Public Hospital Redesign and Incentives in Medi-Cal (PRIME) 5-Year PRIME Project Plan

Application due: **by 5:00 p.m. on April 4, 2016**

Alameda Health System

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General Instructions

Thank you for your interest in the Public Hospital Redesign and Incentives in Medi-Cal (PRIME) program. Your response to this 5-Year PRIME Project Plan ("Plan") will enable the Department of Health Care Services (DHCS) to assess if your entity can meet the requirements specified in the waiver Special Terms and Conditions (STCs) and has the capacity to successfully participate in the PRIME program.

This 5-Year PRIME Project Plan is divided into 10 sections which are structured around the Medi-Cal 2020 Waiver's Special Terms and Conditions (STCs). Additional information about the PRIME program requirements can be found in the PRIME Projects and Metrics Protocol (Attachment Q) and Funding Mechanics (Attachment II) of the STCs.

Scoring

This Plan will be scored on a "Pass/Fail" basis. The state will evaluate the responses to each section and determine if the response is sufficient to demonstrate that the applicant will be able to effectively implement the selected PRIME Projects while simultaneously conducting the regular business of operating the hospital system.

In the event that a response to a Plan section is not sufficient and fails to meet review criteria, the applicant will have an opportunity to revise the response(s) to meet the state's satisfaction. Applicants will have three (3) days to complete the revisions upon receiving feedback from the state.

Please complete all sections in this 5-Year PRIME Project Plan, including the Appendix (the infrastructure-building process measure plan as applicable), and return to Tianna Morgan at PRIME@dhcs.ca.gov **no later than 5:00 p.m. on April 4, 2016**.

Section 1: PRIME Participating Entity Information

Health Care System/ Hospital Name Alameda Health System (AHS)

Health Care System Designation (DPH or DMPH) DPH

Section 2: Organizational and Community Landscape

The purpose of this section is to provide DHCS with an understanding of the demographic makeup of the community the applicant serves, the target population that will benefit from the PRIME activities, and any other relevant information that will help inform the state's review of this Plan.

2.1 Community Background. *[No more than 400 words]*

Drawing on available data (e.g., DHCS, Office of Statewide Health Planning and Development, U.S. Census Bureau), summarize the health care needs and disparities that affect the health of your local community.

Alameda Health System (AHS) is the integrated public health system serving Alameda County. The overwhelming majority of AHS' patients live in communities characterized by significant cultural and linguistic diversity, and by high levels of poverty and associated poor health status. While Alameda County overall ranks well on most health status indicators, countywide statistics mask severe health disparities prevalent in the low-income, vulnerable communities AHS serves—here, residents' average life expectancy is up to 15 years *lower* than that of residents of affluent neighborhoods. Underlying this are high rates of devastating chronic conditions, and acute, life-threatening illnesses and injuries. These are symptoms of deeper, systemic causes of poor health: social, economic, environmental, and legal disparities ("social determinants").

The leading causes of death—cancer, heart disease, stroke and COPD—are similar across communities; however, mortality rates are significantly higher in the county's low-income communities. For example, the cancer mortality rate is close to 200/100,000 in high-poverty neighborhoods versus 140/100,000 in low-poverty neighborhoods. Barriers to access to screening play a large part in this.

Those living in poverty are likely to have multiple chronic conditions. Barriers to access—especially to primary care—and social determinants (e.g., lack of stable housing, food insecurity), lead to high use of the Emergency Department (ED) and inpatient admissions, fragmented care, and poor medication management.

The infant mortality rate (deaths/1,000) in high-poverty areas is higher—5.8 (Oakland) and 5.3 (Hayward)—than in the county overall (4.3). Among Blacks in these communities, the rate is >8.0, and the low birth weight (LBW) rate (11.5) is almost double that for Whites (6.6). Risk factors for LBW—obesity, diabetes, hypertension, smoking, substance use, teenage pregnancy—are more prevalent in these communities; these are exacerbated by barriers to access to prenatal care. LBW infants begin life at a significant disadvantage, and are at high risk for poor health status in childhood and adulthood.

Alameda County's violent crime rate is high compared with California's. Rates are highest in high-poverty neighborhoods, compounding the stress of living in poverty. This manifests in high levels of stress-related illness and high ED visit rates for severe behavioral health disorders. AHS' patients experience high rates of intentional and unintentional injury, and associated pain. Similar to communities across the US, pain treatment has resulted in high rates of debilitating opioid dependence among AHS' patients.

AHS plans to leverage its PRIME projects to address the issues described above.

2.2 Population Served Description. *[No more than 250 words]*

Summarize the demographic make-up of the population included in your hospital's service area, including information about per capita income, age, race, ethnicity, primary language, etc.

AHS' integrated health system spans Alameda County, the third most diverse county in the US. The county's total population is 1.64 million (2016), an 8.7% increase over 2010, compared with a 5.6% growth rate for California overall.

Income: Alameda County's average household income is relatively high. However, this masks the high levels of poverty in the communities served by AHS where 20+% of residents have incomes falling under the Federal Poverty Level (FPL), and unemployment rates are twice that of the county overall. Most AHS patients are covered by Medi-Cal, followed by Medicare. The remainder is largely undocumented persons covered by the county.

Age: Alameda County's median age is 38.1 versus 36.4 for California. However, the age distribution varies across AHS locations. 48% of Highland Hospital's patients are age 20–49, versus 22% for San Leandro Hospital, and 18% for Alameda Hospital. The latter have high portions of patients age 70+: 37% and 50%, respectively; compared with 9% of Highland's patients.

Race/Ethnicity and Language. Alameda County's population is 34% White, 27% Asian/Pacific Islander, 23% Hispanic/Latino, and 12% Black. 43% speak a language

other than English at home. These statistics mask the even greater diversity of the communities AHS serves. AHS' Highland Hospital reports 38+ preferred languages among its patients. Highland's patients are 38% Black, 27% Hispanic/Latino, 13% Asian/Pacific Islander, and 19% White. In contrast, the majority of patients served by AHS' Alameda Hospital are White (52%); 42% of AHS' San Leandro Hospital's patients are Black and 31% are White.

2.3 Health System Description. *[No more than 250 words]*

Describe the components of your health care system, including license category, bed size, number of clinics, specialties, payer mix, etc.

As Alameda County's leading integrated public health system, Alameda Health System (AHS) plays a central role in providing the County's diverse low-income population access to quality, affordable medical care delivered by experienced, culturally- and linguistically-competent clinicians and healthcare providers.

AHS strives to eliminate barriers to access and health disparities, and improve population health, by offering a broad range of patient-centered integrated services: acute inpatient, primary and specialty outpatient, behavioral health, rehabilitation, dental, skilled nursing/long-term care, and preventive services.

AHS' network includes three general acute care hospitals:

- Highland Hospital—a renowned teaching facility and Level II trauma center: 206 beds, 11,242 discharges; 73,187 ED visits; 1,039 live births; 67% Medi-Cal, 21% Medicare.
- Alameda Hospital: 100 acute beds, 181 skilled nursing beds; 2,172 discharges; 14,420 ED visits; 24% Medi-Cal, 61% Medicare.
- San Leandro Hospital: 93 beds, 3,044 discharges; 32,397 ED visits; 33% Medi-Cal, 54% Medicare.

Plus:

- Fairmont Rehabilitation Hospital, a long-term care facility: 50 rehabilitation beds, 367 discharges; 109 skilled nursing beds, 103 discharges.
- John George Psychiatric Hospital, an acute psychiatric facility: 80 beds, 3,226 discharges.

And, four Federally-Qualified Health Centers (FQHCs): These provide a wide range of primary and specialty services including behavioral health, oncology, cardiology, dermatology, gastroenterology, hematology, HIV, immunology, infectious disease, maternal child health, optometry, orthopedics, radiology, respiratory care, stroke, urology, etc. Reflecting general trends, outpatient utilization is increasing.

2.4 Baseline Data. *[No more than 300 words]*

Describe the current resources that your entity has in place to collect, report and monitor performance data and how these resources will support PRIME clinical quality reporting requirements. Please specify any anticipated limitations or barriers to meeting the PRIME reporting requirements and describe your proposed strategies to address these barriers.

Despite many challenges, AHS is making significant improvements in data collection, analysis, reporting, and monitoring. AHS will leverage reporting resources in IT, Quality, and related departments, and will implement additional data analytics capability in the near future to facilitate reporting and monitoring requirements for PRIME.

AHS' medical records system is comprised of paper and multiple electronic sources. For example, Highland campus uses a combination of Sorian, NextGen and paper records. Also, the two recently acquired licensed community hospitals, San Leandro Hospital and Alameda Hospital, have different medical record, data collection, and documentation systems. Further, the varied electronic medical records are not consistently meeting documentation and data needs. These factors present significant barriers to data collection and to meeting reporting requirements across the system for PRIME projects.

AHS is devising short- and long-term solutions to address these deficiencies. Additional FTE resources will help with chart abstraction and data entry in instances where manual chart reviews are needed to collect baseline data. Two new capabilities will be critical in providing baseline data in the short-term, and storage and analytical tools for the longer term. AHS will use its data warehouse for storing and aggregating data from disparate sources. The Midas software system (available in summer 2016) will have the capability to integrate data from disparate sources, and will include fields for auditing, analysis, and monitoring purposes.

To facilitate better documentation and data capture in the long-term, AHS is conducting a comprehensive assessment of all its electronic medical records systems with the objective of selecting a new system-wide EHR. The new EHR selection committee consists of system wide leadership including those who are leading the PRIME effort. Thus, the new EHR system will factor in data and reporting requirements for PRIME, and facilitate documentation and reduce manual data abstraction in the future. In addition, AHS will have a clear plan for a smooth transition to the new EHR to assure that there are no disruptions in its ability to collect and report on PRIME metrics.

AHS' current processes and resources for generating information and dashboards, as well as for facilitating improvements through work groups, are very effective. The current infrastructure, along with the resources needed to achieve consistent data collection, will support our PRIME effort.

Section 3: Executive Summary

The objective of PRIME is to accelerate participating entities' efforts (as applicable), to change care delivery, to maximize health care value and to strengthen their ability to successfully perform under risk-based Alternative Payment Methodologies (APMs). This section of the Plan will be used to present each entity's overall goals and specific aims for PRIME. This section should also describe how these efforts will evolve over the course of the five years.

3.1 PRIME Project Abstract [No more than 600 words]

Please address the following components of the Abstract:

1. *Describe the goals* for your 5-year PRIME Plan;*
   *Note: * Goals (generally 2-5) are general guidelines that explain what you want to achieve in your hospital or health system. They are usually medium- to long-term and represent program concepts such as "eliminate disparities." These goals may already be a part of your hospital or health system's strategic plan or similar document.*

AHS' vision is to be recognized as a world-class patient- and family-centered system of care that promotes wellness, eliminates disparities, and optimizes the health of the diverse communities it serves. This vision is supported by six organizational goals; these and key indicators of success are:

- Access: Patients have timely access to needed primary and specialty care services, and consider AHS their primary care medical home;
- Sustainability: Long-term financial viability;
- Integration: Provider and health system partnership that supports clinical integration and delivery of quality care;
- Experience: Patients feel valued and have high levels of satisfaction;
- Network: External partnerships promote resource alignment; and
- Workforce Development: Staff feels empowered and promotes a culture of excellence

These are aligned with PRIME's overarching objectives, and the required, as well as the optional, projects AHS has selected. They will guide AHS in achieving the required system and care delivery transformation, and population health management model that are required for success in PRIME.

2. *List specific aims** for your work in PRIME that relate to achieving the stated goals;*
   Note: ** Specific aims (generally 2-5) relate to the goals but provide more detail on how the goals will be achieved.

   The aims of AHS' PRIME projects support achievement of its vision and organizational goals; they include:
   - Promote team-based care;
   - Integrate behavioral health and primary care;
   - Coordinate primary and specialty care;
   - Coordinate/manage care to strengthen linkages to necessary resources within AHS and in the community; and
   - Provide staff and physician training so all practice at the top of their licenses.

   By achieving these aims, AHS will increase access to, and experience of, high quality care for the vulnerable and diverse patients it serves. This will help promote optimal health outcomes, eliminate disparities, and achieve sustainability.

3. *Provide a statement of how the selected projects will support the identified goals and specific aims. Note that the narrative should connect the specific aims identified in Section 3.1.2 to the projects you select in Section 4. Each project does not require a specific statement. Instead, the narrative in the abstract is broadly linking projects to identified goals and specific aims;*

   All of AHS' PRIME projects will support standardization of care protocols and workflows, use of team-based care, and care coordination including providing linkages to ancillary, specialty, and other services. In addition to supporting AHS' goals, these projects will facilitate population health management, risk stratification, management of complex patients, outreach efforts, and connection with community resources. This will help achieve fundamental care delivery transformation and population health management by connecting patients quickly and directly with care in the most appropriate setting, and with needed community resources. This will reduce costs, and improve patient experience and outcomes; this supports all AHS goals. In turn, this will enable AHS' transition to Alternative Payment Models (APMs), which supports AHS' goals of Sustainability, Integration, and Network.

4. *If more than one project is selected, describe how the projects will inter-relate to achieve system transformation (not applicable if only one project is selected); and*

   PRIME provides AHS the opportunity to do a wide-sweeping and in-depth assessment of all components of ambulatory care including behavioral health, primary care, and specialty care services. This will help identify areas for improvement to achieve the goal of treating the patient as a "whole person" instead of in fragments. The projects on Patient Safety (specifically focused on persistent high-risk medications and cancer screening and care), will benefit from concurrent improvements in integration of Behavioral Health, Primary Care, and Specialty Care delivery.

   The Perinatal Care, Care Transitions, Complex Care, Chronic Pain and Antibiotics Use projects offer the opportunity to evaluate the entire care continuum, and to support patient navigation and staff collaboration through streamlined data systems and standardization in key practice guidelines. The projects will focus AHS on addressing key deficiencies that—when identified, addressed, and resourced properly—will help create a more integrated system of care and provide the necessary infrastructure to be successful in population health management.

5. *Provide a succinct summary description of how your hospital or health system will be transformed at the end of the five years. Explain how this transformation should result in advances in clinical, population health, fiscal or other critical outcomes through PRIME.*

The PRIME projects will be instrumental in focusing organizational efforts and priorities to fully adopt a population health management model into our care delivery so that AHS can successfully transition to APMs and adoption of managed care risk. In turn, this will assure the required financial viability to serve our communities for the long term.

3.2 Meeting Community Needs. [No more than 250 words]

Describe how your organization will address health needs at a local level as described in Section 2 of the Plan. The narrative should clearly link the projects you select in Section 4 with the community needs identified in your response to Section 2.1.

As outlined in Section 2, residents of the communities served by AHS have high levels of morbidity and lower average life expectancy than the general population. Their poor health status is directly related to poverty and associated social determinants that both compromise their health and create barriers to access to health care and other services. In particular, members of communities served by AHS tend to postpone needed screening and primary care services until their conditions require high cost emergency or acute inpatient services. Lack of coordination between primary and specialty care services, poor coordination of care, lack of communication between providers and facilities, and other system inefficiencies exacerbate the situation. The PRIME projects that AHS will undertake will address both needed improvements within the safety net system of care—within AHS and between AHS and its safety-net partners—and specific needs of its most high-risk, high-utilizing, high-cost patients. These include the need for greater coordination between primary care and behavioral health and substance use care to address the prevalence of dual diagnoses. They also include the need to design and implement improvements in:

- Management of patients on persistent medications and in access to cancer screening and care;
- Perinatal care;
- Coordination of care overall and specifically of complex patients at points of transition across care settings;
- Care of patients with chronic non-malignant pain; and
- Antibiotic stewardship.

3.3 Infrastructure and Alignment with Organizational Goals. [No more than 250 words]

Describe the organizational infrastructure that exists or will be established for purposes of implementing PRIME (e.g., current strategic plan, goals related to quality improvement, monitoring/feedback mechanisms, data-driven decision-making practices).

In 2013, AHS adopted a Lean-based performance management system to facilitate system transformation, and to assign monitoring and/or performance improvement resources for system-wide strategies that support AHS' mission. A formal prioritization process is in place to determine metrics to be monitored and improvement areas to be resourced to achieve specific, measureable, achievable, relevant, and time-specific

(SMART) results. Improvement resources—including leaders trained in facilitation, Lean, IHI improvement methodology, finance, IT, data analytics, and project management—are assigned to help drive improvement for priority projects based on the needs of the improvement team. AHS leaders monitor progress, on an ongoing basis, and identify needed course corrections and actions to achieve these.

Our highly matrix multi-facility system is integrated at different levels; and there is leadership and staff participation in, and oversight of, improvement efforts. Unit level, campus, division-level, and system-level operational teams and huddles assure alignment with strategic priorities and communication throughout the organization and with the Board of Trustees. Clinical integration and alignment also occurs through AHS Magnet Shared Governance (nursing care delivery and practice model to improve nursing engagement, quality, and patient experience) and Medical Staff structures.

There is strong alignment between AHS' strategic priorities and its PRIME targets. AHS will leverage its existing infrastructure, and infuse additional resources where needed, to continue system transformation work and achieve yearly PRIME targets. AHS leadership group, functional area, and division leaders will meet regularly to review performance on strategic improvement priorities and to track progress on PRIME metric targets.

3.4 Stakeholder Engagement. [No more than 200 words]

Describe plans for engaging with stakeholders and beneficiaries in the planning and implementation of PRIME projects. Describe how these activities will complement or augment existing patient engagement efforts.

AHS has experience in engaging stakeholders, and believes strongly in the value and necessity of stakeholder engagement in driving organizational change and broader population health improvements. AHS' mission, vision, and strategic priorities were developed with significant input from a variety of stakeholders both within AHS and from the community—including patients, representatives of partner organizations, and community leaders. Also, AHS has active Patient Advisory Councils at Highland Hospital and a community stakeholder group at John George Psychiatric Hospital.

AHS is actively working with our partners throughout Alameda County in planning PRIME initiatives. We have engaged representatives from the Health Care Services Agency (HCSA) and Alameda Alliance for Health in discussions around the Waiver in general. We have sought input from these and other stakeholders including the Community Health Center Network (CHCN) and Behavioral Health Care Services. We recently established routine bi-directional communication and coordination channels with these agencies. AHS is part of the recently established Compact, an entity comprised of leadership and staff from all these agencies who meet regularly to jointly plan for initiatives like PRIME and Whole Person Care. AHS intends to leverage these channels for collaborative design and implementation of PRIME projects.

3.5 Cultural Competence and Addressing Health Disparities. [No more than 200 words]

Describe planned efforts to ensure cultural competency in implementing PRIME projects and the strategies to reduce healthcare disparities that will be adopted. Identify the resources that the entity has available for this purpose.

Serving one of the country's most diverse populations, AHS has long been a leader in breaking down linguistic and cultural barriers to access faced by patients. AHS strives to ensure that patients have access to interpretation and translation services delivered through a lens of cultural competence. This commitment will be embedded in AHS' PRIME projects, which will draw on its:

- *Interpreter Services Department and resources*: AHS offers two-way video for language interpretation, and has a staff of trained medical interpreters that provides language interpretation in 26 languages. For other languages, patients may access interpreter services via AHS' call center, which has an interactive voice response (IVR) component.

- *Qualified Bilingual Staff (QBS)*: AHS has embraced the QBS model, a "gold standard" in assessment and training related to interpretation skills. Staff members who want to use their bilingual skills in service to patients must first be certified as "QBS." This ensures the staff's language competency. The subsequent training ensures that staff provides culturally competent services. Individuals must pass both to be "QBS" certified.

- *Translation services resources* (for written materials)

- *Commitment to hiring culturally-competent staff and providers* who come from, and are representative of, the communities it serves.

3.6 Sustainability. [No more than 150 words]

Provide a high-level description of the systematic approach for quality improvement and change management that your organization plans to use. The narrative should describe the specific components you have in place, or will implement as part of PRIME, which will enable you to sustain improvements after PRIME participation has ended.

AHS' performance management system includes metrics for monitoring (watch metrics) and for measuring targeted improvements based on strategic priorities. AHS' PRIME projects will be managed through quality and performance improvement processes. AHS will develop project-specific and system-level charters, SMART goals, and dashboards for these. We will employ Lean principles and Value Stream Maps (identifying current state and future state for key processes) to engage all levels of staff,

physicians, and leaders in identifying areas of improvement, and improving and maintaining performance. Progress towards goals will be monitored and communicated to front line staff and physicians, functional area and divisional leadership, and manager groups, and to the Board of Trustees; this will assure achievement of targeted outcomes. Improvements will be monitored until they are deemed stable and then will be checked periodically through AHS' ongoing monitoring process. Unstable metrics will be evaluated and addressed by leadership through a standard review process.

Section 4: Project Selection

The PRIME Projects are organized into three Domains:

- Domain 1: Outpatient Delivery System Transformation and Prevention
- Domain 2: Targeted High Risk or High Cost Populations
- Domain 3: Resource Utilization Efficiency

The PRIME program will provide incentive payments to participating entities that commit to implementing 5-year projects within the PRIME domains and as further described in *Attachment II -- PRIME Program Funding and Mechanics Protocol.* The required set of core metrics for each project is outlined in *Attachment Q: PRIME Projects and Metrics Protocol.* The purpose of this section is for applicants to indicate which projects they will implement and to describe the approaches to implementation.

Selections must comply with the requirements of the STCs and the Attachments Q and II delineating the PRIME program protocols.

Designated Public Hospitals (DPHs) are required to implement projects from all three Domains. DPHs must select at least nine projects, of which six are specifically required:

- Select at least four projects from Domain 1 (Projects 1.1, 1.2, and 1.3 are required);
- Select at least four projects from Domain 2 (Projects 2.1, 2.2, and 2.3 are required); and,
- Select at least one project from Domain 3.

District/Municipal Public Hospitals (DMPHs) are required to select at least one project to implement. DMPHs may select their project(s) from any of the three Domains.

Instructions

For Sections 4.1 - 4.3, click the box(es) that correspond to the project(s) you will undertake. In addition, click the boxes that correspond to the core components you will adhere to in order to achieve the objectives of the project. Note that core components selected are not required; they are meant to guide project execution and serve as recommendations only.

Answer all of the questions below for each selected project. Provide narrative responses in the spaces marked *"[Insert response here]":*

1. *Summarize your approach to designing and implementing the project. Include a rationale for selecting the project and planned approach to implementation. [No more than 300 words]*
2. *Describe how the project will enable your entity to improve care for the specified population [No more than 250 words]*

3. ***For DMPHs (as applicable),*** *indicate which project(s) your entity is selecting that will require infrastructure-building process measures and complete the supplemental document (Appendix) to identify and describe your proposed process measures.*

   For DMPHs requiring infrastructure building metrics that are approved in the Prime Project Plan, 75% of PRIME funding for DY 11 will be based on the achievement of the approved DY 11 infrastructure building metrics through the final year-end report. Up to 40% of the total PRIME funding for DY12 will be based on the achievement of the approved DY 12 infrastructure building metrics through the mid-year and final year-end report. The proposed Process Measures should meet the following criteria:

   - *Specific*
   - *Measurable: Must be able to demonstrate progress throughout the duration of the process metric measurement period.*
   - *Evidence-based: Measures should have a strong evidence-base that can linked process to outcomes.*

Section 4.1 -- Domain 1: Outpatient Delivery System Transformation and Prevention

☒ 1.1 Integration of Physical and Behavioral Health (required for DPHs)

There is a high incidence and prevalence of behavioral health disorders among populations served by AHS. Patients' physical conditions are closely interrelated with behavioral/mental health disorders that either complicate their medical conditions and/or are underlying causes of these. While AHS is a leader in inpatient treatment for psychiatric disorders, there is a need for improved integration of behavioral health and primary care services to promote earlier identification and treatment. To this end, AHS will establish the infrastructure to help identify patients who require intervention/ treatment services and address their needs more holistically by:

- *Convening a multi-disciplinary work group* to lead assessment and adoption of programs to achieve primary care and behavioral health services integration. In DY12, AHS will:
  - Adopt a nationally-recognized model for integration of physical-behavioral health.
  - Implement a screening tool for depression in all primary care clinics and facilitate care management for patients with positive screens.
  - Adopt an Alcohol Screening Brief Intervention and Referral to Treatment (SBIRT) program, drawing on current experience in AHS' Complex Care programs.
  - Achieve agreement on a target diagnosis, such as Diabetes or Depression, for application of system-wide standards of care including medication management.

- *Implementing (in DY12-DY15) work flow changes and programs in the clinics* to:
  - Facilitate collaboration on patients with complex needs.
  - Create appropriate linkages to primary care, mental health, and substance use disorder resources.
  - Provide ongoing training in team-based care to assure all staff and providers practice at the top of their license.
  - Develop a training plan to improve primary care providers' expertise in diagnosis, treatment, and management of common mental/behavioral health conditions.

- *Assessing improvement in integration between behavioral health and primary care* that contributes to achieving the intended metrics and outcomes. This will start in DY12 and will be ongoing.

Target Population: AHS will implement this project in its primary care clinics and will target pediatric and adult medicine populations. As part of the overall assessment, AHS

may further refine the target population, such as by focusing on patients with specific diagnoses that are prevalent among the patients it serves and that have a high correlation with mental/behavioral health issues, such as diabetes. The target population for referrals and linkages to services in the community or to services within AHS will be those who screen positive for behavioral and/or substance use disorder needs.

Vision for Care Delivery: This project aims to provide more holistic care to patients who have behavioral/mental health and/or substance use disorders by identifying these issues within the outpatient setting and helping to prevent progression to more severe stages. This will support AHS' vision of a fully-realized PCMH model of care. This project will enable AHS to focus and build upon its current practice of embedding psychiatry and psychology services in a limited number of its primary care clinics. This integration will assure that patients will receive appropriate preventive services, early diagnosis and treatment, and connection to community-based programs to address underlying social determinants. The project will provide training to providers and staff in the use of screening tools and other integrative programs; this will result in better patient care, increased patient engagement, and improved coordination of care across care settings. The ultimate vision is that this will lead to improved patient outcomes.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**1.1.1** Implement a behavioral health integration assessment tool (baseline and annual progress measurement)
Applicable	**1.1.2** Implement a physical-behavioral health integration program that utilizes a nationally-recognized model (e.g., the Four Quadrant Model for Clinical Integration, the Collaborative Care Model, or other Integrated Behavioral Health (IBH) resources from SAMHSA)
Not Applicable	**1.1.3** Integrate appropriate screening tools and decision support into the emergency department (ED) to ensure timely recognition of patients with mental health and substance use disorder problems. Enhanced access to primary care and/or to behavioral health specialists will be integrated into discharge planning for these patents. Use of 24-7 care navigators (e.g., Community Physician Liaison Program) may be used to support linkages to primary care providers (PCPs), mental health (MH) and substance use disorder (SUD) specialists and behavioral health and other community services through the discharge process.

Check, if applicable	Description of Core Components
Not Applicable	**1.1.4** Integrate physical and behavioral health, either through implementation of a new program or an expansion of an existing program, from pilot sites to hospital and health system primary care sites or from single populations to multiple populations (e.g., obesity, diabetes, maternal, infant, and child care, end-of-life care, chronic pain management).
Applicable	**1.1.5** Patient-Centered Medical Home (PCMH) and behavioral health providers will: • Collaborate on evidence based standards of care including medication management and care engagement processes. • Implement case conferences/consults on patients with complex needs.
Applicable	**1.1.6** Ensure coordination and access to chronic disease (physical or behavioral) management, including self-management support to patients and their families.
Applicable	**1.1.7** Ensure systems are in place to support patient linkages to appropriate specialty physical, mental and SUD services. Preventive care screenings, including behavioral health screenings (e.g., PHQ-2, PHQ-9, SBIRT), will be implemented for all patients to identify unmet needs. When screenings are positive, providers will take immediate steps, including the provision of brief interventions (e.g., motivational interviewing techniques) to ensure access for further evaluation and treatment when necessary. Preferably, this should include a warm transfer to the appropriate provider if the screening provider is unable to provide the service.
Applicable	**1.1.8** Provide cross-systems training to ensure effective engagement with patients with MH/SUD conditions. Ensure that a sufficient number of providers are trained in SBIRT and/or in other new tools used by providers to ensure effectiveness of treatment.
Not Applicable	**1.1.9** Increase access to Medication Assisted Treatment (MAT) for patients with alcohol and opioid addiction to assist in stabilizing their lives, reducing urges or cravings to use, and encourage greater adherence to treatment for co-morbid medical and behavioral health conditions. For alcohol use disorders these medications include naltrexone, acamprosate, and disulfiram. For opioid addiction, medication assisted treatment (MAT) includes maintenance treatment with methadone and buprenorphine.

Check, if applicable	Description of Core Components
Not Applicable	**1.1.10** Ensure the development of a single treatment plan that includes the patient's behavioral health issues, medical issues, substance abuse, social and cultural and linguistic needs. This includes incorporating traditional medical interventions, as well as non-traditional interventions such as gym memberships, nutrition monitoring, healthy lifestyle coaching, or access to culturally and linguistically appropriate peer-led wellness and symptom management groups.
Not Applicable	**1.1.11** Ensure a culturally and linguistically appropriate treatment plan by assigning peer providers or other frontline worker to the care team to assist with care navigation, treatment plan development and adherence.
Not Applicable	**1.1.12** Ensure that the treatment plan: • Is maintained in a single shared Electronic Health Record (EHR)/ clinical record that is accessible across the treatment team to ensure coordination of care planning. • Outcomes are evaluated and monitored for quality and safety for each patient.
Not Applicable	**1.1.13** Implement technology enabled data systems to support pre-visit planning, point of care delivery, care plan development, population/panel management activities, coordination and patient engagement. Develop programs to implement telehealth, eReferral/eConsult to enhance access to behavioral health services.
Not Applicable	**1.1.14** Demonstrate patient engagement in the design and implementation of the project.
Applicable	**1.1.15** Increase team engagement by: • Implementing a model for team-based care in which staff performs to the best of their abilities and credentials. • Providing ongoing staff training on care model.
Not Applicable	**1.1.16** Ensure integration is efficient and providing value to patients by implementing a system for continual performance feedback and rapid cycle improvement that includes patients, front line staff and senior leadership.

☒ 1.2 Ambulatory Care Redesign: Primary Care (required for DPHs)

As part of primary care redesign, AHS will continue its PCMH transformation with the goal of becoming a more efficient system of care with capacity to meet its patients' population health management needs. This includes:

- *Gap analysis*: In DY12, AHS will conduct a gap analysis to identify areas requiring improvement. This includes identifying and addressing gaps/ barriers to meeting population health management needs and to implementing team based care and assessment of necessary technology and workflow changes.

- *Adoption of a PCMH model of care*: While AHS has made significant progress towards instituting a PCMH model in its primary care clinics, we have not fully achieved this goal. In DY12–DY13, we will:
  - Establish a standardized staffing ratio to realize team based care and population health in the primary care setting.
  - Develop capability for risk stratification to enable targeted interventions based on patient acuity, chronic conditions, risk and ability for self management.
  - Expand existing innovative partnerships to address social determinants, such as medical legal partnerships and farmer's markets.
  - Expand existing nontraditional models of care including integrative medicine options and "food as medicine."
  - Implement use of disease registries and evidence-based management of chronic conditions.
  - Facilitate care navigation within and outside AHS by using on-site care managers and leveraging existing models, such as patient navigation and health advocates.
  - Use e-consult and other technology to enable timely provider-to-provider communication.
  - Implement data-driven decisions for team-based care.
  - Develop culturally- and linguistically-appropriate patient education and self-care plans.

- *Training*: In DY12-DY15, AHS will provide appropriate training to help assure that all staff and clinicians practice at the top of their licenses and practice team-based care; this will expand provider capacity. We will also identify and implement initiatives to improve patient experience, such as by using Studer guidelines (www.studergroup.com), physician coaching, and "motivational interviews," and by monitoring CG-CAHPS scores.

Target Population: The target population includes all patients who present to our clinics, and those who are assigned to AHS clinics and providers.

Vision for Care: AHS will redesign primary care delivery by leveraging existing and new technologies to improve provider-to-provider communication, expanding support staff and non-providers' roles in provision of primary care, using disease registries, engaging in activities to drive population health management, and implementing data-driven decisions to support team-based care. Building on current initiatives, AHS will explore alternatives to traditional billable provider face-to-face visits such as expanding group medical visits, e-consults, phone visits, and RN visits for the management of chronic and other conditions. These efforts will help expand overall capacity and address current shortages of primary care providers. They will enable AHS to increase outreach in the communities it serves. This will promote early screening, diagnosis, and treatment of health conditions, helping to reduce morbidity and progression to more serious stages of illness. Additional capacity will also result from expanding existing training efforts to assure that all staff practice at the top of their licenses, which may include leveraging AHS' simulation lab capabilities. Staff will receive ongoing performance feedback to facilitate continuous improvement. AHS will leverage its Qualified Bilingual Staff (QBS) program to assure appropriate interpreter services are provided to our highly-diverse communities; this will enhance patient experience and outcomes.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**1.2.1** Conduct a gap analysis of practice sites within the DPH/DMPH system.
Applicable	**1.2.2** Primary care practices will demonstrate advancement of their PCMH transformation through the use of a nationally-recognized PCMH methodology.
Applicable	**1.2.3** Hiring and training of frontline workforce (e.g., medical assistants, community health workers, promotoras, health navigators or other non-licensed members of the care team) to be responsible for coordination of non-clinical services and elements of the care plan.
Not Applicable	**1.2.4** Implement technology-enabled data systems to support pre-visit planning, point of care delivery, population/panel management activities, care coordination, patient engagement, and operational and strategic decisions including a system for continual performance feedback and rapid cycle improvement that includes patients, front line staff and senior leadership. • Implementation of EHR technology that meets meaningful use (MU) standards.

Check, if applicable	Description of Core Components
Applicable	**1.2.5** Ongoing identification of all patients for population management (including assigned managed care lives): • Manage panel size, assignments, and continuity to internal targets. • Develop interventions for targeted patients by condition, risk, and self-management status. • Perform preventive care services including mental health and substance misuse screenings and brief interventions (e.g., PHQ-9, SBIRT).
Applicable	**1.2.6** Enable prompt access to care by: • Implementing open or advanced access scheduling. • Creating alternatives to face-to-face provider/patient visits. Assigning frontline workers to assist with care navigation and non-clinical elements of the care plan.
Applicable	**1.2.7** Coordinate care across settings: • Identification of care coordinators at each primary care site who are responsible for coordinating care within the PCMH as well as with other facilities (e.g., other care coordinators or PCMH/DPH/DMPH high risk care managers): o Establish onsite care/case managers to work with high risk patients and their care teams, or develop processes for local care coordinators to work with a central complex care management program for these patients Implement processes for timely bi-directional communication and referral to specialty care (including mental health and substance use disorder services), acute care, social services and community-based services.
Applicable	**1.2.8** Demonstrate evidence-based preventive and chronic disease management.
Applicable	**1.2.9** Improve staff engagement by: • Implementing a model for team-based care in which staff performs to the best of their abilities and credentials. • Providing ongoing staff training on the team-based care model to ensure effective and efficient provision of services (e.g., group visits, medication reconciliation, motivational interviewing, cognitive behavioral therapy and Medication-Assistance Treatment (MAT)).
Not Applicable	**1.2.10** Engage patients using care plans, and self-management education, and through involvement in the design and implementation of this project.
Applicable	• 1.2.11 Improve the accuracy and completeness of race, ethnicity,

Check, if applicable	Description of Core Components
	and language (REAL), and sexual orientation and gender identity (SO/GI) data, and use that data to identify and reduce disparities in one or more Primary Care Redesign project metrics by: • Adding granular REAL and SO/GI data to demographic data collection processes and training front-line/registration staff to gather complete and accurate REAL/SO/GI data. • Developing capacity to track and report REAL/SO/GI data, and data field completeness. • Implementing and/or refining processes for ongoing validation of REAL/SO/GI data. • Developing capacity to stratify performance metrics by REAL/SO/GI data and use stratified performance data to identify disparities for targeted interventions. • Developing capacity to plan and implement disparity reduction interventions with input from patients and community stakeholders. • Developing dashboards to share stratified performance measures with front-line staff, providers, and senior leadership.
Not Applicable	**1.2.12** To address quality and safety of patient care, implement a system for continual performance feedback and rapid cycle improvement that includes patients, front line staff and senior leadership.

☒ 1.3 Ambulatory Care Redesign: Specialty Care **(required for DPHs)**

This project will facilitate changes in delivery of specialty care services and improved coordination between primary and specialty care providers, that will improve patient outcomes, reduce ED utilization, and increase system-wide efficiency in providing timely specialty care services. Our approach includes:

- *Gap assessment*: In DY12, we will conduct a system-wide gap analysis to identify opportunities for collaboration between primary care clinics and medical and surgical specialties to improve access to specialty care and patient experience.

In DY12 and DY13 we will:

-*Develop a specialty care model*: We will identify chronic and/or other conditions that will benefit from a standard care model that increases primary care providers' capacity to manage higher acuity patients independently and/or in collaboration with specialty care providers. We will leverage AHS' expanding e-consult capability to facilitate timely specialty care consults, and two-way communication between AHS specialists and primary care providers both inside and outside AHS. The aim is to reduce in-person specialty care visits and wait times, thereby increasing system efficiency, patient access, and overall capacity.
-*Develop standard care plans for use by care teams, as well as patient self-management tools* for selected chronic and other disease conditions.

-*Develop a care team training plan*: To promote efficient team-based care, AHS will develop a training plan to ensure that all team members have training and support to enable them to practice at the top of their abilities and licenses,

In this work, we will:
- *Leverage our existing Qualified Bilingual Staff and Interpreter Services programs* to provide culturally- and linguistically-appropriate interpreter services for our highly diverse patient population.
- *Evaluate formation of an All Cause Readmissions team* to assess trends and improve patient care by addressing system, technology, and workflow improvements. This may leverage AHS' success in reducing readmissions for high-risk patients.

Target Population: This project seeks to improve care for all pediatric and adult patients for whom AHS serves as their assigned PCMH, including those who use AHS' specialty and primary care clinics, ancillary services, and/or emergency departments (EDs). It will also create appropriate care coordination and referral loop back processes for patients who are assigned to non-AHS FQHC's for primary care, and who use AHS' specialty clinics, ancillary services, and EDs. While the project will strive to increase access for all patients (i.e., by expanding primary care capacity), those who will benefit the most will

be patients who need specialty care, especially those specialties that are currently most impacted (i.e., have the longest wait times for appointments). These patients tend to be those at greatest risk of progressing to more severe stages of illness as a result of delays in access to specialty care.

Vision for Care: This project will enable AHS to expand its specialty care capacity by increasing collaboration between primary care and specialty care providers, expanding the roles of support staff and non-providers, and enabling all staff and physicians to practice at the top of their licenses. The project will leverage existing and new technology to facilitate real time provider-to-provider consultations, thereby increasing overall capacity and timely access to specialty care. This will promote earlier diagnosis and treatment, and improved outcomes. In addition, primary care physicians will have greater access to specialists, and will have expanded capacity to address patients' needs in the primary care setting

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Not Applicable	**1.3.1** Develop a specialty care program that is broadly applied to the entire target population.
Applicable	**1.3.2** Conduct a gap analysis to assess need for specialty care including mental health and SUD services (analysis to include factors impacting ability to access specialty care), and the current and ideal state capacity to meet that need. Benchmark to other CA Public Health Care systems.
Applicable	**1.3.3** For ideal state analysis, include potential impact of increased primary care capacity to manage higher acuity conditions either independently, or in collaboration with, specialty care, so as to reduce the need for in-person specialty care encounters (e.g., insulin titration, IBS management, joint injections, cognitive behavioral therapy (CBT) or MAT).
Applicable	**1.3.4** Engage primary care providers and local public health departments in development and implementation of specialty care model.
Applicable	**1.3.5** Implement processes for primary care/specialty care co-management of patient care.
Applicable	**1.3.6** Establish processes to enable timely follow up for specialty expertise requests.
Applicable	**1.3.7** Develop closed loop processes to ensure all requests are

Check, if applicable	Description of Core Components
	addressed and if in person visits are performed, that the outcome is communicated back to the PCP.
Applicable	**1.3.8** Ensure that clinical teams engage in team- and evidence-based care.
Applicable	**1.3.9** Increase staff engagement by: • Implementing a model for team-based care in which staff performs to the best of their abilities and credentials. • Providing ongoing staff training on the care model.
Not Applicable	**1.3.10** Develop and implement standardized workflows for diversified care delivery strategies (e.g., shared medical visits, ancillary led services, population management, telemedicine services) to expand access and improve cost efficiency.
Applicable	**1.3.11** Adopt and follow treatment protocols mutually agreed upon across the delivery system.
Not Applicable	**1.3.12** Implement technology-enabled data systems to support pre-visit planning, point of care delivery, population management activities and care coordination/transitions of care. Ensure that timely, relevant, and actionable data are used to support patient engagement, PCP collaboration, and drive clinical, operational and strategic decisions including continuous quality improvement (QI) activities.
Not Applicable	**1.3.13** Implement EHR technology that meets MU standards.
Applicable	**1.3.14** Patients have care plans and are engaged in their care. Patients with chronic disease (including MH/SUD conditions) managed by specialty care have documented patient-driven, self-management goals reviewed at each visit.
Not Applicable	**1.3.15** Improve medication adherence.
Applicable	**1.3.16** Implement population management strategies for patients in need of preventive services, with chronic conditions, or with recurring long term surveillance needs.
Applicable	**1.3.17** Implement or expand use of telehealth based on DPH/DMPH capacity to address patient and PCP barriers to accessing specialty expertise. Implement a telehealth platform with communication modalities that connect between specialty care and primary care (e.g.,

Check, if applicable	Description of Core Components
	eConsult/eReferral).
Not Applicable	**1.3.18** Demonstrate engagement of patients in the design and implementation of the project.
Not Applicable	**1.3.19** Implement a system for continual performance feedback and rapid cycle improvement that includes patients, front line staff and senior leadership.
Not Applicable	**1.3.20** Test use of novel performance metrics for redesigned specialty care models.

☒ 1.4 – Patient Safety in the Ambulatory Setting

We selected this project because of the prevalence of diabetes, heart disease, hypertension, and CHF in our patient population. These patients are typically on persistent medications and require ongoing monitoring. AHS' patients also have high rates of cancer. The project will focus attention and resources on critical deficiencies in ambulatory patient safety that compromise patient outcomes. It is aligned with AHS' existing grant-supported efforts—including Spark Net UCSF/ AHRQ, Avon (breast cancer), CDPH and ACS (colorectal cancer)—that focus on achieving similar goals/outcomes.

Our approach will include:
- *Gap analysis*: In DY11–DY12, AHS will identify areas for improvement in impacted specialty and primary care clinics, as well as in ancillary services, that affect follow-up and monitoring of patients on persistent medications and follow-up for those with abnormal mammography results. For example, the use of various IT and EHR systems, as well as manual faxes, across AHS' facilities/locations impacts workflows and care coordination. This can also impact coordination with outside labs and imaging centers. This analysis may also identify improvements in communication with patients.

- *Standardized workflows*: In DY12–DY13, AHS will institute processes to assure that all test results are received by ordering providers on a timely basis, and will develop standard workflows for follow-up. AHS will develop standardized guidelines, such as those of American College of Radiology's Actionable Findings Workgroup, to promote documentation of results review by the ordering physician, and appropriate and timely follow-up and treatment for patients with abnormal results.

- *Training*: In DY11–DY15, AHS will assess training needs and requirements for the care teams (per above); implement training to promote team-based care; and institute workflow requirements that support timely follow-up for patients on high-risk, persistent medications and those with abnormal mammography results. Resources will support technology-based changes and associated workflows.

Target Population: The target population will include adult men and women who use AHS' specialty and primary care clinics, who have chronic conditions, and who have been prescribed persistent medications such as warfarin, AC-Inhibitors, ARBs, and diuretics. The target will also include adult women who have abnormal results for mammography. Within these populations, those most at risk will be those who experience severe underlying social determinants that create barriers to access and risk of being lost to follow-up. These include those with unstable housing, who lack access to transportation to/from appointments, and those who experience linguistic and cultural barriers to access.

Vision for Care Delivery: This project will provide critical focus on patient safety in the ambulatory setting for patients on persistent medications such as AC-inhibitors, ARBs, diuretics, and warfarin, as well as for patients with, or at risk for, abnormal mammography results. AHS will develop standard workflows to assure that ordering providers require appropriate laboratory monitoring for those on high-risk medications, that they receive lab and mammography results directly and reliably, and that the care team follows up on all abnormal results in a timely manner to ensure patient safety. Our vision is that these patients will be effectively managed in the ambulatory care setting, that progression to more serious stages of these conditions and unnecessary inpatient admissions will be prevented, and that outcomes for these patients will be improved.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**1.4.1** Perform a baseline studies to examine the current workflows for abnormal results follow-up and monitoring of individuals on persistent medications.
Not Applicable	**1.4.2** Implement a data-driven system for rapid cycle improvement and performance feedback based on the baseline study that effectively addresses all identified gaps in care and which targets clinically significant improvement in care. The improvement and performance feedback system should include patients, front line staff from testing disciplines (such as, but not limited to, radiology and laboratory medicine)

Check, if applicable	Description of Core Components
	and ordering disciplines (such as primary care) and senior leadership.
Applicable	**1.4.3** Develop a standardized workflow so that: • Documentation in the medical record that the targeted test results were reviewed by the ordering clinician. • Use the American College of Radiology's Actionable Findings Workgroup[1] for guidance on mammography results notification. • Evidence that every abnormal result had appropriate and timely follow-up. Documentation that all related treatment and other appropriate services were provided in a timely fashion as well as clinical outcomes documented.
Applicable	**1.4.4** In support of the standard protocols referenced in #2: • Create and disseminate guidelines for critical abnormal result levels. • Creation of protocol for provider notification, then patient notification. • Script notification to assure patient returns for follow up. Create follow-up protocols for difficult to reach patients.
Not Applicable	**1.4.5** Implement technology-enabled data systems to support the improvement and performance feedback system as well as engage patients and support care teams with patient identification, pre-visit planning, point of care delivery, and population/panel management activities.

☒ 1.6 – Cancer Screening and Follow-up

AHS selected this project because of the high incidence and prevalence of cancer in its patient population, and the associated high cancer mortality rates, compared to the general population. This project enables AHS to build on its success in cancer screening and follow-up including its programs that focus on:

- Breast and cervical cancer screening—coordinated through the state's Every Woman Counts program;
- Breast cancer diagnosis and treatment—supported by Avon funding for AHS' highly successful Patient Navigation Program, which seeks to ensure that patients at risk for, or who have, breast cancer receive timely diagnosis and treatment;
- Patient navigation for women with gynecological cancers; and

[1] *Actionable Findings and the Role of IT Support: Report of the ACR Actionable Reporting Work Group. Larson, Paul A. et al. Journal of the American College of Radiology, Volume 11, Issue 6, 552 – 558. http://www.jacr.org/article/S1546-1440(13)00840-5/fulltext#sec4.3, Accessed 11/16/15.*

- Improving screening for colorectal cancer—funded by a grant from the California Department of Public Health and Spark Net.

Our approach will include:

- *Agreeing on standard practices*: In DY12, AHS will evaluate and adopt a national standard for a system-wide approach to screening that takes into consideration age, frequency, and use of diagnostic tools. This will involve obtaining agreement on follow-up protocols, such as expected timelines from abnormal findings to diagnostic study and treatment, and risk stratification variables. This multi-disciplinary approach will include representation from radiology, lab, pharmacy, and specialties such as GI and Maternal Child Health.

- *Instituting process changes*: In DY13, AHS will implement standard protocols that require collaborative team-based care and workflow changes in primary care and affected specialty clinic settings. AHS will also leverage health registries and other technology-based solutions for clinical decision support and outreach activities that best meet the cultural, linguistic, and social needs of our diverse populations.

- *Training care teams*: In DY12–DY15, AHS will provide training and role clarification to care teams to assure appropriate use of screenings and clinical pathways, and to provide linkages to specialty care, diagnostics, and treatment.

Target Population: The target population will be adult men and women who are assigned to AHS as their PCMH, and those who receive care in AHS' primary and specialty care clinics. In addition, agreements on the standard approach to each cancer type and associated metrics will inform the age groups for outreach. Those at highest risk are patients who experience high levels of poverty and associated barriers to access—including linguistic and cultural barriers, housing instability, and lack of transportation—to early cancer screening and diagnosis, and timely treatment. As a result, they experience higher cancer mortality rates, compared with the general population.

Vision for Care Delivery: This project will enable AHS to develop evidence-based approaches for screening and for follow up on abnormal screening results for breast, cervical, and colorectal cancers. This will foster early detection and reduce variation in physician practice patterns. Our vision is that the barriers to access to early screening, diagnosis, and treatment experienced by our patients will be reduced, and that this will result in improved coordination of care, outcomes, and patient experience.

Please mark the core components for this project you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**1.6.1** Develop a multi-disciplinary cross-participating PRIME entity task force to identify principle-based expected practices for screening and follow-up for the targeted services including, but not limited to: • Standard approach to screening and follow-up within each DPH/DMPH. • Screening: o Enterprise-wide standard approach to screening (e.g., ages, frequency, diagnostic tool). • Follow-up for abnormal screening exams: o Clinical risk-stratified screening process (e.g., family history, red flags). Timeliness (specific time benchmark for time from abnormal screening exam to diagnostic exam).
Not Applicable	**1.6.2** Demonstrate patient engagement in the design and implementation of programs.
Applicable	**1.6.3** Collect or use preexisting baseline data on receipt and use of targeted preventive services, including any associated disparities related to race, ethnicity or language need.
Applicable	**1.6.4** Implement processes to provide recommended clinical preventive services in line with national standards, including but not limited to USPSTF A and B Recommendations.
Applicable	**1.6.5** Improve access to quality care and decrease disparities in the delivery of preventive services.
Not Applicable	**1.6.6** Employ local, state and national resources, and methodologies for improving receipt of targeted preventive services, reducing associated disparities, and improving population health.
Applicable	**1.6.7** Adopt and use certified electronic health record systems, including clinical decision supports and registry functionality to support provision of targeted preventive services. Use panel/population management approaches (e.g., in-reach, outreach) to reduce gaps in receipt of care.
Not Applicable	**1.6.8** Based on patient need, identify community resources for patients to receive or enhance targeted services and create linkages with and connect/refer patients to community preventive resources, including those that address the social determinants of health, as appropriate.

Check, if applicable	Description of Core Components
Applicable	**1.6.9** Implement a system for continual performance management and rapid cycle improvement that includes feedback from patients, community partners, front line staff, and senior leadership.

Please complete the summary chart:

	For DPHs	For DMPHs
Domain 1 Subtotal # of DPH-Required Projects:	**3**	**0**
Domain 1 Subtotal # of Optional Projects (Select At Least 1):	**2**	
Domain 1 Total # of Projects:	**5**	

Section 4.2 -- Domain 2: Targeted High-Risk or High-Cost Populations

☒ 2.1 – Improved Perinatal Care (required for DPHs)

In this project, AHS will build on its success in providing quality perinatal care and achieving positive outcomes for women and children. This is a significant achievement given the risk factors and barriers to access experienced by AHS' low-income, diverse patient population. Prenatal care is offered at AHS' four ambulatory care centers, which are distributed throughout Alameda County. AHS' flagship facility, Highland Hospital, provides labor, delivery, recovery, and postpartum care. Highland was designated a "Baby Friendly Hospital" in 2012, and has achieved high levels of breastfeeding initiation and duration, and exclusive breastfeeding. Its overall C-Section rate is 25%, also a significant achievement. Contributing to this are Highland's Lactation Services Department staffed by International Board-Certified Lactation Consultants (IBCLCs), and its experienced team of midwives. Highland has implemented California Maternal Quality Care Collaborative's care guidelines. Recently, Highland instituted CenteringPregnancy, an evidence-based group prenatal visit model associated with positive birth outcomes, as the standard of prenatal care for low risk women.

AHS' approach will include:

- *Renew Baby Friendly designation*: AHS is one of two hospitals in the Bay Area with Baby Friendly designation and will be applying for a renewal in 2017. As part of the re-certification process, AHS' Baby Friendly committee is re-focusing on nursing education and lactation practices for postpartum and NICU care. The Centering Pregnancy project encourages exclusive breastfeeding. Strong breastfeeding programs including use of IBCLCs in the hospital, encourages initiation of breastfeeding, and support for breastfeeding post-partum.

- *Collaboration and participation in learning collaborative:* AHS will be re-launching its focus on OB Hemorrhage through its collaboration with CMQCC in DY12. Through the use of CMQCC OB Hemorrhage toolkit, AHS will be reinvigorating a robust OB Hemorrhage prevention and response program in DY'12 that includes rebooting an established policy and assuring improved adherence, simulation drills, quantifying blood loss, and associated education for all its clinicians including physicians, nurses, midwives, and Maternal Fetal specialists.

- *Safely decrease C-Section Rates:* AHS will participate in a national Healthy Birth initiative to reduce its Nulliparous Term Singleton Vertex (NTSV) C-Section Rates (the rate of Cesarian birth in low risk women having their first babies). Highland Hospital's NTSV C-Section rate of 14% is already below the national average but by reducing safely avoidable C-sections in low risk women even further, Highland

Hospital can become a role model and resource for other perinatal providers. The focus of this project lies in supporting physicological birth. This will be done by promoting comfort in labor, avoiding unnecessary medical interventions in normal labor and supporting spontaneous progress in labor. Highland Hospital will be implementing intermittent auscultation rather than routine electronic fetal monitoring as the primary means of fetal monitoring for appropriate low risk women in labor. This practice change will include providers and nursing. It will be supported by widespread education and continued strong collaboration between Obstetrics, nursing, and the midwifery team throughout labor and birth..

Centering Pregnancy group visits help prepare women for the challenges of labor by emphasizing the normal physiological process of birth, providing non-pharmaceutical comfort and coping measures, and helping women identify sources of support.

- *Educational collaborative*: AHS will optimize the MCH monthly educational conference that involves all the clinicians in Highland Hospital and the primary care clinics including midwives, OB physicians, Advanced Practice Providers, Maternal Fetal Medicine specialists, Family Medicine physicians and Pediatricians to identify areas of improvement for PRIME initiatives such as Breast Feeding, OB Hemorrhage, reduction in C-Section rates, and Newborn Complications.

- *Assessing (in DY12) the current state of post-partum care and linkages between Highland's MCH unit and AHS' primary care clinics* with a focus on improving outreach to women with co-morbid conditions. This will help AHS identify areas for improvement in post-partum care and the associated resource requirements, such as dedicated care coordinators that link patients to primary care clinics, and needed workflow changes.

Target Population: The target population includes women who give birth at Highland Hospital, and who obtain prenatal care and postnatal care at AHS clinics and non-AHS community clinics, as well as women who may not get any prenatal care at all. The latter women are at particular risk for lack of coordination of care due to a disconnect between their prenatal care—received from safety-net providers or not at all, and their labor and delivery services—received from providers outside the safety net. Within the target population, the project will focus on women at greatest risk for poor health status that compromises their birth outcomes. This includes those with co-morbidities, such as diabetes and/or hypertension, and those with behavioral health and/or substance use disorders.

Vision for Care Delivery: AHS will continue to improve perinatal outcomes, especially for women with co-morbid conditions. In doing so, AHS will build upon its successes at Highland Hospital, a designated Baby Friendly hospital and participant in the Healthy

Birth Initiative. These include its success in achieving low PC-02 and first birth low-risk C-Section rates. Guided by its membership in California Maternal Quality Care Collaborative (CMQCC), AHS will continue to reinforce its approach to providing quality perinatal care, which is built on a strong collaboration between Obstetrics and the midwifery team. AHS will also continue to strengthen and expand participation in CenteringPregnancy groups, and will monitor the impact of this evidence-based approach to prenatal care.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**2.1.1** DPHs/DMPHs engagement in best practice learning collaborative to decrease maternal morbidity and mortality related to obstetrical hemorrhage (CMQCC/PSF/HQI combined effort).
Applicable	**2.1.2** Achieve baby-friendly hospital designation through supporting exclusive breastfeeding prenatally, after delivery, and for 6 months after delivery and using lactation consultants after delivery.
Applicable	**2.1.3** Encourage best practice and facilitate provider education to improve cesarean section rates, and decrease inequities among cesarean section rates. Participate, as appropriate, in statewide QI initiatives for first-birth low-risk cesarean births.
Applicable	**2.1.4** Coordinate care for women in the post-partum period with co-morbid conditions including diabetes and hypertension.

☒ 2.2 – Care Transitions: Integration of Post-Acute Care (required for DPHs)

This project seeks to standardize hospital discharge and post-discharge processes across Alameda Health System's (AHS') hospitals. By doing so, we will address the current lack of standardization, which results in disparate care and care transitions programs across our facilities. This compromises patient outcomes and experience, and increases risk of unnecessary readmissions. Drawing on our success in implementing an evidence-based care transitions program for complex patients at high-risk for unnecessary readmissions, we will create and implement a standardized, system-level approach to care coordination and care transitions.

AHS' approach will include:

- *Workflow redesign*: In DY12 and DY13, we will standardize hospital discharge processes across all AHS facilities. We will evaluate and develop processes for medication management and reconciliation, instituting written discharge care plans for patients, and coordination of outpatient visits post-discharge. We will expand care management efforts through the use of ED-based care managers, referrals to internal care management programs and post-acute care facilities, and links to community services.
- *Development of internal capacity*: AHS will also evaluate the feasibility of establishing a hospital follow-up clinic for patients without a designated clinic and PCP, and of expanding its respite bed capacity for homeless patients, especially women.
- *Improved communication and collaboration:* In DY12, AHS will assess and implement best practices for integration of care teams across facilities. We will evaluate technology-enabled solutions and associated workflows that will support communication, and outcome measurement and monitoring. The use of varied technology platforms, including multiple EHR and manual systems used across our facilities, poses challenges. These will be assessed and will shape potential solutions.
- *Training and decision support*: In DY12–DY15, AHS will offer training in team-based care, bedside coaching, and other effective approaches to promote integration and collaboration across teams and facilities. Decision support and analytics will help track outcomes and progress.

Target Population: The target population's age is dependent on specific metrics. However, by improving and expanding resources for care coordination and care transitions, the project is expected to impact all patients discharged from AHS' acute care facilities. Expected outcomes include decrease in avoidable acute care admissions, and reduction in health and health care disparities. Within AHS' overall patient population, this project will focus most closely on patients who experience conditions characterized by co-morbidities, including behavioral health and substance use issues, and who experience underlying social and economic determinants that negatively impact their health, such as housing instability.

Vision for Care: AHS will implement standardized hospital discharge processes that will result in improved care coordination and care transitions between acute care and post-acute care facilities. Upon discharge, patients will leave with an understanding of how to manage their medications, and how to implement and maintain self-care plans. By improving communication and coordination between inpatient and outpatient care teams and increasing patients' capacity for self-management, we expect to improve patient experience, reduce avoidable acute care utilization, and ultimately reduce disparities in health and health care.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**2.2.1** Develop a care transitions program or expand a care transitions program to additional settings (e.g., emergency department), or to additional populations, using or adapting at least one nationally recognized care transitions program methodology.
Applicable	**2.2.2** Establish or expand on a system to track and report readmission rates, timeliness of discharge summaries, and other transition processes, and investigate system-specific root causes/risk factors for readmission, using quantitative and qualitative information to identify the key causes of readmissions, including physical, behavioral and social factors.
Applicable	**2.2.3** Develop and implement a process, including utilization of data and information technology, to reliably identify hospitalized patients at high-risk for readmission.
Not Applicable	**2.2.4** Develop standardized workflows for inpatient discharge care: • Optimize hospital discharge planning and medication management for all hospitalized patients. • Implement structure for obtaining best possible medication history and for assessing medication reconciliation accuracy. • Develop and use standardized process for transitioning patients to sub-acute and long term care facilities. • Provide tiered, multi-disciplinary interventions according to level of risk: o Involve mental health, substance use, pharmacy and palliative care when possible. o Involve trained, enhanced IHSS workers when possible. o Develop standardized protocols for referral to and coordination with community behavioral health and social services (e.g., visiting nurses, home care services, housing, food, clothing and social support). Identify and train personnel to function as care navigators for carrying out these functions.
Applicable	**2.2.5** Inpatient and outpatient teams will collaboratively develop standardized transition workflows: • Develop mechanisms to support patients in establishing primary care for those without prior primary care affiliation. Develop process for warm hand-off from hospital to outpatient provider, including assignment of responsibility for follow-up of labs or studies still pending at the time of discharge.

Check, if applicable	Description of Core Components
Applicable	**2.2.6** Develop standardized workflows for post-discharge (outpatient) care: • Deliver timely access to primary and/or specialty care following a hospitalization. • Standardize post-hospital visits and include outpatient medication reconciliation.
Applicable	**2.2.7** Support patients and family caregivers in becoming more comfortable, competent and confident in self-management skills required after an acute hospitalization by providing: • Engagement of patients in the care planning process. • Pre-discharge patient and caregiver education and coaching. • Written transition care plan for patient and caregiver. • Timely communication and coordination with receiving practitioner. Community-based support for the patient and caregiver post hospitalization focusing on self-care requirements and follow-up care with primary and specialty care providers.
Applicable	**2.2.8** Engage with local health plans to develop transition of care protocols that ensure: coordination of care across physical health, substance use disorder and mental health spectrum will be supported; identification of and follow-up engagement with PCP is established; covered services including durable medical equipment (DME) will be readily available; and, a payment strategy for the transition of care services is in place.
Not Applicable	**2.2.9** Demonstrate engagement of patients in the design and implementation of the project.
Applicable	**2.2.10** Increase multidisciplinary team engagement by: • Implementing a model for team-based care in which staff performs to the best of their abilities and credentials. • Providing ongoing staff training on care model.
Not Applicable	**2.2.11** Implement a system for continual performance feedback and rapid cycle improvement that uses standard process improvement methodology and that includes patients, front line staff and senior leadership.

☒ 2.3 – Complex Care Management for High Risk Medical Populations **(required for DPHs)**

In this project, AHS will build upon its existing complex care management pilots including the Hope Center, Care Transitions Program, and the Homeless Care Management program. These incorporate evidence-based strategies for effective complex care management, and have demonstrated success in achieving the project's objectives. AHS will leverage its experience in using multi-disciplinary teams to provide complex care management that addresses the needs of "super-utilizers" from a holistic perspective. This includes addressing social determinants that underlie and exacerbate poor health status.

AHS' approach includes:

- *Establishment of governance structure* In DY12, AHS will establish a governance structure with executive sponsorship to clarify reporting relationships, accountabilities, and the support needed to achieve the project's aims. This will assure internal alignment across key areas (e.g., Finance, Quality), and coordination and data-sharing with external entities (e.g., health plans).
- *Standardization of risk stratification*: In DY12, AHS will adopt a system-wide standard for stratifying patients by level of risk and acuity to support identification of the target population.

- *Development of data analytics system*: In DY12–DY13, AHS will establish a data management and analytic support system to extract data from its EHRs and registries, and health plan and financial systems, to enable stratification.
- *Implementation of technology-enabled care system*: In DY12, AHS will explore technology-enabled options to support real-time identification of patients who require complex care management, flag patients followed by a complex care team, and transmit care plan updates to PCPs.
- *Hiring and Training*: AHS will continue its successful practice of utilizing community health outreach workers (CHOWs). As members of the communities AHS serves, CHOWs understand the social determinants experienced by patients. They are able to build trust and facilitate connections to social, behavioral health, and substance use services. In DY13–DY14, AHS will identify training requirements to promote CHOWs' professional development.

Target Population: This project provides the opportunity to drive standard definitions and internal agreement on the characteristics of the target population. Drawing on input from internal and community experts, as well as co-morbidity patterns and utilization of ED and inpatient services, AHS will create a standard method for stratifying patients by level of risk and acuity. This will support identification of the target population of high-risk patients who will benefit from complex care management. The project will also enable development of policies and memorandums of understanding regarding care

coordination with non-AHS entities whose patients use AHS emergency rooms, inpatient units, and specialty care services.

Vision for Care Delivery: AHS will leverage the success of its existing complex care management programs for high-risk patients to establish a system-wide approach to identifying high-risk patients and providing standardized complex care management services. This will be facilitated by robust streams of relevant, timely data. The project will leverage AHS' capabilities in providing services that are linguistically- and culturally-appropriate. A governance structure with executive sponsorship will be established and will ensure internal accountabilities, application of standardized definitions, and support from all applicable departments. Strengthened and formalized relationships with non-AHS entities whose high-risk patients use AHS services will support effective complex care management across systems serving vulnerable populations. The project is expected to help reduce necessary utilization of inpatient and ED services by high-risk patients, enhance access to needed social and behavioral/mental health and substance use services, and improve patients' quality of life.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**2.3.1** Develop a complex care management program at one site or with one defined cohort, or expand an existing program from a pilot site to all sites or to additional high-risk groups and demonstrate engagement of patients in the design and implementation of the project.
Not Applicable	**2.3.2** Utilize at least one nationally recognized complex care management program methodology.
Applicable	**2.3.3** Identify target population(s) and develop program inclusion criteria based on quantitative and qualitative data (e.g., acute care utilization, lack of primary care utilization, number of high-risk medical mental or SUD conditions, polypharmacy, primary care input, functional status, patient activation, social support or other factors). Include patient factors associated with a higher probability of being impacted by complex care management.
Not Applicable	**2.3.4** Conduct a qualitative assessment of high-risk, high-utilizing patients.
Applicable	**2.3.5** Establish data analytics systems using clinical data sources (e.g., EHR, registries), utilization and other available data (e.g., financial, health plan, zip codes), to enable identification of high-risk/rising risk patients for targeted complex care management interventions, including ability to stratify impact by race, ethnicity and language.
Applicable	**2.3.6** Develop a multi-disciplinary care team, to which each participant is

Check, if applicable	Description of Core Components
	assigned, that is tailored to the target population and whose interventions are tiered according to patient level of risk.
Applicable	**2.3.7** Ensure that the complex care management team has ongoing training, coaching, and monitoring towards effective team functioning and care management skill sets.
Not Applicable	**2.3.8** Implement evidence-based practice guidelines to address risk factor reduction (smoking cessation/immunization/substance abuse identification and referral to treatment/depression and other behavioral health screening, etc.) as well as to ensure appropriate management of chronic diseases: • Use standardized patient assessment and evaluation tools (may be developed locally, or adopted/adapted from nationally recognized sources). Use educational materials that are consistent with cultural, linguistic and health literacy needs of the target population.
Applicable	**2.3.9** Ensure systems and culturally appropriate team members (e.g. community health worker, health navigator or promotora) are in place to support system navigation and provide patient linkage to appropriate physical health, mental health, SUD and social services. Ensure follow-up and retention in care to those services, which are under DPH/DMPH authority, and promote adherence to medications.
Applicable	**2.3.10** Implement technology-enabled data systems to support patients and care teams throughout the care management program including patient identification, pre-visit planning, point-of-care delivery, care plan development and population/panel management activities.
Not Applicable	**2.3.11** Implement a data-driven system for rapid cycle improvement and performance feedback to address quality and safety of patient care, which includes patients, front line staff and senior leadership.

☒ 2.6 – Chronic Non-Malignant Pain Management

Over the past decade, Alameda County data been consistent with national trends in the rise of opioid-related hospital and clinic visits, clinic prescriptions for controlled medications, and accidental overdose deaths. The latter are primarily related to lack of access to effective management of chronic non-malignant pain. Addressing these issues in AHS' ambulatory clinics will ensure systematic chronic pain platforms that address CNMP prevention, assessment, and treatment.

This will include:

- *Forming a multi-disciplinary team for project implementation (DY12)*:
- *Conducing a gap assessment* (DY12) to inform development of an overall vision for a multi-modal approach that incorporates safe pharmacological and non-pharmacological treatments to manage the needs of patients with CNMP with a focus on those who also have substance use disorders.
- *Developing a multi-model approach (DY12) that includes:*
  - Adoption of a standardized definition of chronic pain;
  - Adoption of a nationally-recognized tool for assessment and management of CNMP, including agreement on the use of standardized tools for pain assessment, functional assessment, psychological assessment, and use of opioids;
  - Development of protocols to improve primary care management of CNMP including use of standard Pain Care Agreement, safe prescribing practices, capture of a comprehensive pain history, screening and management of aberrant behavior, guidelines for maximum acceptable dosing, and protocols for prescribing naloxone; and
  - Identification of data collection requirements and specifications for identifying the target population.

- *Implementing the approach in DY12-DY15* to include:
  - Enabling system-wide availability of care agreements and prescription history to improve the effectiveness of treatment and reduce opioid diversion and misuse;
  - Providing referrals to treatment options including substance use disorder treatment, methadone maintenance, and needle exchange; and
  - Providing ongoing training for staff and clinicians on protocols, and ongoing feedback on effectiveness of care management practices and comparison with peers across the system.

Target Population: The target population will be patients age 18+ who have chronic non-malignant pain with, or at risk for, substance use disorder, and who use AHS' EDs and clinics. In cases where the patient is assigned to another system or clinic, AHS will develop referral loop backs to facilitate the patient's ability to connect with their respective primary care resources (PCMH, PCP). As a result of the social determinants they experience, which are oftentimes caused and/or exacerbated by their CNMP, these patients experience barriers to access to effective care and treatment.

Vision for Care Delivery: AHS' comprehensive chronic pain management program will enable design and implementation of an effective multi-modal approach for addressing the target population's needs. This will include agreements on a staffing model encompassing non-traditional disciplines, such as occupational and physical therapy; use of evidence-based complementary medicine approaches such as acupuncture; use of screening and multi-dimensional assessment tools; protocols for naloxone prescription; and referrals to substance use treatment, needle exchanges, and other community resources. The project's vision is that the comprehensive chronic pain management program targeting patients with chronic non-malignant pain (CNMP) will result in reduced levels of pain in the target population, reduced risk of adverse health outcomes (e.g., opioid overdose), and improved quality of life and satisfaction with care.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Applicable	**2.6.1** Develop an enterprise-wide chronic non-malignant pain management strategy.
Not Applicable	**2.6.2** Demonstrate engagement of patients in the design and implementation of the project.
Applicable	**2.6.3** Implement or adapt a state or nationally recognized methodology for the assessment and management of chronic pain.
Applicable	**2.6.4** Implement protocols for primary care management of patients with chronic pain including: • A standard standardized Pain Care Agreement. • Standard work and policies to support safe prescribing practices. • Comprehensive pain history including psycho/social evaluation, functional evaluations, care plan, pain medication risk/benefit informed consents, ongoing monitoring of plan/outcomes (e.g., use of standardized monitoring template for follow-up visits for CNP), aberrant behavior screening and management protocols. • Guidelines regarding maximum acceptable dosing.
Applicable	**2.6.5** Provide culturally, linguistically and literacy level-appropriate patient education on the pathology of chronic pain, rationale for rehabilitation and expected goals of treatment.

Check, if applicable	Description of Core Components
Applicable	**2.6.6** Coordinate a chronic pain care team that minimally consists of a physician champion and medical support staff. Suggestions for care clinicians from other disciplines include occupational and physical therapy, behavioral health, pharmacy, substance use disorder specialists, neurology, occupational medicine, anesthesiology/pain management, home care, social work, and physical medicine and rehabilitation.
Not Applicable	**2.6.7** Implement technology-enabled data systems to support pre-visit planning, point of care delivery, and team based population/panel management and care coordination.
Applicable	**2.6.8** Determine population ICD-9/ICD-10 codes for data collection that is unique to patients with chronic pain on opioids and develop a registry for pain assessments, care agreements, medication refill standing orders and urine toxicology screening.
Applicable	**2.6.9** Utilize provider activity report card to provide feedback to providers on how their chronic pain management practice compares to peers and benchmarks.
Applicable	**2.6.10** Establish a policy for monitoring and maintaining opioid agreements for prescription refills with other clinics, pharmacies, dentists and specialists.
Applicable	**2.6.11** Develop a process for scheduling pain focused follow-up patient visits to ensure that patients receive refills in a timely manner while also receiving recommended monitoring for signs of diversion or misuse.
Applicable	**2.6.12** Develop staff and clinician training regarding the organization's process for managing patients with chronic non-malignant pain.
Applicable	**2.6.13** Train providers to identify signs of prescription opioid use disorders and provide treatment options for patients diagnosed with opioid use disorders, including suboxone treatment, referral to methadone maintenance, referral to inpatient and outpatient substance use disorder treatment facilities, and referral to needle exchanges.
Applicable	**2.6.14** Develop and implement protocols for prescribing naloxone to patients receiving opioids for chronic pain.
Applicable	**2.6.15** Identify standardized multidimensional pain assessment, functional assessment, psychological assessment, and opioid assessment tools that meet the needs of the care clinicians and are appropriate for the patient populations.

Check, if applicable	Description of Core Components
Not Applicable	**2.6.16** Implement a system for continual performance feedback and rapid cycle improvement that includes patients, front line staff and senior leadership. Timely, relevant and actionable data is used to support patient.

Please complete the summary chart:

	For DPHs	For DMPHs
Domain 2 Subtotal # of DPH-Required Projects:	**3**	**0**
Domain 2 Subtotal # of Optional Projects (Select At Least 1):	**1**	
Domain 2 Total # of Projects:	**4**	

Section 4.3 – Domain 3: Resource Utilization Efficiency

☒ 3.1 – Antibiotic Stewardship

This project offers the opportunity to institute system-wide evidence-based antimicrobial protocols that promote provider, pharmacist, and clinical staff collaboration and coordination designed to reduce unnecessary variation in treatment and adverse drug effects. It will build upon successes of the Empiric Therapy Guide and other standardized protocols used at Highland Hospital, which can be expanded to other AHS hospitals and EDs. AHS will evaluate the addition of another dedicated system-level Infectious Disease physician to augment the work proposed in this project.

AHS' approach will include:

- *Policies and procedures*: In DY 11 to 12, AHS' will assemble a project team—consisting of infectious disease, pharmacy, laboratory, and other key physician leaders and staff—to identify areas of focus for disease types that will best benefit from the project's objectives. The work will include agreement on adoption of components of US programs for antibiotic stewardship that will produce a consensus-driven and implementable program. The procedures and protocols will be syndrome and disease driven. For example, the project team will evaluate the adoption of step-down from intravenous to oral antibiotic therapy to support early hospital discharge with safeguards to ensure appropriateness, and adoption of a "public commitment" strategy to reduce upper respiratory infection-related antibiotic prescription in the clinics.

- *Training*: In DY 12 and 13, we will use EHR-enabled capabilities to provide practicing providers point of care access to protocols and guidelines. The project team will develop an ongoing education and training plan on dosing, route, and duration to enhance guideline adherence. As part of this effort, AHS leaders will participate in learning collaboratives to share best practices for long-term sustainable practice changes.

- *Reporting and Monitoring*: During DY 13 to 15, AHS will institute the use of dashboards to track adherence, performance, and variation among providers on agreed-upon guidelines and protocols.

Target Population: The interventions implemented will be determined by the age of the population for a specific metric and associated core measure. For example, the target population for acute bronchitis (NQF 58), Low Colony Urinary Cultures, and Prophylactic antibiotics at time of surgical closure will be persons 18 to 64 years of age.

All patients will be included for the Antimicrobial Use (AU, NQF 2720) and Clostridium Difficile Infections measure.

Vision for Care Delivery: AHS recognizes the importance of a robust antibiotic stewardship program throughout our inpatient and outpatient facilities to reduce antimicrobial resistance and enhance resolution of infections, costs and adverse events such as kidney damage and C. difficile colitis, and medication and other errors of commission and omission. This project will help AHS' standardize protocols across the system, and incorporate best clinical practices based on dosing, route of delivery, and duration. We intend to build upon existing efforts, such as the Highland Hospital multidisciplinary committee on Empiric Therapy Guide, and expand these to AHS' other hospitals and free-standing ambulatory care centers.

Please mark the core components for this project that you intend to undertake:

Check, if applicable	Description of Core Components
Not Applicable	**3.1.1** Utilize state and/or national resources to develop and implement an antibiotic stewardship program, such as the California Antimicrobial Stewardship Program Initiative, or the IHI-CDC 2012 Update "Antibiotic Stewardship Driver Diagram and Change Package.[2] • Demonstrate engagement of patients in the design and implementation of the project.
Applicable	**3.1.2** Develop antimicrobial stewardship policies and procedures.
Applicable	**3.1.3** Participate in a learning collaborative or other program to share learnings, such as the "Spotlight on Antimicrobial Stewardship" programs offered by the California Antimicrobial Stewardship Program Initiative.[3]
Applicable	**3.1.4** Create standardized protocols for ordering and obtaining cultures and other diagnostic tests prior to initiating antibiotics.
Not Applicable	**3.1.5** Develop a method for informing clinicians about unnecessary combinations of antibiotics.

[2] The Change Package notes: "We do not recommend that any facility attempt to implement all of the interventions at once. There are a large number of interventions outlined in the Change Package, and attempting to implement too many at one time will likely create huge challenges. Rather, the Change Package is meant to serve as a menu of options from which facilities can select specific interventions to improve antibiotic use." (p. 1, Introduction).

[3] Launched in February 2010, this statewide antimicrobial stewardship program expands use of evidenced-based guidelines to prevent and control infections and improve patient outcomes: Click here to see this statistic's source webpage.

Check, if applicable	Description of Core Components
Applicable	**3.1.6** Based on published evidence, reduce total antimicrobial Days of Therapy (DOT) by providing standards and algorithms for recommended agents by disease type, focusing on short course regimens (e.g., 3-5 days of therapy for uncomplicated cystitis, 7 days for uncomplicated pyelonephritis, 5-7 days for uncomplicated non-diabetic cellulitis, 5-day therapy for community acquired pneumonia (CAP), 7-8 days for therapy for VAP or hospital acquired pneumonia).
Not Applicable	**3.1.7** Develop evidence-based computerized provider order entry (CPOE) algorithms and associated clinician training, to support antibiotic stewardship choices during order entry. These could include approaches such as guidelines for duration of antibiotics, within drug class auto-switching for specific antibiotics and doses, or restriction of specific antibiotics at the point of ordering (e.g., broad spectrum agents).
Not Applicable	**3.1.8** Implement stewardship rounds focusing on high yield drugs to promote de-escalation after the drugs are started, such as regular antibiotic rounds in the ICU.
Not Applicable	**3.1.9** Improve diagnostic and de-escalation processes to reduce unnecessary antibiotic use based upon length of therapy or antibiotic spectrum, such as: • Procalcitonin as an antibiotic decision aid. • Timely step-down to oral antibiotic therapy to support early discharge from the hospital for acute infections. • Use of oral antibiotics for osteomyelitis to reduce prolonged IV exposures.
Not Applicable	**3.1.10** Evaluate the use of new diagnostic technologies for rapid delineation between viral and bacterial causes of common infections.
Applicable	**3.1.11** Adopt the recently described "public commitment" strategy in outpatient clinics to encourage providers not to prescribe antibiotics for upper respiratory tract infections (URIs).
Applicable	**3.1.12** Publish organization-wide provider level antibiotic prescribing dashboards with comparison to peers and benchmarks. Contribute system level data for a similar dashboard across all public health care systems.
Not Applicable	**3.1.13** Implement a system a system for continual performance feedback and rapid cycle improvement that includes patients, front line staff and senior leadership.

Please complete the summary chart:

	For DPHs	For DMPHs
Domain 3 Subtotal # of Selected Projects (Select At Least 1):	**1**	
Domain 3 Total # of Projects:	**1**	

Section 5: Project Metrics and Reporting Requirements

Each project includes a required set of metrics, as specified in Attachment Q: PRIME Project and Metrics Protocol. All of the metrics for the required and selected projects must be reported each demonstration year (DY) in compliance with Attachment Q.

Participating entities must report and include baseline data for all relevant project metrics and will identify data sources, consolidating data from multiple inpatient and ambulatory systems, and including data on assigned lives reported from health plans reporting on this data semi-annually. Report submissions must include the numerator and denominator data for each of the metrics for which the entity is seeking payment under PRIME. A PRIME participating entity may provide estimates or reasonable projections if particular data is unavailable due to circumstances beyond the PRIME entity's control, including data that is collected and maintained by an external entity, such as an MCP, which has not been provided to the participating PRIME entity in a timely and accurate manner.

DPHs are required to strengthen data and information sharing with MCPs under the PRIME. To support this requirement, DHCS will establish data and information sharing guidelines and/or mechanisms, which DPHs and DMPHs must follow, consistent with applicable state and federal data privacy and security law, to provide for timely sharing of beneficiary data, assessment, and treatment information, for purposes of identifying and treating the beneficiary for PRIME and Whole-Person Care (WPC). DPHs must demonstrate establishment of new and/or strengthened data and information sharing with MCPs during the demonstration. In particular, the following must occur: reporting of complete, accurate, reasonable and timely reporting of encounter data; sharing of treatment and assessment data for care coordination purposes; and, establishment of processes and infrastructure to support MCP achievement of quality improvement efforts when aligned with PRIME projects.

☒ I understand and accept the responsibilities and requirements for reporting on all metrics for required and selected projects

Section 6: Data Integrity

Each PRIME participating entity must establish and adhere to a data integrity policy throughout the execution of the PRIME Program. Participating entities must be able to verify that all fiscal, clinical, and quality improvement work for which a metric claim is reported. State and federal officials reserve the right to require additional substantiation or verification of any data claim or related documentation and may conduct periodic audits when indicated.

☒ I understand and accept the responsibilities and requirements for establishing and adhering to a data integrity policy.

Section 7: Learning Collaborative Participation

All PRIME participating entities are encouraged to actively participate in learning collaboratives that will be launched by DHCS or their designees for purposes of providing technical assistance and information exchange opportunities as PRIME implementation gets underway. At a minimum, each PRIME participating entity is required to participate in at least one face-to-face statewide learning collaborative per PRIME year. Please acknowledge your understanding and acceptance of this responsibility below.

☒ I understand and accept the responsibility to participate in-person at the annual statewide collaborative.

Section 8: Program Incentive Payment Amount

Please indicate the total computable PRIME incentive payment amount for this 5-year plan, consistent with the PRIME Funding and Mechanics Attachment:

Total computable 5-year PRIME plan incentive payment amount for:

- DY 11 $ 64,342,600
- DY 12 $ 64,342,600
- DY 13 $ 64,342,600
- DY 14 $ 57,908,304
- DY 15 $ 49,222,089

Total 5-year prime plan incentive amount: $ 300,158,229

Section 9: Health Plan Contract (DPHs Only)

DPHs are required to commit to contracting with at least one Medi-Cal managed care health plan (MCP) in the MCP service area that they operate using alternative payment methodologies (APMs) by January 1, 2018.

☒ I understand and accept the responsibility to contract with at least one MCP in the service area that my DPH operates no later than January 1, 2018 using an APM.

Section 10: Certification

☒ I hereby certify that all information provided in this Plan is true and accurate to the best of my knowledge, and that this plan has been completed based on a thorough understanding of program participation requirements as specified in Attachment Q and Attachment II of the Waiver STCs.