ALAMEDA COUNTY MEDICAL CENTER

DELIVERY SYSTEM REFORM INCENTIVE POOL

PROPOSAL FOR THE

CALIFORNIA SECTION 1115 WAIVER

DEMONSTRATION YEARS SIX - TEN

Submitted

February 18, 2011

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I. INTRODUCTION

Alameda County Medical Center is pleased to submit this proposal for delivery system reform under California's Section 1115 Waiver's Delivery System Reform Incentive Pool Program, Demonstration Year six through ten. Our comprehensive, integrated proposal is designed to help ACMC bridge the gap between traditional health care for underserved populations and the health care system of the future, by improving the experience of care, improving the health of our low income populations, and reducing costs and increasing efficiency. Over the next five years, Alameda County Medical Center is committed to:

- **Move from a disease-focused model of episodic care** that is often initiated in response to acute medical conditions, **to a model of coordinated, pro-active care that helps patients manage their own conditions**. Our proposed projects to expand primary care and specialty care capacity (1.1 & 1.3), utilize electronic disease registries and panel managers (1.2), expand medical homes (2.1), create a care management program for people with complex chronic conditions (2.2), and improve care transitions (2.5) are all designed to help us achieve this goal.
- **Put patients at the center of their own care, rather than at the periphery.** Our proposed projects will improve the patient experience by soliciting and spot-lighting patients' opinions and feedback and using that information to guide our care(2.3), actively upgrading caregiver communication (2.3), and smoothing transitions from one part of the system to the next, by reaching out to patients after they leave the hospital to make sure they have what they need to attain the best outcomes and to engage them in a medical home (2.5).
- Enable patients to have **easy access to the appropriate levels of care**, rather than resorting to expensive and temporary care in the emergency department. Projects to create a new 24/7 nurse advice line (1.1) and to expand ambulatory care capacity (1.1, 1.2) will contribute to this goal. And when people do need to use the ED, our aim is to make the visit as efficient and effective as possible, ending with a linkage to a medical home. The project to improve patient flow in the ED (2.4) is designed with this goal in mind.
- **To provide the best care we know how to give, for every patient, at every site, every day.** To support this, the system needs to make the best care the easiest care whenever possible. To this end, ACMC plans to create a Systems Transformation Center (1.4) that will coordinate the implementation of performance improvement activities, and also spread lessons on how to achieve process improvements within the constraints of our urban safety-net healthcare environment. This Center will also help us to achieve the urgent improvements that are undertaken in Category 4.

A. Background

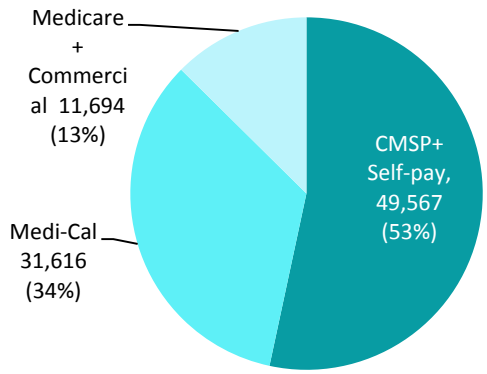
Organizational and Community Context. ACMC is the sole source of health care for tens of thousands of residents of Oakland and Alameda County. We have served this community for nearly one hundred and fifty years and we plan to do so for at least the next one hundred and fifty. Under health care reform, we anticipate the influx of tens of thousands of newly insured patients seeking access to care, and the private health sector in Alameda County currently does not have the capacity to absorb them. Given that reality, we expect to be needed by our community more than ever. However, in order to insure our ability to compete and thrive, we recognize that we must become

more efficient and more effective in how we provide care. We embrace the challenge to win the loyalty of our patients, to meet and exceed standards of quality and safety, and to contain costs – to do more with less.

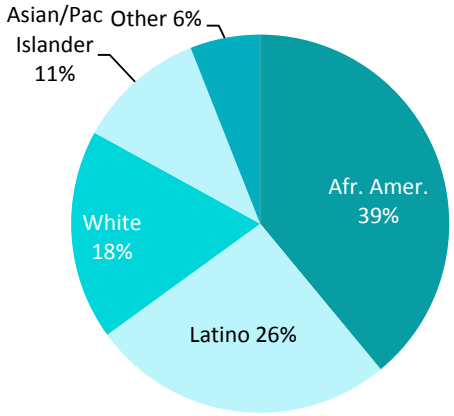
Population Description. ACMC's mission is to maintain and improve the health of all county residents, regardless of their ability to pay.We are an urban public health system with a largely poor, highly diverse patient population, as illustrated below. More than half of patients we serve have no insurance; more than a third are on Medi-Cal.

The diversity of our patients is also evident : 39% of inpatients in 2010 were African American, 26% were Latino, 18% were white, and 11% were Asian/Pacific Islander. More than half (54%) of the ambulatory patients at ACMC are Limited English Proficient (LEP) or monolingual non-English speaking.

92,877 Unduplicated Patients by Payor
ACMC FY 2010



Patient Race/Ethnicity
ACMC FY 2010 Inpatient Discharges



In June 2009, the California Association of Public Hospitals (CAPH) sponsored a Patient Demographic Pilot Study that included ACMC as one of the pilot sites. In this study, patients throughout the system were interviewed or completed questionnaires to gain a more in-depth understanding of the patients served by public hospitals in California. 398 interviews were conducted in English, Spanish, Chinese, Farsi, and Vietnamese. More than half were interviewed in outpatient settings.

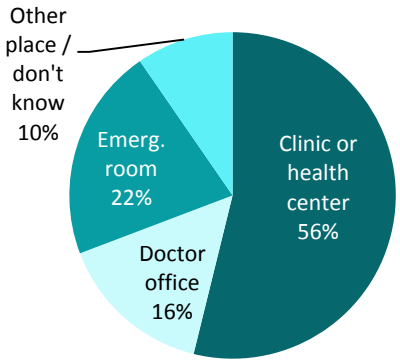
The results of the survey paint a vivid picture of the socially and economically complex characteristics of the patients served at ACMC.

- Almost a quarter (22%) used the Emergency Room as their primary source of health care.
- Almost half (47%) rated their own health status as poor or fair.
- 56% reported income below the federal poverty level, and another 21% had income between 101% and 200% of the FPL.
- Thirty-eight percent did not graduate from high school, and only 11% had a degree from a four year college or higher.

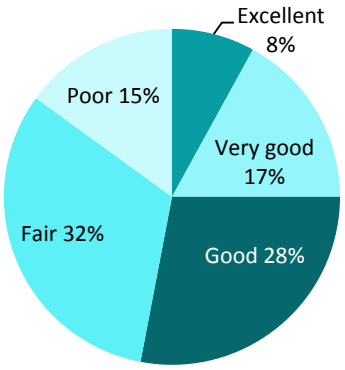
- Most tellingly, almost one third (29%) of respondents stateed they "mostly stay with friends or family, or have no real place to live".

Patient Demographic Pilot Study Results, 2009

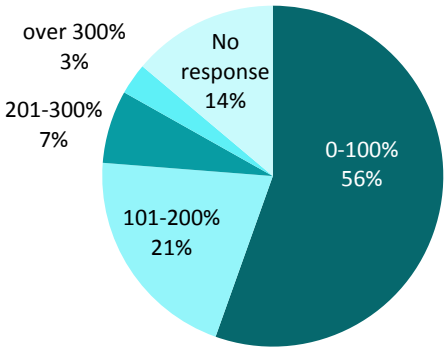
"Where do you usually go for check-ups or when you are sick?"



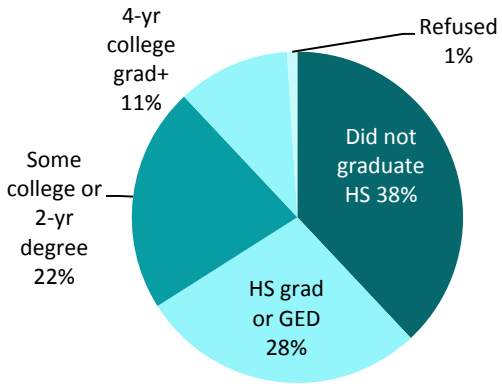
"In general how would you rate your overall health now?"



Income as % of Federal Poverty Level (based on 2008 reported income)



"What is the highest grade or level of school that you have completed?"



Health System Description. ACMC is a public integrated health care delivery system, licensed for 475 beds, serving residents of Oakland, CA, and the wider Alameda County and the East Bay Region with three hospital campuses and three free-standing health centers. We provide a full continuum of care including health promotion and prevention, primary care, chronic disease management, specialty outpatient services in **39 medical and surgical specialties**, labor and delivery, acute medical and surgical inpatient care, acute rehabilitaiton and skilled nursing, acute and outpatient behavioral health care. Our Ambulatory Care Services generated **300,167 outpatient visits** in specialty and primary care in FY2010, the fourth year of steady growth. ACMC provides interpretive services in over **30 different languages** to serve our diverse population, including using state-of-the-art video medical interpretation technology.

The three hospital campuses include 236 acute care beds at Highland Hospital, Oakland, 50 acute rehabilitation beds and 109 skilled nursing facility beds at Fairmont Hospital, San Leandro, and 80 psychiatric beds at John George Psychiatric Pavillion in San Leandro. The average daily census was 319 in FY 2010, and ACMC overall had **14,796 admissions**, an increase of 2% over the prior two years. Our providers performed **4,382 inpatient and outpatient surgeries** in FY2010, a 3% increase over last year. Finally, ACMC operates one of California's busiest emergency departments, a Level II regional trauma center.

Education, training and teaching are also integral parts of our mission. ACMC is a nationally recognized teaching institution, with alumni practicing at most Bay Area hospitals and throughout the US. We operate five major physician training programs, in internal medicine, general surgery (UCSF), oral surgery, emergency medicine & primary care. In 2009, there were 163 residents in training at ACMC. In addition, we are a primary training site for orthopedic and podiatric residents based at St Mary's Hospital, San Francisco.

The Department of Medicine residency programs, including the Primary Care Training Program, are affiliated with the University of California, San Francisco (UCSF). The Primary Care Training Program is a discrete track of the Internal Medicine Residency Training program. ACMC's PCTP has a record of training high numbers of physicians who enter and remain in primary care practice. For the periods 2002-2005 and 2003-2006, five out of six program completers per year entered and remained in primary care careers, with at least half of the class serving primarily uninsured or Medi-Cal/Medicare populations consistently over the last five years. Currently there are 61 residents in the Internal Medicine Residency program.

Change at ACMC. In the past, public hospitals such as ACMC have been handicapped by:

- A bureaucratic culture that stifles innovation
- Funding incentives focused on quantity and demonstrated costs rather than quality and demonstrated outcomes
- Fragmentation and non-coordination of care across the care continuum, despite owning and running all the elements of a fully integrated system of care
- Underinvestment in data collection and information technology

However, over the last five years under the leadership of CEO Wright Lassiter III, and with the assistance of the California Association of Public Hospitals, ACMC has developed and begun to implement a vision to be a leader in integrated, population-based care, using the most current, evidence-based practices. Profiled recently by the California Health Care Foundation as one of two examples of California safety net hospitals that have succeeded financially in difficult times, ACMC has had modest but positive net income for the last five fiscal years in a row, despite the failure of funding sources to keep pace with the rate of medical inflation. We, along with our sister California public hospitals, have spent the past five years under the prior Medicaid waiver building a foundation of innovative programs and reforms that we have piloted, tested, and found successful. Examples of these are:

- Patient visit re-design which has begun to streamline patient flow in clinic using innovative strategies such as having doctors in walkie-talkie contact with staff at all times
- The Patient Centered Scheduling system that increases same day access and reduces no-show rates

- Video Medical Interpretation that allows near-instant video access to interpreters in multiple languages
- The Coverage Initiative (Alameda County Excellence – ACE) which focused on coverage expansion and implementing the chronic care model for targeted disease groups, especially diabetes.
- CAPH's "CEED" program that introduced the use of chronic disease registries and set clinical performance targets
- Project Respect, which has targeted case management services for a small number people who are intensive users of the ED
- Innovative, team-based clinics for complex chronic diseases such as congestive heart failure and diabetes that use group visits, pharmacists, and health educators to empower patients to set and reach their own goals
- ACMC's Primary Care Training Program (PCTP), which for twenty-six years has trained diverse primary care physicians with the goal of improving access to high quality care for underserved populations

Each of these projects has been successful in limited or pilot settings, but with CMS assistance, ACMC is now poised to expand and spread them throughout the entire institution. The delivery system reforms outlined in this proposal will help tip the balance for ACMC to succeed in meeting the needs of our community under health care reform.

B. Executive Summary

Alameda County Medical Center proposes a series of improvements across the four categories prioritized by CMS – Infrastructure, Redesign, Population Health, and Urgent Improvement – that together will address our key challenges:

- Inadequate infrastructure and capacity for both primary care and specialty care
- Fragmented, non-coordinated care within the disparate parts of our delivery system
- Excess reliance on episodic, physician encounters for managing chronic diseases in socially and medically complex populations
- Inefficient internal processes and work flows
- Insufficient attention to the patient's voice and experience
- Lack of focus on clinical outcomes
- Incomplete spread of established best practices in safety

The total proposed incentive amounts across the five years for ACMC is $297.5 million, including ACMC's contribution. This investment spans **13 project areas**, with a total of **120 distinct milestones** over five years, (excluding Category 3: Population Health, still to be determined at the time of this submission)

The table below summarizes the projects that will be addressed in this proposal. Incentive payments associated with each project, for each demonstration year, can be found in the detail that follows, as well as in the summary table at the end of this document. All projects and milestones are derived from the "Superset" guidance documents mutually developed by the State, CMS, and CAPH.

We believe that, together, these projects will help ensure we successfully transform our traditional public health systems into the reliable, patient-centered, and cost effective public delivery system of the future.

Project Title	Description	Five Year Goals
CATEGORY 1: INFRASTRUCTURE		
1.1 Expand Primary Care Capacity (13 milestones)	Build more clinic space for primary care, and increase encounter volumes.	• 25% increase in primary care encounters in the southern Alameda County site (Newark Clinic) • 15% increase in primary care encounters in ACMC's Oakland clinic sites, compared to baseline.
1.2 Implement Disease Registries (9 milestones)	Use Chronic Disease Registries to track and improve the outcomes of ACMC's patients with chronic diseases, targeting diabetes and hypertension.	• Primary care providers and staff of all primary care clinics will be trained in the use of ACMC's disease management registry, panel management and the chronic care model. • Providers will receive monthly registry reports on their patients with diabetes and hypertension. • Providers at all primary care clinics will meet monthly with a panel manager and the care

		team to coordinate care.
1.3 Expand Specialty Care Capacity (9 milestones)	Expand specialty capacity in four critical areas for ACMC: orthopedics, cardiology, eye care, and dermatology, including the use of telemedicine where feasible.	• 80% increase in optometry encounters • 15% increase each in cardiology, dermatology and orthopedic encounters
1.4 Improve Organizational Performance Improvement Capacity (10 milestones)	Create a "System Transformation Center" at ACMC to coordinate implementation of, spread learning from, and report progress on major organizational PI initiatives.	• Create a System Transformation Center at ACMC that will coordinate the implementation of major organizational performance improvement and transformational activities and spread learning and capacity at all levels of the organization. The Center will sponsor ACMC participation in at least three non-mandated statewide, public hospital or national clinical databases or learning collaboratives. • Audit the accuracy, efficiency, and completeness of all systems currently used to gather and report quality and safety performance data, and implement a minimum of five targeted improvements in areas such as enhanced / targeted coder education, physician training for documentation, standardization of observational methodologies, "culture of safety" and "just culture" enhancement, and enhanced tools for prevalence studies. • Create an on-line intranet Quality and Performance Dashboard with all organizational quality measures reported and displayed. • Complete Lean training of 75 staff, conduct at least 17 Kaizen rapid improvement events, and demonstrate cumulative ROI on all Lean initiatives of $3M by DY10.
CATEGORY 2: REDESIGN		
2.1 Expand Medical Homes (5 milestones)	Identify patients in the ACMC system, especially ED and Specialty Clinics, who do not have a medical home, and connect them to one.	• Generate a profile of patients who need a medical home, and develop a plan to connect them to a medical home. • Provide at least 50% of patients in ED and Specialty Clinics who need a medical home (as defined in the plan) with a medical home assignment and an appointment to be seen within 60 days of referral.
2.2 Expand Care Management Models	Pilot, study and expand the use of outpatient clinics that	• Establish a complex care clinic that serves at least 400 patients in need of intensive care

(6 milestones)	use social workers and mid-level providers to help care for highly complex/ high utilizing patients in our system to keep them healthy and out of the ED and hospital.	coordination and interdisciplinary care resources by DY9 • Complete a cost-effectiveness study of utilization and patient satisfaction by DY10.
2.3 Improve Patient Experience (5 milestones)	Improve inpatient experience of communication with their caregivers by adopting, training, and monitoring the successful use of a standardized model for improved communication.	• Ensure that reports on patient experience are available monthly and widely disseminated throughout the organization. • Train and evaluate 85% of permanent inpatient nurses in communication skills competencies. • Improve nurse communication scores on HCAHPS patient experience survey by 12% over 2010 baseline by the last quarter of DY10.
2.4 Improve ED Flow (5 milestones)	Measure and improve the ED Length-of-stay for two groups: the low acuity (level 4&5) ED users, and those admitted to the hospital.	• Reduce overall ED length-of-stay for low acuity patients (level 4 & 5) by 20% compared to the 2010 baseline. • Reduce overall ED length-of-stay for patients admitted to the hospital by 20% compared to the 2010 baseline .
2.5 Improve Hospital Discharge Care Transition (4 milestones)	Identify patients at risk for readmission at ACMC and provide post-discharge telephone care management for them, and measure the impact.	• Implement a post-discharge phone-based care management protocol targeted toward patients who are at high risk for readmission. • Provide post-discharge outreach and assign medical homes to 50% of patients identified as high risk for readmission.
CATEGORY 3: POPULATION HEALTH	TBD	TBD
CATEGORY 4: URGENT IMPROVEMENTS		
4.1 Reduce Sepsis Mortality (13 milestones)	Measure and report rates, and implement improvement strategies	• Achieve "Z"% compliance with Sepsis Resuscitation Bundle, where "Z" will be determined in Year 2 based on baseline data. • Share data, promising practices, and findings with sister public hospitals, the California Safety Net Institute, the State, and CMS.
4.2 Reduce Central Line Blood Stream Infection (16 milestones)	Measure and report rates, and implement improvement strategies	• Achieve Z% compliance with CLIP, where "Z" will be determined in Year 2 based on baseline data. • Reduce Central Line Bloodstream Infections by "Z"%, where "Z" will be determined in Year 2 based on baseline data. • Share data, promising practices, and findings

		with sister public hospitals, the California Safety Net Institute, the State, and CMS.
4.3 Reduce Surgical Site Infections (13 milestones)	Measure and report rates, and implement improvement strategies	• Reduce the rate of surgical site infection for the three high-yield procedures targeted in DY7, that are Class 1 and 2, by "Z"%, where "Z" will be determined at the end of Year 2, based on baseline data. • Share data, promising practices, and findings with sister public hospitals, the California Safety Net Institute, the State, and CMS.
4.4 Reduce Hospital-Acquired Pressure Ulcers (12 milestones)	Measure and report rates, and implement improvement strategies	• Achieve hospital-acquired pressure ulcer prevalence of less than 1.1%. • Share data, promising practices, and findings with sister public hospitals, the California Safety Net Institute, the State, and CMS.

II. Category 1: Infrastructure Development

Project 1.1: Expand Primary Care Capacity

Goal: To increase ACMC's ability to provide "the right care at the right time in the right setting" – to be able to treat more patients in the primary care setting where they can receive more preventive and proactive care, more efficiently. The **five-year target goal** is to substantially improve ACMC's primary care capacity, as evidenced by a **25% increase** in primary care encounters in the southern Alameda County site (Newark Clinic) and a **15% increase** in primary care encounters in ACMC's Oakland clinic sites, compared to baseline.

Major delivery system solution proposed. We propose to **expand the number of exam rooms** in primary care clinics at ACMC's Oakland and southern Alameda County facilities, adding providers and support staff, and to establish **a 24/7 nurse advice line** that includes medical advice and referrals.

Challenges: In Alameda County as elsewhere, low income, uninsured, and minority populations are disproportionately medically disenfranchised. These individuals often have multiple chronic conditions. Without regular primary care, chronic conditions are likely to become acute episodes, putting patients at risk for disability and premature death. Extended delays in appointment scheduling and long waiting times have a significant negative impact on patient and provider satisfaction and quality of care, and discourage people from using health care proactively. In addition, due to the low or negative operating margins of public hospitals, we are relatively disadvantaged in access to capital to expand.

Starting point: Currently Alameda County Medical Center provides high quality, affordable preventive and primary care to residents of Alameda County regardless of ability to pay. However, access to primary care appointments is extremely limited. Patients often wait for many months to access any provider, much less primary care. As a result, many patients are cared for exclusively in specialty care clinics and/or the emergency department; these settings are not designed to provide comprehensive assessment, preventive care and coordination. While we have not yet been able to precisely quantify the unmet demand, recent investigation has revealed that at ACMC we have approximately 8000 uninsured patients seen in our Emergency Department or our Specialty Clinics in the past year who **had not had a single visit to a primary care clinic** in the past year. The number of patients with Medi-Cal who lack a medical home, although not studied, is likely to be similar. In addition, data suggest that the patients currently in our primary care system are also underserved, due to lack of follow-up appointments. ACMC primary care patients average fewer than 2 primary care visits per year, whereas the national average is approximately 3.2/year. We would expect ACMC's rate to be higher than average given the poor health of our population.

A different view of this problem is shown when we look at the average panel size in adult primary care clinics at ACMC: whereas the typical California safety net clinic provider has an active panel of 1000–1200 patients, several of our clinics have **1800 active patients** per provider. This excess patient load leads to patients being unable to be followed at recommended intervals for chronic diseases, or on an urgent basis for acute illness, further burdening our Emergency Department.

Significance: Expansion of primary care is an absolute prerequisite for system-wide improvement, and will have a ripple effect throughout the system. 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 and keep people out of the hospital. It is especially important for inpatients to get follow-up appointments after their hospital stay for optimal recovery and to avoid readmission.

***Relation to other categories*:** Use of disease registries (1.2) and performance improvement capacity (1.4) will support our ability to meet this project goal. In turn, expanded primary care capacity will support the expansion of medical homes (2.1) and more organized care delivery, improving the patient experience (2.3), and better prevention and management of chronic conditions (2.2).

Project 1.1: Expand Primary Care Capacity					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
1. **Process Milestone**: Develop plan and initiate construction to expand primary care capacity in Southern Alameda County (Newark Clinic) and increase encounters there by 25% over 3 years, as compared to ACMC FY 2010. **Metric**: Construction documents and evidence of start of construction at Newark Clinic.	**2. Improvement Milestone**: Expand primary care encounters in Southern Alameda County (Newark Clinic) by 5% compared to baseline (ACMC FY 2010). **Metric:** Newark Clinic encounter data for baseline and demonstration year.	3. **Improvement Milestone**: Expand primary care encounters in Southern Alameda County (Newark Clinic) by 10% compared to baseline (ACMC FY 2010). **Metric**: Newark Clinic encounter data for baseline and demonstration year.	4. **Improvement Milestone**: expand primary care encounters in Southern Alameda County (Newark Clinic) by 25% compared to baseline (ACMC FY 2010). **Metric**: Newark Clinic encounter data for baseline and demonstration year.	5. **Improvement Milestone**: Maintain levels of expansion at DY9 levels. **Metric**: Newark Clinic encounter data for baseline and demonstration year.	1.2 Registry 1.4 Performance Improvement Capacity 2.1 Medical Homes 2.2 Chronic Care Management 2.3 Patient Experience 2.5 Care transitions
	6. **Process Milestone**: Develop plan and initiate construction to expand primary care capacity in ACMC Oakland clinic sites; and increase encounters by 15% by DY10 as compared to ACMC FY 2011. **Metric**: Final approved plan to expand primary care capacity at ACMC Oakland clinic sites.	7. **Improvement Milestone**: Expand primary care encounters in in ACMC Oakland clinic sites by 5% compared to baseline (ACMC FY 2011). **Metric**: Oakland-based clinics' encounter data for baseline and demonstration year.	8. **Improvement Milestone**: Expand primary expand primary care encounters in in ACMC Oakland clinic sites by 10% compared to baseline (ACMC FY 2011). **Metric**: Oakland-based clinics' encounter data for baseline and demonstration year.	9. **Improvement Milestone**: Expand primary care encounters in in ACMC Oakland clinic sites by 15% compared to baseline (ACMC FY 2011). **Metric**: Oakland-based clinics' encounter data for baseline and demonstration year.	

Project 1.1: Expand Primary Care Capacity					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
	10. **Process Milestone**: Submit a business plan to add a 24/7 nurse advice telephone line for all primary care clinic patients. **Metric**: Documentation of approval of above plan.	11. **Process Milestone**: Establish a 24/7 nurse advice telephone line for all primary care clinic sites' patients. **Metric**: Evidence of protocols, patient marketing materials and baseline utilization data.	12. **Improvement Milestone**: Increase utilization of the advice line by 25% over DY8 baseline. **Metric**: Phone logs and aggregated call reports.	13. **Process Milestone**: Complete a cost effectiveness study of nurse advice line utilization and patient satisfaction. **Metric**: Completed cost effectiveness study.	

Project 1.2: Implement and Utilize Disease Management Registry Functionality

Goal: All four ACMC primary care sites will utilize the disease management registry for population health, panel management, and care coordination. The **five-year target goals** are:

- Primary care providers and staff of all primary care clinics will be trained in the use of ACMC's disease management registry, panel management and the chronic care model.
- Providers will receive monthly registry reports on their patients with diabetes and hypertension.
- Providers at all primary care clinics will meet monthly with a panel manager and the care team to coordinate care.

Major delivery system solutions: Spreading the use of a disease registry and panel management in adult primary care clinics, by training providers and clinic staff in the use of ACMC's registry software, i2iTracks; improving registry functionality, including reporting; and implementing panel management at all four primary care sites.

Challenges: The traditional practice of ambulatory medicine is centered on the 15 minute doctor's office visit. While this approach works well for simple acute problems, it is wholly inadequate to provide optimal care for chronic diseases. The critical role of health education, patient engagement and shared goal setting, and evaluating treatments and outcomes against known best practices are well established prerequisites to optimal chronic care, but are impossible in the old model of outpatient care. Without a system to support planned care and data to monitor outcomes, the 15 minute office visit allows the "tyranny of the urgent." Despite the dedication of the primary care clinic staff, basic screening, provider performance profiling, and patient activation receive insufficient attention, as the medical literature has repeatedly shown.

Starting point: In the past ACMC has not had an overall plan for implementing population management. During the past two years ACMC has installed and interfaced i2iTracks at our four primary care clinics—three freestanding and one hospital-based. I2iTracks currently receives data on ICD/CPT codes, laboratory results, and appointment information. We are working with the ACMC registration staff to include accurate information on primary care providers. However, staffing is currently inadequate for good coordination of care—we currently have only one panel manager for the entire ambulatory care division responsible for tens of thousands of patients. ACMC has a very small team of health educators, and there is insufficient self-management support (SMS). Finally, many of the staff (both providers and medical assistants) are not trained and believe that registry use will interfere with their patient care activities. Data on primary care clinic site, medication lists, and some preventive medicine components such as mammogram results are not currently available or implemented, despite now having the technology to do so.

Significance: By enabling chronic disease management, preventive care, health education and care coordination to occur outside of the 15 minute visit, use of the disease registries will increase efficiency, and allow the limited number of primary care providers to use their clinical skills more appropriately in the clinic visit. The personal contact of the panel managers may encourage patients to become more actively engaged in managing their health.

Working together throughout the first five years of the 1115 Waiver, ACMC has participated in establishing a learning community that includes all of the safety net healthcare providers in our community. We have jointly created and adopted formal Standards of Care for panel management and conducted trainings targeted to clinicians and panel managers to spread best practices system-wide. Through DSRIP we will be able to build on this groundwork and fully realize the model within ACMC.

Relation to Other Categories: 1.1 Expand primary care capacity, 2.1 Expand medical homes, 2.2 Chronic care management, 2.3 Patient experience, 2.5 Care transitions.

Project 1.2: Implement and Utilize Disease Management Registry Functionality					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
1. **Process Milestone**: Develop curriculum and initiate training of providers and staff at ACMC primary care clinics in the use and principles of ACMC's disease management registry, including training in the chronic care model and panel management. **Metric**: Training logs, agendas, curricula, presentations and participant learning survey.	2. **Process Milestone**: Train 75% of providers and staff at all ACMC primary care clinics in the use and principles of ACMC's disease management registry. Including training in the chronic care model and panel management. **Metric**: Training logs, agendas, presentations and participant learning survey.	3. **Process Milestone**: Integrate 2-hour refresher training into annual training plans of all primary care clinic clinical staff, and achieve a minimum of 75% completion of training by clinical staff. **Metric**: Document that ACMC annual competency plans for primary care clinics include chronic disease training; document attendance rate; training logs.	4. **Process Milestone**: Achieve 80% attendance in annual 2 hour refresher training in chronic disease management. **Metric**: Document attendance rate; training logs.		1.1 Expand primary care capacity 2.1 Medical Homes 2.2 Chronic Care Management 2.3 Patient Experience 2.5 Care transitions
	5. **Process Milestone**: All four primary care clinics at ACMC will have at least one full time panel manager who will populate the registry and establish a process for accurate panel identification and assignment. **Metric**: "Cleaned" and validated panel reports (reviewed for accuracy of diagnosis and updated patient enrollment status) for	6. **Improvement Milestone**: 90% of providers will receive monthly registry reports on their patients with diabetes and hypertension. **Metric:** Registry reports 7. **Improvement Milestone**: 90% of providers at one of four primary care clinics will meet monthly with panel manager and care	8. **Improvement Milestone**: 90% of providers at two of four primary care clinics will meet monthly with panel manager and care team to red-flag patients to receive outreach by phone, mail, or in-person. **Metric**: Panel management reports, meeting notes, and log of patient interventions.	9. **Improvement Milestone**: 90% of providers at four of four primary care clinics will meet monthly with panel manager and care team to red-flag patients to receive outreach by phone, mail, or in-person **Metric**: Panel management reports, meeting notes and log of patient interventions.	

Project 1.2: Implement and Utilize Disease Management Registry Functionality					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
	all primary care clinics.	team to red-flag patients to receive outreach by phone, mail, or in-person. **Metric**: panel management reports, meeting notes and log of patient interventions.			

Project 1.3: Expand Specialty Care Capacity

Goal: To increase specialty care capacity in four key specialties for which demand most exceeds supply: Optometry, Cardiology, Dermatology and Orthopedics. The five-year target goals for this project are to achieve an **80% increase** in optometry encounters and a **15% increase** each in cardiology, dermatology and orthopedic encounters over baselines.

Major delivery system solution: We have identified two strategies for addressing these challenges:

- **Expanding the existing optometry program to fill significant gaps in services**. Working with our partner, UC Berkeley School of Optometry, we plan to see more patients, including screening of more diabetic patients for retinal disease, and reduce the backlog of patients waiting for screening.
- **Expanding the existing cardiology, dermatology and orthopedics services to fill significant gaps in services.** In DY7, we will develop a plan to expand cardiology, dermatology and orthopedic services to increase the number of encounters and improve access to care and quality of care. Expansion strategies may include moving some specialty care services away from the main hospital campus into the community. We will also explore the use of telemedicine technology to expand capacity in dermatology services.

Challenges: Historically, resources for specialty services have been extremely limited in Alameda County. There is an imbalance of demand and supply of specialty services for low-income people, due to a shortage of providers in several medical specialties who accept Medi-Cal. Under these circumstances, ACMC has effectively become the sole provider of specialty care for people with Medi-Cal and the uninsured, both for our own patients and those of the local Community Health Centers. After review of the demand for specialty care in our system, we have determined four areas with highest demand for services that require immediate attention: optometry, cardiology, dermatology and orthopedic services.

Starting point: Optometry is by far the most common specialty service requested by referring providers. Far from just doing refractions for eyeglasses, in our community, appropriately trained optometrists are the front line in medical evaluation of nearly all eye complaints. Most significantly, the explosion of diabetes in our community, and the resulting risks of loss of vision, has created a huge and unmet demand for retinal screening for diabetic eye complications.

Orthopedics, dermatology and cardiology also are among the top specialty services requested. Orthopedics is particularly urgent because of a high burden of both acute traumatic injury and chronic disease in our community. Many of the patients referred to the orthopedics clinic were initially seen in the Emergency Department and require follow-up in a very timely manner. At the same time, our aging population is seeing increased chronic joint disease and need for joint replacements As a result, there are close to 1000 new patients waiting to be given an appointment in our orthopedics clinics.

Demand for cardiology care is high, given the exceedingly high rates of cardiovascular disease in our community, especially among African-Americans, where both prevalence and mortality rates are 50% higher than the general population, according to a recent study by the Alameda County Department of Public Health. The current wait for a new patient to be seen in cardiology clinic is close to 120 days.

While dermatology may seem a less urgent specialty, our population has very high rates of skin cancer, infectious disease, and autoimmune skin disease, and a substantial burden of tropical disease due to a large immigrant population. The current wait for a new dermatology appointment is approximately nine months.

Significance: Waiting up to nine months for a specialty appointment is both frustrating and dangerous: patients and referring physicians are dissatisfied, and the delays in diagnosis and treatment risk preventable patient harm.

In addition, these delays have less obvious but equally harmful operational consequences: referring physicians must make extreme communication and advocacy efforts to get urgent patients seen, and these patients are then over-booked, which in turn disrupts efficient patient flow and creates further patient waits and dissatisfaction. This project will significantly reduce this system dysfunction for the four targeted specialties.

Relation to Other Categories: 1.2 Disease management registry & panel management, 1.4 Performance improvement, 2.1 Medical homes, 2.2 Chronic care management, 2.5 Care transitions

Project 1.3: Expand Specialty Care Capacity					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
1. **Process Milestone**: Develop business plan to increase optometry encounters by 80% over 4 years. Baseline for FY 2010 is 2,899 visits. **Metric**: Business plan approval documented.	2. **Improvement Milestone**: Increase optometry encounters by 20% compared to baseline (ACMC FY 2010). **Metric**: Encounter data for baseline and demonstration year.	3. **Improvement Milestone**: Increase optometry encounters by 40% over baseline (ACMC FY 2010). **Metric**: Encounter data for baseline and demonstration year.	4. **Improvement Milestone**: Increase optometry encounters by 60% over baseline (ACMC FY 2010). **Metric**: Encounter data for baseline and demonstration year.	5. **Improvement Milestone**: Increase optometry encounters by 80% over baseline (ACMC FY 2010). **Metric**: Encounter data for baseline and demonstration year.	1.2 Disease management registry & panel management 1.4 Performance improvement 2.1 Medical homes 2.2 Chronic care management 2.5 Care transitions
	6. **Process Milestone**: Develop business plan to increase cardiology, dermatology, and orthopedic encounters by 15% each compared to baseline (ACMC FY 2011), by DY10. **Metric**: Business plan approval documented.	7. **Improvement Milestone**: Increase cardiology, dermatology, and orthopedic outpatient encounters by 5% each over baseline (ACMC FY 2011). **Metric**: Documented encounter data for baseline and demonstration year.	8. **Improvement Milestone**: Increase cardiology, dermatology, and orthopedic outpatient encounters by 10% each over baseline (ACMC FY 2011). **Metric**: Documented encounter data for baseline and demonstration year.	9. **Improvement Milestone**: Increase cardiology, dermatology and orthopedic outpatient encounters by 15% each over baseline (ACMC FY 2011). **Metric**: Documented encounter data for baseline and demonstration year.	

Project 1.4: Enhance Performance Improvement and Reporting Capacity

Goal: To ensure that the DSRIP projects and other system transformations occurring in this very dynamic period at ACMC are coordinated, synergistic, well documented, and spread throughout the organization by developing a sustainable capacity for process improvement. The **5 year goals** are to:

- Create a **System Transformation Center** at ACMC that will coordinate the implementation of major organizational performance improvement and transformational activities and spread learning and capacity at all levels of the organization. The Center will sponsor ACMC participation in at least three non-mandated statewide, public hospital or national clinical databases or learning collaboratives.
- **Audit the accuracy, efficiency, and completeness of all systems** currently used to gather and report quality and safety performance data, and **implement a minimum of five targeted improvements** in areas such as enhanced / targeted coder education, physician training for documentation, standardization of observational methodologies, "culture of safety" and "just culture" enhancement, and enhanced tools for prevalence studies.
- Create an **on-line intranet Quality and Performance Dashboard** with all organizational quality measures reported and displayed.
- Complete **Lean training of 75 staff**, conduct at least **17 Kaizen** rapid improvement events, and demonstrate cumulative ROI on all Lean initiatives of at least $3M by DY10.

Major delivery system solutions proposed: ACMC will establish a System Transformation Center to be the central authority for organizing, evaluating, and documenting change efforts. The Transformation Center will be an internal education and capacity development resource for ACMC and will lead initiatives to improve reporting, accelerate the use of data for process improvements, and to achieve efficiency using the Lean/Six Sigma methods.

Challenges: Many workflows and care processes at ACMC are not highly efficient or reliable, with resulting waste in use of human and financial resources. While our cost per adjusted patient day is within industry average, the industry as a whole is inefficient and wasteful. As in most health systems, at ACMC we encounter daily evidence of this, both in clinical and administrative processes. Whether it is patients showing up the morning of surgery without prior authorization, lost clinic charts, or days in accounts-receivable, we need tools to help us work smarter, and reduce our costs without taking it out of quality, service, or access.

Like other under-resourced public institutions, ACMC has poorly developed internal communication structures. Divisions between the silos of administration, nursing, support services, and medical staff have resulted in a multiplicity of parallel and overlapping improvement efforts. There is no clearinghouse or vetting process for improvement efforts and the work of communicating across the functional divisions is not assigned to any particular unit. Meanwhile, dedicated and creative staff members who see the need for improvement forge ahead, resulting in many ad hoc efforts within the organization. It is essential to retain and encourage this good will and energy for improvement, while ensuring that all efforts are aligned and working synergistically to move the institution overall toward a vision of high quality, patient-centered, coordinated and efficient care.

Starting point: The ACMC Quality Department has traditionally focused on regulatory compliance and case review. We have outstanding quality professionals, with excellent qualifications and

training in this approach, and as a result, we have done exceedingly well in regulatory review. While desiring to maintain this expertise, we also recognize that we will need a broader approach to quality based on models of organizational Performance Improvement. We will have to accelerate the learning of an new set of skills within the organization: meeting facilitation, team leadership, expertise in the tools of performance improvement, data analysis and graphic display, communication, organizational development and project management.

ACMC has recently launched a system-wide harm reduction effort with the aim of reducing harm in eleven key areas by December 31, 2011. Each area has a multidisciplinary team working to develop aim statements, measures, tests of change, and ultimately to spread successful improvement strategies. We have brought in external performance improvement coaches and consultants to assist these teams but we are still dramatically under-resourced and under –funded to fully succeed in achieving the stated aim of these teams. The System Transformation Center will ensure these teams have the appropriate skill set and organizational support to succeed and spread what they learn.

Significance: As noted throughout this narrative, fragmentation and lack of coordination is a systemic issue for ACMC. The System Transformation Center directly addresses this issue. By aligning improvement efforts and improving communication across the organization, we will increase efficiency, reduce redundancy and turn the frustration of multiple uncoordinated change efforts into the satisfaction of successful progress toward objectives.

Relation to Other Categories: Category 4-urgent improvements in care; supports all the projects through training, spread, QI capacity, and data support.

Category 1.4: Improve Organizational Infrastructure for Performance Improvement and Reporting					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
1. **Process Milestone**: Develop and approve a plan to create a System Transformation Center at ACMC that will coordinate implementation of, spread learning from, and report progress on, major organizational performance improvement and transformational activities, including but not limited to Waiver implementation, Lean, and Harm Reduction initiatives. **Metric**: Documentation of plan.	2. **Process Milestone:** By mid-year, establish the System Transformation Center: hire staff, establish job duties, set oversight and reporting structures, and develop a four-year work plan. **Metric:** Documentation of establishment of Center, evidence of hiring, and work plan submission. 3. **Process Milestone**: By year's end, System Transformation Center facilitates (via research, grant-writing, and coaching) ACMC's participation in at least three non-mandated statewide, public hospital or national clinical databases or learning collaboratives. **Metric:** Evidence of participation.	4. **Process Milestone**: Develop and implement a plan to audit the accuracy, efficiency, and completeness of all systems currently used to gather and report quality and safety performance data, including but not limited to physician documentation, medical records coding, occurrence reporting, electronic registries, observational strategies, and snapshot prevalence studies. **Metric:** Documentation of plan and budget approval.	5. **Process Milestone**: Implement a minimum of five targeted improvements identified in the quality data audit in DY8 including but not limited to enhanced / targeted coder education, physician training for documentation, standardization of observational methodologies, "culture of safety" and "just culture" enhancement, and enhanced tools for prevalence studies. **Metric:** Evidence of implementation, e.g., training logs, curricula and presentation materials.	6. **Improvement Milestone**: Create an on-line intranet Quality and Performance Dashboard with all organizational quality measures reported and displayed. **Metric:** Copies of dashboard reports containing at least 15 quality and/or safety measures.	Category 4- urgent improvements Supports all the projects through training, spread, QI capacity, and data support.

Category 1.4: Improve Organizational Infrastructure for Performance Improvement and Reporting					
DY6: $5.3436M	**DY7: $4.8998M**	**DY8: $3.983M**	**DY9: $1.762M**	**DY10: $0.5M**	**Inter-related/ Leveraged Projects**
	7. **Process Milestone**: Complete and sign a services contract to implement three-year Lean-Six-Sigma training initiative at ACMC. **Metric**: Completed contract	8. **Process Milestone**: Complete Lean training of 75 staff and conduct two Kaizen rapid improvement events. **Metric**: Training and logs, minutes of events documenting use of Lean analytic tools.	9. **Process Milestone**: Complete 15 additional Kaizen rapid improvement events. **Metric**: Minutes of events documenting use of Lean analytic tools.	10. **Improvement Milestone**: Demonstrate cumulative ROI on all Lean initiatives of $3M. **Metric**: Financial analysis of ROI, including savings in labor and non-labor costs.	

III. Category 2: Innovation and Redesign

Project 2.1: Expand Medical Homes

Goal. Patients who are seen at ACMC specialty clinics and Emergency Department who need a medical home will have one. This project will specifically target the patients whose health suffers as a result of uncoordinated care—those who do not currently have a PCP, who are seen "ad hoc" and repeatedly in the ED and specialty clinics, and whose care is complex for medical and/or psycho-social reasons. Our **five-year target goals** are to

- Generate a profile of patients who need a medical home, and develop a plan to connect them to a medical home.
- Provide at least 50% of patients in ED and Specialty Clinics who need a medical home (as defined in the plan) with a medical home assignment and an appointment to be seen within 60 days of referral.

Major delivery system solutions include developing systems to identify and prioritize patients in need of medical home assignment, defining appropriate provider panel sizes, criteria for prioritizing patients for medical homes, and a tracking database for these patients, and a communication plan between the ED, Specialty Clinics and Primary Care Clinics both within ACMC and at non-ACMC locations.

Challenges. Many patients at ACMC are not identified with one provider or care team—they may be seen by different personnel at every visit and therefore their health and health care are not well coordinated. More significantly, as discussed in Project 1.1, Expanding Primary Care, ACMC lacks a coordinated or systematic approach to identifying patients who need a medical home, triaging and prioritizing them, and insuring that they are both assigned a medical home, and have a first appointment into that home.

Starting point: Currently, the process by which patients make it into a medical home is a combination of random chance, Job-like patience, or exceptional advocacy by someone. In absence of one of these factors, patients often cycle through the ED and specialty clinics receiving high-cost care that is poorly coordinated. This consumes precious specialty clinic and ED slots, crowding out others who genuinely need that level of care, thereby perpetuating a disastrous cycle.

Significance: The purpose of expanding assignments to medical homes is to engage patients in a care setting where a continuous care plan can be put in place, to ensure that they have access to services that are targeted to their personal health needs. The Alameda County safety net health care system encompasses not only ACMC, but many community-based clinics providing primary care and limited specialty services. ACMC provides emergency services and specialty care to many of those patients. We will coordinate with the community-based clinics to establish medical homes for patients using our services.

Relation to Other Categories: 1.1 Expand primary care capacity, 1.2 Disease management registry, 1.4 Performance improvement, and 2.3 Patient experience.

Project 2.1: Expand Medical Homes					
DY6: $4.2749M	**DY7: $3.92M**	**DY8: $3.1864M**	**DY9: $1.4096M**	**DY10: $0.978M**	**Inter-related/ Leveraged Projects**
1. **Process Milestone**: Develop baseline report on patients seen in the ACMC system who lack a medical home (i.e., patients seen in the Emergency Department and Specialty Clinics) including geographic mapping by zip code and city. **Metric**: Report produced of patients who lack a medical home, including geographic distribution.	2. **Process Milestone**: Based on DY6's baseline profile of patients seen who lack a medical home, develop a plan to connect patients to a medical home that contains the following elements: - per-provider panel size definitions - a priority classification for patients - a tracking database for these patients - a communication plan between the ED, Specialty Clinics and Primary Care Clinics both within ACMC and at non-ACMC locations. **Metric:** Plan written and adopted.	3. **Improvement Milestone**: Provide 15% of patients in ED and Specialty Clinics who need a medical home (as defined in DY7 plan) with a medical home assignment and an appointment to be seen within 60 days of referral. **Metric**: Referral & appointment logs documenting medical home appointment given to patients referred from ED or Specialty Clinic.	4. **Improvement Milestone**: Provide 25% of patients in ED and Specialty Clinics who need a medical home (as defined in DY7 plan) with a medical home assignment and an appointment to be seen within 60 days of referral. **Metric**: Referral & appointment logs documenting medical home appointment given to patients referred from ED or Specialty Clinic.	5. **Improvement Milestone**: Provide 50% of patients in ED and Specialty Clinics who need a medical home (as defined in DY7 plan) with a medical home assignment and an appointment to be seen within 60 days of referral. **Metric**: Referral & appointment logs documenting medical home appointment given to patients referred from ED or Specialty Clinic.	1.1 expand primary care capacity 1.2 disease management registry 1.4 performance improvement 2.3 patient experience

Project 2.2: Expand Chronic Care Management Models: Complex Care Management

Goal: To establish a **Complex Care Clinic** that provides coordinated care to patients with highly complex chronic medical and psycho-social conditions (e.g., homelessness, mental illness, multiple chronic medical conditions) that require intensive care management to optimize health and healthcare utilization. The **five-year target goals** are to **establish a complex care clinic** that serves at least 400 patients in need of intensive care coordination and interdisciplinary care resources by DY9, and to complete a cost-effectiveness study of utilization and patient satisfaction by DY10.

Major delivery system solutions: The complex care clinic will serve a cohort of very complex patients in a resource-rich ambulatory setting supported by a multidisciplinary team. The team will support phone care, improved access, pro-active education and self-management (e.g. groups, peer education, and health coaching). It will include a pain specialist, physical therapy, care managers, panel managers, etc.; and offer groups, medication education and management, and health coaching in addition to primary care.

Using data from the ED, hospitalizations, pharmacy, disease registry, and the scheduling system, as well as consultation with providers, we will create systems to identify patients that will benefit from this intensive care coordination; and establish referral and linkage systems to enroll patients in care.

Challenges: One of the keys to success for the CCC will be to avoid becoming full. The program design is to use multidisciplinary teams to manage complex patients who are not adequately served in routine primary care. However, the model requires that at least some of the patients return to regular primary care when they are no longer in need of the intensive care coordination, so that there will continue to be openings for new patients. Establishing the right criteria for inclusion will be critical to success. Fortunately, the other delivery system reform projects that are proposed will help us to meet this challenge, easing access to primary care and creating medical homes that can better support patients with complex needs.

Starting point: For many years, ACMC has had a highly developed model of care management for patients with HIV, providing a variety of non-physician services that help ensure the health of a complex population with a complex disease. We have also implemented robust care management programs for patients with heart failure and diabetes. We propose to expand these models to two additional high-risk, high need patient populations in DY6 for patients with chronic hepatitis and chronic pain. Starting in DY7 we will develop and implement a plan to spread the model beyond specific diseases or conditions to any patient with complex social or medical needs that would benefit from this approach.

Significance: In our system, many of the patients who need intensive care coordination have substance use disorders and complex psychosocial issues, in addition to chronic illness and pain. Having a care management system that can offer these patients the support they need will help all of the other services operate more smoothly. We hope that the result will be to reduce cost and inappropriate ED utilization, to improve care, and yield more empowered patients. If successful, we will be able to share our lessons with our fellow safety net care providers through our existing collaborations and the new System Transformation Center.

Relation to Other Categories: 1.1 Expand primary care capacity; 1.2 Utilize disease registry; 1.4 Enhance performance improvement; 2.1 Expand medical homes; 2.5 Implement care transitions.

Project 2.2: Expand Care Management Models: The Complex Care Clinic					
DY6: $4.2749M	**DY7: $3.92M**	**DY8: $3.1864M**	**DY9: $1.4096M**	**DY10: $0.978M**	**Inter-related/ Leveraged Projects**
1. **Process Milestone:** Plan a pilot for two disease-specific care management clinics (for chronic hepatitis and chronic pain) utilizing social workers and/or mid-level providers, to enhance effectiveness of care. At least one clinic will be started during DY6. **Metric:** Documentation of plan, including staffing model, budget, space and scheduling logistics.	2. **Process Milestone:** Conduct utilization and financial analysis of DY6 disease-specific pilots, after six months of operation. **Metric:** report documenting costs and health care utilization patterns. 3. **Process Milestone:** Develop business plan to expand the care management model beyond chronic hepatitis and chronic pain to include care of complex patients (e.g., homeless, mentally ill, and patients with multiple chronic medical illnesses) requiring care coordination and interdisciplinary care resources. **Metric**: Documentation of plan, including staffing model, budget, space and scheduling logistics.	4. **Improvement Milestone:** Expand disease-specific pilot to broader populations described in DY7 business plan; enroll and serve 200 medically complex patients, regardless of diagnosis. **Metric:** # of patients enrolled into the Complex Care Clinic; enrollment is defined as completion of interdisciplinary intake assessment and assignment of care manager.	5. **Improvement Milestone:** Expand Complex Care Clinic to enroll a total of 400 medically complex patients. **Metric:** # of patients enrolled into the Complex Care Clinic; enrollment is defined as completion of interdisciplinary intake assessment and assignment of care manager.	6. **Process Milestone:** Complete a cost effectiveness study of utilization and patient satisfaction re DY 8 & 9 Complex Care Clinic. **Metric:** Report documented.	1.1 Expand primary care capacity; 1.2 Utilize disease registry; 1.4 Enhance performance improvement; 2.1 Expand medical homes; 2.5 Implement care transitions.

Project 2.3: Redesign to Improve Patient Experience

Goal: Alameda County Medical Center's overall aim is to create an environment in which patients feel safe, listened to and empowered. Our DSRIP project goal is to improve inpatient experience by strengthening the communication skills of our nurses. Nurses are the glue which holds the entire care team together, so engaging nurses' commitment and creativity in the overall patient experience project is a critical early step. The **five year goals** are to

- Ensure that reports on patient experience are available monthly and widely disseminated throughout the organization.
- Train and evaluate 85% of permanent inpatient nurses in communication skills competencies.
- Improve nurse communication scores on HCAHPS patient experience survey by 12% over 2010 baseline by the last quarter of DY10.

Major delivery system redesign solution proposed: ACMC will adopt a model for improved patient-caregiver communication, develop and deliver a training and behavior change curriculum tailored for inpatient nurses, and incorporate standards for communication into annual nursing competency evaluations.

Challenges: Alameda County Medical Center serves a highly diverse population in terms of language, ethnicity, cultural beliefs and practices, as well as prior experiences with the health care system. Trust is the basis for establishing a strong patient-provider alliance that is the foundation for improved health outcomes, and good communication is the key to trust. The challenge at ACMC is to standardize principles of communication for all patients while at the same time finding a way to personalize the message based on the needs of each patient, and to ensure that all staff are skilled communicators.

Starting point: In the 2010 calendar year, on the HCAHPS patient experience domain labeled: "Patients who reported that their nurses "Always" communicated well", ACMC scored 66, well below the national average. In response ACMC will introduce a comprehensive patient-provider communication model and provide intensified support for improved communications, consisting of shadowing, coaching, and feedback process to support nurses, physicians, and all other staff who interact directly with patients. This process is designed to ensure that the knowledge acquired in the training is transformed into changed behavior that sticks. The intensive component of the program will launch early in the program, with assessment tied directly to changes in our patient satisfaction scores. While the inpatient nursing staff is the particular focus of the DSRIP project, the broader initiative will touch all health system staff.

Significance: The inpatient nursing staff are the front line providers of compassion, care and advocacy for acutely ill patients. Nurses have the power to encourage greater patient activation, which ultimately may lead to improved health outcomes. Better communication skills can enhance nurses' effectiveness, and create an overall better experience for patients in the hospital.

Relation to other categories: Reducing readmission, 2.5 Care transitions.

Project 2.3: Redesign to Improve Patient Experience					
DY6:$4.2749M	**DY7: $3.92M**	**DY8: $3.1864M**	**DY9: $1.4096M**	**DY10: $0.978M**	**Inter-related/ Leveraged Projects**
1. **Improvement Milestone:** Create an institution-wide report of patient experience data in both inpatient and outpatient settings, and disseminate monthly. **Metric:** Monthly patient experience report available.	2. **Process Milestone:** Adopt a model for improved nurse-to-patient communication and design curriculum and education plan. **Metric:** Document the communication model adopted as formal policy and procedure, and document curriculum and plan completed.	3. **Process Milestone:** Complete training of 85% of permanent inpatient nursing staff on the communication model and standards. **Metric:** Numerator = number of nurses trained, denominator = total number of permanent employed inpatient nurses.	4. **Process Milestone** Formal evaluation of communication skills competencies will be completed for 85% of permanent inpatient nurses as part of their annual evaluation. **Metric:** Numerator = number of competency assessments successfully completed/ denominator=total # permanent inpatient nurses.	5. **Improvement Milestone:** Improve nurse communication scores on HCAHPS patient experience survey by 12%, by the last quarter of DY10, as compared to calendar year 2010 baseline score. **Metric**: Quarterly average "Nurse Communication" score on HCAHPS survey raw scores, compared to 2010 calendar year baseline.	Reducing readmissions 2.5 Care transitions.

Project 2.4: Improve Patient Flow in the Emergency Department

***Goal*:** To reduce patient wait times in the Emergency Department and improve access to emergency services for all patients in the community. The **five year target goal** is to reduce overall ED length-of-stay for both low acuity patients (level 4 & 5) and for patients admitted to the hospital by 20% compared to the 2010 baseline 2010.

***Major Delivery System Redesign Solution*:** We will establish a baseline value for door-to-inpatient bed for patients admitted from the ED, then use performance improvement processes to identify and implement at least three interventions to reduce ED throughput by 20%.

***Challenge*:** ED overcrowding is a nationwide issue of particular impact at ACMC. While the increase in newly uninsured people due to the poor economy has exacerbated the problem, improving flow through the ED could significantly improve it. Two sub-populations in particular are poorly managed: those patients requiring hospital admission, and those with minor or non-emergency problems. In the "needing admission" group, a series of uncoordinated workflow steps - including waiting for a diagnosis by the ED doctor, waiting for evaluation by the hospital inpatient doctor, waiting for a bed to be free, and waiting for transport – all conspire to back up the availability of an ED bed for the next patient. In the case of the non-emergency patient group, their sheer numbers require a different approach—one better suited to high volume, low acuity.

Starting point: Our Emergency Department sees approximately 86,000 patients annually, or 235 patients per day, and is the designated Level II trauma center for Oakland, CA, and northern Alameda County. Currently more than ten thousand patients per year are admitted to the inpatient service of the Highland Hospital campus at ACMC from the ED. The majority of these patients are admitted by the Medicine Department and experience an average length of stay in the ED of greater than 15 hours, from triage to final hospital bed. While appropriate medical care is initiated in the ED, the impact of this delay is quite significant. Patient safety and quality suffer, as ED personnel necessarily focus on sicker incoming patients. Patient comfort and satisfaction are compromised—the ED is a noisy, crowded and underfed place. And the Emergency Department's ability to provide care to the other patients waiting to be seen also suffers from the extra crowding.

Significance: Reducing the time spent waiting in the emergency department is an absolute prerequisite to reducing harm, improving the patient experience, timeliness and cost of care. With reduced time waiting in the emergency department, access for patients will also be improved.

Relation to Other Categories: 1.1 and 1.2, Expanding primary care and specialty capacity; 1.4 Performance improvement capacity and 2.3 Improving patient experience.

Project 2.4: Improve Patient Flow in the Emergency Department					
DY6:$4.2749M	**DY7: $3.92M**	**DY8: $3.1864M**	**DY9: $1.4096M**	**DY10: $0.978M**	**Inter-related/ Leveraged Projects**
1. Process Milestone: Develop and disseminate monthly med-surgical ED flow report that identifies average ED length -of - stay for both low acuity patients (level 4 & 5) and for patients admitted to the hospital, and establish an organizational baseline for ACMC FY 2010. **Metric:** Average length-of-stay for the two populations as measured by electronic time stamps in ED information system.	**2. Process Milestone:** Identify and implement three improvement interventions and monitor and report their impact on flow. **Metric:** Reports documenting interventions and results.	**3. Improvement Milestone:** Reduce overall ED length-of-stay for both low acuity patients (level 4 & 5) and for patients admitted to the hospital by 10% compared to baseline (ACMC FY 2010). **Metric:** Average length-of-stay for the two populations as measured by electronic time stamps in ED information system.	**4. Improvement Milestone:** Reduce overall ED length-of-stay for both low acuity patients (level 4 & 5) and for patients admitted to the hospital by 20% compared to baseline (ACMC FY 2010). **Metric:** Average length-of-stay for the two populations as measured by electronic time stamps in ED information system.	**5. Improvement Milestone:** Maintain overall ED length-of-stay for both low acuity patients (level 4 & 5) and for patients admitted to the hospital by 20% compared to baseline (ACMC FY 2010). **Metric:** Average length-of-stay for the two populations as measured by electronic time stamps in ED information system.	1.1 and 1.2, Expanding primary care and specialty capacity; 1.4 Performance improvement capacity 2.3 Improving patient experience

Project 2.5: Implement/Expand Care Transitions Programs

Goal: To create smooth transitions of care from inpatient to outpatient settings by providing care management during this time period. The **five year target goal** is to implement a post-discharge phone-based care management protocol targeted toward patients who are at high risk for readmission; **50% of these patients will be assigned medical homes** and receive post-discharge outreach according to protocol.

Major Delivery System Redesign Solution: To create and implement discharge care protocols for a telephone-based post-discharge care management program for patients who are at high risk for readmission or poor health outcomes.

Challenge: Nationwide, patients leave the hospital not understanding why they were admitted, what was done for them in the hospital, and how to care for themselves once released. In particular, patients often leave not knowing what medicines they should and should not be taking, what symptoms to look out for, and who to contact for problems. This lack of knowledge frequently causes patients to be readmitted, causing needless suffering and preventable health care costs. Patients with complex social and medical problems, who represent a significant portion of patients in safety net hospitals, are at particularly high risk for readmission and poor health status.

Starting point: Although Alameda County Medical Center has more than 10,000 inpatient admissions per year at its Highland campus, currently there are no systems in place to check on patients post-discharge, to inquire about their symptoms, reconcile medications or to confirm a post-discharge clinic appointment. The initial work of a Readmissions Reduction Team has identified, through one-on-one interviews with re-admitted patients, that they felt inadequately prepared for discharge, either due to lack of information during discharge planning, and/or inadequate education regarding the disease process. A post-discharge care transition program will begin to address this problem.

Significance: Creating a coordinated transition from inpatient service to home will have multiple benefits to patient experience and safety. With timely and quick post-hospital stay follow-up, problems with understanding and deterioration in clinical health status can be quickly identified and addressed, in most cases over the phone. For patients who have been recently hospitalized, the lack of follow-up appointments and information regarding how to keep themselves healthy puts them at risk for readmission. Reducing expensive and unnecessary readmissions will free resources for care at more appropriate levels.

Relation to other categories: Reducing re-admission, 1.1 and 1.2, Expanding primary care and specialty capacity; 2.1 Expanding medical homes, and 2.3 Improving patient experience.

Project 2.5: Improve Hospital Discharge Care Transitions					
DY6:$4.2749M	**DY7: $3.92M**	**DY8: $3.1864M**	**DY9: $1.4096M**	**DY10: $0**	**Inter-related/ Leveraged Projects**
1. Process Milestone: Develop a protocol for improving the hospital-to-home care transition using post-discharge phone-based care management focused on medication reconciliation and follow-up appointments. **Metric**: Submit care transitions protocol.	**2. Process Milestone**: Implement a pilot of post-discharge phone based care management protocol in one medical-surgical unit. Patient population will be targeted based on diagnoses and patient characteristics identified by analysis of internal readmission data as having high risk for readmission. **Metric:** Contact logs, results from pilot, and analysis identifying critical factors for wider implementation.	**3. Improvement Milestone**: Expand post-discharge phone-based care management protocol to all med surgical units; 50% of all patients discharged from these units who meet DY7 criteria will be assigned medical homes and receive post-discharge outreach according to protocol. **Metric:** Contact logs, monthly call success reports. Numerator is # of high risk patients with at least 3 contact attempts documented / denominator # of eligible patients discharged in the month.	**4. Process Milestone:** Conduct cost-effectiveness analysis of post-discharge phone program on readmissions, patient experience, and follow-up adherence. **Metric:** Report documented.	(No Milestone: project completed in DY9)	Reducing re-admission 1.1 and 1.2, Expanding primary care and specialty capacity 2.1 Expanding medical homes 2.3 Improving patient experience

IV. Category 3: TBD#

V. Category 4 - Urgent Improvements in Quality and Safety

Key Challenges:

As in all hospitals, through a combination of human error and poorly standardized care processes, patients are unintentionally harmed during their stay at ACMC. Where evidence-based best practices are available that can reduce these harm events, ACMC is fully committed to implementing them.

Overarching system challenges include: dependence on imperfect data sources such as the occurrence reporting system, billing/coding data, and spot audits; lack of internal expertise in team formation and management and the tools of process improvement; and the need to more effectively align goals and coordinate improvement efforts across departments, between doctors and nurses, and between staff and management.

To address this challenge, we have undertaken an organization-wide **Harm Reduction Initiative**. Based on the IHI's "Boards on Board" campaign, we have engaged both the Board of Trustees and the Organized Medical Staff in this effort. In late 2009, the Medical Staff leadership identified eleven areas of preventable harm occurring across all service areas at ACMC: acute inpatient, emergency care, obstetrics and neonatal care, acute psychiatric care, skilled nursing and rehabilitation, and ambulatory care. The Board of Trustees have adopted and championed the goal of reducing harm at ACMC, have requested open-session updates at every board meeting, and have charged the Quality and Professional Services subcommittee with oversight.

During the current Waiver Demonstration Year DY6 we have launched, eleven "Harm Reduction Teams," with the aim of measurably reducing harm in each key area by December 31, 2011. Each multidisciplinary team has a physician champion, and is made up of a range of relevant staff, which may include nurses, residents, educators, social workers, and others. Quality analysts are providing support for the teams, including data gathering, analysis, and reporting, and meeting support. Teams are co-led by two champions, usually a physician and a nurse or other leader. Teams will report on their progress quarterly to the Quality Council, comprised of senior administrative and medical leaders including as the CEO, CMO, CNE, and officers and chairs of the medical staff. The QC role is to help problem-solve barriers to progress, and to identify successful strategies that should be spread and incorporated across the medical center. This process provides a strong foundation for the goals we have set for Category 4 - Urgent Improvement in Quality and Safety.

Intervention 4.1: Improve Severe Sepsis Detection and Management

Key Challenge: The incidence of sepsis is high and increasing despite advances in medical technology. Severe sepsis and septic shock carry a particularly high mortality with rates as high as 50-60% in some studies. Improvement depends on the coordination of a complex treatment algorithm implemented by a multi-disciplinary team across critical care sites. Adherence to evidence-based guidelines across these multiple care transitions within the inpatient service (ED, ICU and inpatient wards) has historically been a challenge, due to the lack of a clear vision and leadership.

Major Delivery System Solution: Starting in January 2009, with the help of a grant from the Betty Moore Foundation, ACMC has been working to successfully and lastingly implement the Sepsis Resuscitation Bundle, an evidence-based package of care improvements demonstrated to reduce sepsis mortality. A multi-disciplinary team that includes physicians, nurses, and a pharmacist, has worked to:

- establish policies and procedures for the standardized care of sepsis, based on a four-element sepsis bundle;
- implement electronic sepsis screening tools at ED triage and inpatient nursing including the use of standing orders to start the diagnostic process earlier;
- purchase and deploy point-of-care blood lactate measurement devices for use in the ED to avoid delays caused by lab turn-around times;
- standardize and distribute reports that highlight the presence of sepsis early in the clinical course, (e.g., the Lactate Level Report).

Results are regularly audited, and reports on bundle compliance are produced and disseminated. In an effort to utilize novel and fun-based learning, the ED nursing and physician staff even created a "Sepsis Rap" video showing various members of the nursing and medical staff singing and acting out the elements of the sepsis bundle. It is posted on YouTube and has had over 40,000 "hits" (search "Highland Sepsis"). Anecdotally we understand that our neighboring Kaiser Hospital has adopted it in the new nurse orientation program. The efforts to improve order set and bundle compliance will continue throughout the DSRIP project period. Upcoming strategies include: instituting a unit RN huddle when a case is detected, standardized practices with regard to lactate ordering; and potentially piloting a "Code Sepsis", similar to a "Code Blue", to launch a swift, organized response to every new case.

Project 4.1: Improve Severe Sepsis Detection and Management				
DY6: $0.938M	**DY7: $1.876M**	**DY8: $3.751M**	**DY9: $5.627M**	**DY10: $6.564M**
1. **Milestone**: Report a baseline mortality rate from Severe Sepsis, and form an interdisciplinary Sepsis Mortality Reduction Team with a charter, identified physician champion, and proposed improvement strategies presented to the ACMC Quality Council. **Metric**: Produce mortality report, evidence of team formation, and copy of Quality Council presentation.	2. **Milestone:** Implement the Sepsis Resuscitation Bundle, as evidenced by: policy & procedures, training records, team meeting minutes, sepsis screen tools used by ED and inpatient nursing 3. **Milestone:** Report at least 6 months of data collection on Sepsis Resuscitation Bundle to SNI for purposes of establishing the baseline and setting benchmarks. 4. **Milestone:** Report the Sepsis Resuscitation Bundle results to the State.	5. **Milestone:** Achieve "X"% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data. 6. **Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. 7. **Milestone:** Report Sepsis Resuscitation Bundle and Sepsis Mortality results to the State.	8. **Milestone:** Achieve "Y"% compliance with Sepsis Resuscitation Bundle, where "Y" will be determined in Year 2 based on baseline data. 9. **Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. 10. **Milestone:** Report results to the State.	11. **Milestone:** Achieve "Z"% compliance with Sepsis Resuscitation Bundle, where "Z" will be determined in Year 2 based on baseline data. 12. **Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. 13. **Milestone:** Report results to the State.

Intervention 4.2: Central Line-Associated Bloodstream Infection (CLABSI) Prevention

***Key Challenge*s:** Central line bloodstream infections remain a major cause of mortality and morbidity nationwide and at ACMC. The literature points to several failures including: contamination at the time of insertion, suboptimal maintenance of the IV line once inserted, and lengthy utilization of the central line or delay in timely removal. Changing and monitoring practices at ACMC as both a trauma and teaching hospital, has been particularly challenging.

Major Delivery System Solutions: Over two years ago, clinical leaders at ACMC formed an ICU Systems Improvement Committee (I-Sys) which has been focusing on the problem of CLABSI. The team's major strategies are:

1. Reduce insertion contamination by implementing Central Line Infection Practices (CLIP). Improvements include ensuring central line carts are available and properly stocked so that all equipment that is required is easily available for every insertion procedure; logs documenting cart checks; use of CLIP checklists and targeted trainings for both nurses and physicians on proper insertion techniques.
2. Improve the quality of line maintenance by standardizing dressing change techniques, creating a Dressing Change Bundle, standardizing the process by which treatments are inserted into the front of the catheter, creating a Hub Access Bundle, and regular monitoring of performance through audits.
3. Control and optimize location and duration of central lines by ensuring early removal of lines placed in the Femoral or groin area, daily review of central lines, and monitoring and auditing length of use of central lines.

Project 4.2: Central Line-Associated Bloodstream Infection (CLABSI) Infection Prevention				
DY6: $0.938M	**DY7: $1.876M**	**DY8: $3.751M**	**DY9: $5.627M**	**DY10: $6.564M**
1. Milestone: Report a baseline rate for ACMC's Central Line Associated Blood Stream Infection rate for the ICU, step-down unit, and medical-surgical inpatient units, and form an interdisciplinary CLABSI Reduction Team with a charter, identified physician champion, and proposed improvement strategies presented to the ACMC Quality Council. **Metric:** Documentation of team formation and copy of Quality Council presentation.	**2. Milestone:** Implement the Central Line Insertion Practices (CLIP), as evidenced by policy & procedures, training records, central line insertion carts, logs of cart checks, team meeting minutes, checklist /CLIP form, ICU daily assessment sheets **3. Milestone:** Report at least 6 months of data collection on CLIP to SNI for purposes of establishing the baseline and setting benchmarks. **4. Milestone:** Report at least 6 months of data collection on CLABSI to SNI for purposes of establishing the baseline and setting benchmarks. **5. Milestone:** Report CLIP results to the State.	**6. Milestone:** Achieve X% compliance with CLIP, where "X" will be determined in Year 2 based on baseline data. **7. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **8. Milestone:** Report CLIP and CLABSI results to the State.	**9. Milestone:** Achieve Y% compliance with CLIP, where "Y" will be determined in Year 2 based on baseline data. **10. Milestone:** Reduce Central Line Bloodstream Infections by Y%, where "Y" will be determined in Year 2 based on baseline data. **11. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **12. Milestone:** Report CLIP and CLABSI results to the State.	**13. Milestone:** Achieve Z% compliance with CLIP, where "Z" will be determined in Year 2 based on baseline data. **14. Milestone:** Reduce Central Line Bloodstream Infections by Z%, where "Z" will be determined in Year 2 based on baseline data. **15. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **16. Milestone:** Report CLIP and CLABSI results to the State.

Intervention 4.3: Surgical Site Infections (SSI) Prevention

Key Challenges: Surgical Site Infections continue to be a significant problem for ACMC, despite relatively high compliance with CMS Core process measures (in the high 90% as reported on CMS's Hospital Compare website, for the most recent reporting period as of this submission.) The Surgical Site Infections harm reduction team has targeted several peri-operative strategies known to improve outcomes:

- Standardize and monitor optimal skin prep techniques
- Optimize timing of antibiotics
- Achieve intra-operative normothermia
- Monitor and minimize total operative times
- Improve consistency of pre-operative antibacterial baths
-

An accurate surveillance tool is needed to audit success / failure at implementation of recommended system changes. There is currently no way to track the endpoint (incidence of postoperative infections). Outpatient clinics and discharge periods have been identified as the areas where maximal capture can occur, but consistent and accurate capture of data from these arenas is difficult.

Maintenance of good practices once successful algorithms for peri-operative categories are defined will be another key challenge. Because many staff rotate through our service, maintaining standard practices requires an ongoing education, audit, feedback process.

Major Delivery System Solutions: Our Surgical Site Infections harm reduction team will be developing specific recommendations on improving practices in the perioperative categories listed in item 1. Once improved practices have been identified, the Systems Transformation Center (1.4) will work with the team to standardize and sustain best practices through monitoring regular data reports, designing the system to support the best practices, and training new and rotating staff. Developing a way to capture and report out the incidence of post-operative infections will be key to developing and maintaining momentum.

Project 4.3: Surgical Site Infections (SSI) Prevention				
DY6: $0.938M	**DY7: $1.876M**	**DY8: $3.751M**	**DY9: $5.627M**	**DY10: $6.564M**
1. Milestone: Form an interdisciplinary SSI Reduction Team with a charter, identified physician champion, and proposed improvement strategies presented to the ACMC Quality Council. **2. Metric:** Documentation of team formation, copy of Quality Council presentation.	**3. Milestone:** Report at least 6 months of data collection on SSI to the California Safety Net Institute and identify the three top procedures causing SSI at ACMC for purposes of establishing the baseline and setting benchmarks. **4. Milestone:** Report results to the State.	**5. Milestone:** Reduce the rate of surgical site infection for the three high-yield procedures targeted in DY 7, that are Class 1 and 2, by X%, where "X" will be determined at the end of Year 2, based on baseline data. **6. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **7. Milestone:** Report results to the State.	**8. Milestone:** Reduce the rate of surgical site infection for the three high-yield procedures targeted in DY 7, that are Class 1 and 2, by Y%, where "Y" will be determined at the end of Year 2, based on baseline data. **9. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **10. Milestone:** Report results to the State.	**11. Milestone:** Reduce the rate of surgical site infection for the three high-yield procedures targeted in DY 7, that are Class 1 and 2, by Z%, where "Z" will be determined at the end of Year 2, based on baseline data. **12. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **13. Milestone:** Report results to the State.

Intervention 4.4: Hospital-Acquired Pressure Ulcer Prevention (HAPU)

Key Challenges Currently, as measured and reported to the California Collaborative Alliance for Nursing Outcomes, (CalNOC) and the California CHART program, ACMC has a prevalence rate of Hospital Acquired Pressure Ulcers that, at 3.1%, is higher than the state average. We have identified several key issues that we believe are leading to avoidable HAPUs at ACMC. Early identification of risk factors for HAPU's is essential, and this requires communication across departments, e.g., the ED and the inpatient floor. Patients can wait for many hours in the Emergency Department, but ED nursing care is traditionally focused on short-term acute care, and not necessarily prevention of HAPU. On the inpatient units, while regular turning and meticulous nursing inspection and documentation are critical interventions, our success in monitoring adherence to these interventions is still imperfect. In addition, the appropriate use of pressure-reducing mattresses is a key intervention for HAPUs, but tight budgets have been a barrier to purchasing and deploying them universally. However, having only a subset of adequate mattresses turns out creates new problems in swapping mattresses while other patients are on them.

Major Delivery System Solutions: ACMC has chartered a multidisciplinary HAPU reduction team that has initiated many interventions: incorporating standardized cues for interventions that must be repeated regularly (e.g. a regularly repeated brief melody played on the intercom system) to remind staff to turn patients; "Wound Wednesdays" for regular inspection and documentation of wound status). In addition, policies and procedures regarding the prevention and care of pressure ulcers are being developed. They include a two-RN skin assessment on every patient, and screening for nutrition, mobility and incontinence. Ongoing training will be given in skin assessment, ulcer documentation, staging, treatment and reporting. Education will be directed to nursing staff and physicians.

In addition, a key intervention identified by our team is to conduct an interdisciplinary huddle very shortly after the identification of a HAPU. The goal of the huddle is to highlight the event as a serious adverse outcome, to analyze and identify any preventable factors, and to prepare a multidisciplinary care plan for that patient going forward. This will ensure ongoing education in conjunction with comprehensive treatment planning. Presently we have designated skin integrity specialists on each unit who will also serve as "champions" on each floor for all delivery system changes we institute. Finally, a mattress inventory has been conducted and new mattresses will be ordered. Funding under this DSRIP program will be key to our success in implementing both the capital and the training and monitoring components to our HAPU reduction strategy.

Project 4.4: Hospital-Acquired Pressure Ulcer Prevention				
DY6: $0.938M	**DY7: $1.876M**	**DY8: $3.751M**	**DY9: $5.627M**	**DY10: $6.564M**
1. Milestone: Report baseline prevalence of Hospital-Acquired Pressure Ulcers at ACMC and form an interdisciplinary HAPU reduction team with a charter, identified physician champion, and proposed improvement strategies presented to the ACMC Quality Council. **Metric:** Documentation of team formation copy of Quality Council presentation.	**2. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **3. Milestone:** Report hospital-acquired pressure ulcer prevalence results to the State.	**4. Milestone:** Achieve hospital-acquired pressure ulcer prevalence of less than 3%. **5. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **6. Milestone:** Report hospital-acquired pressure ulcer prevalence results to the State.	**7. Milestone:** Achieve hospital-acquired pressure ulcer prevalence of less than 2%. **8. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **9. Milestone:** Report hospital-acquired pressure ulcer prevalence results to the State.	**10. Milestone:** Achieve hospital-acquired pressure ulcer prevalence of less than 1.1%. **11. Milestone:** Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals. **12. Milestone:** Report hospital-acquired pressure ulcer prevalence results to the State.

VI: ACMC Five-Year DSRIP Incentive Payment Table

	DY 6		DY 7		DY 8		DY 9		DY 10	
CATEGORY & PROJECT	amount in $ Mill	Percent of year	amount in $ Mill	Percent of year	amount in $ Mill	Percent of year	amount in $ Mill	Percent of year	amount in $ Mill	Percent of year
Cat 1 Subtotal: Infrastructure	**$ 21.3745**	**46%**	**$ 19.5990**	**33%**	**$ 15.9320**	**25%**	**$ 7.0480**	**11%**	**$ 2.000000**	**3%**
PC Expansion	$ 5.3436		$ 4.8998		$ 3.9830		$ 1.7620		$ 0.5000	
Disease Registry Use	$ 5.3436		$ 4.8998		$ 3.9830		$ 1.7620		$ 0.5000	
Specialty Access	$ 5.3436		$ 4.8998		$ 3.9830		$ 1.7620		$ 0.5000	
Improvement Infrastructure	$ 5.3436		$ 4.8998		$ 3.9830		$ 1.7620		$ 0.5000	
CAT 2 :Subtotal: Redesign	**$ 21.374500**	**46%**	**$ 19.600000**	**33%**	**$ 15.932000**	**25%**	**$ 7.048000**	**11%**	**$ 3.912000**	**6%**
Medical Home Model	$ 4.2749		$ 3.9200		$ 3.1864		$ 1.4096		$ 0.978	
Care Mangmnt/ Complex Care	$ 4.2749		$ 3.9200		$ 3.1864		$ 1.4096		$ 0.978	
Patient Experience	$ 4.2749		$ 3.9200		$ 3.1864		$ 1.4096		$ 0.978	
ED Throughput	$ 4.2749		$ 3.9200		$ 3.1864		$ 1.4096		$ 0.978	
Care Transitions/ Discharges	$ 4.2749		$ 3.9200		$ 3.1864		$ 1.4096		$ 0	
CAT 3: Subtotal: Pop. Health	**0**	**0%**	**13.299**	**22%**	**17.732**	**27%**	**26.598**	**42%**	**31.031**	**49%**
Patient Experience			TBD		TBD		TBD		TBD	
Care Coordination			TBD		TBD		TBD		TBD	
Safety			TBD		TBD		TBD		TBD	
Preventive Health			TBD		TBD		TBD		TBD	
At Risk Populations			TBD		TBD		TBD		TBD	
Cat 4 Subtotal: Urgent Improvements	**$ 3.7510**	**8%**	**$ 7.5020**	**13%**	**$ 15.0040**	**23%**	**$ 22.5060**	**36%**	**$ 26.2570**	**42%**
Sepsis	$ 0.938		$ 1.876		$ 3.751		$ 5.627		$ 6.564	
CLABSI	$ 0.938		$ 1.876		$ 3.751		$ 5.627		$ 6.564	
SSI	$ 0.938		$ 1.876		$ 3.751		$ 5.627		$ 6.564	
HAPU	$ 0.938		$ 1.876		$ 3.751		$ 5.627		$ 6.564	
TOTAL ANNUAL INCENTIVE	$ 46.50	100%	$ 60.00	100%	$ 64.60	100%	$ 63.20	100%	$ 63.20	100%