

SMMC WAIVER MILESTONES PROPOSAL

Background:

San Mateo Medical Center (SMMC) is a 509-bed public hospital and clinic system fully accredited by The Joint Commission. SMMC's predominant service is a network of outpatient clinics throughout San Mateo County, supported by long-term care facilities in San Mateo and Burlingame and an acute-care hospital that includes both medical and psychiatric inpatient and emergency services. We served 76,297 patients and delivered 238,572 outpatient visits in 2009-10. Our payor mix is 43% Medicaid, 31% Uninsured, 16% Medicare, 8% Commercial/Third Party payors, and 2% Healthy Kids/Healthy Families. The mission of San Mateo Medical Center is to "open doors to excellence in healthcare." As part of the San Mateo County Health System, SMMC serves the health care needs of all residents of San Mateo County, with an emphasis on education and prevention. Our vision is to offer timely access to care through an integrated delivery system, with a culture of service, innovation, satisfaction and safety. In working toward achieving this vision, SMMC currently has strategically-placed and comprehensive health services upon which to build an integrated approach to care. Despite this intensive work, improvement remains to be made to reach our vision.

Executive Summary:

In this proposal, we:

- **Identify key challenge areas that need to be addressed** in order to provide better care for patients and to transition successfully to health care reform implementation. Specifically, these are the barriers that SMMC feels it must overcome in order to: improve the quality of care we deliver, improve the patient's experience of care, improve population health and reduce the cost of care. Following are descriptions of the high-level challenges. We also provide specific issues within each of these challenges throughout the proposal, including the variables that are being modified and the resulting impact.
 1. There is inadequate primary care capacity to meet demand.
 2. Health care disparities are likely to exist but remain unrecognized and therefore unaddressed.
 3. All patients are not necessarily receiving the right care in the right place at the right time, reflecting poorly coordinated care.
 4. Existing primary care capacity is not necessarily being used in the most effective and efficient manner.
 5. Although improving the patient's experience of care is an institutional priority, our ability to improve is impaired by inadequate tools and data.
 6. Primary care and mental health function separately.
 7. There is inadequate access to specialty care and specialty care capacity is not always efficiently or effectively utilized.

8. Care is not at all times of sufficient value, that is, the highest quality at the lowest cost.
 9. Patients seeking care for sepsis suffer high rates of morbidity and mortality.
 10. Patients suffer from serious hospital acquired infections related to central lines.
 11. Patients may experience serious complications related to surgical site infections.
 12. Patients can suffer significant injuries due to falls in the acute care setting.
- **Determine four major categories of delivery system reform to address these challenges** and prepare for health care reform as outlined in the California Section 1115 Waiver Terms and Conditions:
 - **Category I: Infrastructure Development** – Investments in technology, tools and human resources that will strengthen the organization’s ability to serve its population and continuously improve its services
 - **Category II: Innovation and Redesign** – Investments in new and innovative models of care delivery (e.g., Medical Homes) that have the potential to make significant, demonstrated improvements in patient experience, cost and disease management
 - **Category III: Population-focused Improvement** - Investments in enhancing care delivery for the highest burden conditions in the populations served by California Public Hospitals (Category III plan to be submitted at a later date)
 - **Category IV: Urgent Improvement in Care** – Broad dissemination of top-level interventions where there is deep evidence that major improvement in care is possible within 5 years, and that are measurable and meaningful for almost all hospital populations such as those served by the California Public Hospitals
 - **Establish a five-year implementation plan** of 12 projects and 111 investment, improvement, and outcomes milestones, which commit SMMC to concrete progress on the four major categories of delivery system reform:
 - Investment milestones reflect needed investment in infrastructure, resources, processes, and programs.
 - Improvement milestones demonstrate significant care transformation.
 - Outcomes milestones reflect improved clinical and process outcomes, patient experience, and Emergency Department/hospital utilization rates.

At the end of the five years, if we achieve the milestones we are proposing, we will have:

- Reduced the time to third next available appointment to less than seven days in four clinics
- Expanded primary care capacity by adding three new provider teams
- Implemented best practice race, ethnicity, gender, primary language, and literacy (REAL) data for at least 90% of patients seen at SMMC
- Incorporated the comparison of patient demographic and quality data to identify disparities
- Assigned at least 90% of eligible patients to primary care teams
- Reduced no-show rates for medical home patients to less than 10%
- Spread validated patient experience surveys to the outpatient and Emergency Department settings
- Made patient experience data for the medical/surgical wards, Emergency Department, and four outpatient clinics easily available to staff
- Implemented physical-behavioral health care integration in at least four primary care clinics
- Utilized depression screening tools for at least 60% of patients with diabetes
- Implemented an electronic “SMART” referral system to improve efficiency and expand specialist capacity, such that 90% of referrals are submitted through the system and 70% of patients are evaluated in less than 30 days
- Completed at least 12 efficiency and quality improvement initiatives using LEAN methodologies and trained at least 15 medical providers and thirty other staff in their use
- Improved compliance with a validated set of interventions to reduce sepsis mortality
- Reduced central line associated bloodstream infections
- Reduced surgical site infections
- Achieved a rate of zero falls with injury per 1000 patient days for at least six months of the year

The proposal is structured so that each section articulates the key challenges, our innovative solutions based on proven methods to address the challenges, and the five-year milestones we commit to meeting in implementing the solutions. The solutions represent outcomes for our patients and our delivery system. This proposal identifies the challenges, the variables being modified, the modifications to those variables, and the expected outcomes. All of the milestones are measurable.

Category 1: Per the California Section 1115 Waiver Terms and Conditions, the purpose of Category 1: Infrastructure Development is “investments in technology, tools and human resources that will strengthen the organization’s ability to serve its population and continuously improve its services.” Therefore, San Mateo Medical Center’s Category 1 plan includes infrastructure development, including investment in people, places, processes and technology. This category is foundational to the success of Categories 2-4. This plan describes how the Category 1 infrastructure development will enhance capacity to conduct measure, and report on quality/performance improvement, expand access to meet demand, and enable improved care with strong emphasis on building coordinated systems that promote preventive, primary care.

Key Challenge: There is inadequate primary care capacity to meet current demand:

- *Our primary care capacity is only able to serve about 53,000 patients annually while the San Mateo County Health System currently estimates demand at 90,000 patients:* Primary care capacity, resources, infrastructure, and technology are severely limited.

Major Delivery System Solutions:

- *Increasing Primary Care Capacity:* In order to provide more preventive, primary, and chronic care in the primary care setting, it is critical to expand primary care capacity. Our goal is to better treat the volume of patients who need primary care in the primary care setting, with limited wait times. In order to provide more preventive, primary, and chronic care in the primary care setting, it is critical to expand primary care capacity. This includes increased efficiencies to maximize the capacity San Mateo Medical Center already has, as well as adding capacity so that we can treat more patients. In order to do this, we propose to:
 - Expand Primary Care Capacity; and
 - Re-Integrate Urgent Care Services into Primary Care Clinics in order to significantly reduce the need for a dedicated same day provider to see urgent care patients; primary care teams will be able to see their own patients with urgent care needs. Enhanced capacity for each primary care team to see its own patients with urgent and ongoing needs enhances care continuity.
- *Expected Result:* At least three new primary care providers will have been hired. At least four primary care clinics will have implemented new systems such that empanelled patients can see their primary care team within 7 days. These gains will occur as a result of expanding primary care capacity, including the reintegration of urgent care services into primary care.

Relation to Improvements addressed in other projects: Expanded primary care capacity also feeds into the expansion of medical homes and more organized care delivery, better prevention and management of chronic conditions, integrated physical-behavioral health care, and better utilization of health care resources. With expanded primary care capacity, more patients can have access to primary and preventive care, which increases opportunities to prevent disease and treat it early. Inpatients and Emergency Department patients, upon discharge, can be scheduled for follow-up appointments and care at a primary care clinic, thereby reducing the risk and consequences of worsening health conditions.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Expanding Primary Care Capacity						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Expanding Primary Care Capacity	<p>1. Milestone: Initiate position creation for at least one additional primary care provider position to establish at least one additional primary care team in one clinic</p> <p>Metric: Document initiation of position creation</p>	<p>2. Milestone: Implement a system to accommodate urgent care needs in at least 1 primary care clinic, as measured by achieving Time to Third Next Available Appointment of under 7 days for empanelled patients for at least 3 months during year.</p> <p>Metric: Third-Next-Available Appointment Available Within seven calendar days: Number of Calendar days until third next available appointment.¹ The rate is an average, measured monthly, for all providers within clinic</p>	<p>3. Milestone: Hire at least one additional primary care provider to establish at least one additional primary care team in one clinic (total of two care teams across system compared with baseline).</p> <p>Metric: Hiring of staff</p> <p>4. Milestone: Implement a system to accommodate urgent care needs in at least 1 additional (2 total) primary care clinic, as measured by achieving Time to Third Next Available Appointment of under 7 days for empanelled patients (for at least 3 months during year) in at least 2 clinics within the system.</p> <p>Metric: Third-Next-Available Appointment Available Within 7 Calendar Days: Number of Calendar days until third next available appointment</p>	<p>5. Milestone: Hire at least 1 additional primary care provider to establish at least one additional primary care team in one clinic (total of three care teams across system compared with baseline).</p> <p>Metric: Hiring of staff</p> <p>6. Milestone: Implement a system to accommodate urgent care needs in at least 1 additional (3 total) primary care clinic as measured by achieving Time to Third Next Available Appointment of under 7 days for empanelled patients (for at least 3 months during year) in at least 3 clinics within system.</p> <p>Metric: Third-Next-Available Appointment Available Within 7 Calendar Days: Number of Calendar days until third next available appointment</p>	<p>7. Milestone: Implement a system to accommodate urgent care needs in at least 1 additional (4 total) primary care clinic as measured by achieving Time to Third Next Available Appointment of under 7 days for empanelled patients (for at least 3 months during year) within at least 4 clinics within system.</p> <p>Metric: Third-Next-Available Appointment Available Within 7 Calendar Days: Number of Calendar days until third next available appointment)</p>	<ul style="list-style-type: none"> • Spreading primary care medical homes (Cat. 2) • Redesigning Primary Care (Cat. 2) • Improving care coordination (Cat. 3) • Improving Patient/Caregiver Experience(Cat. 2 and 3) • Improving preventive health screening (Cat. 3) • Improve the care of at-risk populations (Cat. 3)

¹ Taken from IHI definition in white paper on whole system measures

Key Challenge: Health Care Disparities are likely to exist but remain unrecognized and therefore unaddressed

SMMC patients are diverse and multi-lingual. Of our patients, 58.5% are Hispanic/Latino, 14.7% are White, 4.9% are Black, 9.3% are Asian, and 12.6% Other. In order to make sure patients are sufficiently engaged in their care, we need to break down barriers that result from health care disparities. By doing so, we will improve communication between the patient and the provider, patients will be more involved in their health care, and patients will receive equitable health care.

Major Delivery System Solutions:

Collection of Accurate Race, Ethnicity, and Language (REAL) Data to Reduce Disparities: While San Mateo Medical Center may presume that health care disparities exist, we are an enterprise that believes in using data to drive quality improvement. Therefore, we believe it is imperative to stratify quality data, such as clinical outcomes and interventions, by race, ethnicity and language (“REAL data”) so that we know the facts of where disparities exist. By having this knowledge, we will be able to target improvements in health care equity appropriately and effectively, and measure our progress along the way. Providing equitable care is critical to getting patients engaged in their care – every patient, regardless of who they are, deserves high quality health care. It is likely that race, ethnicity and language disparities exist both in accessing and receiving care; however, we have unreliable data by which to identify them. Therefore, it is our goal to develop the ability to: (1) Collect patient demographic data in a way that can be compared to quality and health outcomes data and (2) Stratify patient demographic data by outcomes to identify disparities.

Expected Result: REAL Data is available to identify disparities for at least 90% of patients seen (encountered) throughout the organization

Relation to improvements addressed in other projects: Reducing disparities in health care will support improved care for all projects in all categories through the provision of equitable health care. The identification of disparities is especially important for optimizing care for at-risk populations.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Collection of Accurate Race, Ethnicity, and Language (REAL) Data to Reduce Disparities						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Collection of Accurate Race, Ethnicity, and Language (REAL) Data to Reduce Disparities	8. Milestone: Develop a plan to improve collection of patient demographic information such as race, ethnicity, gender, primary language, and literacy level (“REAL data”) in order to identify potential health care disparities Metric: Documentation of plan, including work plan and timelines.	9. Milestone: Establish data stratification and comparison processes for capturing accurate REAL data and linking it to quality data, including designating specified data fields for REAL data recording Metric: Documentation of established processes, including work plan and timelines.	10. Milestone: At least 70% of unique patients seen within the reporting period have the designated REAL data fields recorded as structured data Metric: The percent of patients with Race, Ethnicity and Language (REAL) fields identified in Health Information Systems <ul style="list-style-type: none"> • Numerator: Number of unique patients seen within the reporting period who have the designated REAL data fields recorded • Denominator: Number of total unique patients seen within the reporting period 	11. Milestone: At least 80% of unique patients seen within the reporting period have the designated REAL data fields recorded as structured data Metric: The percent of patients with Race, Ethnicity and Language (REAL) fields identified in the Health Information Systems <ul style="list-style-type: none"> • Numerator: Number of unique patients seen within the reporting period who have the designated REAL data fields recorded • Denominator: Number of total unique patients seen within the reporting period 	12. Milestone: At least 90% of unique patients seen within the reporting period have the designated REAL data fields recorded as structured data Metric: The percent of patients with Race, Ethnicity and Language (REAL) fields identified in Health Information Systems <ul style="list-style-type: none"> • Numerator: Number of unique patients seen within the reporting period who have the designated REAL data fields recorded • Denominator: Number of total unique patients seen within the reporting period 	<ul style="list-style-type: none"> • Spreading primary care medical homes (Cat. 2) • Redesigning Primary Care (Cat. 2) • Improving care coordination (Cat. 3) • Improving Patient/Caregiver Experience(Cat. 2 and 3) • Improving preventive health screening (Cat. 3) • Improve the care of at-risk populations (Cat. 3)
					13. Milestone: Perform REAL data analysis and identify at least two specific health care disparities Metric: Report of the results of the analysis with identification of two specific health care disparities	

Category 2: Per the Waiver Terms and Conditions, the purpose of Category 2: Innovation and Redesign is “investments in new and innovative models of care delivery (e.g., Medical Homes) that have the potential to make significant, demonstrated improvements in patient experience, cost and disease management.” Therefore, San Mateo Medical Center’s Category 2 projects include the piloting, testing, and spreading of innovative care models. San Mateo Medical Center’s patient population experiences significant challenges associated with poverty, such as psychosocial barriers to health and multiple concurrent medical conditions. San Mateo Medical Center has had to be very creative to address the needs of the patient population with extremely limited resources. SMMC needs to further refine these innovations, test new ways of meeting the needs of our target populations, and disseminate learnings in order to spread promising practices.

Key Challenge: All patients are not necessarily receiving the right care in the right place at the right time, reflecting poorly coordinated care.

- *Some potential medical home patients do not have an assigned primary care provider: One of the prerequisites for a medical home is that a patient must have a primary care provider team that they can identify and trust.* SMMC has piloted the medical home and chronic care models, but needs to spread these effective models throughout the hospital system. Right now, some primary care clinics are utilizing some components of these models, but not necessarily all. For example, while most clinics make some attempt to empanel patients, there is variation in the rigor of this process and inconsistency in commitment to scheduling patients with their designated care team. We want to make sure these models are embedded within our care delivery model.
- *Only about 61% of our providers are organized as care teams, while the remaining 29% are still functioning in a more traditional approach.*
- *Only 20,000 of our patients are assigned to primary care teams, thereby missing opportunities to provide better care through improved prevention screenings and routine primary and chronic care.*

Major Delivery System Solutions:

- *Spreading Primary Care Medical Homes:* To address this challenge, we have already begun work to make sure that all patients will receive the right care in the right place at the right time. This is a strategic priority for SMMC because by providing more patients with coordinated care services grounded in their primary care medical homes, patients can stay healthier and manage their chronic conditions, thereby reducing avoidable ED visits, admissions, and readmissions. Patients will receive this care in a proactive, planned manner so that they can receive evidence-based interventions.

It is a strategic priority of SMMC to provide a continuity of primary care for our patients through the medical home model. We have begun to offer primary care medical homes to patients so that preventive, primary, and chronic care can be managed proactively in the outpatient setting, thereby keeping patients healthy and out of the hospital. In 2007, SMMC opened its Innovative Primary Care Clinic, which piloted many components of what we believe should be spread and sustained throughout our primary care clinics. This initiative included comprehensive clinic redesign through which we implemented:

- Medical home team-based care
- Expanded staff roles
- The Chronic Care Model, including initiating a disease registry to track patients with chronic conditions and thereby proactively manage their care
- Advanced patient access to appointments
- Performance outcomes measurement
- Effective use of health information technology (IT)
- Coordination of care with support staff
- Health promotion and education

Staff includes nutritionists, social workers, community health workers and therapists. Services include group visits, case management, and telephone outreach. We also have implemented a medication management program with a clinic-based pharmacist at the Innovative Care Clinic.

The Innovative Care Clinic utilizes the Chronic Care Model to enhance primary and preventive care delivery with appropriate management of chronic conditions. This chronic disease management and care coordination includes the identification and management of patients with complex and/or combinations of chronic diseases and improved management of chronic disease across systems to enhance efficiency and effectiveness in care coordination and utilization of medical resources. As a result of this improved care, blood sugar, blood pressure and cholesterol levels have been reduced for patients regularly treated by the Innovative Care Clinic.

By spreading this model beyond the Innovative Care Clinic to all of our primary care clinics comprehensively and systemically, we will make a real difference in the experience, outcomes and cost of health care. Please see Appendix A for more specific results of piloting the medical home model in the Innovative Care Clinic.

Primary care medical homes need to be spread and sustained system-wide. In order to achieve this, we need to increase our capacity for expanded primary care services. We propose to implement this model fully in all of our primary care clinics so that San Mateo County patients receive more preventive, primary, and chronic care. Our patients will have a care team and a care plan so that they can experience a continuity of care and establish trusting relationships with their care teams. They will have more access to primary care so that they can get the care when they need it. This will enable patients to receive the right care in the right place at the right time.

- *Expected Result:* At least 90% of eligible patients are assigned to primary care teams serving as their medical homes. Care teams actively manage their patient panel so that patients are reminded of services needed and receive coordinated care rooted in a primary care setting. Patients know the professionals on their care team and establish trusting, ongoing relationships to reinforce continuity of care.
- *Relation to improvements in other categories:* By spreading the medical home model to all of our primary care clinics to empanel tens of thousands of patients comprehensively and systemically, we will make a real difference in the experience, results and cost of health care.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Spreading Primary Care Medical Homes						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Spreading Primary Care Medical Homes	<p>14. Milestone: Establish process to track assignment of patients to primary care provider teams Metric: Documentation of process and production of panel reports (patients assigned to individual primary care provider teams)</p>	<p>15. Milestone: At least 60% of eligible patients will be assigned to primary care provider teams Metric: primary care provider team assignment</p> <ul style="list-style-type: none"> • Numerator: Number of eligible patients assigned to a primary care provider • Denominator: Number of eligible patients (patients seen at the same primary care clinic at least twice in last 12 months) 	<p>16. Milestone: At least 70% of eligible patients will be assigned to primary care provider teams Metric: Primary Care Provider Team Assignment</p> <ul style="list-style-type: none"> • Numerator: Number of eligible patients assigned to a primary care provider • Denominator: Number of eligible patients (patients seen at the same primary care clinic at least twice in last 12 months) 	<p>17. Milestone: At least 75% of eligible patients will be assigned to primary care provider teams Metric: Primary Care Provider Team Assignment</p> <ul style="list-style-type: none"> • Numerator: Number of eligible patients assigned to a primary care provider • Denominator: Number of eligible patients (patients seen at the same primary care clinic at least twice in last 12 months) 	<p>18. Milestone: At least 90% of eligible patients will be assigned to primary care provider teams Metric: Primary Care Provider Team Assignment</p> <ul style="list-style-type: none"> • Numerator: Number of eligible patients assigned to a primary care provider • Denominator: Number of eligible patients (patients seen at the same primary care clinic at least twice in last 12 months) <p>19. Milestone: Report shared learnings of the medical home model, and any findings related to impact on improved health, experience and cost to the Safety Net Institute and SMMC Stakeholders Metric: Report Production</p>	<ul style="list-style-type: none"> • Redesigning Primary Care (Cat. 2) • Improving care coordination (Cat. 3) • Improving Patient/ Caregiver Experience (Cat. 2 and 3) • Improving preventive health screening (Cat. 3) • Improve the care of at-risk populations (Cat. 3)

Key Challenge: Existing Primary Care Capacity is not necessarily being used in the most effective and efficient manner:

We currently have about 2,200 patients waiting for primary care medical home appointments. It may be difficult for the patient to get a primary care appointment in a timely manner due to traditional scheduling processes and the practice of medicine structured around the physician, not around the patient.

Major Delivery System Solutions:

- *Primary Care Redesign:* In order to address this challenge, San Mateo Medical Center will redesign primary care to achieve increased efficiencies to maximize the capacity we already have. This plan seeks to build upon work we have started to standardize clinic-level data across San Mateo Medical Center so that we can better understand cycle time, wait times for primary care, and patient satisfaction. In order to do this, we propose to: (1) Build internal capacity with the resources we already have through implemented efficiencies that will reduce primary care cycle times, patient no-show rates, and days to third next available appointments; and (2) Implement the Patient Centered Scheduling Model so that patients can see their primary care team when needed and at the patient's convenience to enable expanded access to primary care. Historically at San Mateo Medical Center, patient appointment "no-show" rates have been as high as 30%.
- *Expected Result:* Patient "no-show" to appointment rate is less than 10% as a result of improved access when it is convenient for the patient and due to establishing an ongoing relationship with his/her care team that reinforces continuity of care.
- *Relation to improvements in other categories:* With increased access to primary care, patients are better able to receive preventive, primary and ongoing care, developing continuity of care with their primary care team. In addition, increased access to primary care and a strong relationship with an established primary care provider improve the patient's experience of care.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Primary Care Redesign						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Primary Care Redesign	<p>20. Milestone: Establish Patient Centered Scheduling within at least 4 primary care clinics Metric: Documentation of the number of clinics that have implemented the core processes of patient centered scheduling including open access appointments and preregistration</p> <p>21. Milestone: Achieve at least a 25% or lower patient no-show rate (for at least 4 months of the reporting period) for primary care medical homes² due to enhanced continuity of care and lasting relationships established between the provider and the patient Metric: No-show rate</p> <ul style="list-style-type: none"> ○ Numerator: Number of patients who missed an appointment in a medical home session ○ Denominator: Number of patients scheduled for each session 	<p>22. Milestone: Achieve at least a 15% or lower patient no-show rate (for at least 4 months of the reporting period) for primary care medical homes due to enhanced continuity of care and lasting relationships established between the provider and the patient Metric: No-show rate</p> <ul style="list-style-type: none"> • Numerator: Number of patients who missed an appointment in a medical home session • Denominator: Number of patients scheduled for each session 	<p>23. Milestone: Achieve at least a 12% or lower patient no-show rate (for at least 4 months of the reporting period) for primary care medical homes Metric: No-show rate</p> <ul style="list-style-type: none"> • Numerator: Number of patients who missed an appointment in a medical home session • Denominator: Number of patients scheduled for each session 	<p>24. Milestone: Achieve at least a 10% or lower patient no-show rate (for at least 4 months of the reporting period) for primary care medical homes Metric: No-show rate</p> <ul style="list-style-type: none"> • Numerator: Number of patients who missed an appointment in a medical home session • Denominator: Number of patients scheduled for each session 	<p>25. Milestone: Maintain 10% or lower patient no-show rate for primary care medical homes in order to demonstrate sustainability of the improvement for at least 2 consecutive quarters during the reporting period Metric: No-show rate</p> <ul style="list-style-type: none"> • Numerator: Number of patients who missed an appointment in a medical home session • Denominator: Number of patients scheduled for each session 	<ul style="list-style-type: none"> • Spreading primary care medical homes (Cat. 2) • Improving care coordination (Cat. 3) • Improving Patient/ Caregiver Experience (Cat. 2 and 3) • Improving preventive health screening (Cat. 3) • Improve the care of at-risk populations (Cat. 3)

² For this and other milestones using this measure, measurement is determined based on the percentage of the patients scheduled for each session who did not show up for their medical home visit. The rate is an average measured monthly. This measurement would be based on the most recent reporting month.

Key Challenge: Although improving the patient's experience of care is an institutional priority, our ability to improve is impaired by inadequate tools and data

San Mateo Medical Center's commitment to improving the patient's experience of care is embedded in its overall strategic plan. Some areas such as the medical/surgical ward utilize well validated patient surveys from Press Ganey. Other units such as the Emergency Department and outpatient clinics use homegrown survey tools that make it difficult to compare and improve performance.

Major Delivery System Solutions:

- *Redesign to Improve Patient Experience:* We intend to increase the organization's capacity to improve patients' experience of care and their satisfaction with the care provided. This will be accomplished by implementing new tools to measure the patients' experience and satisfaction. In addition, internal display and sharing of data will give staff the tools and information necessary to improve the experience.
- *Expected Results:* Press Ganey survey tools will be spread to the Emergency Department and outpatient clinics. Baseline performance will be measured in the Emergency Department and at least three adult primary care clinics and three pediatric clinics. Performance data from the medical/surgical ward, the Emergency Department and four outpatient clinics will be internally displayed in order to promote performance improvement.
- *Relation to improvements in other categories:* Improved patient experience of care improves our ability to better prevent and manage chronic conditions in partnership with our patients. With improved patient experience, our patients likely have better access to care and are better able to be engaged in and take shared responsibility with staff and providers for managing chronic conditions and improving chronic disease outcomes.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Redesign to Improve Patient Experience						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Redesign to Improve Patient Experience	<p>26. Milestone: Expand the use of Press Ganey Patient Satisfaction surveys into the ambulatory and ED settings</p> <p>Metric: Press Ganey Contract /Statement of Work to expand use of survey</p>	<p>27. Milestone: Establish baseline performance in Emergency Department.</p> <p>Metric: Report Baseline Data</p> <p>28. Milestone: Internally display quarterly patient experience data for inpatient medical/surgical unit</p> <p>Metric: Documentation of data display and dissemination</p>	<p>29. Milestone: Establish baseline performance in at least one adult outpatient clinic and one pediatric clinic</p> <p>Metric: Report Baseline Data</p> <p>30. Milestone: Internally display quarterly patient experience data for Emergency Department</p> <p>Metric: Documentation of data display and dissemination</p>	<p>31. Milestone: Establish baseline performance in at least one additional adult outpatient clinic and at least one additional pediatric clinic (total of four clinics)</p> <p>Metric: Report Baseline Data</p> <p>32. Milestone: Internally display quarterly patient experience data for at least one adult outpatient clinic and one pediatric clinic</p> <p>Metric: Documentation of data display and dissemination</p>	<p>33. Milestone: Establish baseline performance in at least one additional adult outpatient clinic and at least one additional pediatric clinic (total of six clinics)</p> <p>Metric: Report Baseline Data</p> <p>34. Milestone: Internally display quarterly patient experience data for at least two adult outpatient clinics and two pediatric clinics (total of four clinics)</p> <p>Metric: Documentation of data display and dissemination</p>	<ul style="list-style-type: none"> • All projects (Cat. 1-4)

Key Challenge: Primary Care and Mental Health Function Separately:

- Based on 14% of the more than 5,000 patients we serve in our primary care medical homes with diabetes also suffer from depression.
- The Health System has separate divisions and separate sets of guidelines for behavioral health and primary care, as evidenced by our patients with diabetes who also suffer from depression whose conditions are being treated for these inter-related conditions in discrete institutions.
- For the most part, physical and behavioral health are viewed as neither related nor interdependent.

Major Delivery System Solutions:

- *Integration of Physical and Behavioral Health:* Better integration between primary and behavioral health care will help to more appropriately address these patients' health care needs. As a result, behavioral health conditions can be better diagnosed in primary care settings, medication errors can be reduced, improvements can be made in patients' health outcomes, and utilization of avoidable emergency/inpatient services can be reduced. The Behavioral Health/Primary Care Four Quadrant integration model describes how we should serve the populations that Behavioral Health/Primary Care integration must address: 1) Low behavioral health-low physical health complexity/risk served in primary care with behavioral health staff on site; 2) High behavioral health-low physical health complexity/risk served in a specialty behavioral health system that coordinates with the primary care team; 3) Low behavioral health-high physical health complexity/risk served in the primary care/medical specialty system with behavioral health staff on site in primary or medical specialty care, coordinating with all medical care providers; 4) High behavioral health-high physical health complexity/risk served in both the specialty behavioral health and primary care/medical specialty systems.
- *Expected Result:* Utilizing the Four Quadrant Model, pilots of physical and behavioral health integration will be established in 4 primary care clinics. At least 60% of diabetics will be routinely screened for depression utilizing a standard, evidence based tool.
- *Relation to improvements in other categories:* Recent studies show that integration of behavioral health (mental health and substance abuse) and physical health services should be the standard for advanced health care systems. This finding is part of a larger trend to better integrate the various parts of a health care system in the interest of more cost-effective and comprehensive patient care. The more integrated these various components are at the programmatic and clinical levels, the more likely that patients with complex conditions and socio-economic challenges will have their medical and psychosocial needs met in a comprehensive fashion rather than falling through the cracks between various "silos," with resultant adverse health

outcomes and increased cost. There is sufficient evidence that there are significant numbers of patients who could benefit from better recognition and treatment of mental health issues within primary care. Health care systems which have successfully implemented programs to integrate behavioral health and primary care services have tended to demonstrate improved care and significant cost savings (Health Management Associates, 2007), in addition to increased provider satisfaction and improved patient satisfaction. A number of leading organizations, including the Institute of Medicine, the Robert Wood Johnson Foundation, and the Health Resources and Services Administration (HRSA), have either recommended integration of physical and behavioral health services or funded projects dedicated to doing so (Health Management Associates, 2007). Optimal management of chronic diseases such as diabetes is often hampered by unrecognized or inadequately treated depression. In addition, improved recognition of depression through systematic screening within the diabetic population will promote better outcomes. The PHQ-9 is recommended as an effective measurement tool; however, there are other effective tools. Research indicates that 10-15% of all primary care patients have depression, and is one of the top five most common conditions found in primary care settings. According to an evaluation of 20 studies over the past 10 years, the prevalence rate of diabetics with major depression is three to four times greater than in the general population, according to the American Diabetic Association.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Integration of Physical and Behavioral Health						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Integration of Physical and Behavioral Health	<p>35. Milestone: Pilot the Four Quadrant Model through the use of SBIRT (substance abuse Screening, Brief Intervention, Referral, and Treatment)in one primary care clinic</p> <p>Metric: Documentation of SBIRT integration in one primary care clinic.</p>	<p>36. Milestone: Implement at least 1 pilot of physical and behavioral health integration consistent with the Four Quadrant model</p> <p>Metric: Successful implementation of model)</p>	<p>37. Milestone: Implement at least one additional pilot (total 2 pilots) of physical and behavioral health integration consistent with the Four Quadrant model</p> <p>Metric: Expansion of model to two clinics</p> <p>38. Milestone: Integrate Depression screening of diabetics by using the Patient Health Questionnaire (PHQ-9) (or other validated tool) in the physical and behavioral health integration pilot primary care clinics</p> <p>Metric: Percentage of diabetics in pilot clinics who have undergone screening</p>	<p>39. Milestone: Implement at least one additional pilot (total 3 pilots) of physical and behavioral health integration consistent with the Four Quadrant model</p> <p>Metric: Expansion of model to three clinics</p> <p>40. Milestone: At least 50% of diabetic patients seen in the physical and behavior health integration pilot primary care clinics are screened with the PHQ-9 (or other validated tool)</p> <p>Metric: Percentage of diabetics in pilot clinics who have undergone screening</p>	<p>41. Milestone: Implement at least one additional pilot (total 4 pilots) of physical and behavioral health integration consistent with the Four Quadrant model</p> <p>Metric: Expansion of model to four clinics</p> <p>42. Milestone: At least 60% of diabetic patients seen in the physical and behavior health integration pilot primary care clinics are screened with the PHQ-9 (or other validated tool)</p> <p>Metric: Percentage of diabetics in pilot clinics who have undergone screening</p>	<ul style="list-style-type: none"> • Spreading primary care medical homes (Cat. 2) • Redesigning Primary Care (Cat. 2) • Improving care coordination (Cat. 3) • Improving Patient/ Caregiver Experience(Cat. 2 and 3) • Improving preventive health screening (Cat. 3) • Improve the care of at-risk populations (Cat. 3)

Key Challenge: There is inadequate access to specialty care and specialty care capacity is not always efficiently or effectively utilized:

Specialty care access is a major challenge for SMMC: Wait times for six specialties are greater than 3 months with two specialties having wait times over four months. The referral process can be confusing and inefficient. Its limitations include: lackluster tracking of referrals and outcomes, limited standardization, extensive paper-based rework by staff, inadequate information for specialists and lack of specialty feedback to referring providers. For patients, the referral process is long and cumbersome.

Major Delivery System Solutions:

- *Electronic Specialty Referral Process:* We propose to implement electronic referrals (e-referrals) technology and processes that enable improved and more streamlined provider communications. This e-referrals technology has been successfully implemented in other California public hospitals and other safety net systems. It has been shown to drastically reduce wait times, as well put in place many efficiencies, resulting in increased patient access to specialty care. E-referrals technology will help identify those patients who can be treated in the primary care setting, thereby reducing the volume of patients waiting for and enabling quicker time to treatment by specialists. Specialists will have the information they need to work up patients, while referring providers have the information to continue care delivery. For those patients needing specialty care, this solution will help to make sure that before the specialty visit; all pre-work (e.g., labs, tests, etc.) is completed in the primary care setting so that the specialist can focus on the treatment, thereby eliminating unnecessary specialist time doing such pre-work and increasing efficiency. San Mateo Medical Center's e-referral system will evolve into a "SMART" referral system with embedded clinical guidelines and capacity for bidirectional communication between the primary care provider and the specialist. Through these types of reforms, patient wait times for specialty care appointments can be reduced, waste and inefficiencies can be eliminated, and specialist capacity can be increased. Most importantly, patients can receive more timely interventions.
- *Expected Result:* 90% of specialty referrals will be submitted utilizing an electronic referral system that has functionality for bidirectional communication. 70% of referred patients will be evaluated (either in person or electronically) within 30 days of referral.

- *Relation to improvements in other categories:* According to a recent University of California at San Francisco (UCSF) report³, access to specialists is a common barrier for primary care clinicians trying to deliver high-quality, coordinated care, especially when their patients are poor or uninsured. To offer the standard of care required by the patient-centered medical home model, clinicians must be able to tap into a "medical neighborhood" of specialists and hospitals to obtain timely consultations, diagnostic services, and needed treatments. The way many healthcare networks still communicate is through telephone, paper and fax, which creates process inefficiencies, inaccurate data and slow information updates. Use of electronic referral systems can successfully address many of these issues and improve care outcomes. In addition, more timely access to specialty evaluation and recommendations can improve the patient's experience of care.

³ See *A Safety-Net System Gains Efficiencies Through 'eReferrals' To Specialists* report. Alice Hm Chen, Margot B. Kushel, Kevin Grumbach, and Hal F. Yee, Jr. <http://content.healthaffairs.org/cgi/content/extract/29/5/969>

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Electronic Specialty Referral Process						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Electronic Specialty Referral Process	<p>43. Milestone: Implement an electronic referral system to enable improved and more streamlined provider communications</p> <p>Metric: Documentation of implementation of e-referrals</p>	<p>44. Milestone: Expand e-referrals to include bidirectional communication such that 50% of specialty referrals originating from a SMMC primary care provider will be made utilizing bidirectional electronic referral systems</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referrals made into specialty clinics utilizing electronic referral system ○ Denominator: Total number of referrals from SMMC primary care providers into specialty clinics <p>45. Milestone: Utilize electronic referral to measure the wait time for specialty care</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referred patients who are evaluated (electronically or in person) within 30 days ○ Denominator: Total number of referred patients 	<p>46. Milestone: 60% of specialty referrals originating from a SMMC primary care provider will be made utilizing bidirectional electronic referral systems</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referrals made into specialty clinics utilizing electronic referral system ○ Denominator: Total number of referrals from SMMC primary care providers into specialty clinics <p>47. Milestone: 50% of referred patients will be evaluated (electronically or in person) within 30 days</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referred patients who are evaluated (electronically or in person) within 30 days ○ Denominator: Total number of referred patients 	<p>48. Milestone: 75% of specialty referrals originating from a SMMC primary care provider will be made utilizing bidirectional electronic referral systems</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referrals made into specialty clinics utilizing electronic referral system ○ Denominator: Total number of referrals from SMMC primary care providers into specialty clinics <p>49. Milestone: 60% of referred patients will be evaluated (electronically or in person) within 30 days</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referred patients who are evaluated (electronically or in person) within 30 days ○ Denominator: Total number of referred patients 	<p>50. Milestone: 90% of specialty referrals originating from a SMMC primary care provider will be made utilizing bidirectional electronic referral systems</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referrals made into specialty clinics utilizing electronic referral system ○ Denominator: Total number of referrals from SMMC primary care providers into specialty clinics <p>51. Milestone: 70% of referred patients will be evaluated (electronically or in person) within 30 days</p> <p>Metric:</p> <ul style="list-style-type: none"> ○ Numerator: Number of referred patients who are evaluated (electronically or in person) within 30 days ○ Denominator: Total number of referred patients 	<ul style="list-style-type: none"> ● Redesigning Primary Care (Cat. 2) ● Improving care coordination (Cat. 3) ● Improving Patient/Caregiver Experience (Cat. 2 and 3) ● Improve the care of at-risk populations (Cat. 3)

Key Challenge: Care is not at all times of sufficient value, that is, the highest quality at the lowest cost.

Higher quality, better value care is needed in order to improve patient health outcomes and bend the health care cost curve. In order to address this need, organizations will need to adopt tools and methodologies that will facilitate rapid improvement.

Major Delivery System Solutions:

- *Utilize LEAN management principles and methodologies to rapidly improve and provide efficient, value-added care:* Developed by Toyota in the 1950s to strengthen automobile manufacturing infrastructure and maximize resources, LEAN is an example of a management engineering approach now being adopted successfully by health care organizations to address a range of quality and operational issues. The LEAN method, specifically, provides a range of techniques to create a more efficient and effective workplace by having smooth work flows and eliminating waste in time, effort, or resources. According to the California HealthCare Foundation report “Operations Improvement Methods: Choosing a Path for Hospitals and Clinics” by David Belson, PhD, “LEAN helps providers work toward a state of continuous improvement, whereby the product flows at the pull of the customer in pursuit of perfection.”⁴ Also, Denver Health System has had much success implementing LEAN process improvement methodologies.⁵ We will be implementing 12 LEAN performance improvement events over the five years of this proposal. Lean includes reducing waste so that all work adds value and serves the patient's needs. This work includes identifying value-added and non-value-added activities, fostering an organizational culture with a commitment to continuous quality improvement, and involving all relevant staff in helping to redesign processes to improve flow and reduce waste.
- *Expected Result:* Complete 12 LEAN Process Improvement Events. Train Executive Management and at least 15 medical providers and 30 additional staff members as process improvement champions with expertise in LEAN methodologies.
- *Relation to Category 3 Population-Focused Improvement and Category 4 Urgent Improvements in Quality and Safety:* In order to achieve the goals outlined in Category 3 and 4 of this plan, San Mateo Medical Center will need to utilize advanced rapid improvement methodologies and train large teams of performance improvement experts and change agents. At SMMC, we see efficiency and quality as being inter-related: When the process of

⁴ See: <http://www.chcf.org/publications/2007/12/improving-efficiency-management-engineering-comes-to-the-safety-net#ixzz11umwfMFJ>

⁵ Meyer, Harris, “Life in the ‘Lean’ Lane: Performance Improvement at Denver Health,” *Health Affairs* (November 2010), vol. 29 no. 11, 2054-2060

care delivery is of the highest quality and efficiency, more time and effort can be spent on value-added activities. In other words, a more efficient system can produce a higher quality output. By providing safer, higher quality care, patients' health outcomes will improve, along with their experience of the care.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Implement LEAN Methodologies						
	Year 1	Year 2	Year 3	Year 4	Year 5	Related Projects
Implement LEAN Methodologies	<p>52. Milestone: Continue LEAN Performance Improvement Project focused on Contract Services Metric: Documentation of Performance improvement project</p>	<p>53. Milestone: Implement at least 3 LEAN performance improvement events Metric: Number of performance improvement events</p> <p>54. Milestone: Train Executive Leadership in LEAN methodologies Metric: Completion of training</p>	<p>55. Milestone: Implement at least 3 additional (total of 6 new events) LEAN performance improvement events Metric: Number of performance improvement events</p> <p>56. Milestone: Train at least 5 medical providers and 10 additional staff as process improvement champions with expertise in LEAN methodologies Metric: Completion of training</p>	<p>57. Milestone: Implement at least 3 additional (total of 9 new events) LEAN performance improvement events Metric: Number of performance improvement events</p> <p>58. Milestone: Train at least 5 additional (total of 10) medical providers and 10 additional staff (total of 20) as process improvement champions with expertise in LEAN methodologies Metric: Completion of training</p>	<p>59. Milestone: Implement at least 3 additional (total of 12 new events) LEAN performance improvement events Metric: Number of performance improvement events</p> <p>60. Milestone: Train at least 5 additional (total of 15) medical providers and 10 additional staff (total of 30) as process improvement champions with expertise in LEAN methodologies Metric: Completion of training</p>	<ul style="list-style-type: none"> All projects (Cat. 1-4)

Category 3: Per the California Section 1115 Waiver Terms and Conditions, the purpose of Category 3: Population-focused Improvement is “investments in enhancing care delivery for the 5-10 highest burden (morbidity, cost, prevalence, etc.) conditions in public hospital systems for the population in question.”

Specific Category 3 projects TBD

Category 4: Per the Waiver Terms and Conditions, the purpose of Category 4: Urgent Improvement in Quality and Safety, is to make urgent improvements in care that: 1) have a promised impact on the patient population, 2) have a strong evidence base and 3) are meaningful to California's Public Hospital Systems. Therefore, San Mateo Medical Center's Category 4 includes the rapid implementation of evidence based interventions aimed at conditions and events that have significant morbidity and mortality within our patient population. San Mateo Medical Center is committed to providing its patients with the highest quality, safest medical care by using data to drive its improvement efforts.

Key Challenge: Patients seeking care for Sepsis suffer high rates of morbidity and mortality:

Sepsis, a form of severe bloodstream infection, can harm and kill patients if not treated quickly, and increases ICU length of stay and its associated costs. While and after receiving hospital services, challenges remain regarding the provision of safe, high-quality health care. Furthermore, it is critical to avoid causing harm or death to patients seeking care. Currently, approximately a quarter of patients with severe sepsis or septic shock die in public hospitals.

Major Delivery System Solutions:

- *Reduce avoidable harm or deaths due to severe sepsis in patients receiving inpatient services:* In support of our commitment to continuous quality improvement so that patients receive the safest and highest quality health care possible, we propose to make improvements in care provided to patients. We propose to improve severe sepsis detection and management to reduce unnecessary death and harm attributable to sepsis. Our interventions and improved processes are based upon the IHI recommended Surviving Sepsis Campaign to establish reliable detection and treatment for severe sepsis. This includes implementing the Sepsis Resuscitation Bundle. Since March of 2009, San Mateo Medical Center has participated in the Integrated Nurse Leadership Program's "Reducing Sepsis Mortality" initiative run out of the UCSF Center for the Health Professions. As part of this program, SMMC has begun to implement evidence based interventions to improve sepsis survival, but significant opportunities remain.
- *Expected Result:* Establish baseline bundle compliance in year two with significant targeted improvement in compliance by year five. Establish processes to measure and track impact of improved bundle compliance on overall sepsis mortality.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Improve Severe Sepsis Detection and Management					
	Year 1	Year 2	Year 3	Year 4	Year 5
Improve Severe Sepsis Detection and Management	<p>61. Milestone: Participate in Integrated Nurse Leadership Reducing Sepsis Mortality Collaborative Metric: Documentation of participation</p>	<p>62. Milestone: Implement the Sepsis Resuscitation Bundle Metric: Data submission through the INLP Reducing Sepsis Mortality Collaborative</p> <p>63. Milestone: Report at Least 6 months of data collection on Sepsis Resuscitation Bundle to SNI for purposes of establishing the baseline and setting benchmarks. Metric: Report of data</p> <p>64. Milestone: Report the Sepsis Resuscitation Bundle results to the State. Metric: Report of data</p>	<p>65. Milestone: Achieve X% compliance with Sepsis Resuscitation Bundle, where “X” will be determined in Year 2 based on baseline data. Metric: Sepsis Resuscitation Bundle compliance rate</p> <p>66. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>67. Milestone: Report Sepsis Resuscitation Bundle and sepsis mortality results to the State. Metric: Documentation of report</p>	<p>68. Milestone: Achieve X% compliance with Sepsis Resuscitation Bundle, where “X” will be determined in Year 2 based on baseline data. Metric: Sepsis Resuscitation Bundle compliance rate</p> <p>69. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>70. Milestone: Report Sepsis Resuscitation Bundle and Sepsis Mortality results to the State. Metric: Documentation of report</p>	<p>71. Milestone: Achieve X% compliance with Sepsis Resuscitation Bundle, where “X” will be determined in Year 2 based on baseline data. Metric: Sepsis Resuscitation Bundle compliance rate</p> <p>72. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>73. Milestone: Report Sepsis Resuscitation Bundle and Sepsis Mortality results to the State. Metric: Documentation of report</p>

Key Challenge: Patients suffer from serious hospital acquired infections related to central lines:

Many hospitalized patients who require central lines are critically ill and have multiple co-morbidities. These patients often are at high risk for bloodstream infections related to their central lines and they can suffer significant injury if an infection occurs. It is essential to avoid causing harm or death to this highly susceptible population. Reductions in hospital acquired infections like central line associated bloodstream infections (CLABSI) represent a tremendous opportunity to improve quality, safety, and patient experience.

Major Delivery System Solutions:

- *Reduce the incidence of bloodstream infections related to central lines:* San Mateo Medical Center is committed to preventing avoidable harm. By using a bundle of validated interventions known as the Central Line Insertion Practices (CLIP), San Mateo Medical Center will work to reduce the incidence of CLABSI.
- *Expected Result:* Improved compliance with CLIP standards and demonstrate related reductions in CLABSI.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Central Line-Associated Bloodstream Infection (CLABSI) Infection Prevention					
	Year 1	Year 2	Year 3	Year 4	Year 5
Central Line-Associated Bloodstream Infection (CLABSI) Infection Prevention	<p>74. Milestone: Report Central Line Insertion Practices (CLIP) data to the National HealthCare Safety Network (NHSN) Metric: Report of data to NHSN</p>	<p>75. Milestone: Report at Least 6 months of data collection on CLIP to SNI for purposes of establishing the baseline and setting benchmarks. Metric: Report of data</p> <p>76. Milestone: Report at Least 6 months of data collection on CLABSI to SNI for purposes of establishing the baseline and setting benchmarks. Metric: Report of data</p> <p>77. Milestone: Report CLIP results to the State. Metric: Report of data</p>	<p>78. Milestone: Achieve X% compliance with CLIP, where “X” will be determined in Year 2 based on baseline data. Metric: CLIP compliance rate</p> <p>79. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>80. Milestone: Report CLIP and CLABSI results to the State. Metric: Documentation of report</p>	<p>81. Milestone: Achieve X% compliance with CLIP, where “X” will be determined in Year 2 based on baseline data. Metric: CLIP compliance rate</p> <p>82. Milestone: Reduce CLABSI’s by X%, where “X” will be determined in Year 2 based on baseline data Metric: CLABSI rate</p> <p>83. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>84. Milestone: Report CLIP and CLABSI results to the State. Metric: Documentation of report</p>	<p>85. Milestone: Achieve X% compliance with CLIP, where “X” will be determined in Year 2 based on baseline data. Metric: CLIP compliance rate</p> <p>86. Milestone: Reduce CLABSI’s by X%, where “X” will be determined in Year 2 based on baseline data Metric: CLABSI rate</p> <p>87. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>88. Milestone: Report CLIP and CLABSI results to the State. Metric: Documentation of report</p>

Key Challenge: Patients may experience serious complications related to Surgical Site Infections:

Hospital Acquired Infections represent a significant source of preventable morbidity and mortality in hospitalized patients. It is estimated that approximately 17% of all hospital acquired infections are related to surgical site infections.⁶ San Mateo Medical Center is committed to reducing preventable harm. However, the organization does not currently have good data to measure and track Surgical Site Infections.

Major Delivery System Solutions:

- *Reduce Surgical Site Infections:* San Mateo Medical Center will work to document the rate of Surgical Site Infections at our institution. Utilizing documented best practices including superior compliance with the Surgical Care Improvement Project interventions, we will reduce the rate of surgical site infections.
- *Expected Result:* Reduce the rate of Surgical Site Infection (in select surgeries as specified by the California Department of Public Health) as compared with baseline established in year 2.

⁶ Klevens RM, Edwards JR, et al. Estimating health care-associated infections and deaths in U.S. hospitals, 2002. Public Health Reports 2007;122:160-166.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

Surgical Complications Core Processes (SCIP)					
	Year 1	Year 2	Year 3	Year 4	Year 5
Surgical Complications Core Processes (SCIP)	<p>89. Milestone: Designate interdisciplinary team to lead process to capture and analyze Surgical Site Infection (SSI) data.</p>	<p>90. Milestone: Report at Least 6 months of data collection on SSI (in specified surgical procedures as defined by CDPH) for purposes of establishing the baseline and setting benchmarks. Metric: Report of data</p> <p>91. Milestone: Report SSI results to the State. Metric: Report of data</p>	<p>92. Milestone: Reduce the rate of surgical site infection (in specified surgical procedures as defined by CDPH) for Class 1 and 2 wounds by X, where “X” will be determined in Year 2 based on baseline data. Metric: SSI rate for Class 1 and 2 wounds</p> <p>93. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>94. Milestone: Report SSI results for class 1 and 2 wounds to the State. Metric: Documentation of report</p>	<p>95. Milestone: Reduce the rate of SSI (in specified surgical procedures as defined by CDPH) for Class 1 and 2 wounds by X, where “X” will be determined in Year 2 based on baseline data. Metric: SSI rate for Class 1 and 2 wounds</p> <p>96. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>97. Milestone: Report SSI results for class 1 and 2 wounds to the State. Metric: Documentation of report</p>	<p>98. Milestone: Reduce the rate of SSI (in specified surgical procedures as defined by CDPH) for Class 1 and 2 wounds by X, where “X” will be determined in Year 2 based on baseline data. Metric: SSI rate for Class 1 and 2 wounds</p> <p>99. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>100. Milestone: Report SSI results for class 1 and 2 wounds to the State. Metric: Documentation of report</p>

Key Challenge: Patients can suffer significant injuries due to falls in the acute care setting:

Falls are a significant cause of preventable injury in the acute care setting and according to the Institute for HealthCare Improvement; falls are the leading cause of death in hospitals for patients 65 and older. San Mateo Medical Center is committed to keeping all of its patients safe, and therefore is focused on eliminating falls with injury in its acute care setting.

Major Delivery System Solutions:

- *Reduce the prevalence of falls with injury:* San Mateo Medical Center will work to document the rate of falls with injury at our institution. In order to reduce the prevalence of falls, SMMC will utilize best practices which will include: appropriate assessment of risk for falling, communication to staff regarding individual patient risk for falling, and institution of specific interventions for patients at risk for falling.
- *Expected Result:* Achieve a rate of zero falls with injury per 1000 patient days for at least 6 months of a year.

Implementation Milestones

We will receive funding after meeting the following milestones in this project:

		Prevent Falls with Injury				
		Year 1	Year 2	Year 3	Year 4	Year 5
Prevent Falls with Injury		<p>101. Milestone: Report falls data to Collaborative Alliance for Nursing Outcomes (CALNOC) Metric: Report of data</p>	<p>102. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>103. Milestone: Report falls with injury to the State. Metric: Documentation of report</p>	<p>104. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>105. Milestone: Report falls with injury to the State. Metric: Documentation of report</p>	<p>106. Milestone: Achieve <i>one</i> fall with injury per 1000 patient days for at least six months out of a year (months are not necessarily consecutive) Metric: Rate of falls with injury per 1000 patient days</p> <p>107. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>108. Milestone: Report falls with injury to the state Metric: Documentation of report</p>	<p>109. Milestone: Achieve <i>zero</i> falls with injury per 1000 patient days for at least six months out of a year (months are not necessarily consecutive) Metric: Rate of falls with injury per 1000 patient days</p> <p>110. Milestone: Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. Metric: Documentation of report</p> <p>111. Milestone: Report falls with injury to the State. Metric: Documentation of report</p>

Appendix A: The Innovative Care Clinic (ICC) – A Successful Implementation of the Medical Home Model at SMMC

THE VISION

The ICC’s vision is to use a team-based approach to strive for high quality care that addresses the whole person’s need with emphasis on self empowerment, education and prevention. To do this, they use the following strategies:

- Team-Based Care
- Case management and telephone outreach
- Flexible/Expanded Staff roles
- Chronic Disease Management
- Medication Management Program
- Advanced Access
- Outcomes Focused
- Utilization of Registry/EMR
- Focus on Health Promotion/Education

Although the ICC “go live” is built from years of experience with chronic disease management, over the last three years there has been an intensive focus on clinic redesign including the following specific changes:

- Staff formation into teams/pods
- Utilization of registry for all providers
- Utilization of a special camera to screen for diabetic retinopathy, Increased use of group visits
- Clinic physical space redesign to support team-based care
- Participation in the RAND/MacColl study and Optimizing Primary Care Collaborative

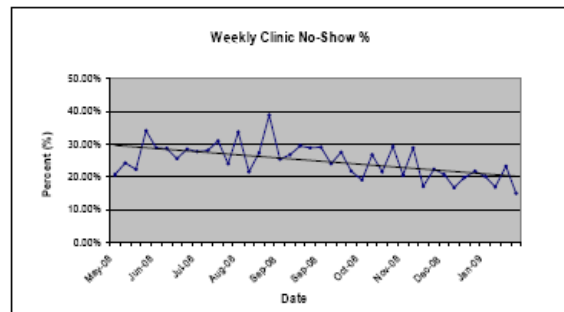
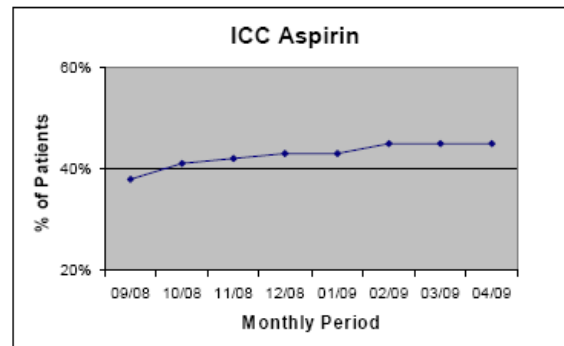
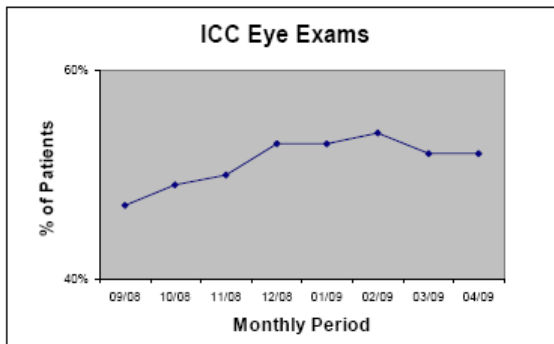
Chronic Disease Management	
HbA1c (%<7.0)	60%
LDL (%<100)	70%
Pneumovax	80%
Flu Vaccine	80%
Eye Exams	80%
Foot Exams	80%
Self Management Goals	80%
ASA	80%
BP (%<130/80)	60%
Health care Maintenance	
Mammograms	
Advanced Access	
Panel Size	
Provider Supply	
Provider Demand	
Activity	
No Show Rate	
3rd Next Appt	
Continuity	
Patient Satisfaction	
Cycle Time	
Patient Survey	
Staff Survey	
Finance	
MD/RN Productivity	
Total Visits to ICC	
ER Visits	
Hospitalizations	

TRACKING OUTCOMES

Through its participation and experience in multiple collaboratives and research efforts, the ICC leadership and team developed the core process and outcome measures shown to the right.

RESULTS

Within the first 2 years all of the ICC providers began using the CDEMS registry to track diabetic patients. After one year, the patients in the registry totaled 1435. For these patients, they have been tracking many of these dashboard measures over time. For example:



Appendix B: Four Quadrant Physical/Behavioral Clinical Integration Model

