS) enrollees. The FFS Medi-Cal population will shrink, in relative terms, as a consequence of California's 1115 Medicaid waiver and the ACA. With the exception of beneficiaries residing in rural counties, most of those who receive preventive, primary, and acute care through the FFS program after 2014 will be certain immigrants eligible only for restricted benefits.[1] If DHCS chooses to collect and report HEDIS and CAHPS measures for its FFS population, it should consider developing a hybrid methodology so that it can compare the results across FFS and managed care.[2]

In subsequent years, when additional resources become available, dashboard measures should be expanded in two ways. First, measures should be reported for additional populations (e.g., measures of patient experience for the FFS population). Second, the list of measures should be expanded to include measures that require medical record reviews and the use of additional patient experience survey instruments.

**Table 1. Summary of Population Measures Using Available Data**

| MEASURE NAME | DOMAIN | POPULATION |
|---|---|---|
| Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) composite for children | Preventive care | Children and adolescents |
| EPSDT composite for adolescents | Preventive care | Children and adolescents |
| Cervical cancer screening | Preventive care | Adults, adults with disabilities |
| Timeliness of prenatal care | Prenatal care | Maternal health |
| Frequency of ongoing prenatal care | Prenatal care | Maternal health |
| Low birth weight rate—Pediatric Quality Indicator (PQI) 9 | Birth care | Maternal health |
| Postpartum care | Postnatal care | Maternal health |
| Appropriate treatment for children with upper respiratory infection | Acute and chronic care | Children and adolescents |
| Use of appropriate medications for people with asthma | Acute and chronic care | Children and adolescents, adults |
| PQI composite | Acute and chronic care | Children and adolescents |
| Diabetes composite | Acute and chronic care | Adults, adults with disabilities |
| Use of imaging studies for low back pain | Acute and chronic care | Adults |
| Medication possession ratio | Acute and chronic care | Adults with disabilities |
| Risk-adjusted average length of hospital stay | Acute and chronic care | Adults with disabilities |
| Antidepressant medication management composite | Behavioral health care | Adults with disabilities |
| Follow-up after hospitalization for mental illness within 30 days of discharge | Behavioral health care | Children and adolescents, adults, adults with disabilities |
| Initiation of alcohol and other drug dependence treatment | Behavioral health care | Children and adolescents, adults, adults with disabilities |
| Consumer Assessment of Healthcare Providers and Systems (CAHPS)* survey composite: getting care quickly and getting needed care | Patient experience | Children and adolescents, adults, adults with disabilities |
| Waiver waiting lists | Long term care | Adults with disabilities, seniors |
| Services in community vs. institution | Long term care | Adults with disabilities, seniors |
| Nursing facility residents with pressure sores | Long term care | Adults with disabilities, seniors |
| Nursing facility residents that lose too much weight | Long term care | Adults with disabilities, seniors |

*CAHPS is technically a part of the HEDIS measurement set.

## Program-Wide Measures

Table 2 lists the recommended program-wide measures that should be used for the initial performance dashboard. These measures look at the performance of Medi-Cal across eligibility, enrollment, financing, fraud and abuse, and support of the health safety net.

**Table 2. Program-Wide Measures**

| MEASURE NAME | DOMAIN |
|---|---|
| Timely eligibility determinations, general applications | Eligibility and enrollment |
| Timely eligibility determinations, disability-based applications | Eligibility and enrollment |
| Timely redeterminations | Eligibility and enrollment |
| Appropriate bridging activity | Eligibility and enrollment |
| Eligible but unenrolled | Eligibility and enrollment |
| Average length of enrollment | Eligibility and enrollment |
| Timely provider enrollment | Access to providers |
| Ratios of providers to population | Access to providers |
| Beneficiaries with a primary care physician (PCP) visit | Access to providers |
| Beneficiaries changing managed care plans within 60 days | Access to providers |
| Implementation of electronic health records (EHR) systems | Access to providers |
| Difficulty speaking with provider due to language | Cultural competency |
| Respect from providers | Cultural competency |
| Access to interpreter | Cultural competency |
| Difficulty finding information on Medi-Cal | Cultural competency |
| Per-enrollee spending | Spending |
| Annual Medi-Cal growth | Spending |
| Medi-Cal's share of general fund | Spending |
| Treatment authorization requests (TAR) composite | Program integrity |
| Ratio of cost avoidance to invested resources | Program integrity |
| Number of enrollees in Health Care Coverage Initiative (HCCI) programs | Health safety net |
| Number of new Medi-Cal enrollees through HCCI enrollment | Health safety net |
| Retention rate of HCCI enrollees | Health safety net |
| Emergency department use by HCCI enrollees | Health safety net |

In later years, when more resources are available, program-wide dashboard measures should be expanded to include provider satisfaction surveys, particularly to gain a better understanding of participation rates within Med-Cal and providers' satisfaction with the program.

## Next Steps

Development and implementation of a Medi-Cal performance dashboard will take time and be an evolving process. DHCS should begin by devising an initial dashboard with measures that rely on easily collected and reported data. To advance the development of a Medi-Cal performance dashboard, DHCS should:

- Identify an internal unit to lead the project and the resources it needs to collect and report the data and prepare the dashboard. DHCS should seek to leverage its investment with other public and private sources of funding.
- Review the recommended measures in light of the ACA requirements and California's recently-approved 1115 Medicaid waiver. DHCS should closely review the child health quality measures developed under the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009, and should monitor national efforts to develop a set of health quality measures for Medicaid-eligible adults required by the ACA.
- Decide whether to collect HEDIS and CAHPS data for its FFS population.
- Test any new measures to ensure that DHCS has appropriate data and sufficient sample sizes to report meaningful results.

Finally, the Medi-Cal performance dashboard should both draw upon and influence federal and state investments to promote meaningful use of electronic health records and the exchange of health information among providers serving the Medi-Cal population. These efforts should, in the near future, make it easier for DHCS to report measures that require clinical results and health outcomes, thereby strengthening the dashboard as a tool for managing the Medi-Cal program and providing public accountability about its performance.

# II. Introduction

The California Medicaid program provides health care coverage to 7.7 million people — nearly one in five Californians. Known as Medi-Cal, it serves many different functions. It provides affordable health care coverage to low-income parents and their children. It provides coverage to individuals with extensive physical disabilities and mental impairments who lack access to affordable employer-based coverage. And it provides coverage for long term care and cost sharing not covered by Medicare for low-income seniors and people with disabilities. It also provides assistance in building and maintaining the core infrastructure of the health care safety net delivery system, and it subsidizes providers who serve indigent populations.

Medi-Cal is the largest Medicaid program in the country (measured by enrollment), and the largest insurer in the state. The California Department of Health Care Services (DHCS) administers it; however, several key Medi-Cal programs are operated through other agencies of state government, including the Department of Social Services, the Department of Mental Health and Development Services, and county health and social services departments.

Medi-Cal also accounts for a larger share of state general fund spending than any other budget category except education. In fiscal year 2010–11, Medi-Cal expenditures are projected to surpass $50 billion, with roughly half this amount funded by the state's general fund and the other half funded by federal matching funds.[3] As such, state officials are constantly under pressure to accomplish the following:

- Control the growth of program expenditures while developing innovative ways to expand coverage to a growing population of uninsured residents;
- Increase payment rates to providers; and
- Improve quality of care provided to beneficiaries.

Despite Medi-Cal's importance to the people it serves, the health care delivery system, and the state budget, its performance has gone largely unmeasured. While there are performance measurements in place for the families and children who are enrolled in one of the 23 health plans that participate in Medi-Cal managed care, there is no performance monitoring for fully one-half of Medi-Cal's members who are enrolled in the fee-for-service (FFS) program, which garners four-fifths of Medi-Cal program spending and is larger than all but two health plans in the state — Kaiser Permanente and Anthem Blue Cross of California.[4]

The need to monitor Medi-Cal's performance has never been more evident. Data about the program's performance could be used to measure the potential impact of program reforms to be enacted as part of the state's 1115 Medicaid waiver, program changes resulting from health reform, and any future program cuts or enhancements. Performance data could also be used by DHCS to measure its progress toward meeting the goals and objectives identified in its 2008 strategic plan.

Recognizing the need for measuring Medi-Cal's performance and understanding that Medi-Cal is constantly evolving, the California HealthCare Foundation (CHCF) and DHCS leadership began

working in tandem in the fall of 2007 to investigate the potential usefulness of a Medi-Cal performance dashboard.

A performance dashboard is a regular report that provides a picture of how well an organization or program is operating, relative to established goals. It can be used to identify areas of strong performance, alert program managers and policymakers to areas that require additional attention or analysis, and show customers that the organization evaluates its work and strives to improve itself. (See Appendix D for a full description of performance dashboards.) The annual scorecard published online by the Minnesota Department of Public Transportation provides an excellent example of how a dashboard might be organized and used.[5]

CHCF and DHCS approached the project with the following objectives:

1. Identify and prioritize a set of metrics that could be used by DHCS and others to regularly assess the performance of the Medi-Cal program, develop improvement goals, and assess how well those goals are being met.

2. Inform and help focus future Medi-Cal funding decisions that will be made by state and local policymakers, and by additional funders such as CHCF.

CHCF engaged Bailit Health Purchasing to facilitate these efforts. This report presents the findings of the joint CHCF and DHCS project, based on the results from an examination of the following:

- Performance measurement and reporting, in particular among Medicaid programs in other states, and among government programs in general;
- Degree of interest among stakeholders in a performance dashboard of the Medi-Cal program;
- Availability of performance data; and
- Potential challenges in the design and use of a performance dashboard.

These findings are followed by a series of recommendations for the framework of a Medi-Cal performance dashboard and for specific measures to be reported as part of the dashboard.

# III. Methodology

The first phase of the project began in November 2007 with interviews of state officials and other Medi-Cal stakeholders. (Appendix A provides a list of individuals and organizations interviewed by Bailit.) The purpose of these interviews was to identify the following:

- Level of interest in a performance measurement report focused on Medi-Cal;
- Existing performance measures; and
- Sources of data not currently being collected that could be used to support additional recommended measures.

In addition, Bailit conducted a national scan of efforts that have been undertaken to monitor the performance of Medicaid programs in other states.

An advisory group meeting was held in April 2008 to share findings from the first phase of the project, and to discuss design options, potential areas of focus, and potential criteria for determining which measures should be included in a dashboard. Meeting participants included staff from DHCS and other departments that oversee Medi-Cal-funded services (e.g., social services, public health, mental health, developmental services, managed health care, and alcohol and drug programs); legislative staff; county officials; and representatives of a broad array of Medi-Cal stakeholders, including consumers, health care providers, and health plans. (Appendix B provides a list of stakeholders who participated in the advisory group meetings held in April 2008 and March 2009.)

Following the meeting, Bailit created a catalog of hundreds of potential performance measures, which reflected the areas that were of greatest interest to advisory group participants. They were gathered from numerous sources, including the National Quality Forum, which is a national leader in endorsing measures; the Healthcare Effectiveness Data and Information Set (HEDIS) and Consumer Assessment of Healthcare Providers and Systems (CAHPS)[6] measures, which are maintained by the National Committee on Quality Assurance; and the Center for Quality Assessment and Improvement in Mental Health.

Bailit then organized a series of conference calls with stakeholders to solicit input on the number of measures that should be included. (Appendix C lists the conference call participants who were involved in the project.) These stakeholders were also invited to recommend additional measures not reflected in the catalog, and to prioritize which measures (of those in the catalog and any new ones) should be included in a Medi-Cal performance dashboard.

Each conference call was focused on measures specific to one of eight topic areas: children, pregnant women, parents, seniors, adults with disabilities, behavioral health, beneficiary access, and financial and system performance. The calls included some advisory group members, but also drew on a broader group of stakeholders, including individuals with expertise and/or interest in specific areas of performance measurement.

The experience of the initial calls suggested that stakeholders had difficulty in agreeing on the appropriate number of measures, and, as a result, they also had difficulty in determining how many measures to prioritize. So before continuing with additional calls, Bailit worked with DHCS and

CHCF to develop a proposed framework for the dashboard that included draft recommendations for the number of measures in each of the eight topic areas and for the measures themselves. These recommendations were subsequently revised as stakeholders provided their feedback.

Before finalizing a set of recommended measures, Bailit conducted additional interviews with DHCS staff to examine the operational implications of potential measures — that is, the level of effort and cost required to report the measures under consideration, including costs associated with data collection and analysis. A revised set of measures was presented at a second advisory group meeting in March 2009. The recommendations were revised based on the feedback of the advisory group participants.

After the initial recommendations were developed in 2009, CHCF engaged the Centers for Health Care Strategies (CHCS) in November 2009 to examine in detail how other states use performance measurement in their FFS populations. Bailit revised this report to reflect the key findings from the CHCS study, published in October 2010.[7] In addition, Bailit reviewed and revised the final recommendations for the dashboard based on its assessment of the implications of the Medicaid provisions of the Accountable Care Act (ACA), the health information technology provisions of the American Recovery and Reinvestment Act of 2009, and California's new 1115 Medicaid waiver. The final recommendations are presented in Chapters VI and VII of this report.

# IV. Findings

The research findings for this report focus on five key areas: the use of performance dashboards in other states, the level of interest in a dashboard among California stakeholders, the availability of health care measures that could be included in a Medi-Cal performance dashboard, the availability of data that could support the measures, and potential challenges to the design and use of a dashboard.

## Use of Performance Dashboards in Medicaid

Bailit found no examples of states that use program-wide performance dashboards in Medicaid, but it learned that most states do measure the performance of specific areas of their programs. Performance reports are common in states with Medicaid managed care, largely due to federal requirements that managed care plans have independent quality reviews on an annual basis, and several states measure performance within their FFS programs. States use these reports to identify areas where improvement is needed and track the impact of quality improvement projects, performance-based financial incentives, or policy changes.[8] Pennsylvania's Medicaid program reports HEDIS scores for both its Medicaid managed care program and its FFS-based primary care case management program.[9] Because Pennsylvania uses the same methodology for calculating HEDIS scores in both programs, program managers and policymakers can compare performance across each. However, the reports that Bailit found differ from dashboards in that they represent a deep focus on a particular area of the program, rather than a selection of key performance indicators.

## Interest among California Stakeholders

During the course of the individual interviews, the advisory group meeting in April 2008, and subsequent conference calls, it became clear that both state officials and external stakeholders were interested in having a Medi-Cal performance dashboard that provides basic statistics, descriptive information, and evaluative information regarding the overall performance of the program. Those interested in performance measurement expressed two different desires: a high-level dashboard that provides key indicators of performance, and a more detailed set of measurements that allow for a deeper "dive" into specific areas of the Medi-Cal program.

Stakeholders also shared their concerns and skepticism that DHCS would be able to sustain its interest in performance measurement or that department leadership would be able to bring such fundamental change to the department. They commented that the Medi-Cal program has not focused on performance measurement in either the management of its program or as a way of providing stakeholders with information about its programs.[10] Some stakeholders also expressed a concern that a dashboard with too few measures would lead the agency to focus only on areas in which measurement occurred, while one with too many measures would be both overly burdensome to produce and overwhelming to use.

Stakeholders also noted a number of additional challenges and barriers to producing a Medi-Cal performance dashboard. They voiced concern about the ability of DHCS to produce measures based on current data and about the quality of the data. They also raised the issue of how particular measures

might be collected and reported on, and whether a dashboard would result in any action taken based on an indication that action was warranted. Finally, they worried that a dashboard might become a budget-cutting device, rather than being used as a tool for prioritizing program investments.

Despite these concerns, stakeholders generally agreed that Medi-Cal is simply too important to the health of low-income Californians and the fiscal health of the state to not have a dashboard that provides timely information on key indicators of the program's performance.

## Availability of Relevant, Nationally Recognized Measures

Developing the recommended measures for inclusion in a Medi-Cal performance dashboard involved a comprehensive review of available health care measures, including those developed by measurement sources, measurement clearinghouses, and accrediting organizations.

Measurement sources often include government agencies, measurement organizations, health plans or academic medical centers, and other providers that invest resources in measurement development and validation, either independently or in partnership with professional organizations. Measurement clearinghouses, such as the National Quality Measures Clearinghouse, collect and publish available measures without endorsing specific ones. And accrediting organizations, such as the National Quality Forum (NQF) and the National Committee for Quality Assurance (NCQA), publish available measures that the accrediting organizations approve as valid and meaningful.

Health care measures are constantly changing and improving, and number in the thousands. A majority of the available measures focus on preventive, acute, and chronic care provided to children and adults. Many measures are process measures, reflecting whether a particular service has been provided. However, an increasing number of measures are outcome measures, reflecting the health of an individual.

For some populations served by the Medi-Cal program, particularly children and parents, an abundance of measures of key services are available and could be used to measure performance. Maternal-health measures are also available, although there are few actionable ones that do not require medical record review (see the next topic, "Availability of Data to Support Measures," for a discussion of the issues surrounding medical record review). For long term care services and support, particularly for care provided in the community to seniors and people with disabilities, there are few existing performance measures.

Recently, quality measurements for children and adults in publicly funded programs have received increased attention. First, the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 included the development of quality measures for children across Medicaid and CHIP programs. More recently, the ACA now requires the development of a set of health-quality measures for Medicaid-eligible adults.[11] Pursuant to the ACA, on December 30, 2010 the Centers for Medicare & Medicaid Services (CMS) released a core set of 51 measures for public comment. Comments are due by March 1, 2011.

## Availability of Data to Support Measures

Measurements that rely on medical record reviews or survey data are significantly more costly to collect and report on than measurements that rely on administrative data. Administrative data typically includes claims data, including pharmacy

and laboratory data, or encounter data that is often collected by health plans for management and/or claims payment purposes. Administrative data is typically a less burdensome source of measurement data because it is available electronically and in a standardized format. Medi-Cal currently has limited access to medical record reviews or survey data, except to the extent that it is collected through the Medi-Cal managed care plans.

Most of the process measures that are available require mainly administrative data. The available measures of key services for children and their parents are also based on administrative data. Outcome measures, on the other hand, often rely on a combination of administrative data and medical record reviews. Patient or member surveys are another common method of collecting information on the health care system and patient outcomes.

NCQA's HEDIS and CAHPS measures are currently used extensively by Medi-Cal's managed care program, by other state Medicaid managed care programs, and in the commercial insurance sector. The scores of many of the HEDIS measures can be calculated using solely administrative data; therefore they can, with comparative ease, be reported for Medi-Cal's FFS population. Numerous HEDIS scores allow for a hybrid approach to reporting. The hybrid approach allows a measure to be calculated using only administrative data or via a combination of administrative data and medical record reviews. Today, Medi-Cal's managed care plans supplement their administrative data with medical record reviews when reporting on HEDIS measures to DHCS.

CAHPS surveys are also used biannually to report on patients' experiences with Medi-Cal managed care plans. These surveys are not currently used for the FFS population, but surveys of that population could be added in at a later date.

While administrative data is less burdensome to use for measurement reporting purposes, obtaining it is still not an easy task for Medi-Cal. Because of the complexity of the Medi-Cal program and its data, even seemingly simple requests for basic program information using administrative data may be difficult and time-consuming for DHCS to produce, whether the request is from internal staff, sister agency staff, or external stakeholders, including the legislature. In addition, even where data exists, it is often considered outdated by the time it is made publicly available.

To address some of these concerns, DHCS implemented an enhanced data warehouse, and in 2007 selected a new vendor to manage it. With the implementation of the enhanced data warehouse, DHCS expanded its training of internal state staff on its use. The state has two major systems that provide data for the warehouse: the Medicaid Eligibility Data System (MEDS), which provides eligibility data, and the Medicaid Management Information Systems (MMIS), which provides claims data.

Because eligibility determinations are the responsibility of county departments of social services, DHCS has less eligibility data than other state Medicaid programs that do not outsource eligibility to counties. The eligibility division within DHCS reviews the 25 counties with the largest Medi-Cal enrollment against performance standards each year.

DHCS makes data available to the public on its Web site. Available data includes deidentified beneficiary data files and utilization data files. DHCS also produces an annual statistical report of the program. Much of the program analysis is conducted by the Medical Care Statistics Section (MCSS)[12] within the Fiscal Forecasting and Data Management Branch of DHCS. For more detailed information about the data available at DHCS, see Appendix E.

## Potential Challenges to Design and Use

Several potential challenges to the design and construction of a performance dashboard were identified during the course of this study. Understanding these challenges at the outset will allow for the development of a Medi-Cal performance dashboard that includes the most appropriate measures, given DHCS's ability to produce individual measures initially, and over time. Four of these challenges—the breadth of the Medi-Cal program, the current lack of available measures and comparison groups, the barriers that make it difficult to efficiently collect data, and the lack of DHCS resources available to sustain a performance dashboard—are discussed in this section.

### Breadth of the Medi-Cal Program

Medi-Cal's beneficiaries reflect a diverse population, from infants to seniors, from groups typical of a commercial health plan to people with severe developmental disabilities. The program also covers a broad array of services, from benefits that are typical of an employer-sponsored insurance plan to services that are unique to the population Medi-Cal serves, such as transportation and long term care. The diversity of the populations that Medi-Cal serves and the breadth of services it provides present a unique challenge to designing a dashboard that provides a comprehensive view of the program's performance without being too lengthy and overwhelming, or overly resource-intensive to produce.

### Availability of Measures and Comparison Groups

As discussed earlier in this section, there are few agreed-upon performance measures pertaining to long term care services and supports for non-elderly people with disabilities. An additional challenge is finding an appropriate comparison group that uses the same measures, at least until a critical mass of states report performance data for their Medicaid programs. Under national health reform and its requirement for the development of a set of health quality measures for the Medicaid program, the ability for Medi-Cal to compare itself to other Medicaid programs should substantially increase.

### Data Barriers

A number of factors make it difficult to efficiently collect complete Medi-Cal data that can be used for the proposed Medi-Cal performance dashboard.

First, it is important to understand the many different sources that feed into the DHCS data warehouse and the reliability of such data. For FFS beneficiaries, DHCS has claims data and stores relevant information from each claim submission within its MMIS system. For managed care beneficiaries, the state receives and stores encounter data from its managed care plans within its MMIS system.

Until recently, the completeness and timeliness of the managed care encounter data has been questionable.[13] This has made it difficult for DHCS to generate reliable measures from administrative data on its own, even in cases in which a particular measure technically may need only administrative data. DHCS has often found it necessary to supplement administrative data with costly medical record reviews to complete the data set and obtain reliable measurements. For those measures in which medical record reviews are necessary to generate accurate and meaningful measures, data collection is significantly more resource-intensive and expensive.

Second, not all the data that is needed to measure Medi-Cal performance is housed within the data warehouse. It can be difficult to conduct matches with sister agencies for a number of technical and

administrative reasons. Commonly cited barriers are the federal Health Insurance Portability and Accountability Act (HIPAA) of 1996[14] and state privacy rules. In the case of eligibility data, the MEDS system receives information only on individuals who are determined to be eligible for Medi-Cal. This limits DHCS's ability to analyze the complete eligibility process because information about denied applications remains at the county level. While some counties use the same eligibility systems, there is no standard eligibility system used by all counties in determining eligibility for Medi-Cal, making comparisons time-consuming and riddled with caveats. However, DHCS does collect data from the 25 largest counties on an annual basis, as part of its quality control oversight. This provides the state with some ability to compare counties on performance standards for which necessary data do not reside in MEDS.

Finally, because Medi-Cal beneficiaries often have other sources of health insurance, it can be difficult to get a large enough sample size from which to measure performance. For example, DHCS has previously made efforts to review and report on the number of women within the Medi-Cal program who receive a recommended mammogram. However, the agency could not reliably report on this measure because too few women met the measurement criteria. First, the program as a whole has relatively fewer women between the ages of 40 and 65, and many of those who were enrolled in Medi-Cal either had other insurance that would cover the mammogram or were covered through the Medi-Cal program for less than the period required for reporting purposes.

### Current Resources and Sustainability

Creating and sustaining a Medi-Cal performance dashboard will require DHCS to commit staff resources and funding to collect the performance measures, produce the report, and, if desired, maintain an online version that allows the user to create user-defined tables. In addition to staff time, DHCS would need additional funding to collect measures that are not available today through administrative data, including through use of medical record reviews and surveys.

It will be difficult for DHCS to devote staff and resources to the launching of a Medi-Cal performance dashboard in the near term. In recent years, California lawmakers have struggled to balance the state budget and have made numerous cuts to Medi-Cal and many other public programs and services. Sustaining the dashboard over time may also be a challenge in the face of leadership changes within DHCS and the administration broadly, and in the legislature.

# V. Recommended Framework

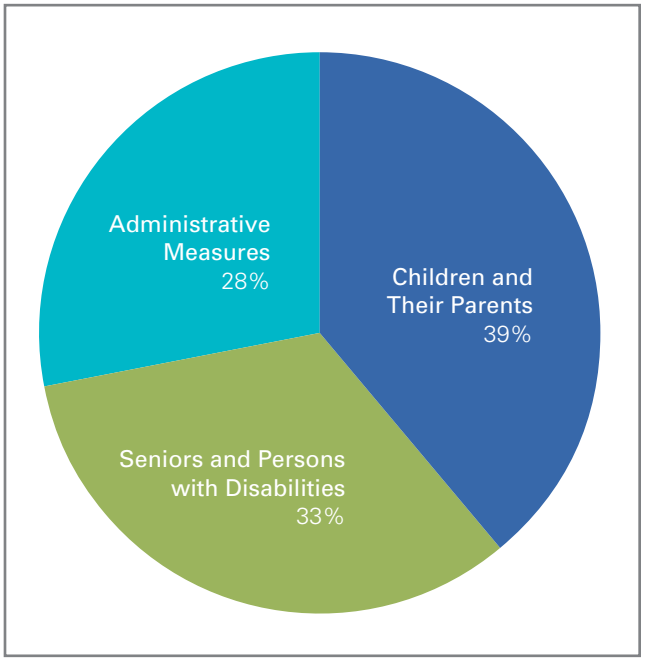
The framework for the Medi-Cal performance dashboard is based on an overall goal of developing a dashboard that accomplishes the following:

- Reflects how well Medi-Cal serves its beneficiaries and California taxpayers, as well as the integral role it plays in the overall health care delivery system;
- Balances the interests of program officials, policy-makers, and stakeholders in a tool that provides a clear summary of program performance while providing sufficient depth; and
- Applies measures among the different population groups, services, and programs in a manner that reflects the importance of each of these performance categories.

With this goal in mind, and based on the findings of the project, the following list details recommendations for the framework of a Medi-Cal performance dashboard (for a detailed description of the potential design, see Appendix F):

1. **The dashboard should include both descriptive and evaluative information.** The report should provide sufficient background information and context, as well as a mix of measures that provide data points and compare Medi-Cal's performance to a benchmark or goal.
2. **The dashboard's evaluative information should provide "scores."** The report should include a summary evaluative score for each particular population (e.g., children), as well as evaluative scores for the specific measures throughout the report. In addition, the report should include change-over-time assessment scores that reflect a judgment of how well the program is performing, and whether it is improving.
3. **The dashboard should include a combination of population-specific measures and program-wide measures.** Including both types of measures will ensure that the Medi-Cal performance dashboard presents a balanced view of the program. Figure 1 illustrates the suggested distribution of measure types.

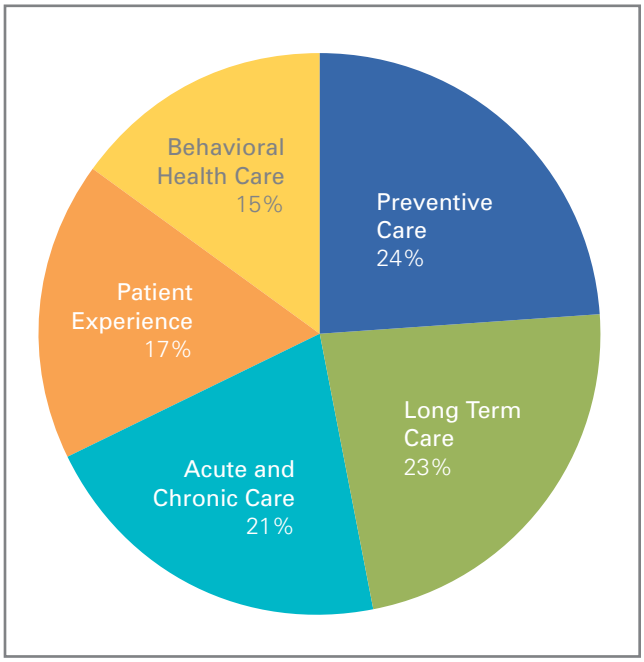
**Figure 1. Suggested Distribution of Population-Based and Program-Wide Measures**




4. **The dashboard should examine performance in specific service domains.** The population-specific measures should reflect the four major

service domains—preventive care, acute and chronic care, behavioral health care, and long term care—as well as patient experience. Program-wide measures should reflect administrative performance, access, and Medi-Cal's influence on the health care delivery system. Figure 2 illustrates the suggested breakdown for the population-specific measures.

**Figure 2. Suggested Distribution of Domains of Care**




5. **The dashboard should reflect a targeted set of priority measures.** The dashboard should include a representative rather than comprehensive set of measures. A total of 75 measures, spread across two population-specific categories and one program-wide category, would allow for an average of 25 performance measures per category.[15] More than 75 measures may be overwhelming for readers and unsustainable for DHCS; fewer than 75 may provide insufficient detail to paint a picture of overall performance of the Medi-Cal program.

6. **The dashboard should include comparisons for population measures both within the Medi-Cal program and to California commercial insurers and Medicaid programs in other states.** For the dashboard to be most useful, two types of comparison measures should be made. First, the data should be stratified, where possible, so that internal comparisons can be made—that is, comparisons of performance across Medi-Cal populations (e.g., children/adults, adults with/without disabilities, and race and ethnicity), across programs (e.g., managed care and FFS), and across counties or other geographic divisions. In addition to these comparisons within Medi-Cal, the performance of Medi-Cal should be compared, when appropriate, to commercial and/or Medicare coverage in California and to Medicaid programs in other states.

   Before making such comparisons, however, careful consideration must be given to the differences between Medi-Cal and other Medicaid programs and payers. For example, the prevalence of enrollees who have multiple chronic conditions and a concurrent mental health diagnosis is much greater among Medi-Cal beneficiaries than it is in a commercially-insured population.

7. **The dashboard should include trend-over-time comparisons for program-wide measures.** Most of the program-wide measures will require DHCS to set a specific standard or goal for comparison. In the initial dashboard, those measures should be reported as rates to provide a basic understanding of performance without making a comparison or providing a score. Because the recommended measures are so specific to DHCS and Medi-Cal, it will be difficult to make national comparisons. Therefore, in most cases measures should be

compared across Medi-Cal populations and regions, and trended over time.

8. **Dashboard measures should be phased in over time.** Given the resources necessary to produce an ideal Medi-Cal performance dashboard, the initial version of the dashboard should include fewer measures, with low-intensity resource requirements. Over time, the report should grow to include more resource-intensive measures, such as those that require medical record reviews.

9. **The dashboard should be produced annually.** Producing the report annually will enable state policymakers and stakeholders to review progress on measures consistently over time. However, not all measures would need to be updated annually. For instance, where Medi-Cal managed care plans conduct the CAHPS survey biannually, those measures would need to be updated only when new data becomes available. However, where possible, particularly for measures focused on persons with disabilities, it would be ideal to have a "real-time" dashboard that could be updated quarterly to provide an early warning system and identify opportunities for quality improvement in a timely way.

10. **The dashboard should be available online in both static and dynamic formats.** The static version would present a summary of key findings. The dynamic version would allow the user to click on measures, which would then produce user-defined tables using the underlying data. The dynamic version should be refreshed as more current data becomes available.

## Addressing the Experiences of Children and Their Parents

One-half of the population-based measures and one-third of the total number of measures should reflect the experience of children, pregnant women, and parents. These groups account for nearly three-quarters of Medi-Cal beneficiaries, though just over a third of total program costs.[16] Measures for children and their parents should represent performance on preventive care, acute and chronic care, and behavioral health care.

In addition, because Medi-Cal pays for nearly half of the births in California, there should be a special emphasis on maternal health measures. For the purposes of this report, prenatal care and postnatal care are characterized as preventive care, and birth is characterized as acute care. Because children

**Table 3. Proposed Distribution of Measures for Children and Their Parents**

| MEASURE CATEGORY | CHILDREN | MATERNAL HEALTH | PARENTS | SUBTOTAL |
|---|---|---|---|---|
| Acute and chronic care | 3 | 1 | 3 | **7** |
| Behavioral health care | 2 | 0 | 2 | **4** |
| Long term care | 0 | 0 | 0 | **0** |
| Patient experience | 1 | 0 | 1 | **2** |
| Preventive care | 2 | 3 | 1 | **6** |
| **TOTAL** | **8** | **4** | **7** | **19** |

Note: Preventive care measures for maternal health reflect prenatal and postnatal health; acute and chronic care measures reflect birth.

and their parents receive significantly fewer long term care services than do other populations, no long term care measures are recommended for measurement at this time. Table 3 on the previous page provides the recommended number of measures by category to be included in the initial dashboard for addressing children and their parents.[17]

## Addressing Seniors and People with Disabilities

The other half of population-based measures should reflect the experience of seniors and non-elderly adults with disabilities. These two groups together account for one-fourth of the Medi-Cal population (13 percent and 12 percent, respectively), but over 60 percent of program expenditures (27 percent and 34 percent, respectively).

Because virtually all acute medical care for Medi-Cal seniors is covered through Medicare, the dashboard should report only on long term care measures for seniors. But it should report on all aspects of care for beneficiaries with disabilities, since fewer than half of this group is also covered by Medicare. Moreover, beneficiaries with disabilities are much more likely than other adult beneficiaries to have multiple chronic conditions.

Table 4 lists the number of measures by category that is recommended for inclusion in the initial dashboard report for addressing seniors and people with disabilities. As noted previously, there are not as many available measures tailored for people with disabilities as there are for other categories of people, particularly for long term care services, or for measurements that do not include the use of medical record reviews.

## Addressing the Administration of the Medi-Cal Program

A Medi-Cal performance dashboard would not be complete if it did not look beyond the populations served to consider how well the program is run, how well it serves taxpayers, and the integral role it plays in the broader health care system in California. The following are six recommended categories for the program-wide measures:

- Success in enrolling and retaining Californians eligible for Medi-Cal;
- Beneficiaries' access to health care providers;

**Table 4. Proposed Distribution of Measures for Seniors and People with Disabilities**

| MEASURE CATEGORY | SENIORS | PEOPLE WITH DISABILITIES | SUBTOTAL | TOTAL OF ALL POPULATIONS |
|---|---|---|---|---|
| Acute and chronic care | 0 | 3 | 3 | **10** |
| Behavioral health care | 0 | 3 | 3 | **7** |
| Long term care | 4 | 4 | 8 | **8** |
| Patient experience | 0 | 1 | 1 | **3** |
| Preventive care | 0 | 1 | 1 | **7** |
| **TOTAL** | **4** | **12** | **16** | **35** |

Note: Long term care includes home and community-based services and care in nursing facilities.

- The extent to which Medi-Cal is improving the cultural competency of the care provided to its members;
- The amount Medi-Cal spends;
- How well DHCS prevents and detects fraud and abuse; and
- The financial health of safety net providers.

In examining the measures within these categories, it is important to recognize that DHCS does not control all aspects of performance in the Medi-Cal program. Authority is shared among the governor, DHCS, the counties, and the legislature for the ultimate implementation of Medi-Cal. Table 5 provides the number of program-wide measures by category recommended for inclusion in the initial dashboard report.

**Table 5. Proposed Distribution of Measures for Evaluating Program-Wide Performance**

| MEASURE CATEGORY | NUMBER OF MEASURES |
|---|---|
| Access to providers | 5 |
| Cultural competency | 4 |
| Enrollment and retention | 6 |
| Health of the safety net | 4 |
| Program integrity | 2 |
| Spending | 3 |
| **TOTAL** | **24** |

# VI. Recommended Population Measures

Population measures should focus on children, pregnant women, parents, seniors, and people with disabilities and should reflect the four major service domains of preventive care, acute and chronic care, behavioral health care, and long term care, as well as patient experience. This portion of the report provides an overview of the process and criteria that were used to select recommended population-based measures, and details the types of measures that can address performance in the topic areas outlined above.

## Overview of the Selection Process and Approach

This section describes the criteria used to select measures, discusses the types of comparisons of performance that should be made, examines the use of composites, and presents a phased approach to implementing a performance dashboard, with expansion of the measurement set over time.

### Measurement Selection

After conducting exhaustive research of nationally accepted and currently available measures, followed by a series of conference calls with stakeholders to obtain their feedback and recommendations, seven criteria for determining which measures should be included in a Medi-Cal performance dashboard were selected:

- The measure should be nationally accepted or, if not, should have been validated and tested;
- The measure should reflect a condition, service, or function that has a significant impact on the population;
- The measure should serve as "representative" of the domain;
- The measure should report on a topic that is a priority for the Medi-Cal program and its stakeholders;
- The measure should be useful for informing action;
- The measure should be minimally burdensome for the state, the state's vendor, or the provider to produce; and
- The measure should lend itself to comparisons across sources of insurance coverage.

Similarly, representatives of other state Medicaid programs that routinely measure performance recommended that California select measures that rely on administrative data, that have a business case, and that focus on overuse and misuse.[18]

As a result of applying these selection criteria, many of the measures recommended in this report are HEDIS or CAHPS measures. HEDIS and CAHPS are nationally accepted and commonly used today by both Medicaid managed care organizations and commercial insurers.

In addition to HEDIS and CAHPS measures, a number of Agency Healthcare Research and Quality (AHRQ) Pediatric Quality Indicators (PQIs), which are claims-based measures of quality for ambulatory care-sensitive conditions, should also be included. These measures are currently based solely on administrative data and can be generated for the entire Medi-Cal population.

In addition to these measures, which are mostly process-related, the dashboard could be expanded over time to include additional measures that address outcomes using clinical data from medical record reviews. NQF-approved measures are always evolving, and several of them could be included in the dashboard. However, because the NQF-approved outcome measures rely primarily on medical record reviews, and because the state has limited resources to devote to collecting and reporting on such measures, only one NQF-endorsed measure is recommended for inclusion in the initial dashboard report. Bailit recommends that additional NQF-approved measures be added to the dashboard as the use of electronic health records (EHR) among California physicians becomes more prevalent, as this should lower the cost of collecting medical results.

DHCS should continually monitor the national quality measurement sets being developed for children in the Medicaid and CHIP programs and for adults in the Medicaid program, as required by national health care reform. These national efforts provide the potential for increased comparisons between different state Medicaid programs and increased federal resources focused on measurement development specific to Medicaid populations, particularly those with special health care needs.

### Use of Composite Measures

Composite measures aggregate performance on a number of measures to provide an overall view of performance. They are a common feature of many performance dashboards, and it is recommended that they be a part of a Medi-Cal performance dashboard. Composite measures are useful in providing a more robust view of a particular area (e.g., diabetes care or well-child care). However, the averaging of a number of measures also has its drawbacks. For instance, it dilutes the impact of reporting performance on individual measures.

Composite scores should be used within domains in which a number of potentially relevant measures are available that relate to care for a particular condition (e.g., diabetes care) or are similar in some other way (e.g., cancer screenings). Composites can be calculated in a number of different ways, depending on the type of data that is used for the underlying measures, the homogeneity of the population being measured, and the relative size of the populations being measured. Weighted averages and simple averages are easy to calculate and should be used to create composites at the domain level.

### Phased Implementation

Each of the recommended measures has been placed into one of two groups, based on the resources that are required to collect and report the measure:

- **Group 1** contains measures that are recommended for the initial Medi-Cal performance dashboard. These measures rely solely on administrative data, encounter data, or currently collected survey data. In addition, these measures are either already being reported today for at least a portion of the Medi-Cal population, or the underlying data have already been collected and can, without significant additional resources, be used to calculate measures for inclusion in a dashboard report.
- **Group 2** includes measures that improve upon Group 1 in two ways: First, the number of measures would expand. Second, the populations for which the measures are reported would expand (e.g., FFS populations would be added to the managed care population). Group 2 measures are described in more detail in Chapter VIII.

## Overview of Recommended Population Measures

Bailit recommends that the first iteration of the dashboard include 22 distinct population-based measures. Some of these measures are used for more than one population group, and there are a total of 35 dashboard measures across the five population groups.

Of the 22 measures, 19 can be calculated with existing administrative data. Of these, 13 are HEDIS measures and six are non-HEDIS measures. Table 6 lists the population measures that use administrative data. Of the remaining three measures, one is a CAHPS measure, and two require data from chart reviews of nursing home residents. Table 7 provides details on these measures. Appendix G provides

**Table 6. Summary of Recommended Population Measures Using Administrative Data**

| MEASURE NAME | TYPE | DOMAIN | POPULATION |
|---|---|---|---|
| Early & Periodic Screening, Diagnosis, and Treatment (EPSDT) composite for children | HEDIS | Preventive care | Children and adolescents |
| EPSDT composite for adolescents | HEDIS | Preventive care | Children and adolescents |
| Appropriate treatment for children with upper respiratory infection | HEDIS | Preventive care | Children and adolescents |
| Use of appropriate medications for people with asthma | HEDIS | Preventive care | Children and adolescents, adults |
| Cervical cancer screening | HEDIS | Preventive care | Adults, adults with disabilities |
| Timeliness of prenatal care | HEDIS | Prenatal | Maternal health |
| Frequency of ongoing prenatal care | HEDIS | Prenatal | Maternal health |
| Low birth weight rate | AHRQ | Birth | Maternal health |
| Postpartum care | HEDIS | Postnatal | Maternal health |
| PQI composite | AHRQ | Acute and chronic care | Children and adolescents |
| Diabetes composite | HEDIS | Acute and chronic care | Adults, adults with disabilities |
| Use of imaging studies for low back pain | HEDIS | Acute and chronic care | Adults |
| Risk-adjusted average length of hospital stay | NQF | Acute and chronic care | Adults with disabilities |
| Medication possession ratio | Other | Acute and chronic care | Adults with disabilities |
| Antidepressant medication management composite | HEDIS | Behavioral health care | Adults with disabilities |
| Follow-up after hospitalization for mental illness within 30 days of discharge | HEDIS | Behavioral health care | Children and adolescents, adults, adults with disabilities |
| Initiation of alcohol and other drug dependence treatment | HEDIS | Behavioral health care | Children and adolescents, adults, adults with disabilities |
| Waiver waiting lists | Other | Long term care | Adults with disabilities, seniors |
| Services in community vs. institution | Other | Long term care | Adults with disabilities, seniors |

**Table 7. Summary of Population Measures Using Other Data**

| MEASURE NAME | DOMAIN | POPULATION |
|---|---|---|
| CAHPS composite: getting care quickly and getting needed care | Patient experience | Children and adolescents, adults, adults with disabilities |
| Percentage of long term stays with pressure sores | Long term care | Adults with disabilities, seniors |
| Percentage of residents who lose too much weight | Long term care | Adults with disabilities, seniors |

a more detailed description of all the population measures recommended for the first iteration of the dashboard.

Bailit recommends that both HEDIS and CAHPS data be reported for the managed care population, since this data is already being collected by the managed care plans and DHCS. In light of the expanded role that the managed care program is likely to play in the coming years for many services, as a result of both the addition of 2 to 3 million more enrollees under the ACA and the transition of most Medi-Cal-only people with disabilities to managed care, California must consider whether it is worthwhile in the near term to collect a comparable set of measure for beneficiaries in rural areas, pregnant women, and others using FFS Medi-Cal. Beginning in 2014, California may want to focus its FFS measurement on behavioral health and long term care services, which are likely to remain under FFS for the foreseeable future.

## Addressing Children and Adolescents in Population-Based Measures

For both Medi-Cal categorization and measurement, "children" typically refers to individuals through the age of 18. Adolescents are characterized as individuals in their late teens to mid-twenties (typically, ages 16 through 24). A Medi-Cal performance dashboard should include measures that focus on preventive care, acute and chronic care, behavioral health care, and patient experience for both age groups. Nearly all of the measures recommended in this report for children and adolescents are HEDIS or CAHPS measures.

Because children receive care through mandatory managed care in counties where it is available, accurate measures will depend, in large part, on the completeness of the encounter data received by the plans. The measures should compare Medi-Cal's performance in serving children regionally within the state to the performance of other state Medicaid programs. Where possible, the dashboard should also compare performance by race and ethnicity, and highlight the differences, if any, in care for children with special health care needs and those in foster care.

As mentioned previously, as required under CHIPRA, efforts are underway to develop a national measurement set for children covered through the Medicaid and CHIP programs. DHCS should look to any standardized measurement set that effort produces and include relevant measures that allow for comparison across Medicaid programs.

### Preventive Care Measures

Central to its mission is Medi-Cal's provision of access to important preventive services for children and adolescents. To showcase Medi-Cal's performance in this area, the initial dashboard should focus on two sets of measures: a composite Early

and Periodic Screening, Diagnosis, and Treatment (EPSDT)[19] measure focused mostly on younger children, and an adolescent composite measure focused on young adults.

Both sets of measures can be reported with administrative data through claims and/or encounter data. The composite EPSDT measure includes four individual HEDIS measures focusing on well-child visits, lead screening, childhood immunization status, and dental care visits. For the adolescent composite measure, the dashboard should include two HEDIS measures focusing on chlamydia screening and an adolescent well-care visit.

### Acute and Chronic Care Measures

The dashboard should include two HEDIS measures that use administrative data and address acute and chronic care.

The first is an acute care measure that reports the percentage of children 3 months to 18 years of age who were given a diagnosis of upper respiratory infection (URI) and were not dispensed an antibiotic prescription. This measure uses a combination of different types of claims data, including pharmacy data and laboratory data.

The second is a chronic care measure that reports the percentage of members 5 to 9 years old and 10 to 17 years old during the measurement year who were identified as having persistent asthma and were prescribed medication within the measurement year.

In addition, the dashboard should include a third measure that reflects a composite of PQIs that are focused on acute and chronic pediatric care. The PQIs measure inpatient admission rates for care of asthma, diabetes, gastroenteritis, perforated appendixes, and urinary tract infections.

### Behavioral Health Care Measures

Behavioral health is a significant issue for Medi-Cal beneficiaries. The initial dashboard should include two HEDIS behavioral health measures, which are also recommended as measures for adults and people with disabilities. These measures use Medi-Cal's administrative data — either claims data or encounter data, depending on whether the individuals are enrolled in a managed care plan.

The first is a HEDIS measure focused on follow-up care within 30 days of discharge following hospitalization for a mental illness. Specifically, the measure reports the percentage of discharges for members six years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge.

The second recommended HEDIS measure is focused on the initiation of alcohol and other drug (AOD) dependence treatment. As with mental illness, substance abuse is a significant issue within the Medi-Cal population, and this measure will provide one preliminary indication of Medi-Cal's performance. The measure specifically reports the percentage of adolescent and adult members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis.

### Patient Experience Measures

For patient experience measures, the dashboard should use measures that have been generated from questions included in the CAHPS survey, which is currently performed by the state's External Quality Review Organization vendor for the Medi-Cal managed care population.[20] From the Child CAHPS

survey, the dashboard should use two composite measures: The first focuses on a parent's experience with his or her child's doctor in regard to obtaining that physician; the second focuses on accessing specialized health care services.[21] These survey questions ask patients or their parents about their experiences in getting an appointment for care quickly when needing it; getting an appointment for routine care; ease of getting care; tests or treatment; and getting an appointment with a specialist. The dashboard should report on these same survey questions for children, adults, and adults with disabilities.

Also, the dashboard should include CAHPS questions relating to language and cultural competency as part of the program-wide measures discussed in Chapter VII.

## Pregnant Women

The dashboard should include preventive care measures (including prenatal and postnatal care) and acute care measures (birth) to showcase care provided to pregnant women covered through Medi-Cal. Because the most relevant maternal health measures often require medical record reviews, the initial dashboard would have limited maternal health measures.

### Prenatal Measures

For prenatal measures, the initial dashboard should include two HEDIS measures that use administrative data. The first measure looks at the timeliness of prenatal care, reporting on the percentage of deliveries that also included a prenatal visit in the first trimester (or within 42 days of enrollment). The second measure looks at the frequency of ongoing prenatal care, reporting on the percentage of women undergoing Medicaid deliveries who received less than 21 percent, 21 to 40 percent, 41 to 60 percent, 61 to 80 percent, or at least 81 percent of the expected number of prenatal care visits between November 6 of the year prior to the measurement year and November 5 of the measurement year.

### Birth Measures

The dashboard initially should include one birth measure: an AHRQ PQI measure of the low birth weight rate (PQI 9), which reports the percentage of births out of the total number of live births that received ICD-9 CM diagnosis codes for weights less than 2500 grams.

### Postnatal Care Measures

The initial dashboard should include a HEDIS measure for timely postpartum visits, reporting on the percentage of deliveries that included a postpartum visit on or between 21 and 56 days after delivery.

## Adults

The vast majority of non-disabled adults who are served by the Medi-Cal program are parents. For both Medi-Cal and measurement, non-disabled adults are typically defined as individuals between 19 and 64 years old. The dashboard should initially use eight measures focused on non-disabled adults that assess selective preventive, acute, chronic care, and behavioral health care services, as well as patient experience. Non-disabled adult beneficiaries residing in the 23 managed care counties in California are required to enroll in a Medi-Cal managed care plan. For these adults, the data to populate these measures will derive from encounter data. For the remainder of non-disabled adults, the data to populate these measures will derive from Medi-Cal FFS claims data.

### Preventive Care Measures

The initial dashboard report should include a HEDIS cervical cancer-screening measure, reporting on the percentage of women 21 to 64 years of age who received one or more Pap tests during the measurement year or the two years prior to the measurement year. Given the demographics of the Medi-Cal population, there is more likely to be a reliable target population for this measure than for a measure of breast cancer screening.

### Acute and Chronic Care Measures

The dashboard should include one acute care measure and two chronic care measures for non-disabled adults.

The acute care measure should be a HEDIS measure that addresses the use of imaging studies for low back pain, reporting on the percentage of members with a primary diagnosis of low back pain who did not have an imaging study (e.g., standard x-ray, MRI, or CT scan) within 28 days of the diagnosis. Many believe that imaging studies unnecessarily add to the cost of health care,[22] so monitoring their use within the Medi-Cal program is critical.

The two chronic care measures should focus on asthma and diabetes care. These are among the most prevalent chronic diseases in the adult Medi-Cal population and contribute significantly to the cost of the program. The dashboard should include a HEDIS measure that examines the use of appropriate medication for people with asthma, reporting on the percentage of patients who were identified as having persistent asthma and were dispensed a prescription for either an inhaled corticosteroid or an acceptable alternative medication during the measurement year and the year prior to the measurement year. The measure, which is similar but not identical to the measure recommended for children and adolescents, requires administrative data, including pharmacy data.

Because of the abundance of diabetes measures that can be collected through administrative data, the initial dashboard should include a composite measure comprised of four individual HEDIS measures that focus on the percentage of members with diabetes who had the following: a hemoglobin A1c (HbA1c) test, an eye screening for diabetic retinal disease, a low-density lipoprotein cholesterol (LDL-C) test, and a nephropathy screening test. In addition, because diabetes is also prevalent in the disabled adult population, the dashboard should use the diabetes composite measure for both populations and compare performance between them to determine whether any significant differences exist in the quality of care delivered.

### Behavioral Health Care Measures

The initial dashboard should include two HEDIS behavioral health measures for adults. These measures are also recommended for inclusion for children and people with disabilities. The first measure is focused on follow-up care within 30 days of discharge following hospitalization for a mental illness. The second is focused on the initiation of AOD dependence treatment.

### Patient Experience Measures

The dashboard should include two measures focused on the adult patient experience. As noted previously, Medi-Cal uses the CAHPS survey for its managed care population. The initial dashboard should include results for the managed care population only.

The dashboard should use one composite measure for children, adults, and adults with disabilities, based on two sets of CAHPS survey questions that are focused on the beneficiary's experience with his or her doctor and the ease in obtaining care.

## Adults with Disabilities

For Medi-Cal and measurement categorization purposes, adults with disabilities are typically defined as individuals between 19 and 64 years of age. It is recommended that the initial dashboard include 12 measures that assess selective preventive, acute, and chronic care, behavioral health care services, and patient experience for people with disabilities. Data to populate these measures will be derived from claims and encounter data.

### Preventive Care Measures

The initial dashboard report should include a HEDIS cervical cancer-screening measure for people with disabilities, which was also recommended earlier in this report for adults without disabilities.

### Acute and Chronic Care Measures

The initial dashboard should include one acute care measure and two chronic care measures for people with disabilities.

The acute care measure is an NQF-endorsed measure of the risk-adjusted average length of inpatient hospital stay for people with disabilities as compared to adults without disabilities. This measure is important for identifying any potential difficulty in discharging people with disabilities from hospital settings. The measure uses administrative data and requires use of risk-adjustment software.[23]

One of the chronic care measures that is recommended is a composite measure comprised of four HEDIS diabetes measures, which was also recommended and discussed in detail in the section on population-based measures for adults without disabilities. Utilizing the same diabetes composite measure for adults with and without disabilities will allow for an analysis of whether any significant differences in quality of care exist between populations.

The second chronic care measure is a medication possession ratio that assesses the timely refill of prescription drugs. The management of chronic illness often requires beneficiaries to be on a number of prescription drugs. This measure will provide Medi-Cal with an indication of whether individuals are appropriately taking their medication or whether additional education or outreach may be useful.

The measure uses a formula to determine compliance that is based on the time from the first to the last medication prescribed. The denominator in the formula reflects the time from the index to the exhaustion of the last prescription; the numerator reflects the days the medication was supplied over that period from the first prescription to last prescription.[24]

### Behavioral Health Care Measures

The initial dashboard should include three HEDIS behavioral health measures for people with disabilities. Two of these measures are also reported for children and adults without disabilities. All three measures use Medi-Cal's administrative data—either claims data or encounter data—depending on whether the individuals are enrolled in a managed care plan.

Of the two measures also recommended for children and adults without disabilities, the first is a HEDIS measure focused on follow-up care within 30 days of a hospital discharge for a mental illness. The second is also a HEDIS measure, focused on the initiation of AOD dependence treatment.

The third HEDIS behavioral health measure is a composite focused on antidepressant medication management. This measure examines the effectiveness of care provided within the acute and continuation phases of treatment. The individual measures that make up the composite use either encounter data or claims data, depending on whether

the individual receives care through a Medi-Cal managed care plan or through the Medi-Cal FFS program.

### Long Term Care Measures

It is recommended that the initial dashboard include four long term care measures that are focused on the provision of home and community-based services and institutional care. As an increasing number of states begin providing greater amounts of care for seniors and people with disabilities in the community, performance measurement in this area will evolve.

**Home and community-based services.** Two measures should be included for reviewing Medi-Cal's performance in providing services in the community for people with disabilities. The first is a simple measurement of waiver waiting lists for one of the state's several 1915(b) waivers, with an enrollment cap. Including a measure focused on the waiver waiting list will provide a sense of unmet access to home- and community-based services within the system. This measure, based on administrative data, would provide a year-to-year comparison of the number of individuals who have been placed on a waiver waiting list. The dashboard should also include an administrative-based measure of the percentage of people with disabilities who receive long term care services in the community of all people with disabilities served in the Medi-Cal program.

**Institutional care.** The initial dashboard should include two measures from the CMS relating to the care of people with disabilities in nursing facility settings. The first measure reports on the percentage of people who had long term stays and contracted pressure sores during their stay. The second measure reports on the percentage of residents who have lost too much weight during their stay. The data for both of these measures are currently collected by all nursing facilities and reported to the Medicare-sponsored Nursing Home Compare Web site for the purposes of rating nursing facilities.[25]

### Patient Experience Measures

It is recommended that the dashboard address the patient experience of people with disabilities by including the same two patient experience measures that are recommended for adults without disabilities and for children. As noted earlier in this report, Medi-Cal uses measures that have been generated from questions included in the CAHPS survey for its managed care population.

## Seniors

The initial dashboard should include only those measures for seniors that are related to long term care services, as was pointed out earlier in this report. These measures include two home- and community-based service measures and two nursing facility measures. Because only a limited number of measures of long term care services are available, it is recommended that the dashboard include the same long term care measures for seniors as it does for people with disabilities.

# VII. Recommended Program-Wide Measures

THIS PART OF THE REPORT HIGHLIGHTS the measures pertaining to health care access and spending that are recommended for inclusion in a Medi-Cal performance dashboard, as well as an overview of the process and approach that was used to select them. (A more detailed description of recommended program-wide measures for the initial dashboard is included as Appendix H.)

The recommended administrative measures look specifically at the following areas of operation of the Medi-Cal program:

- Eligibility and enrollment;
- Access to providers;
- Cultural competency;
- Spending;
- Program integrity; and
- Health care safety net.

## Overview of the Selection Process and Approach

Unlike the population-based quality measures described in Chapter VI, there are limited nationally-accepted and available measures of Medicaid performance in regard to administration of the program. The process of selecting program-wide measures involved discussions among advisory group members and conference call participants regarding administrative topics that would be appropriate for measurement, as well as potential measures. The proposed measures were then refined based on feedback from those calls and further discussion with DHCS regarding what information can be most easily reported.

In developing measures, the following criteria were considered:

- The measure should capture a function that has a significant impact on Medi-Cal beneficiaries, providers, or California taxpayers and is a priority for the Medi-Cal program and its stakeholders;
- The measure should serve as "representative" of the function it captures;
- The measure should be useful for informing action;
- Generation of the measure should be minimally burdensome to the state, the vendor, or the provider; and
- The measure should lend itself to comparisons within the Medi-Cal program, across sources of insurance coverage, and/or across other state Medicaid programs.

Selected measures were placed in two groups based on the ease with which their data can be collected and reported. The first group contains measures that are recommended for inclusion in the initial dashboard report. These measures rely solely on administrative data that are currently available within the Medi-Cal information systems, or are otherwise collected and reported. The second group, described in more detail in Chapter VIII, improves on the initial group of measures in two ways: by expanding on the number of measures that use administrative data, and by expanding measurement activity to include the use of surveys.

Following the passage of the ACA and federal approval of California's 1115 Medicaid waiver, Bailit reviewed the proposed measures and added one additional measure to the initial set of recommended program-wide measures developed in 2009.

## Eligibility and Enrollment Measures

Determinations for Medi-Cal eligibility occur at the county level. MEDS does not contain all eligibility data, especially information about denials of eligibility (mentioned in Chapter IV). Medi-Cal currently measures the performance of counties relative to eligibility through County Performance Standards (CPS). Using CPS, DHCS reviews the self-certifications of 25 counties — the largest Medi-Cal enrollment on redeterminations, applications, and "bridging" of eligibility.[26]

Given the status of current reporting, it is recommended that the initial dashboard include measures that are reflected in CPS, for all of which state law requires a standard of 90 percent.[27] More specifically, the dashboard should include the following eligibility measures from CPS:

- Percentage of general applications for Medi-Cal that have no applicant errors and were completed within 45 days;
- Percentage of applications based on disability that were completed within 90 days, excluding delays by the state;
- Percentage of the annual redetermination verifications (RV) that were completed within 60 days of the recipient's annual RV date, which pertains only to RVs whose forms were completed by the recipient and returned to the county in a timely manner; and
- Percentage of children no longer eligible for Medi-Cal whose parents were sent a notice informing them of the Healthy Families Program within five working days of determining that the family is eligible for Medi-Cal with a share of the cost of services.[28]

The dashboard should also include an existing measure from the California Health Interview Survey (CHIS) that reports on the number of individuals eligible for but unenrolled in Medi-Cal. The measure will differentiate the numbers of children from all eligible but unenrolled individuals. While this number is otherwise reported as part of the CHIS report, it is important to also provide this information in the context of the performance of the Medi-Cal program in serving eligible individuals.[29]

Finally, the dashboard should include a measure of the average length of enrollment of populations within the Medi-Cal program based on eligibility data available in MEDS. As expanding Medicaid eligibility is a key component of the ACA, DHCS should revisit these measures in light of the ACA and emerging federal rules and guidance regarding eligibility determinations for Medicaid.

## Access to Providers

During interviews, the advisory group meeting, and stakeholder conference calls, stakeholders conveyed a strong interest in measuring access to providers. To meet that need, it is recommended that the initial dashboard include the following regarding provider access:

- A measure that reports the ratio of providers (Medi-Cal full-time equivalence) to population by region and/or county.
- A measure that reports the average length of time required for a provider to become enrolled in Medi-Cal.

- A measure that reports the percentage of beneficiaries who had a primary care visit during the measurement year. This measure should be completed for all beneficiaries for whom Medi-Cal is the primary coverage, regardless of whether the beneficiary is served through FFS or managed care.
- For Medi-Cal beneficiaries in managed care, a measure of the percentage of clients changing health plans within 60 days of enrollment. This information is readily available through the state's managed care enrollment vendor.

Given the increased attention of EHR and the availability of enhanced funds for physicians participating in the Medicaid program through the American Recovery and Reinvestment Act, Bailit also suggests including a measure in the initial set of dashboard measures of EHR penetration within the Medi-Cal program. DHCS will be required to collect this information for the purpose of making EHR incentive payments, so inclusion of the measure on the dashboard should not require additional resources.

## Cultural Competency

To assess cultural competency, it is recommended that the dashboard initially use CAHPS survey questions that gather information from beneficiaries on whether providers were able to meet their cultural and linguistic needs. Initially, these measures will report on only the Medi-Cal managed care population, but the survey may eventually be used for FFS Medi-Cal beneficiaries as well, which was mentioned previously.

The CAHPS questions that are focused on cultural competency include the following topics:

- Difficulty in speaking with or understanding a health care provider because of language difference;
- Respect for what the beneficiary had to say;
- The ability to get an interpreter when needed; and
- Whether it was a problem to find or understand information on Medi-Cal.

## Spending

While spending measures do not by nature lend themselves to a dashboard report, the dashboard should, for contextual purposes, strive to include information on spending within the Medi-Cal program, including trends over time. However, in cases where DHCS has limited control over available spending for the program, it will be important to exclude this information as part of a measure of DHCS performance.

The dashboard should include measures that reflect:

- Per-enrollee spending by population in Medi-Cal;[30]
- Total Medi-Cal rate of annual spending growth; and
- General fund spending on Medi-Cal as a percentage of total general fund expenditures.[31]

An important component of Medi-Cal spending are the rates paid to Medi-Cal providers. While this is a core issue for analysis and discussion, the issue is too complex to easily include within the context of the dashboard. For that reason, provider rates should be the focus of separate, in-depth reporting efforts.[32]

## Program Integrity

Because California spends such a vast amount of state and federal dollars on the Medi-Cal program annually, many stakeholders — particularly legislators — are interested in integrating into the dashboard measures that relate to the integrity of the program. For this reason, two measures of program integrity should be included. One should leverage two biannual reports currently being produced by DHCS: the biannual Medi-Cal Payment Error Rate study, which identifies errors and potential fraud, and another that catalogs the anti-fraud activities of DHCS and reports on the productivity of investigators. From this, the dashboard should include a measure that provides a ratio of cost avoidance to resource investment, and examines trends over time.

In addition, the dashboard should also include two measures focused on treatment authorization requests (TARs) as a means of ensuring program integrity. Medi-Cal requires TARs for a number of Medi-Cal services, which gives DHCS an additional method for monitoring and ensuring that only medically necessary services are provided. The first recommended measure is a composite that reports the percentage of TARs that have been approved, modified, or denied, by service type and by region. The second dashboard measure should report the average length of time it has taken to make determinations by service type.

## Health Care Safety Net

DHCS and the Medi-Cal program provide significant support to the health care system as a whole. While this type of support is an essential part of Medi-Cal's overall responsibility, it is difficult to measure and report on this capacity using a dashboard format. However, to assess the overall level of health care system support as broadly as possible, it is recommended that the dashboard include measures that relate to the success of the state's Low Income Health Program (LIHP), a key component of the state's 2010 Medicaid waiver.

The measures to be included in the dashboard should reflect the evaluation of the LIHP. Bailit anticipates that the LIHP evaluation will include many of the same measures that are part of the state's evaluation in the 10-county Health Care Coverage Initiative (HCCI). These measures include:

- Number of enrollees in the HCCI program;
- Number of new enrollments to Medi-Cal and other public programs;
- Retention rate of HCCI enrollees; and
- Decrease in the number of emergency department visits or hospitalizations by individuals in the HCCI program.

The counties participating in the LIHP would provide these data. The last measure, however, will also use data from the California Office of Statewide Health Planning and Development (OSHPD).

# VIII. Measures Recommended for Later Versions of the Dashboard

Given the resource constraints facing DHCS, it is not possible for the initial dashboard to include all of the measures that would be worthwhile to include, as has been mentioned previously in this report. This section highlights measures that should be given careful consideration for inclusion in later versions of the dashboard, if more resources can be committed to it.

## Population Measures

DHCS should consider including a number of additional measures to round out the dashboard and provide a more comprehensive view of the Medi-Cal program. The measures recommended for later versions include:

- An obesity measure for children, adults, and people with disabilities. HEDIS has just added an obesity measure that reports the percentage of children 3 to 17 years of age who had an outpatient visit and who had evidence of body mass index (BMI) percentile documentation, counseling for nutrition, and counseling for physical activity in the measurement year. However, the measure requires a medical record review and would require the state to invest dollars in collecting data for the measure.
- A measure of access to child psychiatrists. Lack of available child psychiatry is an issue across Medicaid programs. However, the available measures of access in this instance require committing resources to a review of training and/or licensing data to determine whether a psychiatrist is a child psychiatrist.
- Additional measures of patient experience. The state should consider utilizing a version of the CAHPS survey that identifies children with special health care needs and asks a series of questions to generate a composite measure of access to specialized health care services. In addition, a later version of the dashboard could include a focus on the patient experience of adolescents through the use of the Child and Adolescent Health Measurement Initiative's (CAHMI) adolescent survey or another similar vehicle.
- Rate of Cesareans for low-risk women. The National Quality Forum has endorsed a measure of Cesarean rate for low-risk women birthing their first child that has been developed by the California Maternal Quality Care Collaborative (CMQCC). The measure requires a medical record review.
- A measure of maternal hospital readmission. While no current validated measure exists, such measures are in the development process.
- A measure of mothers who are breastfeeding exclusively. NQF recently endorsed a measure focused on breastfeeding exclusively at hospital discharge; however, the measure requires an investment of resources to collect the pertinent data through medical record review.
- Outcome-focused diabetes measures. The measures used as part of the recommended composite measure for adults and people with disabilities could be expanded to include outcome measures, such as hemoglobin A1c and lipid

control measures that look at the lab results for diabetes care and blood pressure control. The latter is particularly important, given recent research suggesting that blood pressure control may be more important for good diabetic care than blood sugar control.

- The percentage of approved In-Home Supportive Service (IHSS) hours that are actually delivered. This measure should be compared across counties to determine if there is a difference in hours being filled across the state. While the measure requires only administrative data, the data resides outside of DHCS and is not easily accessible or reportable.
- Measures of access to durable medical equipment (DME) from the Assessment of Health Plans and Providers by People with Activity Limitations (AHPPPAL). This new CAHPS survey, which has been tested in California, includes two DME questions that can be used to form a composite DME measure and provide information on the capability to obtain new equipment and the capability to obtain repairs on equipment.
- Measures that use institutional care measures for seniors and people with disabilities that DHCS also intends to apply to a nursing facility pay-for-performance program.

A proposed list of recommended additional population measures for inclusion in later versions of the dashboard is included in Appendix I.

In addition to these specific measures, the state should compare performance within the population measures described in Chapter VI based on beneficiaries' race and ethnicity. Medi-Cal data on race and ethnicity are currently unreliable. However, there are numerous efforts on the state and national levels to improve the collection of such data.

Finally, the state should revisit which HEDIS and CAHPS measures reported for the managed care population should also be reported for the FFS population. The state should consider which populations and services remain in FFS in managed care counties, and the importance of collecting similar data for beneficiaries in rural counties.

## Program-Wide Measures

Like the population measures, a number of program-wide measures will not be feasible for an initial Medi-Cal performance dashboard report, but they should be considered for future versions of the report. A full description of the recommended program-wide measures is included in Appendix J. These measures include:

- A measure of enrollment "churn" — the percentage of individuals who have been dropped from coverage and then re-enrolled in the program in less than six months;
- One or more measures of provider participation in Medi-Cal; and
- A measure of cultural competency based on a newly developed question being tested within the CHIS that focuses on whether an individual felt as if he or she was treated differently based on his or her race or ethnicity.

# IX. Next Steps

Medi-Cal is one of the most important and most expensive programs administered by the state of California. Given the number of individuals directly impacted by the program and the cost to state taxpayers, Medi-Cal administrators and program stakeholders recognize and support the need to measure the program's performance as a whole.

The development of a Medi-Cal performance dashboard should be viewed as a long-term process that will evolve as the program changes, as priorities shift, as new measures are developed, and as additional resources become available. In just the last year, after the majority of the work on this project was completed, measures have evolved and there have been major changes in federal and state policy that have enormous implications for Medi-Cal.

To advance the development of a Medi-Cal performance dashboard, DHCS should:

- Identify an internal unit to lead the project and the resources that will be needed to develop and sustain the dashboard. DHCS should seek to leverage its funding with other public and private sources, including the federal government, universities, and philanthropic foundations, to the extent that there are shared interests.
- Review the recommended measures in light of ACA requirements, California's recently-approved 1115 Medicaid waiver, and the child health quality measures developed under CHIPRA in 2009. Monitor national efforts to develop a set of health quality measures for Medicaid-eligible adults required by the ACA and any federal or state efforts to measure performance across health plans offered through the Exchanges.
- Decide whether to collect HEDIS and CAHPS data for the Medi-Cal FFS population.
- Test any new measure to ensure that it has appropriate data and sufficient sample sizes to report meaningful results.

Finally, the Medi-Cal performance dashboard should both leverage and influence federal and state funding to promote meaningful use of electronic health records and the exchange of health information among providers serving the Medi-Cal population. These efforts should, in the near future, make it easier for DHCS to report measures that require clinical results and health outcomes, thereby strengthening the dashboard as a tool both for management and public accountability of Medi-Cal's performance.

## **Appendix A:** Interview Participants*

### State DHCS Staff

| | |
|---|---|
| Vivian Auble | Medi-Cal Eligibility |
| Vanessa Baird | Managed Care |
| Jeff Blackmon | Third Party Liability & Recovery |
| David Botelho | Audits & Investigations |
| Nyla Christopher | Fiscal Intermediary & Contracts Oversight |
| Dr. Marian Dalsey | Systems of Care |
| James Delgado | Systems of Care |
| Dr. Larry Dickey | Office of Clinical Preventive Medicine |
| Don Fields | Managed Care |
| Beth Fife | Utilization Management |
| Marco Gonzales | Pharmacy Benefits |
| Mark Helmar | Long Term Care |
| Nancy Hutchinson | Safety Net Financing |
| Raul Rameriz | Provider Enrollment |
| Jerry Stanger | Fiscal Intermediary & Contracts Oversight |
| Terri Thorfinnson | Office of Women's Health |
| Vic Walker | Pharmacy Benefits |
| Jim Watkins | Medical Care Statistics Section |
| Irv White | Medi-Cal Benefits, Waivers Analysis, & Rates |
| Karen White | Systems of Care |
| Pilar Williams | Pharmacy Benefits |
| Dr. Craig Yamada | Medi-Cal Benefits, Waivers Analysis, & Rates |

### Sister-Agency Staff

| | |
|---|---|
| Joe Carlin | Department of Social Services |
| Eileen Carroll | Department of Social Services |
| Karen Dickerson | Department of Social Services |
| Michael Ellison | Department of Alcohol & Drug Programs |
| Karlen Harmison | Department of Social Services |
| Susan King | Department of Alcohol & Drug Programs |
| George Lembi | Department of Alcohol & Drug Programs |
| Rebecca Lira | Department of Alcohol & Drug Programs |
| Don Lyman | Department of Public Health |
| Robert Maus | Department of Alcohol & Drug Programs |
| Jose Ortiz | Department of Developmental Services |
| Don Richards | Department of Social Services |
| Sherie Smalley | Department of Public Health |
| Sarah Steenhausen | Department of Developmental Services |
| Cheryl Treadwell | Department of Social Services |
| Rita Walker | Department of Developmental Services |
| Richton Yee | Department of Social Services |

*All affiliations listed reflect participants' affiliations at the time of the interviews.

## Legislative Staff and Other Stakeholders

| | |
|---|---|
| Beth Abbott | Health Access |
| Dr. Andrew Bindman | University of California, San Francisco (UCSF) |
| Dr. E. Richard Brown | University of California, Los Angeles (UCLA), Center for Health Policy Research |
| Leona Butler | Santa Clara Family Health Plan |
| Richard Chambers | CalOptima |
| Elizabeth Cheung | Legislative Analyst's Office |
| Stuart Drown | Little Hoover Commission |
| Teresa Favuzzi | California Foundation for Independent Living Centers |
| Kirk Feely | Legislative Analyst's Office |
| Dale R. Fleming | San Diego County Health and Human Services |
| Kim Flores | Senate Office of Research |
| Lisa Folberg | California Medical Association |
| Jean Fraser | Formerly with the San Francisco Health Plan |
| Angela M. Gilliard | Formerly with the Western Center on Law & Poverty |
| John Gilman | Assembly Health Committee |
| Erin Aaberg Givans | Children's Specialty Care Coalition |
| Jack Hailey | Senate Human Services Committee |
| Peter Hansel | Senate Health Committee |
| Charlene Harrington | UCSF |
| Julie Hornback | Fresno County Human Services System |
| Anne Burnes Johnson | Aging Services of California |
| Deborah Kelch | Assembly Health Committee |
| Don Kingdon | California Mental Health Directors Association |
| Richard Kronick | University of California, San Diego (UCSD) |
| Trula M. LaCalle | California Association of Public Authorities for IHSS |
| Agnes Lee | Senate Office of Research |
| Lisa Simonson Maiuro | Health Management Associates |
| Patricia McGinnis | California Association for Nursing Home Reform |
| Lydia Missaelides | California Association of Adult Day Services |
| Katie Murphy | Western Center on Law & Poverty |
| Anissa Nachman | Senate Republican Caucus |
| Dave Pilon | National Mental Health Association of Greater Los Angeles |
| Brenda Premo | Western University, Center for Disability Issues and the Health Professions |
| Tom Riley | Cal Capitol Group (for California Academy of Family Physicians) |
| Allison Ruff | Assembly Committee on Aging and Long Term Care |
| Patricia Ryan | County Mental Health Directors Association |
| Cathy Senderling-McDonald | California County Welfare Directors Association |
| Ralph Silber | Alameda Health Consortium |
| Melissa Stafford Jones | California Association of Public Hospitals |
| Seren Taylor | Senate Minority Fiscal Office |
| Kristen Golden Testa | The Children's Partnership |
| Anthony Wright | Health Access |
| Lucien Wulsin Jr. | Insure the Uninsured Project |

## **Appendix B:** Advisory Group Participants*

### State DHCS Staff

| | |
|---|---|
| Dr. Marian Dalsey | Formerly Chief, Children's Medical Services |
| Dr. Larry Dickey | Chief, Office of Clinical Preventive Medicine |
| Toby Douglas | Deputy Director, Health Care Policy |
| Cathy Halverson | Deputy Director, Health Care Operations |
| Karen Johnson | Chief Deputy Director, Policy & Program |
| Jane Lamborn | Senior Staff Counsel |
| David Maxwell-Jolly | Director, DHCS |
| Rene Mollow | Associate Director |
| Stan Rosenstein | Formerly Chief Deputy Director, Health Care Policy |
| Sandra Shewry | Formerly Director, DHCS |
| Terri Thorfinnson | Chief, Office of Women's Health |
| Mary Lou Urquizo | Chief, Management Information System/Decision Support System |
| Jim Watkins | Chief, Medical Care Statistics Section |

### Other Stakeholders

| | |
|---|---|
| Beth Abbott | Health Access |
| Neal Adams | California Institute for Mental Health |
| Dr. Andrew Bindman | UCSF |
| Debbie Blakenship | Fresno County Department of Employment and Temporary Assistance |
| Dr. E. Richard Brown | UCLA Center for Health Policy Research |
| Leona Butler | Santa Clara Family Health Plan |
| Richard Chambers | CalOptima |
| Elizabeth Darrow | Santa Clara Family Health Plan |
| Stuart Drown | Little Hoover Commission |
| Teresa Favuzzi | California Foundation for Independent Living Centers |
| Dale R. Fleming | San Diego County Health and Human Services |
| Kim Flores | Senate Office of Research |
| Lisa Folberg | California Medical Association |
| Jean Fraser | Formerly with the San Francisco Health Plan |
| Jennifer Gabales | Association for Adult Day Services |
| Angela M. Gilliard | Formerly with Western Center on Law & Poverty |
| John Gilman | Assembly Health Committee |
| Erin Aaberg Givans | Children's Specialty Care Coalition |
| Julie Hornback | Fresno County Human Services System |
| Dr. Gregory Janos | Children's Specialty Care Coalition |
| Anne Burnes Johnson | Aging Services of California |
| Ladan Keene | CalOptima |
| Jennifer Kincheloe | UCLA Center for Health Policy Research |
| Don Kingdon | California Mental Health Directors Association |
| Dr. Richard Kronick | UCSD |
| Trula M. LaCalle | California Association of Public Authorities for IHSS |
| Elizabeth Landsberg | Western Center on Law & Poverty |

*All affiliations listed reflect participants' affiliations at the time of the initial advisory group meetings.

| | |
|---|---|
| Agnes Lee | Senate Office of Research |
| Lisa Simonson Maiuro | Health Management Associates |
| Robert Maus | California Department of Alcohol and Drug Programs |
| Patricia McGinnis | California Association for Nursing Home Reform |
| Lydia Missaelides | California Association of Adult Day Services |
| Anissa Nachman | Senate Republican Caucus |
| Donald Nollar | Maternal and Child Health Access |
| Sandra Perez | California Office of the Patient Advocate |
| Brenda Premo | Western University, Center for Disability Issues and the Health Professions |
| Cori Reifman | California Office of the Patient Advocate |
| Tom Riley | Cal Capitol Group (for California Academy of Family Physicians) |
| Cathy Senderling-McDonald | California County Welfare Directors Association |
| Ralph Silber | Alameda Health Consortium |
| Melissa Stafford Jones | California Association of Public Hospitals |
| Kristen Golden Testa | The Children's Partnership |
| Ruth Watson | CalOptima |

## **Appendix C:** Conference Call Participants*

This list reflects only those stakeholders who participated in a scheduled conference call, not all stakeholders who were invited to participate. Representatives from DHCS and CHCF also participated in the calls.

### Pediatrics

| | |
|---|---|
| Dr. Christy Beaudin | Children's Hospital Los Angeles |
| Kristin Golden Testa | The Children's Partnership |
| Lark Galloway-Gilliam | Community Health Councils |
| Angela Gilliard | Formerly Western Center on Law & Poverty |
| Erin Aaberg Givans | Children's Specialty Care Coalition |
| Paul Wise | Stanford University |
| Charity Bracy | California Children's Hospital Association |
| Laurie Soman | Packard Children's Hospital |
| Melissa Stafford Jones | California Association of Public Hospitals |
| Dr. Thomas Klitzner | UCLA and Children's Specialty Care Coalition |
| Dr. Gregory Janos | Sutter Health and Children's Specialty Care Coalition |
| Caroline Rivas | Community Health Councils |
| Dr. Erin Stucky | UCSD |
| Dr. Francine Kaufman | University of Southern California (USC) |
| Paul Kurtin | UCSD |
| Linda Swann | Family Voices California |
| Leona Butler | Santa Clara Family Health Plan |

### Maternal Health

| | |
|---|---|
| Karen Farley | California Women, Infants, and Children Association |
| Debra Bingham | Executive Director, CMQCC |
| Dr. Jeff Gould | Chair, California Perinatal Quality Care Collaborative (CPQCC) |
| Laura Hardcastle | California Department of Public Health, Office of Multicultural Health |
| Suzanne Haydu | California Department of Public Health |
| Leslie Kowalewski | March of Dimes |
| Dr. Robert Mirth | CPQCC |
| Connie Mitchell | California Department of Public Health |
| Alina Salganicoff | Kaiser Family Foundation |
| Leona Shields | California Department of Public Health |
| Shannon Smith-Crowley | Lobbyist, American College of Obstetricians and Gynecologists |

### Seniors

| | |
|---|---|
| Lora Connolly | California Department on Aging |
| Daryl Nixon | California Association of Health Facilities |
| Dr. Cheryl Phillips | On Lok |
| Dr. Timothy Schwab | Scan Health Plan |
| Dr. Kate Wilber | USC Center for Long Term Care |

*All affiliations reflect the participants' affiliations at the time of the conference calls.

### People with Disabilities
(including those receiving community-based waiver services)

| | |
|---|---|
| Brenda Premo | Western University, Center for Disability Issues and the Health Professions |
| Anne Cohen | Disability Health Access |
| Deborah Doctor | Disability Rights California |
| Megan Juring | California Health and Human Services |

### Parents/Adults Without Disabilities

| | |
|---|---|
| Rachel Brodie | Pacific Business Group on Health |
| Lisa Folberg | California Medical Association |
| Mark Paredes | Community Health Councils |
| Dolores Yanagihara | Integrated Healthcare Association |

### Behavioral Health

| | |
|---|---|
| Sai-Ling Chan-Sew | San Francisco Department of Public Health |
| Dr. Nathaniel Israel | San Francisco Department of Public Health |
| Sheila Baler | Formerly with APS Healthcare |
| Dr. Timothy Brown | UC Berkeley School of Public Health |
| Marti Johnson | California Department of Mental Health |

### Beneficiary Access-Related Issues: Group A
(eligibility/enrollment, service access, cultural and disability competency, and customer service)

| | |
|---|---|
| Dale Fleming | San Diego County Health and Human Services |
| Kelvin Quan | UC Berkeley School of Public Health |
| Cathy Senderling-McDonald | California County Welfare Directors Association |
| Ruth Watson | CalOptima |
| Ellen Wu | California Pan-Ethnic Health Network |

### System Financial Management and Support Issues: Group B
(spending/cost control, fraud and abuse, and health care system support, including safety-net financing and infrastructure)

| | |
|---|---|
| Elia Gallardo | California Primary Care Association |
| Melissa Stafford Jones | California Association of Public Hospitals and Health Systems |
| Kelvin Quan | UC Berkeley School of Public Health |
| Lucian Wilson | Insure the Uninsured Project |

## **Appendix D:** What Is a Performance Dashboard?

There are a number of different ways in which organizations may present reports of their performance. The focus in this appendix is on the potential of utilizing a performance dashboard and comparing it to other potential report structures.

A performance dashboard is a way of organizing and publishing the metrics of an organization to allow for review of an entity's performance. In the private sector, a performance dashboard is typically used as an internal tool to focus a company's efforts so that everyone is working toward the same goals and objectives. Performance dashboards provide real-time feedback on overall performance, much as a car's dashboard provides indicators of areas that require attention.

A performance dashboard can be used to:

- **Monitor critical business processes and activities** using the metrics of business performance that trigger alerts when potential problems arise;
- **Analyze the root cause of problems** by exploring relevant and timely information from multiple perspectives and at various levels of detail; and
- **Manage people and processes** to improve decisions, optimize performance, and steer the organization in the right direction.[33]

In the public sector, performance dashboards are also used for the purpose of publicly reporting on performance. For example, the Minnesota Department of Public Transportation uses its dashboard to measure performance and provide evidence to its customers that it evaluates its work and strives to improve.[34]

Dashboards differ from scorecards in subtle but important ways:

- Dashboards make use of a simple color scheme to flag performance that is falling below expectation and warrants action, while scorecards use letter or number grades.
- Dashboards make use of a limited number of measures, which are sometimes aggregated, while scorecards may provide finer detail.

To be effective, performance measurement reports—whether framed as a dashboard or a scorecard—should strive to meet each of the following criteria:

1. The report should be designed for one or more specific, well-defined purposes. For Medi-Cal, a report may be designed to do the following:
   - Regularly assess and publicly report the performance of Medi-Cal;
   - Develop and periodically evaluate improvement goals; and
   - Inform and focus future investment decisions related to Medi-Cal.
2. The report should be composed of domains that represent key performance attributes of the Medi-Cal program, for clinical and administrative services provided by and through Medi-Cal.
3. The measures included within the performance report must be very carefully chosen and well supported, as there are only a limited number of measures that can be included in the report.
4. The performance report should support additional analysis to address root causes. A dynamic performance report will be more effective than a static one.
5. There should be clear internal agency policies regarding who "owns" performance responsibility relating to each indicator within the performance report, and what actions are to be taken when indicators generate lower-than-desired ratings.

The performance report should clearly convey information in a fashion that promotes understanding. Where necessary, the report should include an accompanying narrative so that both internal and external readers will understand the import of the measurement.

## **Appendix E:** Additional Information on Availability of Data

DHCS recently implemented an enhanced data warehouse and selected a new vendor in 2007 to manage it. The state has two major systems that feed the data warehouse:

- The state's MMIS, for claims data; and
- The state's MEDS, for eligibility data.

MMIS, operated by HP, formerly EDS Corp., produces a dashboard that provides highlights from reports generated by MMIS on claims activities (e.g., cycle times for claims processing), claims payments, provider activities (e.g., participation by geography and specialists, top 10 providers by claims payments, and claims denials), anti-fraud activities, and treatment authorization activities. Delta Dental provides similar information on dental claims and providers through another dashboard. Encounter data from the Medicaid managed care plans are entered into MMIS and are also included within the DHCS data warehouse.[35]

MEDS receives information directly from counties. It includes a beneficiary's aid category and information regarding share of cost, but does not include a beneficiary's income level. In addition, DHCS receives information about members only—it does not receive any information about those who initially apply and are denied. MEDS does receive information when an existing member's coverage ends.

In its implementation of the enhanced data warehouse, DHCS has made a concerted effort to train more DHCS staff on how to use the data warehouse and develop their own reports, with the ultimate goal of encouraging managers to make better use of data in their daily work. The warehouse can produce ad hoc reports, standard monthly reports, and user-specific dashboards. It is important to note that during its initial startup, the data warehouse will include information on only the claims that are eligible for Federal Financial Participation. Information about state-only payments and denied claims will be added in the second phase of implementation.

A few examples of the types of measures that can be generated through the warehouse include:

- Expenditures by category of service;
- Top providers by claims paid and by number of services provided; and
- Episode grouper analysis of provider practice patterns by diagnosis or condition.[36]

Certain aspects of Medi-Cal spending come from sources that are not fed into the data warehouse. For example, Disproportionate Share Hospital payments are paid outside of the claims systems. In addition, case management and treatment authorization request information are housed in separate databases. Sister agencies that provide Medi-Cal services feed summary data into MMIS for the purpose of federal claiming, but the detailed data are contained in each agency's separate systems. In addition to its own data, DHCS also relies heavily on the California Health Interview Survey (CHIS), which includes Medi-Cal-specific information.

# **Appendix F:** Potential Design of the Medi-Cal Performance Dashboard

There are a number of options for organizing and presenting the Medi-Cal performance dashboard. This appendix provides some suggestions for potential designs that could be used as a starting point for further discussion as the development of the performance dashboard progresses.

## Report Organization

The report could be organized by population group and measure domain.[37] This organizational model, presented in Table A1, allows all the measures for a population group to be viewed together and compared.

**Table A1. Dashboard Organized by Population Group and Measure Domain**

| CHILDREN | YEAR 1 | YEAR 2 | YEAR 3 |
|---|---|---|---|
| **Preventive Care** | | | |
| Preventive Care 1 | | | |
| Preventive Care 2 | | | |
| Preventive Care 3 | | | |
| **Acute and Chronic Care** | | | |
| Acute and Chronic Care 1 | | | |
| Acute and Chronic Care 2 | | | |
| Acute and Chronic Care 3 | | | |
| **Behavioral Health Care** | | | |
| Behavioral Health Care 1 | | | |
| Behavioral Health Care 2 | | | |
| **Patient Experience** | | | |
| Patient Experience 1 | | | |
| Patient Experience 2 | | | |

An alternative option for presenting quality data is to organize the measures first by domain and then by population group, as illustrated in Table A2. This option allows readers to view performance across the preventive care domain and variation across the different populations. For measures that are consistent across populations, this view may be particularly helpful.

**Table A2. Dashboard Organized by Measure Domain and Population Group**

| PREVENTIVE CARE | YEAR 1 | YEAR 2 | YEAR 3 |
|---|---|---|---|
| **Children** | | | |
| Preventive Care 1 | | | |
| Preventive Care 2 | | | |
| Preventive Care 3 | | | |
| **Adults — Maternal Health** | | | |
| Preventive Care — Prenatal 1 | | | |
| Preventive Care — Postpartum 2 | | | |
| Preventive Care — Postpartum 3 | | | |
| **Adults — Parents** | | | |
| Preventive Care 1 | | | |
| Preventive Care 2 | | | |
| **People with Disabilities** | | | |
| Preventive Care 1 | | | |
| Preventive Care 2 | | | |

## Report Presentation

As described in Appendix D, there are differences between dashboards and scorecards. From a presentation perspective, a performance measurement report may provide ratings through a dashboard's "red, yellow, green" scheme,[38] or through a scorecard's absolute rates or letter grades. A "red, yellow, green" ranking may work better for DHCS than a letter grade because such a scheme does not pose the risk of a headline that broadcasts "failing" in a particular area based on the performance measurement report.

A dashboard, at its most basic, provides for a graphical representation of performance that is categorized into three ratings. The most popular way of displaying a dashboard is to use a graphical stoplight metaphor that distinguishes performance by color:

- Green (●): at or above target;
- Yellow (●): below target; and
- Red (●): significantly below target, requires intervention.

Alternatively, the three colors can be used to represent the degree to which performance is improving or declining.

Table A3 illustrates a dashboard example that uses colors to represent performance relative to a target and shapes to indicate the change in performance year after year. The arrows indicate the direction of the change:

- Up arrow (↑): improved;
- Sideways arrow (↔): stayed the same; and
- Down arrow (↓): declined.

Note: For this table, and for scorecards and other examples that follow, all rates and performance indicators are fictional and do not represent Medi-Cal performance on any measure.

The data could also be presented so that it is aggregated into composites. At the population level, a composite could be calculated for children, adults, seniors, and people with disabilities. For example, a children's composite could be calculated by combining all of the measures pertaining to children to create one overall comparison. These composites could be presented as a first summary table in the report, and as the opening screen online.

Additional composites could be created by measurement domain for each population, and also across populations. For all composite measures, the report would provide the ability, in both electronic and paper formats, to drill down into the component measures to reveal more detail about performance. In Table A4, for example, Preventive Care 1 is a composite measure. In an online version of the dashboard, the component elements of the composite measure would be presented when the reader clicks on the measure name, at which point the table would expand to reveal the underlying components. In a printed version of the report, this detail could appear on the next page.

**Table A3. Dashboard Organized by Population**

| CHILDREN AND THEIR PARENTS | YEAR 1 | YEAR 2 | YEAR 3 |
|---|---|---|---|
| **Preventive Care** | | | |
| Preventive Care 1 (composite) | ● | ● ↔ | ● ↔ |
| Preventive Care 2 | ● | ● ↑ | ● ↑ |
| **Acute/Chronic Care** | | | |
| Acute/Chronic Care 1 | ● | ● ↑ | ● ↔ |
| Acute/Chronic Care 2 | ● | ● ↑ | ● ↑ |
| Acute/Chronic Care 3 | ● | ● ↑ | ● ↑ |
| **Behavioral Health Care** | | | |
| Behavioral Health Care 1 | ● | ● ↔ | ● ↓ |
| Behavioral Health Care 2 | ● | ● ↓ | ● ↑ |
| **Patient Experience** | | | |
| Patient Experience 1 | ● | ● ↑ | ● ↔ |
| Patient Experience 2 | ● | ● ↑ | ● ↑ |

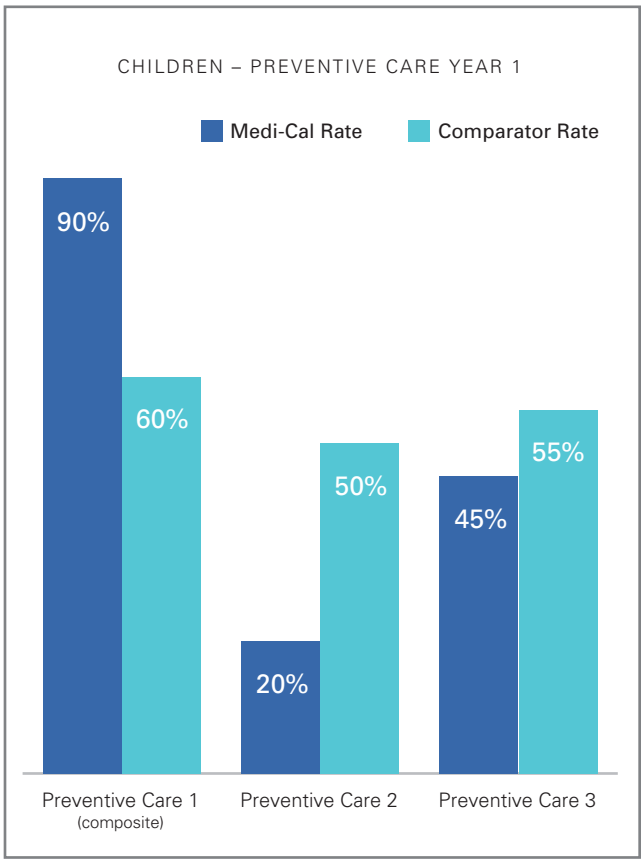
**Table A4. Composite Data with Drill-Down Functionality**

| CHILDREN AND THEIR PARENTS, COMPOSITE DETAIL | YEAR 1 | YEAR 2 | YEAR 3 |
|---|---|---|---|
| **Preventive Care** | | | |
| Preventive Care 1 (composite) | ● | ● ↔ | ● ↔ |
| Preventive Care 1a | ● | ● ↔ | ● ↔ |
| Preventive Care 1b | ● | ● ↔ | ● ↔ |

An online report should also have the ability to drill down into the underlying data and show the detailed rates of the measure for Medi-Cal and the comparator. The comparator could be a DHCS-defined target, a target based on national data, or any other benchmark identified and adopted by DHCS.

Another view that could be made available is a simple bar chart displaying the Medi-Cal rates and the comparator rates. Bar charts could be included in a printed report in lieu of or in addition to the tables of rates. Bar charts could also be generated for online viewing. Figure A.1 illustrates a bar chart showing performance for three preventive measures for children.

**Figure A.1. Dashboard Presented As Bar Chart**




## Importance of Definitions and Explanatory Text

The display of dashboard results and data should be supplemented with the definition of the measures and the sources of both the DHCS data and the relevant comparators. It is also important to supply a brief explanation of why the measure is important and a brief narrative analysis of the results. This explanation and analysis could be included in the printed report following the dashboard on a separate page. In an online version, readers should be able to click on the measure name and get a definition and explanation of the measure.

# **Appendix G:** Recommended Population Measures for the Initial Dashboard

**Proposed Dashboard Measures**

| DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|
| Pediatric: Preventive Care | | | |
| **1 EPSDT composite:** *Composite calculation methodology: weighted average of the component measures* | | | |
| **Well-child visits in the first 15 months of life:** The percentage of members who turned 15 months old during the measurement year and who had zero, one, two, three, four, five, or six or more well-child visits with a primary care physician (PCP) during their first 15 months of life (HEDIS). | Administrative (encounter data from Managed Care Organizations [MCOs] and claims data from FFS)[39] | 50th and 75th percentile of the California commercial MCO HEDIS rates for the component measures | By region/county |
| **Well-child visits in the third, fourth, fifth, and sixth years of life:** The percentage of members who were three to six years of age during the measurement year who received one or more well-child visits with a PCP during the measurement year (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| **Lead screening in children:** The percentage of children two years of age who had one or more capillary or venous lead blood tests for lead poisoning by their second birthday (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| **Childhood immunization status combo 3:** The percentage of enrolled children who had four diphtheria, tetanus, and acellular pertussis, three injectible polio virus, one measles-mumps-rubella, three haemophilus influenza type B, three hepatitis B, one chicken pox vaccination and four pneumococcal conjugate vaccinations by their second birthday (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| **Dental care:** The percentage of members 2 to 21 years of age who had at least one dental visit during the measurement year (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| **2 Adolescent composite:** This composite combines chlamydia screening and adolescent well-care visits. Details of the component measures follow. *Composite calculation methodology: weighted average of the component measures* | | | |
| **Chlamydia screening:** The percentage of women 16 to 19 and 20 to 24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| **Adolescent well-care visits:** The percentage of members who were 12 to 21 years of age who had at least one comprehensive well-care visit with a PCP or an obstetrics and gynecology (OB/GYN) practitioner during the measurement year (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| Pediatric: Acute and Chronic Care | | | | |
| 3 | **Appropriate treatment for children with upper respiratory infection (URI):** The percentage of children 3 months to 18 years of age who were given a diagnosis of URI and were not dispensed an antibiotic prescription (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) and pharmacy | HEDIS national Medicaid 75th percentile | By region/county |
| 4 | **Use of appropriate medications for people with asthma:** The percentage of members 5 to 9 and 10 to 17 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year (HEDIS). | Administrative and pharmacy | HEDIS national Medicaid 75th percentile | By region/county |
| 5 | **PQI area indicators composite:** *Composite calculation methodology: weighted average based on occurrence* | | | |
| | **Asthma admission rate (PQI 14):** The percentage of discharged children 2 to 17 years of age with ICD-9-CM principal diagnosis code of asthma out of the population 2 to 17 years of age in metro area or county (AHRQ and PQI). | Administrative | PQI comparative data for area indicators | By region/county |
| | **Diabetes short-term complications admission rate (PQI 15):** The percentage of non-maternal discharges 6 to 17 years of age with ICD-9-CM principal diagnosis code for short-term complications (ketoacidosis, hyperosmolarity, coma) out of the population 6 to 17 years of age in a metro area or county (AHRQ and PQI). | Administrative | PQI comparative data for area indicators | By region/county |
| | **Gastroenteritis admission rate (PQI 16):** The percentage of non-maternal discharges 3 months to 17 years of age with ICD-9-CM principal diagnosis code for gastroenteritis or with secondary diagnosis code of gastroenteritis and a principal diagnosis code of dehydration out of the population three months to 17 years of age in a metro area or county (AHRQ and PQI). | Administrative | PQI comparative data for area indicators | By region/county |
| | **Perforated appendix admission rate (PQI 17):** The percentage of discharged children 1 to 17 years of age with ICD-9-CM diagnosis code for perforations or abscesses of appendix out of the population 1 to 17 years of age in a metro area or county (AHRQ and PQI). | Administrative | PQI comparative data for area indicators | By region/county |
| | **Urinary tract infection admission rate (PQI 18):** The percentage of non-maternal discharges 3 months to 17 years of age with ICD-9-CM principal diagnosis code of urinary tract infection out of the population 3 months to 17 years of age in a metro area or county (AHRQ and PQI). | Administrative | PQI comparative data for area indicators | By region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| **Pediatric: Behavioral Health Care** | | | | |
| 6 | **Follow-up after hospitalization for mental illness within 30 days of discharge:** The percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| 7 | **Initiation of AOD dependence treatment:** The percentage of adolescent and adult members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile | By region/county |
| **Pediatric: Patient Experience** | | | | |
| 8 | **CAHPS survey composite:** Questions regarding member's experience with doctor and the ease of obtaining care.<br>**Getting care quickly composite:**<br>In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed it?<br>In the last 12 months, not counting the times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed it?<br>**Getting needed care composite:**<br>In the last 6 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?<br>In the last 6 months, how often was it easy to get appointments with specialists? | CAHPS Health Plan Survey 3.0H and Child Questionnaire (Medicaid, with CCC measure) | State-determined goal | By region/county |
| **Maternal Health: Prenatal** | | | | |
| 9 | **Timeliness of prenatal care:** The percentage of deliveries that received a prenatal care visit in the first trimester (or within 42 days of enrollment) (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| 10 | **Frequency of ongoing prenatal care:** The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year who received less than 21 percent, 21 to 40 percent, 41 to 60 percent, 61 to 80 percent, or at least 81 percent of the expected number of prenatal care visits (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| **Maternal Health: Birth** | | | | |
| 11 | **Low birth weight rate (PQI 9):** The number of births with ICD-9-CM diagnosis codes for birth weight less than 2500 grams out of the number of live births (AHRQ and PQI). | Administrative | PQI comparative data for area indicators | By region/county |
| **Maternal Health: Postnatal** | | | | |
| 12 | **Postpartum care:** The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| **Parents/Adults: Preventive Care** | | | | |
| 13 | **Cervical cancer screening:** The percentage of women 21 to 64 years of age who received one or more Pap tests during the measurement year or the two years prior to the measurement year (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| **Parents/Adults: Acute and Chronic Care** | | | | |
| 14 | **Use of appropriate medications for people with asthma:** The percentage of patients who were identified as having persistent asthma during the measurement year and the year prior to the measurement year and who were dispensed a prescription for either an inhaled corticosteroid or for acceptable alternative medication (HEDIS). | Administrative and pharmacy[40] | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| 15 | **Diabetes composite** (specific HEDIS measures follow):<br>*Composite calculation methodology: numerator is calculated by averaging rates; denominator is calculated using the sample size* | | | |
| | **Comprehensive diabetes care—HbA1c testing:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had a hemoglobin A1c (HbA1c) test during the measurement year. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| | **Comprehensive diabetes care—eye screening:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had an eye screening for diabetic retinal disease. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| | **Comprehensive diabetes care—low-density LDL-C test performed:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had an LDL-C test performed. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| | **Comprehensive diabetes care—nephropathy screening:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had a nephropathy screening test or evidence of nephropathy. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| 16 | **Use of imaging studies for low back pain:** The percentage of members with a primary diagnosis of low back pain who did not have an imaging study (plain x-ray, MRI, CT scan) within 28 days of the diagnosis (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| | Parents/Adults: Behavioral Health Care | | | |
| 17 | **Follow-up after hospitalization for mental illness within 30 days of discharge:** The percentage of discharges for members six years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| 18 | **Initiation of AOD dependence treatment:** The percentage of adolescent and adult members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county |
| | Parents/Adults: Patient Experience | | | |
| 19 | **CAHPS survey composite:** Questions regarding member's experience with doctor and ease of obtaining care.<br>**Getting care quickly composite:**<br>In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed it?<br>In the last 12 months, not counting the times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed it?<br>**Getting needed care composite:**<br>In the last 6 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?<br>In the last 6 months, how often was it easy to get appointments with specialists? | CAHPS survey | HEDIS national Medicaid 75th percentile | By region/county |
| | Adults with Disabilities: Preventive Care | | | |
| 20 | **Cervical cancer screening:** The percentage of women 21 to 64 years of age who received one or more Pap tests during the measurement year or the two years prior to the measurement year (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| Adults with Disabilities: Acute and Chronic Care | | | | |
| 21 | **Risk-adjusted average length of inpatient hospital stay:** The number of excess in-hospital days in a given inpatient population (Care Science) (NQF). | Administrative | State-determined goal and compared to general adult population | By FFS/managed care and region/county |
| 22 | **Diabetes composite** (measures below):<br>*Composite calculation methodology: numerator is calculated by averaging rates; denominator is calculated using the sample size* | | | |
| | **Comprehensive diabetes care—HbA1c testing:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had a HbA1c test during the measurement year. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| | **Comprehensive diabetes care—eye screening:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had an eye screening for diabetic retinal disease. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| | **Comprehensive diabetes care—low-density LDL-C test performed:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had an LDL-C test performed. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| | **Comprehensive diabetes care—nephropathy screening:** The percentage of members 18 to 75 years of age with diabetes mellitus (type 1 and type 2) who had a nephropathy screening test or evidence of nephropathy. | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| 23 | **Medication possession ratio:** A formula used to determine compliance that is measured from the first to the last prescription, with the denominator being the duration from index to exhaustion of the last prescription and the numerator being the days supplied over that period from first to last prescription (NQF).[41] | Administrative (encounter data from MCOs and claims data from FFS) | State-determined goal | By FFS/managed care and region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| **Adults with Disabilities: Behavioral Health Care** | | | | |
| 24 | **Follow-up after hospitalization for mental illness within 30 days of discharge:** The percentage of discharges for members six years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| 25 | **Initiation of AOD dependence treatment:** The percentage of adolescent and adult members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| 26 | **Antidepressant medication management composite:** *Composite calculation methodology: numerator is calculated by averaging rates; denominator is calculated using the sample size* | | | |
| | **Effective acute phase treatment:** The percentage of members 18 years of age and older as of April 30 of the measurement year who were diagnosed with a new episode of major depression, were treated with antidepressant medication, and remained on an antidepressant drug during the entire 84-day (12-week) acute treatment phase (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| | **Effective continuation phase treatment:** The percentage of members 18 years of age and older as of April 30 of the measurement year who were diagnosed with a new episode of major depression and were treated with antidepressant medication, and who remained on an antidepressant drug for at least 180 days (HEDIS). | Administrative (encounter data from MCOs and claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal, and compared to general adult population | By FFS/managed care and region/county |
| **Adults with Disabilities: Long Term Care (HBCS)** | | | | |
| 27 | **Waiver waiting list:** Point-in-time measure of adults with disabilities on the waiver wait list. | Administrative | State-determined goal and compared to general adult population | By region/county |
| 28 | **Community vs. nursing facility service:** The percentage of disabled persons who are nursing facility-eligible and were served in the community rather than a nursing facility. | Administrative | State-determined goal compared to general adult population and to other Medicaid programs where possible | By region/county |

**Proposed Dashboard Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION |
|---|---|---|---|---|
| **Adults with Disabilities: Long Term Care (Nursing Facility)** | | | | |
| 29 | **Pressure sores:** The percentage of individuals who had long-term stays in nursing facilities and had pressure sores during their stay (CMS). | Chart review | | By region |
| 30 | **Weight loss:** The percentage of residents in a nursing facility who lose too much weight (CMS). | Chart review | | By region |
| **Adults with Disabilities: Patient Experience** | | | | |
| 31 | **CAHPS survey composite:** Questions regarding member's experience with doctor and the ease of obtaining care.<br>**Getting care quickly composite:**<br>In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed it?<br>In the last 12 months, not counting the times you needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed it?<br>**Getting needed care composite:**<br>In the last 6 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?<br>In the last 6 months, how often was it easy to get appointments with specialists? | CAHPS survey | Medicaid national 75th percentile compared to general adult population and compared to other Medicaid programs where possible (Minnesota, for example) | By FFS/managed care and region/county |
| **Seniors: Long Term Care (Home and Community-Based Services [HCBS])** | | | | |
| 32 | **Nursing home care vs. nursing facility:** The total number of seniors eligible for nursing home care based on an HCBS evaluation who are served in the community vs. those who are served in a nursing facility. | Administrative | State-determined goal compared to general adult population and to other Medicaid programs where possible | By region/county |
| 33 | **Waiver wait list:** A point-in-time measure of the number of seniors on the waiver wait list. | Administrative | State-determined goal compared to general adult population and to other Medicaid programs where possible | By region/county |
| **Seniors: Long Term Care (Nursing Facility)** | | | | |
| 34 | **Pressure sores:** The percentage of patients in a facility admitted with a pressure ulcer and the percentage of patients in a facility who develop pressure ulcers while there (CMS). | Chart review | State-determined goal | By region |
| 35 | **Weight loss:** The percentage of residents who have experienced weight loss of 5 percent or more in the last 30 days or 10 percent or more in the last 6 months (CMS). | Chart review | State-determined goal | By region |

# **Appendix H:** Recommended Program-Wide Measures for the Initial Dashboard

**Proposed Access and Spending Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATOR | STRATIFICATION |
|---|---|---|---|---|
| **Eligibility/Enrollment** | | | | |
| 1 | Percentage of general applications without applicant errors and completed within 45 days | Administrative (CPS) | Within Medi-Cal | By county |
| 2 | Percentage of applications for Medi-Cal based on disability completed within 90 days, excluding delays by the state | Administrative (CPS) | Within Medi-Cal | By county |
| 3 | Percentage of the annual redetermination verifications (RV) completed within 60 days of the recipient's annual RV date for those RVs based on forms that are complete and have been returned to the county by the recipient in a timely manner | Administrative (CPS) | Within Medi-Cal | By county |
| 4 | Percentage of children who are no longer eligible for Medi-Cal whose parents were sent a notice informing them of the Healthy Families Program within five working days after determining that the family is eligible for Medi-Cal with a share of the cost of services | Administrative (CPS) | Within Medi-Cal | By county |
| 5 | Eligible for Medi-Cal but unenrolled, by population (Note: measurement should be consistent with measure of eligible but unenrolled children by Managed Risk Medical Insurance Board) | CHIS | Within Medi-Cal | By county |
| 6 | Average length of enrollment in Medi-Cal, by population | Administrative | Year-to-year and within Medi-Cal | By county |
| **Access to Providers** | | | | |
| 7 | Average length of time for a physician to obtain a provider number | Administrative | Year-to-year or shorter comparisons for online version | N/A |
| 8 | Ratio of providers to population | Administrative | Within Medi-Cal | By region/county |
| 9 | Percentage of clients who have had a PCP visit within the measurement year | Administrative | Within Medi-Cal | By county |
| 10 | Percentage of clients who change health plans within 60 days | Administrative | Within Medi-Cal | By county |
| 11 | Percentage of Medi-Cal participating physicians and hospitals that have fully or partially implemented an EHR system that qualifies the physician for an enhanced Medi-Cal payment | Administrative | State-determined goal and other state Medicaid programs | By county |

**Proposed Access and Spending Measures**

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATOR | STRATIFICATION |
|---|---|---|---|---|
| **Cultural Competency** | | | | |
| 12 | In the last 6 months, how often did you have a hard time speaking with or understanding your doctors or other health providers because you spoke different languages? | CAHPS survey | Within Medi-Cal | By region/county |
| 13 | In the last 6 months, how often did your doctors or other health providers show respect for what you had to say? | CAHPS survey | Within Medi-Cal | By region/county |
| 14 | In the last 6 months, when you needed an interpreter to help you speak to your doctors or other health care providers, how often did you get one? | CAHPS survey | Within Medi-Cal | By region/county |
| 15 | In the last 6 months, how much of a problem, if any, was it to find or understand information on Medi-Cal? | CAHPS survey | Within Medi-Cal | By region/county |
| **Spending** | | | | |
| 16 | Per-enrollee spending by population in Medi-Cal, compared to other state Medicaid programs | Administrative, survey, and other state Medicaid programs | Other state Medicaid programs | N/A |
| 17 | Medi-Cal growth annually, compared to other Medicaid programs | Administrative, survey, and other state Medicaid programs | Other state Medicaid programs | N/A |
| 18 | General fund spending on Medi-Cal as a share of total general fund expenditures (trend over time) | Administrative, survey, and other state Medicaid programs | Year-to-year comparison | N/A |
| **Administrative Measures: Program Integrity** | | | | |
| 19 | TARs composite:<br>• Percentage of TARs approved/denied/modified<br>• Average length of time for making TAR determinations | Administrative | Year-to-year comparison | By service and region |
| 20 | Ratio of cost avoidance to resources invested in fraud and abuse prevention | Administrative (Medi-Cal Payment Error Study and DHCS annual anti-fraud legislative report) | Year-to-year comparison | N/A |
| **Health Safety Net: Health Care Coverage Initiative** | | | | |
| 21 | Number of enrollees in the HCCI programs | Administrative (county) | Year-to-year comparison | By participating county |
| 22 | Number of new enrollees in Medi-Cal and other public programs | Administrative (county) | Beginning of coverage initiative | By participating county |
| 23 | Retention rate of HCCI program enrollees | Administrative (county) | Year-to-year comparison | By participating county |
| 24 | Decrease in emergency department visits or hospitalizations by individuals in the HCCI program | Administrative (county and OSHPD) | Beginning of coverage initiative | By participating county |

# **Appendix I:** Population Measures Recommended for Later Versions of the Dashboard

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION* |
|---|---|---|---|---|
| **Pediatric: Preventive Care** | | | | |
| 1 | **Weight assessment and counseling for nutrition and physical activity for children/adolescents:** The percentage of children 3 to 17 years of age who had an outpatient visit to a PCP or OB/GYN and who had evidence of BMI percentile documentation, counseling for nutrition, and counseling for physical activity in the measurement year (HEDIS) | Administrative (encounter data from MCOs and claims data from FFS)[42] | HEDIS national Medicaid 75th percentile | By region/county and race/ethnicity |
| **Pediatric: Behavioral Health Care** | | | | |
| 2 | **Access to child specialty care for depression:** The number of children age 12 or younger with a primary visit diagnosis of major depression or dysthymia who saw a clinician who has specialized training in the mental health care of children (appropriate skills and qualifications to be determined by the health plan) (American Psychiatric Association) | Administrative data and clinician training/certification records | TBD | By region/county and race/ethnicity |
| **Pediatric: Patient Satisfaction** | | | | |
| 3 | **Additional measures of patient experience:** CAHPS identifying children with special health care needs; CAHMI or other adolescent survey | Survey data | State-determined goal | By region/county and race/ethnicity |
| **Maternal Health: Birth** | | | | |
| 4 | **Cesarean rate for low-risk, first-birth women:** The percentage of patients who have a cesarean delivery of a live birth at or beyond 37.0 weeks' gestation and who are having their first delivery and are birthing just one baby with vertex presentation (no breech or transverse positions) (CMQCC; NQF-endorsed) | Claims data and vital records (birth certificate)[43] | Births statewide | By region/county and race/ethnicity |
| **Maternal Health: Postnatal** | | | | |
| 5 | **Exclusive breastfeeding at hospital discharge:** The percentage of live births, excluding those discharged from neonatal intensive care, who were fed by "breast only" since birth (CMQCC; NQF-endorsed) | Medical record review | State-determined goal | By region/county and race/ethnicity |
| 6 | **Hospital readmission** (under development by CMQCC) | | | |
| **Parents/Adults: Preventive Care** | | | | |
| 7 | **Adult BMI assessment:** The percentage of members 18 to 74 years of age who had an outpatient visit and had their BMI documented during the measurement year or the year prior to the measurement year (HEDIS) | Administrative (encounter data from MCOs, claims data from FFS) | HEDIS national Medicaid 75th percentile or state-determined goal | By region/county and race/ethnicity |
| **Adults with Disabilities: Preventive Care** | | | | |
| 8 | **Adult BMI assessment** (see measure #7) | | | |

*Many measures recommend stratifying by race/ethnicity. However, prior to including this stratification, Medi-Cal should work with its race and ethnicity data to ensure reliability.

| | DASHBOARD MEASURE | DATA SOURCE | COMPARATORS | STRATIFICATION* |
|---|---|---|---|---|
| **Adults with Disabilities: Long Term Care (HBCS)** | | | | |
| 9 | **IHSS hours:** The percentage of approved IHSS hours that are being delivered (examine by county to determine whether differences exist in hours being filled). | Administrative data (other) | State-determined goal and compared to general adult population | By region/county and race/ethnicity |
| 10 | **DME composite:**<br>In the last 6 months, how often was it easy to get your health plan to get or replace mobility or breathing equipment?<br>In the last 6 months, how often was it easy to get your health plan to pay for repairs to mobility or breathing equipment? | Survey (AHPPPAL) | State-determined goal and compared to other Medicaid programs where possible | By region/county and race/ethnicity |
| **Adults with Disabilities: Patient Experience** | | | | |
| 11 | **Case management composite:**<br>In the last 6 months, how often did your case manager help you get the care, services, and medicines that you needed?<br>In the last 6 months, how often did the case manager seem to know the important information about your medical history?<br>In the last 6 months, how often did your case manager take into account what you wanted to do?<br>Think about your case manager. Using any number from 0 to 10, with 0 representing the worst case manager possible and 10 representing the best, what number would you use to rate your case manager of the last 12 months? | Survey (AHPPPAL) | State-determined goal and compared to other Medicaid programs where possible (Minnesota, for example) | By FFS/managed care, region/county, and race/ethnicity |
| 12 | **Physical access composite:**<br>In the last 6 months, were there barriers that made it hard for you to move around inside the exam rooms at your personal doctor's office?<br>In the last 6 months, when you visited your personal doctor, how often were you able to get on the examination table when you needed to?<br>In the last 6 months, when you visited your personal doctor, did someone weigh you?<br>In the last 6 months, if you used the restroom at your personal doctor's office, how often was it easy to move around in this restroom? | Survey (AHPPPAL) | State-determined goal and compared to other Medicaid programs where possible (Minnesota, for example) | By FFS/managed care, region/county, and race/ethnicity |
| **Seniors: Long Term Care (HCBS)** | | | | |
| 13 | **Percentage of approved IHSS hours that are being delivered** (examine by county to determine whether there are differences in hours being filled) | Administrative | State-determined goal and compared to general adult population and to other Medicaid programs where possible | By region/county and race/ethnicity |

*Many measures recommend stratifying by race/ethnicity. However, prior to including this stratification, Medi-Cal should work with its race and ethnicity data to ensure reliability.

# **Appendix J:** Program-Wide Measures Recommended for Later Versions of the Dashboard

| | DASHBOARD MEASURES | DATA SOURCE | COMPARATOR | STRATIFICATION |
|---|---|---|---|---|
| **Eligibility/Enrollment** | | | | |
| 1 | **Percentage of clients who lose eligibility during a measurement year and return to the program within 6 months of disenrollment** | Administrative | Year-to-year comparison and within Medi-Cal | By county and race/ethnicity |
| **Access to Providers** | | | | |
| 2 | **Composite measure:** Full-time equivalency positions accepting Medi-Cal, such as:<br>• PCPs<br>• Specialty care providers<br>• Behavioral health providers<br>• Pharmacies<br>• Dentists | Provider survey | First year as a baseline, comparators for improvement thereafter | By region/county |
| 3 | **Provider satisfaction survey** | Provider survey | First year as a baseline, comparators for improvement thereafter | |
| **Cultural Competency** | | | | |
| 4 | **CHIS question:** Has individual felt as if he or she was treated differently based on his or her race or ethnicity? (question being tested) | Administrative (CHIS) | Within Medi-Cal and to commercial covered lives and Medicare covered lives | By region/county and race/ethnicity |

## Endnotes

1. Certain services, however, are likely to continue to be reimbursed on a fee-for-service (FFS) basis for most beneficiaries. These include behavioral health, long term care, and specialty care for children with special health care needs.
2. With a hybrid methodology, the state would develop adjustors to HEDIS measures based on claims data. These adjustors would enable a comparison to Medi-Cal managed care and national HEDIS rates that have been developed using encounter data and medical record data (a "hybrid methodology"). This approach has been used elsewhere in the country, including in the Pennsylvania Medicaid program, and would result in a more accurate representation of FFS performance than would be possible if only administrative data were used.
3. This amount reflects Medi-Cal expenditures in all departments. Also, because the federal government has been providing states, including California, with enhanced federal match since October 1, 2008, the actual federal share of Medi-Cal spending has been about 60 percent. Enhanced federal match to states is scheduled to end on June 30, 2011.
4. California HealthCare Foundation. *California Health Plans and Insurers.* Oakland, CA: January 2009.
5. Minnesota 2009 Transportation Results Scorecard, www.dot.state.mn.us (accessed October 19, 2010).
6. CAHPS is technically a part of the HEDIS measurement set.
7. For the full report, see www.chcs.org.
8. See Center for Health Care Strategies, Inc. *Performance Measurement in Fee-for-Service Medicaid.* California HealthCare Foundation, October 2010.
9. Ibid.
10. This is true of most state Medicaid programs. More recently, as Medicaid has become an increasing allocation of states' budgets, agencies have begun to focus internally on making decisions based on data.
11. The PPACA also requires enhanced collection and reporting of data on race, ethnicity, sex, primary language, disability status, and underserved rural and frontier populations. This requirement should translate into an increased ability for DHCS to collect and report on quality measures across these factors.
12. This section has been recently renamed the Research and Analytics Studies Branch.
13. As DHCS begins to set Medicaid managed care plan rates based on encounter data, it will be in the plans' best interests to provide complete data to the state. Therefore, DHCS staff anticipate that encounter data received from managed care organizations will improve significantly over time.
14. HIPAA established for the first time a set of national standards for the protection of individually identifiable health information.
15. Some measures are repeated across populations, and, in several instances, the measures are composites of several measures rolled into one. This is discussed in more detail in Chapter VI.
16. California HealthCare Foundation. *Medi-Cal Facts and Figures.* Oakland, CA: September 2009, www.chcf.org.
17. For each of the tables in this section, a composite measure is counted as one measure, although each composite is made up of several measures.
18. See Center for Health Care Strategies, Inc. *Performance Measurement in Fee-for-Service Medicaid.* California HealthCare Foundation, October 2010.
19. EPSDT is a federally mandated program required by Title XIX of the Social Security Act.
20. Based on federal Medicaid managed care requirements, states are required to engage independent external evaluators, known as External Quality Review Organizations, to measure annually the performance of Medicaid managed care organizations.

21. This measure reflects a parent or guardian's perception of the child's experience, not a direct survey of the children's experiences.

22. See, for example, Baker, L. C., S. W. Atlas, and C. Afendulis. November 1, 2008. "Expanded Use of Imaging Technology and The Challenge of Measuring Value." *Health Affairs* 27 (6); 1467–8.

23. Medi-Cal's data warehouse includes a risk adjustment algorithm that could be used for this purpose.

24. Fuente. 1999. "Analyzing Variations in Medication Compliance Related to Individual Drug, Drug Class, and Prescribing Physician." *J Managed Care Pharm.;* 47–51.

25. See www.medicare.gov/nhcompare (last accessed on August 12, 2009). In total, Nursing Home Compare looks at 18 different quality measures.

26. Bridging refers to the referral of applications between counties and the state's SCHIP eligibility vendor.

27. For complete requirements and sampling methodology, see All County Letter 07-33, County Performance Standards Instructions for Eligibility Determinations and Annual Redeterminations, December 11, 2007; and All County Letter 09-12, Bridging Performance Standards, March 10, 2009.

28. Given requirements in national healthcare reform to have streamlined eligibility across Medicaid, CHIP, and subsidy programs, this measure likely will not be necessary in this form after 2013. DHCS may want to substitute another measure focused on the success of streamlined eligibility under national healthcare reform.

29. This measure may be changed in 2014 once the individual mandate for health insurance becomes effective.

30. Per-enrollee spending should be displayed comprehensively, as well as by member category, including children, non-disabled adults, people with disabilities, and seniors.

31. Because of the enhanced Medicaid match that California is currently receiving for the Medi-Cal program, and the increase in federal support for low-income, non-disabled adult Medicaid populations going forward, it will be difficult to compare state spending on the Medi-Cal program over time. Bailit suggests that the initial dashboard include this as a point-in-time measure and that DHCS consider whether it continues to make sense to include in standard dashboard reports. Alternatively, the dashboard may want to consider total state funding for publicly subsidized programs including Healthy Families and subsidized coverage through the Exchange.

32. The Kaiser Family Foundation recently released through its State Health Facts an analysis of Medicaid rates nationally as a percentage of Medicare rates. For more information, see www.statehealthfacts.org (last accessed on August 12, 2009). In addition, the California HealthCare Foundation published a report in April 2009, *Medi-Cal Physician and Dentist Fees: A Comparison to Other Medicaid Programs and Medicare.* The report is available at www.chcf.org (last accessed on August 12, 2009).

33. Wayne W. Eckerson. *Performance Dashboards: Measuring, Monitoring, and Managing Your Business*. Hoboken, NJ: John Wiley & Sons, 2005.

34. Minnesota Department of Transportation. *Dashboards Help "Drive" Mn/DOT Performance,* www.dot.state.mn.us (last accessed August 11, 2009).

35. DHCS requires that the state's Medi-Cal MCOs provide it with detailed encounter data on every service that the plans deliver. Although plans are required to share encounter data with the state, the encounter data received by the plans are submitted at varying degrees of completion. Because the encounter data are often incomplete, DHCS frequently is required to complete any study utilizing encounter data as a source of measure by completing it through use of medical record reviews. This problem may be remedied over time, since beginning in FY10, managed care plan payment rates will be determined utilizing encounter data. Source: conversation with DHCS staff, February 5, 2009.

36. A grouper is an analytical tool that allows for review of performance by episodes of care, among other analyses.

37. Measurement domains include preventive, acute, chronic, behavioral health, long term care, and patient experience. Administrative measures will be reported by the grouping of measures on similar topics.

38. Dashboards typically include a color scheme to provide readers quick comprehension of the relative performance of the entity for the measurement. The color scheme is typically red (poor, needs significant improvement and attention), yellow (cautionary, needs improvement or bears watching), or green (meets or exceeds expectations). As an alternative, a dashboard could use words instead of a color scheme.

39. Medicaid managed care plans were required to report this data (and all of the measures shown as using this type of data) as part of the External Accountability Set in 2008. The Medicaid managed care plans are using the hybrid method that supplements administrative data with medical record review. As noted in the body of the report, DCHS should consider whether to use the hybrid methodology to compare health outcomes in its FFS counties with its managed care counties.

40. Medicaid managed care plans were required to report this data as part of the External Accountability Set in 2008.

41. Fuente. 1999. "Analyzing Variations in Medication Compliance Related to Individual Drug, Drug Class, and Prescribing Physician." *J Managed Care Pharm.;* 47–51.

42. Medicaid managed care plans were required to report this data as part of the External Accountability Set in 2008. The Medicaid managed care plans are using the hybrid method that supplements administrative data with medical record review. As noted in the body of the report, DCHS should consider whether to use the hybrid methodology to compare health outcomes in its FFS counties with its managed care counties.

43. Note: DHCS staff indicated that they believed they would be able to collect this information through administrative data.

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