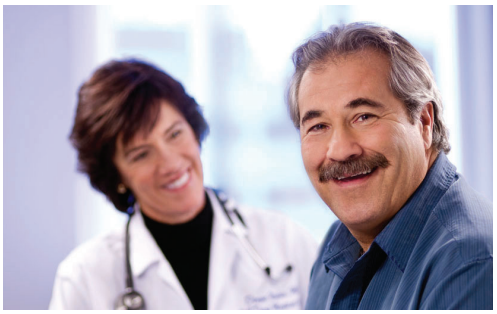
MEDI-CAL QUALITY IMPROVEMENT PROGRAM

INSTITUTE FOR POPULATION HEALTH IMPROVEMENT

UC DAVIS HEALTH SYSTEM



FINAL REPORT TO THE CALIFORNIA DEPARTMENT OF HEALTH CARE SERVICES

September 30, 2018

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Interagency Agreement #11-88141 **October 1, 2011 to September 30, 2018**

University of California, Davis Institute for Population Health Improvement
Final Report to the California Department of Health Care Services
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Introduction

The Medi-Cal Quality Improvement Program (MCQuIP) was established on October 1, 2011, through a 5-year, $4.25 million Interagency Agreement (IA) between the California Department of Health Care Services (DHCS) and the University of California, Davis Institute for Population Health Improvement (IPHI). In July 2016, the IA was extended through September 30, 2018. Under this agreement, IPHI, in close collaboration with DHCS, was charged with:

- Establishing and maintaining a Quality Improvement (QI) program for the more than $95 billion per year California Medical Assistance Program (Medi-Cal);
- Developing a systems-level quality management strategy;
- Providing ongoing technical assistance for the $3.7 billion, 5-year Public Hospital Redesign and Incentives in Medi-Cal (PRIME) program, and its predecessor, the Delivery System Reform Incentive Payments (DSRIP) program;
- Supporting the development and management of lifestyle programs and member communication approaches to optimize population health; and
- Providing executive-level strategic advice, thought leadership, and organizational change management support within DHCS.

MCQuIP produced tangible results during the collaboration, October 1, 2011 through September 30, 2018. This report highlights the major accomplishments achieved for each deliverable in the IA, focusing especially on program outcomes.

Deliverable A

Develop a written quality improvement plan whose aims and priorities reflect shared values and best practices, and which is consistent with the federal Department of Health and Human Services' National Quality Strategy. Update the quality improvement plan at least annually beginning one year after acceptance of the initial plan. Provide strategic counsel and advance the *DHCS Strategy for Quality Improvement in Health Care* (*Quality Strategy*). Provide guidance on measuring the effectiveness of the *Quality Strategy*, advancing initiatives within each priority area, and developing new initiatives to achieve the three linked goals.

Outcomes

DHCS Strategy for Quality Improvement in Health Care

In the first year of the IA, IPHI's Chief Quality Improvement Consultant (CQIC), Kenneth W. Kizer, MD, MPH, and Chief Prevention Officer (CPO), Desiree Backman, DrPH, MS, RD,[1] worked with the former DHCS Medical Director, Neal Kohatsu, MD, MPH, to develop the first *Quality Strategy, 2012*. The *Quality Strategy* serves as the blueprint for the Department's efforts to improve the health of all Californians; improve the quality of health care, including the patient care experience, in all DHCS programs; and reduce the rate of increase in the Department's per capita health care costs. To accomplish these three linked goals, the *Quality Strategy* is supported by seven priorities, which include:

(1) Improve patient safety;
(2) Deliver effective, efficient, affordable care;
(3) Engage persons and families in their health;
(4) Enhance communication and coordination of care;
(5) Advance prevention;
(6) Foster healthy communities; and
(7) Eliminate health disparities.

All six editions of the *Quality Strategy* can be found at:
http://www.dhcs.ca.gov/services/Pages/DHCSQualityStrategy.aspx.

Baseline Assessment

The CPO conducted a comprehensive baseline assessment of QI activities in DHCS from April-December 2012. The purpose of the assessment was to: (1) establish a Department-wide baseline of QI activities in three areas: clinical care, health promotion and disease prevention, and administration; (2) identify quality metrics that were being collected by the Department but which were not specifically linked to QI activities; (3) identify gaps in the Department's QI activities; and (4) obtain recommendations for additional QI efforts.

The assessment team, led by the CPO, developed and pilot tested a Quality Improvement Survey (QIS) instrument that was then administered to all operational units within the Department. The *Baseline Assessment for Quality Improvement Activities in DHCS: Methods and Results* is available at
http://www.dhcs.ca.gov/services/Pages/DHCSQualityStrategy.aspx.

[1] Desiree Backman was an IPHI employee embedded in DHCS.

Quality Improvement Evaluation System

The CPO and former Quality Scientist (QS), Brian Paciotti, PhD, MS,[2] developed an evaluation system to assess the performance of existing QI activities and collect new QI activities annually. The templates and detailed instructions were launched by the Office of the Medical Director in September 2013.

In February 2016, the CPO initiated plans to further streamline the QI evaluation system. The CPO, Social Media Specialist (SMS), Rachel Robins,[3] former Quality Scientist (QS), Zhiwei Yu,[4] and former Research Coordinator (RC), Rachel Abbott [5] worked with staff throughout the Department to complete their QI project summaries. The summaries provide a snap-shot of each project's QI efforts and results, to date. These summaries are linked to the *Quality Strategy*, *2018* and available for public review at http://www.dhcs.ca.gov/services/Documents/QIProjects.pdf.

Quality Improvement Training

The former Clinical Quality Officer (CQO), Ulfat Shaikh, MD, MPH, MS,[6] presented a curriculum in QI for interdisciplinary DHCS staff as part of the DHCS Adult Medicaid Quality Grant. Training commenced in January 2014 and continued through July 2015. Training sessions occurred 1-2 times per month and were delivered face-to-face by the former CQO in interactive group sessions. The CQO also presented a training session on Basics of Lean Management at a DHCS Learning Series session.

Quality Improvement Presentations

In June 2012, the CPO and former DHCS Medical Director presented on the emerging *Quality Strategy* to DHCS executive staff. Since then, they provided updates about the *Quality Strategy* to executive staff annually as each edition was released. They also developed and implemented a webinar to present the *Quality Strategy* to stakeholders statewide in June 2012.

The CPO presented the *Quality Strategy, 2012* and emerging areas of the *Quality Strategy, 2013* at the Drug Utilization Review Board meeting in February 2013 and the DHCS new employee orientation in March, June, July, and August 2013. The CPO and former DHCS Medical Director presented the results of the baseline assessment of QI activities and new *Quality Strategy* ideas at the supervisors and above meeting in March 2013. The CPO also presented the new elements of the *Quality Strategy, 2013* at the Managed Care Medical Directors meeting in April 2013. In August 2013, the CPO and former DHCS Medical Director presented the *Quality Strategy, 2012* and lessons

[2] Brian Paciotti was an IPHI employee embedded in DHCS.
[3] Rachel Robins was an IPHI employee embedded in DHCS.
[4] Zhiwei Yu was an IPHI employee embedded in DHCS.
[5] Rachel Abbott was an IPHI employee embedded in DHCS.
[6] Ulfat Shaikh was an IPHI employee embedded in DHCS.

learned during a *National Quality Strategy* webinar hosted by the Agency for Healthcare Research and Quality. For slides and a transcript of the presentation, go to https://www.ahrq.gov/workingforquality/events/webinar-2013-annual-progress-report-update.html.

In February 2014, the CPO was invited by the former DHCS Medical Director to present models of care during a panel session at the American College of Preventive Medicine Conference, *Preventive Medicine, 2014*. In October 2014, the CPO presented *Moving the System from Sick Care to Health Care* at the University of California, Davis Department of Public Health's graduate seminar.

In February 2015, the CPO delivered a presentation, titled *Quality Improvement in the California Department of Health Care Services: Strategy, Culture & Momentum* at the American College of Preventive Medicine Conference, *Preventive Medicine, 2015.*

In July 2016, the CPO presented elements of the *Quality Strategy* in a presentation, titled *Advancing Prevention in the Medi-Cal Delivery System*, to the California Primary Care Association's Board of Directors. The CPO and former DHCS Medical Director also presented the *Quality Strategy* to professionals participating in the DHCS Academy[7] in August 2016 and September 2017.

Using Data to Drive Quality Improvement

Data System Refinement

In 2013, the former QS, Brian Paciotti, worked with the DHCS Data Research Committee to build the complex queries necessary to extract MIS/DSS data requested by external researchers, and helped define processes (e.g., privacy, security, forms) required to provide data to approved researchers. Specifically, the former QS:

- Sent data to Dr. Todd Gilmer in August 2013 for the Medicaid utilization project;
- Created a preliminary dataset for Dr. Ushma Upadhyay to investigate the distance to receive a pregnancy termination procedure in Medi-Cal;
- Collaborated with the Medi-Cal Incentives to Quit Smoking (MIQS) team and the Research Triangle Institute (RTI) to identify data fields within MIS/DSS that would be required to support the evaluation of MIQS and provided a list of fields related to encounter/claims data, eligibility, and providers that could be used to measure specific process and outcomes of interest to RTI.
- Worked with the DHCS Pharmacy Division to perform initial queries to evaluate the prevalence of smoking among Medi-Cal members; and

[7] DHCS Academy is a comprehensive training program for DHCS managers and supervisors. Its purpose is to help people grow their understanding of Medicaid, Medi-Cal, and the broader health care environment, as well as build skills in policy analysis, fiscal analysis, measuring performance, and transforming DHCS into a more efficient and effective organization.

- Assisted in defining required fields and created SQL code to extract data, linking Cancer Registry data with Medi-Cal data.

Quality Improvement Maturity Survey

The former CQO worked with the former DHCS Medical Director and staff to identify a validated questionnaire to assess the culture and readiness for QI at DHCS. Results from the Quality Improvement Maturity Survey were published in the DHCS Newsletter and presented by the former CQO at DHCS leadership meetings.

Pediatric Asthma Analysis

The former CQO worked with DHCS staff and the University of California, Davis health services researchers to analyze data on pediatric asthma within the California Health Interview Survey (CHIS). Several issues affecting asthma care and a number of public policy strategies to remedy the issues were published in a manuscript, titled *Population Health Considerations for Pediatric Asthma: Findings from the 2011–2012 California Health Interview Survey.* The manuscript was published in the journal *Population Health Management* in 2016: https://www.liebertpub.com/doi/10.1089/pop.2015.0015.

Child Health and Disability Prevention (CHDP) Program

From May 2014 to July 2015, the former Special Advisor for Behavioral Health Integration, in collaboration with the DHCS Managed Care, Systems of Care, and Medi-Cal Dental Services Divisions, co-led a workgroup to analyze the impact of managed care and the CHPD Program on the provision of Early and Periodic Screening, Diagnosis, and Treatment. The workgroup convened stakeholder meetings and developed final recommendations for DHCS executives, which were discussed with staff from the Centers for Medicare and Medicaid Services (CMS) in March 2015.

Health Disparities Fact Sheets

The former QSs, Brian Paciotti and Zhiwei Yu, and CPO worked with a DHCS Research Scientist, Patricia Lee, PhD, to analyze data and review health disparities fact sheets, which are linked to the seven priorities of the *Quality Strategy*. The DHCS Research Scientist continues to develop fact sheets that are available at: http://www.dhcs.ca.gov/dataandstats/reports/Pages/DisparitiesFactSheets.aspx. These fact sheets contribute to the deliverables specified in the Department's IA with the California Department of Public Health's Office of Health Equity.

Deliverable B

Provide strategic counsel and recommendations to improve population health management in Medi-Cal. Activities may include, but are not limited to: describing the epidemiology of Medi-Cal emergency department super-utilizers and their health services utilization patterns, and making recommendations for how their urgent care needs could be more effectively met; describing Medi-Cal's top 1, 5, and 20 percent utilizers, as defined by expenditures, and their health services utilization patterns, and making recommendations for how their care could be better coordinated and managed; and describing models of care that connect community resources, public health, and clinical services to achieve optimal "whole person" care.

Outcomes

High-Cost Member Reports ("Super-Utilizers")

Former QS, Brian Paciotti, created SQL queries and implemented data mining algorithms to create a high-cost member/"super-utilizer" report. The former QS produced a "super-utilizer" summary that profiles various demographic, disease traits, and utilization patterns among members in various high-cost cohorts. The CQIC worked with the Chief of the Research and Analytic Studies Division (RASD) at DHCS to create a presentation on "super-utilizers" in Medi-Cal, which was presented at a Data Symposium on High Utilizers of Medi-Cal Services on March 4, 2015. The presentation, *Understanding Medi-Cal's High-Cost Populations*, focused on trends in Medi-Cal eligibility, enrollment, spending, and caseload. Because of the high demand for this information, the CQIC and Chief of RASD again presented the findings of their analysis in a webinar on June 9, 2015. Well over 500 persons registered for the webinar, which can be found at: https://naswcanews.org/webinar-data-presentation-on-high-utilizers-of-medi-cal-services/.

Further efforts to improve population health management in Medi-Cal

Please refer to Deliverables for A, C-E, G-I, and L for efforts to improve population health management in Medi-Cal.

Deliverable C

Provide leadership, policy development, and research capabilities to achieve effective integration and coordination of behavioral health services in key DHCS initiatives such as Cal MediConnect, the transition of the Low Income Health Program populations into Medi-Cal managed care, the expansion of childless adult populations to Medi-Cal managed care, and implementation of managed care for Medi-Cal members in rural counties.

Outcomes

Behavioral Health Integration Report and Executive Summary

IPHI's former Special Advisor for Behavioral Health Integration, Efrat Eilat, PhD, MBA,[8] worked closely with the former DHCS Medical Director, Deputy Director of Mental Health and Substance Use Disorder Services, Karen Baylor, PhD, LMFT, the CPO, and national and local experts to develop a vision and action plan, which supports the integration of physical, behavioral and mental health, and social services for Californians.

The former Special Advisor worked with the CPO, former RC, former DHCS Medical Director, and internal and external partners to produce a draft report, titled *Recommendations to the California Department of Health Care Services for Behavioral Health Integration*. This report was accompanied by an executive summary on the topic in 2015.

Deliverable D and E

Develop a Systems-level Quality Management Strategy for the Delivery System Reform Incentive Payments (DSRIP) program of the Department's 1115 Medicaid Waiver. This strategy shall make specific recommendations for DHCS and individual hospital systems to optimize the achievement of the milestones identified in each hospital system plan involved in the DSRIP program. Provide ongoing evaluation of the DSRIP program, including providing at least semi-annual reports that assess general and specific areas of improvement. This evaluation shall address the interventions identified in each hospital system plan such as: implementation of electronic health records and use of other health information technology, implementation of patient centered medical homes, use of evidence-based population health management methods, delivery of complex care, implementation of patient safety methods, and integration of clinical services to improve the coordination and continuity of care.

Outcomes

DSRIP

Between October 1, 2011 and September 30, 2015, IPHI provided ongoing technical support to optimize achievement of DSRIP program milestones for the 21 designated public hospitals that participated. Support included providing recommendations for the selection of severe sepsis and stroke targets, and assessment of interventions implemented by hospitals based on published literature and national guidelines. Semi-annual and annual reports from participating public hospitals, as well as aggregate reports from the

[8] Efrat Eilat was an IPHI employee embedded in DHCS.

California Association of Public Hospitals—Safety Net Institute, were rigorously reviewed. Individual feedback to hospitals was provided in written format. These feedback reports assessed implementation of milestones and addressed general as well as specific ways to improve reporting and implementation. Technical assistance and mentoring was provided to hospitals on best practices and strategies related to their QI initiatives. The CQIC and former CQO evaluated the DSRIP experience and published *Observations from California's Delivery System Reform Incentive Payment Program* in the *American Journal of Medical Quality*, March 2017, which is available at http://journals.sagepub.com/doi/full/10.1177/1062860617696579.

Public Hospital Redesign and Incentives in Medi-Cal (PRIME) Program

IPHI participated in regular development and planning meetings to inform the PRIME portion of California's 1115 Medicaid Waiver, Medi-Cal 2020, with a focus on population health projects. Development of these projects, led by the CPO, included the Million Hearts® Initiative, Cancer Screening and Follow-Up, and Obesity Prevention and Hospital Healthier Food Initiative. In total, these projects represent an investment of $556.7 million in prevention by Medi-Cal and CMS (http://www.dhcs.ca.gov/provgovpart/Pages/WaiverRenewal.aspx).

Since receiving approval of the Waiver by CMS on December 30, 2015, the CPO has provided technical support, focusing primarily on prevention objectives. In addition, the CPO has participated in a PRIME Topic-specific Learning Collaborative for Obesity Prevention and the Hospital Healthier Food Initiative on April 24, May 29, June 26, and August 28, 2018.

PRIME Presentation

The CPO presented *Understanding Perspectives on Health and the Obesity Epidemic in California Communities* at the first annual PRIME Ed Conference in November 2017.

Deliverable F

Convene and lead a multi-disciplinary Medi-Cal Performance Advisory Committee (MPAC). MPAC shall be composed of approximately nine persons having demonstrated expertise in relevant clinical sciences, systems thinking, quality improvement, and/or organizational behavior. MPAC shall routinely meet about quarterly, and more frequently if needed, and issue periodic reports summarizing its findings and recommendations.

Outcomes

Because of the scale and complexity of the scope of work undertaken by IPHI, the CQIC proposed and DHCS agreed that an external advisory group composed of experts in QI and

population health would be very useful. The overarching purpose of MPAC was to advise IPHI and the Department on how to most effectively advance health, clinical quality, and outcomes. Specific goals for MPAC members included:

- Review and comment on the Department's evolving *Quality Strategy*;
- Review and comment on QI activities being pursued by Medi-Cal and identify where additional efforts may be needed;
- Advise on building a culture of quality at DHCS and implementing large-scale, sustainable delivery system reforms;
- Review and comment on DSRIP status reports and advise on how to optimize achievement of QI targets; and
- Otherwise provide input on topics proposed by DHCS and the CQIC.

The CQIC secured the panel of experts and four MPAC meetings were held between 2012 and 2014, with each meeting informing the goals. These meetings were especially critical as the QI strategies were being formed and put into action. The final MPAC meeting was held on December 15, 2014. No further meetings of the MPAC were held pursuant to the direction of the Department.

Deliverable G

Support the development and management of lifestyle programs to optimize population health with particular attention to: smoking cessation, nutrition, physical activity, and alcohol/substance abuse.

Outcomes

Tobacco Cessation

Archimedes Modeling

In 2013, the former DHCS Medical Director requested that the Archimedes simulation modeling tool developed by Kaiser Permanente to predict health outcomes for a variety of health interventions be used to project various outcomes associated with smoking cessation programs. The former QS, Brian Paciotti, and former RC (then intern), Rachel Abbott, used this simulation modeling tool and produced preliminary results that could help Medi-Cal shape policies related to smoking cessation programs.

Tobacco Summit to Advance Quit Attempts

The CPO was invited by the Centers for Tobacco Cessation and California Smoker's Helpline to attend a statewide tobacco summit in January 2013. At the summit, an action plan was developed to increase the quit attempt rate in California from 60.7 percent to 66.8 percent by 2014. The CPO offered several DHCS tobacco cessation approaches to the plan, including the

Medi-Cal Incentives to Quit Smoking Program (MIQS), promotion of MIQS through *Welltopia by DHCS,* and the establishment of a standard of care for treating tobacco use in the Medi-Cal managed care plans by implementing the recommendations included in the *Treating Tobacco Use and Dependence: 2008 Update, Clinical Practice Guideline.* The CPO also continued collaborating with the MIQS Program Manager to provide updates on DHCS progress to help meet the target.

Increasing Food Availability for Medi-Cal Families

The CPO, in partnership with the California Department of Social Services (CDSS), led efforts to increase CalFresh enrollment among the nearly 2 million Medi-Cal members who were eligible but not enrolled in the nutrition assistance program. The CPO, former QS, Brian Paciotti, and two former DHCS analysts, Tianna Morgan and Jennifer Byrne, worked with CDSS to set a target of increasing CalFresh enrollment by 5 percent from January 2014 through January 2015. The target for this QI project was surpassed in 2015, according to CDSS reports.

Centers for Medicare and Medicaid Services (CMS) Prevention Learning Network

Hypertension Control

In late 2013, the CPO submitted a proposal to, and received approval from, CMS to participate in the Medicaid Prevention Learning Network. The aim of the proposal was to align DHCS programs and services, measures and data, information technology, the Medi-Cal health care delivery system, and public, non-profit, and private sector partnerships to support the Million Hearts® initiative (http://millionhearts.hhs.gov/aboutmh/overview.html).

The IPHI team, led by the CPO, and several DHCS staff launched a one-year QI collaborative to improve hypertension control rates among nine Medi-Cal Managed Care Plans (MCPs). The QI collaborative included quarterly webinars and links to local, state, and national resources that consisted of materials and consultations with subject matter experts. Participating MCPs demonstrated an average increase of 5.0 percentage points in their rates of controlled hypertension. A detailed description of the QI collaborative and positive outcomes are captured in the manuscript, titled *Implementing a Quality Improvement Collaborative to Improve Hypertension Control and Advance Million Hearts® among Low-income Californians, 2014-2015.* The manuscript was published in *Preventing Chronic Disease*, July 2017 (https://www.cdc.gov/pcd/issues/2017/16_0587.htm).

The manuscript also garnered media attention. In July 2017, *Kaiser Health News* (https://californiahealthline.org/news/state-led-effort-helps-improve-blood-pressure-control-among-low-income-patients/) and *The Mercury News* (http://www.mercurynews.com/2017/07/27/medi-cal-hypertension-study-7-of-9-health-plans-saw-improvements/) featured interviews with the CPO and former DHCS Medical Director.

In addition, the CPO presented the findings of the QI collaborative at the DHCS Learning Series in September 2017, PRIME webinar in October 2017, and the Global Medi-Cal Drug Use Review Board in September 2018.

Aspirin Prescribing and Use Study

To support the Million Hearts® initiative, the CPO, former QS, Zhiwei Yu, and former RC worked with the DHCS Pharmacy Division to complete an aspirin QI study. The purpose of the study was to determine whether the rate of Medi-Cal members who are appropriately prescribed and take aspirin is accurately reflected in Fee-For-Service (FFS) claims data. The former QS analyzed results from the survey, which helped to inform the DHCS Pharmacy Division and other QI efforts in the Department. In September 2017, the former QS presented the results of the study at the Global Medi-Cal Drug Use Review Board.

Partnerships to Advance Cardiovascular Health

The former RC participated on the advisory committee for the Healthy Hearts California Coalition, organized by the California Department of Public Health. The CPO partnered with the Right Care Initiative and Million Hearts® at the national level to advance cardiovascular health among Medi-Cal members. In addition, Million Hearts® is part of PRIME.

Alcohol Abuse

Alcohol Screening, Brief Intervention, and Referral to Treatment (SBIRT) Implementation

The former Special Advisor co-led a multi-divisional project to implement the Alcohol Screening, Brief Intervention, and Referral to Treatment (SBIRT) benefit for adult Medi-Cal members in primary care settings throughout the state. The former Special Advisor submitted a proposal and was awarded a grant from the California Health Care Foundation in May 2014 to: (1) provide 30 face-to-face trainings to primary care providers, clinic administrators, medical directors, and others across the state, on how to effectively deliver SBIRT to those with alcohol disorders; and (2) provide a three-part evaluation of the training efforts. The former Special Advisor managed the development of a subcontract with the University of California, Los Angeles, Integrated Substance Abuse Programs, who provided the trainings and evaluation, and executed a separate agreement with Harbage Consulting to support DHCS with outreach and ongoing communication with providers. The Special Advisor supported the grant objectives from October 2014-June 2015.

Obesity Prevention

Background

IPHI, in partnership with DHCS, is developing and testing a 5-year (2015-2020) obesity prevention project, called Koa Family (formerly known as Project Connect), to reduce the risk and prevalence of obesity and projected health care costs among low-income Californians. This project is funded by the United States Department of Agriculture Supplemental Nutrition Assistance Program-Education (SNAP-Ed) and CAL FIRE, in partnership with the California Department of Social Services.

Formative Research

Between 2015 and 2016, all formative research was completed for Koa Family, including a review of systematic reviews of obesity prevention and management literature, key informant interviews, focus groups, and video ethnographies. All results from the formative research can be accessed at: http://www.dhcs.ca.gov/formsandpubs/publications/Pages/Obesity-Prevention-Project.aspx.

Program Development and Evaluation Preparation

Based upon the formative research, the team, led by the CPO, has designed the intervention and evaluation, selected low-income mothers as the target audience, and is preparing to conduct a Randomized Controlled Trial (RCT) and economic evaluation to test the effectiveness of the intervention.

At the core of the intervention, Koa Family is grounded in wholehearted living, a values-oriented approach to life that centers on authenticity, where values constitute an individual's guiding force. Wholehearted living touches every aspect of life, from eating nourishing foods, to enjoying enough physical activity, to having support of family and friends in good and challenging times, to joining together with neighbors to stand up for positive changes, and more. Unfortunately, for many low-income Californians, the idea of wholehearted living is an aspiration and not a reality. Koa Family: Strong, Healthy, Whole is an approach designed to make wholehearted living available for all.

Koa Family is a 6-month journey to establish "micro-communities" of mothers supporting one another in healthy, wholehearted living. The foundation of this approach is a new, custom-designed Whole Health Program (WHP) that addresses mind, body, and spirit. Low-income mothers living in the same community will meet weekly to experience how to cultivate wholehearted living through healthful eating, physical activity, mindfulness and meditation, coping with stress, connecting to local resources, building a growth mindset, and more. The goal is to support healthier and more resilient, mindful, and empowered mothers. The weekly experiences will provide a safe place and touchstone for mothers to

navigate their journeys. The weekly experiences are informed, in part, by the Centers for Disease Control and Prevention's National Diabetes Prevention Program, Family Hui, SNAP-Ed, and new approaches by the IPHI and DHCS team. This part of the intervention has been developed and relevant components have been field tested with low-income mothers.

Mothers in the WHP will receive additional encouragement and access to local resources through a text messaging campaign. A secure Facebook group will serve as a virtual meeting space for mothers to continue their journeys beyond the weekly sessions. Finally, mothers will be invited to take part in a neighborhood tree planting campaign to create real, long-lasting, healthy changes to the environment in which they live. This activity will also build empowerment among the participants and foster a growth mindset. The team is in the process of completing the communication arm of the intervention and the CPO secured funding from CAL FIRE to support the tree planting and stewardship effort.

Koa Family will be introduced in the Mack Road neighborhood of Sacramento and the City of Woodland from February-August 2019. It will be evaluated for effectiveness among 190 low-income, SNAP-Ed eligible mothers using a RCT study design, the gold standard of evidence. Outcomes include changes in Body Mass Index, diet, physical activity, and quality of life, measured at 3, 6, 9, and 12 months from baseline. An economic analysis will assess the cost-effectiveness of Koa Family, while qualitative methods will identify mediating factors related to the study outcomes. The IPHI team has developed and field tested the evaluation instruments, and has developed all recruitment materials, screeners, and consent forms. They also secured approval for the study protocol from the state's Committee for the Protection of Human Subjects (CPHS) on January 11, 2018. An amendment to the CPHS application describing a new qualitative component was approved June 19, 2018. In addition, the team obtained approval from the University of California, Davis Institutional Review Board on June 29, 2018.

The team will continue to prepare for the launch of the RCT and coordinate all study logistics with their evaluation partner, Westat; WHP partner, Lead4Tomorrow; communication partner, Marketing by Design; and tree planting partner, Davey Resource Group. After the intervention ends in August 2019 and the 9- and 12-month follow-up data collection has been completed, the team will analyze the data, create a report of the findings, and identify recommended action steps to inform evidence-based practice and policy at the local, state, and national levels.

Koa Family Presentations

Members of the Koa Family team have presented the formative research and intervention approach at two SNAP-Ed convenings, a legislative briefing, and two American College of Preventive Medicine Conferences from 2016-2018.

Deliverable H and I

Evaluate and analyze the delivery of clinical preventive services; develop and implement strategies to improve network performance in quality measures in this domain. Identify and encourage adoption of effective (i.e., improve health while reducing cost) population health strategies by DHCS contracted plans, including but not limited to: recommendations for a standardized Health Risk Appraisal, minimum standards of preventive care, and recommendations for how the effectiveness and utility of these services could be routinely monitored and evaluated.

Outcomes

Medi-Cal Managed Care Plan Health Promotion Survey

The CPO, CQIC, former QS, former DHCS Medical Director, and a former DHCS Analyst conducted a study to inventory health promotion interventions delivered through 21 MCPs; identify attributes of the interventions that plans judged to have the greatest impact on their members; and determine the extent to which the plans refer members to community assistance programs and sponsor health-promoting community activities.

Results showed that health promotion interventions judged to have the greatest impact on Medi-Cal members were delivered in various ways; educational materials, one-on-one education, and group classes were delivered most frequently. Behavior change, knowledge gain, and improved disease management were cited most often as measures of effectiveness. Across all interventions, median educational hours were limited and median Medi-Cal member participation was low. Most interventions with greatest impact focused on tertiary prevention. There were mixed results in referring members to community assistance programs and investing in community activities. A manuscript, titled *Health Promotion Interventions for Low-Income Californians Through Medi-Cal Managed Care Plans, 2012*, was published in *Preventing Chronic Disease,* November 2015 (http://www.cdc.gov/pcd/issues/2015/pdf/15_0269.pdf).

The recommendations from the study suggest that DHCS should determine: (1) how MCPs assess health risks among Medi-Cal members and how risk-related data are used to inform intervention delivery; (2) the best approach to set QI targets and accountability systems, starting with the leading causes of preventable mortality and illness, to ensure that evidence-based interventions are delivered to Medi-Cal members in a timely, prudent, and effective manner; (3) methods to optimize the delivery of the United States Preventive Services Task Force A and B recommendations and other evidence-informed best practice interventions; (4) opportunities to ensure that health care and community prevention efforts are available, integrated, mutually reinforcing, and address multiple determinants of health; and (5) methods to implement a monitoring system for tracking the delivery and

performance of health promotion interventions. Such a system could help decision-makers deploy resources to the most effective programs while curtailing ineffective programs.

The CPO and former RC attended quarterly Health Education, Cultural and Linguistics Workgroup (HECLW) meetings, representing all MCPs, and engaged in discussions with the Health Educators and others on the best ways to advance the five recommendations.

Staying Healthy Assessment

The CPO and former RC conducted a review of the Department's version of a Health Risk Assessment, called the Staying Healthy Assessment (SHA), which is administered by providers to Medi-Cal members.

The CPO and former RC worked with the former DHCS Medical Director and managed care staff to modernize the SHA by identifying and providing a core set of valid and reliable questions. The former RC also participated in HECLW meetings to redesign the SHA.

Medi-Cal Managed Care Plan Performance on HEDIS Measures

The CQIC, working with the CPO and former QS, analyzed MCP HEDIS performance metric results since 2005. Of the 40 measures for which data had been collected, data were available for 17 measures that had not changed in how they were calculated, were still being monitored, and have five or more years of results. Using a three-year moving average, these data were tracked over time and showed overall mixed results with few examples of clearly improved outcomes. The CQIC presented these data to more than 200 MCP representatives at a meeting of the California Association of Health Plans on February 24, 2016.

Deliverables J and K

Foster partner relationships between DHCS and members by strong bi-directional communication with respect to needs, responsibilities, and preferences related to healthy lifestyle. Design a strong member education, communication, and intervention platform that drives improvement in population health (e.g., a robust website, the use of social media).

Outcomes

Welltopia by DHCS Facebook Page

The CPO led efforts, with support from a team, to build, pilot test, and implement a DHCS wellness Facebook page, titled *Welltopia by DHCS*. The purpose of the Facebook page is to engage Californians, especially mothers, in their well-being and to help them realize their

full, healthful potential. It also creates a space for community members to share their ideas about wholehearted living. The SMS and former DHCS Assistant to the Medical Director, Camlyn McCracken, developed posts for the Facebook page with oversight from the CPO and former DHCS Medical Director.

The Facebook page, located at www.facebook.com/DHCSWelltopia, was launched on April 24, 2013, with the goal of achieving 10,000 "likes" by December 31, 2013. The initial goal was exceeded, as were all annual goals set thereafter. The page currently has over 114,000 "likes" and 112,000 followers.

Population Health Improvement Website

As a result of feedback received from roundtable discussions with low-income Californians in August 2013, the CQIC, CPO, and IPHI's Chief Administrative Officer (CAO), Allyn Fernandez-Ami, MPH, secured $50,000 from the California Health e-Quality Program to develop and implement a population health improvement website that supports *Welltopia by DHCS* and enhances the availability of prevention and wellness resources for Medi-Cal members. The website, found at www.MyWelltopia.com, launched in February 2015. The website features six areas where users can find useful, trustworthy information, including Well Body, Well Mind, Well Spirit, Jobs & Training, Health Care, and Basic Needs.

The SMS and former RC continuously monitored and evaluated the site's activity using Google Analytics in order to assess the site's reach and usefulness. The site received positive feedback and attracted attention and content from local and state partners, including the California Departments of Public Health and Social Services. The site has received over 88,675 page views.

The website's success and high-quality was recognized with the Digital Government Achievement Award, 2015 from the Center for Digital Government, Government-to-Citizen State Government Category: http://www.govtech.com/cdg/digital-government-achievement/Best-of-the-Web--Digital-Government-Achievement-Awards-2015-Winners-Announced.html.

Choosing Wisely® Public Deliberations with Medi-Cal Members

From 2015-2016, the CPO chaired the Center for Healthcare Decision's (CHCD) *Doing What Works* (DWW) Advisory Committee, which partnered with the Choosing Wisely® initiative to engage Medi-Cal members and those receiving commercial insurance in a public deliberation process about overuse and misuse of medical services. The partnership between DHCS and CHCD represented the first time DHCS engaged Medi-Cal members using a public deliberation process. The CPO co-authored a manuscript detailing the deliberation process and outcomes, titled *Assessing Social Values for California's Efforts to*

Reduce the Overuse of Unnecessary Medical Care. The manuscript was published in *Health Expectations*, November 2017: https://onlinelibrary.wiley.com/doi/full/10.1111/hex.12644.

Deliverable L

Support a strong prevention focus across all DHCS programs.

Outcomes

Deliverables A, D-E, G-K, and M demonstrate IPHI's efforts to support a strong prevention focus across DHCS programs.

Deliverable M

Provide executive-level strategic advice, thought leadership and technical assistance through in-person, teleconference and other means.

Outcomes

The IPHI team provided executive- and program-level strategic advice, thought leadership, and technical assistance in the following areas:

- The CQIC (Kenneth W. Kizer, MD, MPH) met with DHCS leadership and staff regularly for strategic and tactical discussions on all aspects of MCQuIP, and provided direction to the CPO.
- The CPO (Desiree Backman, DrPH, MS, RD) met with DHCS leadership and staff daily to provide leadership and support on the *Quality Strategy*, prevention and health promotion system-wide, obesity prevention, member communication approaches, research and evaluation, and IPHI administrative matters. She also provided day-to-day oversight of the RS, PE, SMS, and all former team members.
- The CAO (Allyn Fernandez-Ami, MPH) provided technical assistance and fiscal management of the IA.
- The PE (Orion Stewart, PhD, MUP) provided support on all aspects of the obesity prevention project, with an emphasis on program evaluation, and advised on QI.
- The SMS (Rachel Robins) provided support for all IPHI projects, with an emphasis on health promotion communication.

Deliverable N:

Provide thought leadership and analytical support to advance DHCS policies and programs, such as the California State Innovation Model grant and the 1115 Waiver.

Outcomes

Let's Get Healthy California and California State Innovation Model

The CQIC served as a member of the Governor's Let's Get Healthy California Task Force, and the CPO provided staff support on DHCS assignments related to the Task Force, including weekly meetings and health indicator development. The Let's Get Healthy California Task Force Final Report was released December 12, 2012 (http://www.chhs.ca.gov/LGHC/__Let%27s%20Get%20Healthy%20California%20Task%20Force%20Final%20Report.pdf).

The CPO served as a DHCS liaison for the California State Innovation Model (CalSIM) Workgroup—Living Well: Preventing and Managing Chronic Disease. The recommendations from this and four other workgroups were used to inform the development of a State Health Care Innovation Plan proposal. The CPO also served on a CalSIM workgroup to define the roles and responsibilities, skills and core competencies, and reimbursement options for Community Health Workers in the health care system. In addition, the CQIC served as the principal investigator and senior scientific advisor on the CalSIM Planning Grant (through an interagency agreement with the California Health and Human Services Agency) and provided feedback on the innovation plan proposal.

Further efforts to advance DHCS policies and programs

Please refer to deliverables A-M for a description of IPHI's contributions to advancing DHCS policies and programs in multiple areas, including the 1115 Waiver.