

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

# NORTHERN INYO HEALTHCARE DISTRICT

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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 <u>Special Terms and Conditions (STCs)</u>. Additional

information about the PRIME program requirements can be found in the PRIME Projects and Metrics Protocol (<u>Attachment Q</u>) and Funding Mechanics (<u>Attachment II</u>) 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 <u>PRIME@dhcs.ca.gov</u> no later than 5:00 p.m. on April 4, 2016.

# Section 1: PRIME Participating Entity Information

#### Health Care System/Hospital Name

Northern Inyo Healthcare District

#### Health Care System Designation(DPH or DMPH)

DMPH

# 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.

Northern Inyo Healthcare District (NIHD) is located in Bishop, the largest city in Inyo County. The health care needs and disparities of our community are summarized below.

The County Health Rankings compiled by the Robert Wood Johnson (RWJ) Foundation ranked Inyo County 40<sup>th</sup> out of 57 total California counties for health outcomes. Health indicators and disparities can be difficult to track in Inyo County due to the small population size. Statistics are often not available, unreliable, or combined with data from other small counties in order to reach a statistically significant sample size. That being said, we know that smoking rates, STD rates, poverty rates, and other key health or social indicators tend to be higher in Inyo compared to statewide data. The RWJ Community Health Rankings and Roadmap report states that we have a low birth weight rate of 8.7% compared to a 6.8% statewide average. Our adult obesity rate is 23%, which is right on par for the state, and our diabetes rate is about 10% compared to an 8% state average.

The 2015 Community Health Status Indicators (CHSI) provided by the Centers for Disease Control and Prevention, list Inyo County in the "Worse" quartile among U.S. peer counties (those with similar demographic characteristics) for:

- Chronic lower respiratory disease (CLRD) deaths
- Coronary heart disease deaths
- Male life expectancy
- Adult diabetes
- Adult obesity
- Preterm births
- Uninsured
- Teen Births
- Children in single-parent households
- Inadequate social support
- On time high school graduation
- Unemployment

- Violent crime
- Limited access to healthy food
- Living near highways

#### 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.

Inyo County has a population of 18,410 according to the Census Bureau's 2014 estimates. The county inhabits a very isolated portion of Eastern California along the Highway 395 corridor. Due to the rugged terrain, Inyo County residents are fairly isolated from the rest of California. It takes at least 3 to 5 hours by car to reach a moderately large city in California or Nevada. Los Angeles and Las Vegas are a  $4\frac{1}{2}$  -5½ hour drive south, while Sacramento or Fresno are a 4 to 5 hour drive north and west over the Sierra Nevada mountains. It is not unusual for the passes through the mountains to be closed during the winter months. In that case, residents must travel many additional miles to circumvent the mountains, thereby adding miles, gas costs and hours.

<u>Income</u>: The average per capita income in Inyo County is \$27,028 and the median family income is \$45,625. The percentage of the population living at or below the poverty level is about 16.5% according to the Public Policy Institute of California. Again that is aggregated data between the following counties: Alpine/Amador/Calaveras/Inyo/Mariposa/Mono/Tuolumne.

Age: The age breakdown is as follows:

- 0-18 years (21%)
- 19-64 years (58%)
- 65 and over (21%)

<u>Race/Ethnicity and Language</u>: The population of Inyo County is 0.7% Non-Hispanic African American, 12.7% American Indian and Alaskan Native, 1.5% Asian, 0.1% Native Hawaiian/Other Pacific Islander, 20.8% Hispanic, 64.5% Non-Hispanic white. While English is the primary language, the large Hispanic community makes Spanish a very prevalent language as well.

#### 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.

NIHD is a 25 bed, critical access hospital that provides acute inpatient, outpatient, and 24/7 emergency care. The District also provides diagnostic imaging services, physical therapy, respiratory therapy, a Rural Health Clinic, and outpatient care clinics such as women's health, general surgery, orthopedics, neurology, and pediatrics. Of the 25 inpatient beds, 5 are perinatal, 4 are intensive care, and 16

are unspecified general acute care. The District works closely with the Toiyabe Indian Health Clinic that serves our native population and the Inyo County Health Department. We currently have a Rural Health Network Planning grant from the Health Resources and Services Administration (HRSA) between the three entities to better coordinate care provided to all residents of Inyo County.

In fiscal year 2015, NIHD's payer mix was as follows: Medicare - 39%, Medicaid, including County Medical Services Program (CMSP) - 23%, other third-party payors - 30%, and self-pay - 8%. NIHD had 1,069 acute inpatient discharges and 37,684 outpatient visits. The average length of stay for acute care was 3.3 days, up from 2.7 the previous year and hospital beds had a 42% occupancy rate. Our Emergency Department saw 7,948 patients.

#### 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.

NIHD currently collects, monitors, and reports data for only one of the five required metrics, Hospital-Acquired Clostridium difficile infections, via NHSN. The Pharmacy director, Laboratory director, Information Technology Applications Manager, QAPI Department and Directors of Nursing will be working together to meet the PRIME program data collection, monitoring and reporting requirements.

<u>Data Collection</u>: In 2016, NIHD adopted a revamped Hospital-Wide Quality Plan and adopted an Integrated Quality Assurance and Performance Improvement (QAPI) Organizational Structure. One of the committees that is part of this structure is the Data and Information Committee, which will contribute to improving data-driven learning, decision-making and strategy development. Additionally, part of the plan includes creating a Hospital-Wide Metric/Indicator log, to identify data sources, data definitions, crosswalk metrics and data reporting plans. This information will help to streamline data collection and processing, and improve clinical documentation, data querying and validation processes.

The infrastructure-building process will result in data for the following Antibiotic Stewardship metrics:

- 1. Avoidance of antibiotic treatment in adults with acute bronchitis
- 2. Avoidance of antibiotic treatment with Low Colony Urinary Cultures
- 3. NHSN Antimicrobial Use Measure
- 4. Prophylactic antibiotics discontinued at time of surgical closure

<u>Reporting</u>: NIHD uses Pillars of Excellence, a Balanced Scorecard approach to track performance. Some metrics are reported monthly and others are reported

quarterly and the data flows through Medical Staff committees and the Board of Directors, as appropriate.

<u>Monitoring</u>: The QAPI Department and the Data and Information Committee review data collection processes and area managers and appropriate committees review outcomes against goals and benchmarks set in the Pillars of Excellence.

<u>Barriers</u>: There are several barriers to meeting the PRIME reporting requirements, as follows:

- Human Resources: The data collection and reporting responsibilities for QAPI & Informatics Departments have increased dramatically in the last few years and additional metric reporting may require additional FTE(s).
- 2. IT Infrastructure:
  - a. Limited Systematized Nomenclature of Medicine (SNOMED) codes for antibiotic drug categories and sub-categories. These antibiotic category codes as wells as some laboratory SNOMED codes will need to be built into the electronic health record (EHR). Antibiotic dosing routes are currently coded. The coding requirements will be built within the next 1- 3 months.
  - b. The operating room (OR) and post anesthesia care units (PACU) still utilize a paper process.

# **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;

<u>Note</u>:

\* 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.

NIHD's Hospital-Wide Quality plan and the strategic plan focuses around the six Institute of Medicine (IOM) aims and has a vision of providing healthcare that is safe, effective, patient-centered, timely, efficient and equitable to the people of the Eastern Sierra Region. We also realize that in order to achieve these aims, there needs to be a focus on financial sustainability and cost-effectiveness, as well as developing a culture of continuous improvement and learning in our workforce.

As part of PRIME, NIHD intends to implement more effective and efficient approaches to patient-centered care, by identifying and implementing best practices in antibiotic stewardship. This will contribute to:

- 1. Improved patient safety
- Long-term sustainability and financial viability of our community hospital, which services remote communities with limited access to healthcare services
- 2. List specific aims\*\* for your work in PRIME that relate to achieving the stated goals;

<u>Note</u>:

# \*\* Specific aims (generally 2-5) relate to the goals but provide more detail on how the goals will be achieved.

NIHD has the following two specific aims for the NIHD PRIME participation: (1) Ensure that patients receive the appropriate antimicrobial agent with the correct dose, indication, and duration. (2) Prevent antimicrobial overuse, misuse and abuse.

In terms of Aim #1, we will:

- Research and modify Zynx evidence-based order sets based on our community population.
- Make associated revisions/updates in the Computerized Physician Order Entry (CPOE) System.

In terms of Aim #2, we will:

- Incorporate pharmacists in interdisciplinary daily rounds with a focus on prescribing, reassessing appropriate antibiotic use and discontinuing antibiotics when not appropriate.
- 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;

NIHD selected the PRIME Antibiotic Stewardship Project (3.1). This project directly aligns with our goal and aims and will enable us to develop the

infrastructure needed to develop an antimicrobial stewardship program. This program will help us promote the appropriate use of antimicrobials by selecting the appropriate agent, dose, duration and route of administration in order to improve patient outcomes, while minimizing toxicity and the emergence of antimicrobial resistance.

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

Being a DMPH, only 1 project has been selected.

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.

At the end of the five-year PRIME participation, NIHD will see improvements in the appropriate use of antimicrobials, and more specifically, 1) Reductions in the use of inappropriate broad spectrum antibiotic utilization, and 2) Reductions in antimicrobial utilization for non-bacterial diseases. Clinical pharmacy services will be improved through the development of standardized protocols for ordering and obtaining cultures, diagnostic tests prior to initiating antibiotics and for the ordering of antibiotic therapy through CPOE pathways. Implementation of these initiatives will see a reduction in inappropriate antibiotic use and reduction in pharmacy expenditures. As a result of these PRIME activities, NIHD expects to see improvements in patient safety and long-term sustainability and financial viability of our hospital, which services remote communities with limited access to healthcare services.

#### 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 discussed in Section 2.1, Inyo County ranks in the Worst quartile for chronic lower respiratory disease (CLRD) deaths. PRIME project activities may reduce mortality associated CLRD, by reducing antibiotic resistance and thereby improving efficacy of antibiotics in more serious infections. Additionally, Inyo County experiences higher than average STD rates compared to other California counties, which is a concern with the growing threat of antibiotic- resistant gonorrhea. This project may consider additional community initiatives geared towards these specific issues and sub-populations later in the project.

#### 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).

The 2016 Hospital-Wide Quality Plan has included the Antibiotic Stewardship Program Development & Implementation project as part of its plan and will continue to incorporate these efforts into future Annual Work Plans. NIHD has also developed an Antibiotic Stewardship Committee and reporting structure to oversee implementation of the PRIME project.

The Antimicrobial Stewardship Committee will be responsible for the:

- 1. Development or revision of existing policies, procedures, protocols and guidelines related to infectious diseases (e.g., restricted antimicrobials, treatment guidelines based on local susceptibilities)
- 2. Development and distribution of an antibiogram at least annually and assessing trends of antimicrobial resistance within the facility
- 3. Providing recommendations to the Pharmacy and Therapeutics Committee about antimicrobial selection, dose, and duration of therapy
- 4. Providing ongoing healthcare practitioner education (e.g., newsletters, inservices, and one-on-one interaction) regarding antimicrobial stewardship initiatives
- 5. Collection, tracking and analysis of antimicrobial consumption though days of therapy and purchasing costs.
- 6. Collection, tracking and analysis of resistance patterns (at a later date)
- 7. Regularly reporting antimicrobial stewardship measures to relevant healthcare practitioners and hospital administration

The Chief Performance Excellence Officer has drafted an Antibiotic Stewardship Program Development and Implementation project charter and identified important internal stakeholders, including Pharmacy Management and staff, Lab, physicians, Informatics, Information Technology, Infection Control and Quality Assurance and Performance Improvement. The project team will primarily use the California Department of Public Health's Healthcare-Associated Infections Program – California Antimicrobial Stewardship Program Initiative guidance to implement our PRIME project. Other guidance which may be used is that from the Institute for Healthcare Improvement, the Centers for Disease Control and others.

This group has had several meetings over the last year and is ready to undertake this important project with the full support of the NIHD Board and leadership team. They will be ready to make regular updates to the district board and executive team to ensure proper resources are being devoted to the project and will be the core group responsible for the reporting on the performance measures.

#### 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.

The Hospital-Wide Quality Plan has recently undergone a major revision, which involves structural changes including the formation of a Patient Experience Committee and Patient Experience Council. The Patient Experience Council will solicit feedback from a variety of stakeholders, including community members, Board members and patients and report back to the Patient Experience Committee on quality/performance improvement initiatives, including PRIME projects. The manner of obtaining feedback may be face-to-face meetings, surveys such as KAP (knowledge, attitudes, practices) surveys, focus groups and other methods.

Part of the implementation of the Antibiotic Stewardship Program will be community and healthcare worker education and promotion of the program and its aims, with the goal of increasing awareness, knowledge and behavior regarding antibiotic use and resistance. These strategic communication efforts will include partnering with other local healthcare providers and partners to ensure consistent, aligned messaging.

#### 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.

NIHD interacts with a diverse population on a daily basis. With both the Native American and Hispanic population making up almost 35% of the patients we see, there are established modes and methods for addressing their needs. NIHD works diligently to ensure that material is available in both English and Spanish. Employees participate in *Culturally and Linguistically Appropriate Services in Health and Healthcare (CLAS)* training, upon hire and annually, thereafter. The staff of the hospital is actively engaged in community events, such as health fairs, the county fair, and other social gatherings of both these populations where we can engage and circulate information that is culturally relevant to them.

NIHD works with the Language Services Coordinator to translate written information into Spanish. NIHD uses a combination of live, over-the-phone and remote video interpretive services to facilitate oral communication in Spanish, and on occasion, other languages.

#### 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.

NIHD participated in the IHI Improvement Leader Fellowship in 2014, via CalHEN 1.0, and has implemented basic formal project management methods, as well as introducing Lean Six Sigma methods. NIHD will leverage its experience to develop, implement and sustain PRIME improvement through use of the following:

- Stakeholder engagement, via an interdisciplinary, cross-functional approach, including providers and clinical and non-clinical champions.
- Using data-driven decision-making, including the use of process, outcome and balancing measures and project management measures. One example might include data from Knowledge, Skills and Abilities (KSA) assessments and Knowledge, Attitudes, Practices (KAP) assessments to drive training and educational programs and internal and external communication plans, respectively.
- Consideration of various aspects of project management, including scope, time, cost, resources, procurement, risk, quality, integration and communication.
- Incorporation of continuous improvement principles such as PDSA into the improvement of new processes and systems.

# **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 <u>Attachment II</u> -- PRIME Program Funding and Mechanics Protocol. The required set of core metrics for each project is outlined in <u>Attachment Q</u>: 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.

<u>Designated Public Hospitals (DPHs)</u> 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.

<u>District/Municipal Public Hospitals (DMPHs)</u> 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 <u>each</u> 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. <u>For DMPHs (as applicable)</u>, 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 4.3 – Domain 3: Resource Utilization Efficiency

☑ 3.1 – Antibiotic Stewardship

Problems with the excessive and inappropriate use of antimicrobial agents in the United States have been widely recognized for a long time. Antimicrobial stewardship is a key component in the prevention and control of antimicrobial resistance. At this time, NIHD engages in some activities around stewardship, but there is not a systematic approach to antibiotic stewardship that is fully integrated into the hospital's practices. Participation in the PRIME program will help facilitate that process and implementing this type of program at NIHD is vital for the organization. That is because it has been widely documented that the potential consequences of inappropriate antimicrobial use include toxicity, the emergence of antimicrobial resistance, Clostridium difficile (C. difficile) and other hospital-acquired infections (HAI), increased morbidity and mortality, prolonged hospital lengths of stay, and increased health care costs. Antimicrobial resistance is a serious public health concern as well due to the emergence of multidrug-resistant and extremely drug-resistant microbial species for which there is no effective antimicrobial agent. To make matters worse, the research and development pipeline for antimicrobial agents is essentially empty, lending urgency to the need to use currently available effective agents wisely.

Currently, NIHD is identifying sources of data and developing custom reports that will allow the facility to develop an Antibiotic Stewardship Dashboard for internal and external reporting.

Our planned design and implementation approach is:

Antibiotic Stewardship (ABS) Program: NIHD will use antimicrobial stewardship resources from the GPO, Intelere, to develop standard operating policies and procedures for our antimicrobial stewardship program. Several pharmacists and the ABS physician champion have completed the first two modules of "Making A Difference In Infectious Diseases (MAD-ID) training and will become certified during DY 11 – DY 12. Additional training will be provided for pharmacy staff, physicians and nursing. The ABS Committee will create standardized protocols for ordering and obtaining cultures and other diagnostic tests prior to initiating antibiotics and will develop a method for informing clinicians about unnecessary combinations of antibiotics. These activities will occur and tools will be designed and implemented by DY 12.

Standardize Order Sets: NIHD will standardize evidence-based order sets which will include protocols on obtaining cultures and diagnostic tests prior to initiating antibiotics. These protocols will be specific to patient diagnosis and aid physicians identify specific types of infections. We will utilize prompts in the computerized physician order entry (CPOE) system to guide clinicians to order the appropriate cultures/diagnostics tests prior to initiating and will flag combinations of antibiotics within the same therapeutic class and/or with similar coverage spectrums. We plan on developing this during DY 11 and

DY 12 following the next EHR upgrade and ZYNX order set review and implementation.

1. Describe how the project will enable your entity to improve care for the specified population [No more than 250 words]

*Target Population.* During the infrastructure building process, the target population will be based on the specific target populations indicated and described in the PRIME metric specification manual. We intend to begin this work in the inpatient setting and then move to other settings as indicated by metric and performance improvement and reporting requirements and as the data collection process advances. For example, we plan on screening patients between the ages of 18 - 64 in the PRIME target population with suspected acute bronchitis to prevent antibiotic treatment if the episode is 3 days or older. The target population for the antimicrobial stewardship population (Project 3.1) will include the eligible population as described in the PRIME metric specification manual OR individuals with any acute care utilization at the PRIME entity during the measurement period.

Vision for Care Delivery. This project will keep NIHD up to date with the current standards set from the California Antimicrobial Stewardship Program Initiative. Developing a process around the order in which diagnostic tests and cultures are obtained is crucial to prevent false positives that might cause harm to patients. Using order sets based on the most recent literature will ensure our patients get the best, most up to date care. In addition, they will help us be stewards of antimicrobial care. NIHD will continue its use of the Procalcitonin and rapid diagnostic tests which will limit the unnecessary use of antimicrobial agents and will help prevent resistance and protect our patient's from C. Diff infections. By avoiding long term IV antibiotic use whenever possible, NIHD will provide convenience and added safety to our patients. By identifying and implementing best practices in antibiotic stewardship, NIHD's Hospital-Wide Quality and strategic plans of providing quality healthcare that is safe, effective, patient-centered, timely, efficient and equitable will lead to improved outcomes.

Check, if applicable	Description of Core Components
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. <sup>1</sup>

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

<sup>&</sup>lt;sup>1</sup> 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

Check, if applicable	Description of Core Components
	<ul> <li>Demonstrate engagement of patients in the design and implementation of the project.</li> </ul>
Applicable	<b>3.1.2</b> Develop antimicrobial stewardship policies and procedures.
Applicable	<b>3.1.3</b> 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. <sup>2</sup>
Applicable	<b>3.1.4</b> Create standardized protocols for ordering and obtaining cultures and other diagnostic tests prior to initiating antibiotics.
Applicable	<b>3.1.5</b> Develop a method for informing clinicians about unnecessary combinations of antibiotics.
Not Applicable	<b>3.1.6</b> 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).
Applicable	<b>3.1.7</b> 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	<b>3.1.8</b> 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	<ul> <li>3.1.9 Improve diagnostic and de-escalation processes to reduce unnecessary antibiotic use based upon length of therapy or antibiotic spectrum, such as:</li> <li>Procalcitonin as an antibiotic decision aid.</li> <li>Timely step-down to oral antibiotic therapy to support early</li> </ul>

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).

<sup>&</sup>lt;sup>2</sup> Launched in February 2010, this statewide antimicrobial stewardship program expands use of evidenced-based guidelines to prevent and control infections and improve patient outcomes: <u>Click here to see this statistic's source</u> <u>webpage</u>.

Check, if applicable	Description of Core Components
	<ul> <li>discharge from the hospital for acute infections.</li> <li>Use of oral antibiotics for osteomyelitis to reduce prolonged IV exposures.</li> </ul>
Applicable	<b>3.1.10</b> Evaluate the use of new diagnostic technologies for rapid delineation between viral and bacterial causes of common infections.
Not Applicable Not Applicable	<ul> <li>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).</li> <li>3.1.12 Publish organization-wide provider level antibiotic prescribing dashboards with comparison to peers and benchmarks. Contribute</li> </ul>
Аррисанс	system level data for a similar dashboard across all public health care systems.
Not Applicable	<b>3.1.13</b> 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:

<b>_</b>		
	For DPHs	For
		DMPHs
Domain 3 Subtotal # of Selected		1
Projects		
(Select At Least 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 <u>Attachment Q</u>: 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 <u>Attachment Q</u>.

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.

 $\boxtimes$  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.

 $\boxtimes$  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.

 $\boxtimes$  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 \$3,960,000.00
- DY 12 \$3,960,000.00
- DY 13 \$3,960,000.00
- DY 14 \$3,564,000.00
- DY 15 \$3,029,400.00

#### Total 5-year prime plan incentive amount: \$18,473,400.00

#### 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.

 $\Box$  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 <u>Attachment Q</u> and <u>Attachment II</u> of the Waiver STCs.

#### Proposed **Proposed Milestones** Applicable **Process Measure Start** Process Project Date – End Date Numbers Measures 1. 3.1 Develop 1. Convene interdisciplinary January 1, 2016 – June Antibiotic group to develop, review 30, 2016 and revise charter Stewardship committee governance 2. Finalize committee structure participants 3. Identify areas for improvement and determine target areas 4. Select high-level strategies for improving outcomes 2. Creation or 1. Conduct a gap analysis of 3.1 January 1, 2016 current data system and its December 31, 2016 Expansion of data reporting shortcomings systems for PRIME 2. Identify gaps in current EMR and potential changes needed to support 3. Identify resource/staffing requirements needed extract and analyze data 4. Implement changes necessary to EMR to support data need 5. Implement changes necessary to data analytics system/support to support data extraction and analysis 6. Work with IT to ensure proper metrics for project are capture and tracked with regards to improvements 7. Build data elements within EHRs 8. Train clinical staff on clinical documentation

#### Appendix- Infrastructure Building Process Measures

	Proposed Process Measures	Proposed Milestones	Applicable Project Numbers	Process Measure Start Date – End Date
		needed to capture data elements		
		<ol> <li>Report to identify patients with Medi-Cal and eligible conditions real time</li> </ol>		
		10. Develop report template to track target population		
		11. Build internal data queries		
		12. Establish reporting schedule and distribution process		
3.	Develop and Implement Antibiotic Stewardship Program	<ol> <li>Select metrics and review literature (includes, but may not be limited to, PRIME required metrics*)</li> </ol>	3.1	January 1, 2016 – December 31, 2016
	Performance Measurement Scorecard	<ol> <li>Identify and understand data definitions</li> </ol>		
	/Dashboard	<ol> <li>Identify potential sources of data (EMR modules, paper, logs, etc.)</li> </ol>		
		<ol> <li>Complete and submit IT report requests or develop Data Collection Plans if manual process</li> </ol>		
		<ol> <li>Validate data from IT or manual reports and refine as necessary</li> </ol>		
		<ol><li>Create assessment and reporting plans</li></ol>		
*Avoidance of antibiotic treatment in adults with acute bronchitis, Avoidance of Antibiotic Treatment with Low Colony Urinary Cultures, NHSN Antimicrobial Use, Prophylactic antibiotics discontinued at time of surgical closure, Reduction in Hospital Acquired Clostridium Difficile Infections				
4.	Develop process to avoid treatment of antibiotics in adults with acute	<ol> <li>Review literature and best practices around ordering and obtaining cultures and diagnostic tests</li> </ol>	3.1	January 1, 2016 – December 31, 2016
	bronchitis	2. Identify gaps in current		

	Proposed Process Measures	Proposed Milestones	Applicable Project Numbers	Process Measure Start Date – End Date
		reporting barriers and required data.		
		<ol> <li>Complete and submit IT report requests or develop Data Collection Plans if manual process</li> </ol>		
		4. Develop required data inquiries to address gaps which will provide the necessary data for NQF 0058: Avoidance of antibiotic treatment in adults with acute bronchitis		
		5. Develop a protocol to avoid treatment of antibiotics in adults with acute bronchitis on or 3 days after episode		
		6. Develop training materials to prevent treatment of adult patients with acute bronchitis with antibiotics on or 3 days after episode		
		7. Train staff to prevent treatment of adult patients with acute bronchitis with antibiotics on or 3 days after episode		
		8. Incorporate into Antibiotic stewardship program.		
5.	to avoid treatment of Antibiotics with	<ol> <li>Review literature and best practices around ordering and obtaining cultures and diagnostic tests</li> </ol>	3.1	January 1, 2016 – December 31, 2016
	Low Colony Urinary Cultures	<ol> <li>Complete and submit IT report requests or develop Data Collection Plans if manual process</li> </ol>		
		<ol> <li>Validate data from IT or manual reports and refine as necessary</li> </ol>		

	Proposed Process	Proposed Milestones	Applicable Project	Process Measure Start Date – End Date
	Measures		Numbers	
		<ol> <li>Develop protocol to address gaps and standardize cultures and diagnostic test ordering and receipt process for low colony cultures for urinary cultures</li> </ol>		
		5. Develop and train staff utilizing order sets and diagnostic testing for low colony urinary cultures		
		<ol> <li>Implement process to prevent treatment of patients with antibiotics that do not show bacterial levels consistent with infections</li> </ol>		
		7. Incorporate into Antibiotic stewardship program		
6.	Develop process to discontinue Prophylactic antibiotics discontinued at time of surgical closure	<ol> <li>Review literature and best practices around prophylactic antibiotics discontinued at the time of surgical closure (variation on NQF 0529)</li> </ol>	3.1	January 1, 2016 – December 31, 2016
		2. Determine the clean and clean contaminated procedures conducted at the hospital		
		3. Identify gaps in current reporting barriers and required data for prophylactic antibiotics discontinued at time of surgical closure for clean and clean contaminated procedures		
		4. Complete and submit IT report requests or develop Data Collection Plans, if a manual process, which will provide the necessary data to report if prophylactic		24

Proposed Process Measures	Proposed Milestones	Applicable Project Numbers	Process Measure Start Date – End Date
	antibiotics were discontinued at the time of surgical closure for clean and clean-contaminated procedures		
	5. Develop a protocol to prevent the ordering of additional prophylactic antimicrobial agent doses after the surgical incision is closed in the operating room, even in the presence of a drain in clean and clean contaminated procedures		
	6. Develop training materials to prevent additional antibiotics from being administered in clean and clean- contaminated procedures, after the surgical incision is closed in the operating room, even in the presence of a drain		
	7. Educate and train staff on the principles of clean and clean-contaminated surgical procedures and the protocols used to prevent prophylactic antibiotic administration after the surgical incision is closed in the operating room even in the presence of a drain.		
	<ol> <li>Incorporate into Antibiotic stewardship program.</li> </ol>		