

# CAPH Ventura County Medical Center WAIVER MILETONES PROPOSAL

Ventura County Medical Center (VCMC) is a county-owned and operated hospital and health system that provides high-quality health care for the residents of Ventura County, regardless of ability to pay or insurance status. VCMC has two hospital campuses located in the City of Ventura and the City of Santa Paula. VCMC Ventura is a 223-bed general acute care hospital and Level II Trauma Center, which also includes a 43-bed Inpatient Psychiatric Unit. Santa Paula Hospital is a 49-bed general acute care hospital. The VCMC system has thirty outpatient clinics located geographically in communities throughout Ventura County, providing primary care, specialty, and urgent care service to over 130,000 individuals or approximately 450,000 outpatient visits annually. Of the individuals and families served by VCMC, approximately 54% are Medicaid beneficiaries, 18% are uninsured, 15% are Medicare beneficiaries, and 13% have third-party insurance. Also, about 48% of patients are Hispanic, 29% White, 13% Black, 6% Asian, and 4% other. About one-third of patients speak a language other than English and are monolingual. VCMC has 350 physicians and 42 primary care Resident physicians. These and other clinicians provide care throughout the hospital system – in the emergency department, trauma center, adult and pediatric oncology unit, hospital-based outpatient clinics, and affiliated satellite clinics.

• If we meet all of our milestones, we would receive a total of \$221 million, which is gross of Inter-Governmental transfer, over five years. This proposal aligns with the underlying theory and framework of the Triple Aim goals, which will be demonstrated throughout the proposal. These dollars will support the transformation of health care delivered at VCMC. The initiatives described are proven, evidence-based, best practices that have been shown to result in significant improvements. Our approaches are aligned with those proposed by the other designated public hospitals in California, and we will be implementing them in a coordinated fashion, including sharing lessons learned and leveraging each other's successes – particularly through our statewide partnership of the California Association of Public Hospitals and Health Systems,

2323 Knoll Drive ■ Ventura, California 93003 ■ (805) 677-5110 ■ FAX: (805) 677-5116

and its affiliate, the California Health Care Safety Net Institute. In this way, the comprehensive reform proposed will have lasting effects and result in dramatic improvements in the health care for low-income Californians, paving the road for a more successful implementation of health care reform in the state. We have established a five-year implementation plan of 96 investment, improvement, and outcomes milestones, which commit VCMC to concrete progress on the four major categories of delivery system reform.

## In this proposal, we:

- Identify four major categories of delivery system reform to address these challenges and prepare for health care reform as outlined in the California Section 1115 Waiver Terms and Conditions:
  - Category i: Infrastructure Development Investments in technology, tools and human resources that will strengthen the organization's ability to serve its population and continuously improve its services.
  - Category ii: Innovation and Redesign Investments in new and innovative models of care delivery that have the potential to make significant, demonstrated improvements in patient experience, cost and disease management.
  - Category iii: Population-focused Improvement Investments in enhancing care delivery for the highest burden conditions in the
    populations served by California Public Hospitals- this is not included in the first submission and is held in place.
  - Category iv: Urgent Improvement in Care Broad dissemination of top-level interventions where there is deep evidence that major improvement in care is possible within 5 years, and that are measurable and meaningful for almost all hospital populations such as those served by the California Public Hospitals
- Identify key areas of challenges that need to be addressed in order to provide better care for patients and transition successfully to health care reform implementation:
  - i-1. We face a shortage of primary care providers locally and nationally. VCMC has the oldest and largest Family Medicine Residency in the State of California. Recognizing the shortage of this integral provider base, we are committed to increasing our Residency compliment to provide for better access for patients both in our county and in the nation. Although we consistently have a full match, there are various difficulties in recruiting graduates that are unrelated to our hospital. Specifically:
    - Challenges in recruitment to this region due to high cost of living
    - Multiple competing factions for graduating residents once they complete the program.

- i-2. Enhancing interpretation services allows for reduction in disparity for patients who are Limited English Proficient (LEP). Our proposal will allow for a bridging of cultural and interpretation services to improve patient satisfaction, care and to come to a mutual understanding of medical needs and instruction for patient and provider alike. Specifically:
  - Addition of technological service availability
  - Trilingual translation
- i-3. Public hospitals serve as the health care safety-net providing care to a diverse population with multiple/complex health care needs. Providing safe and quality health care to this diverse population is a priority but more resources are needed to improve the care and measure outcomes, in order to deliver compassionate and cost effective health care. VCMC will invest in a formalized performance improvement process, including Lean as a methodology, as well as rapid cycle change processes. Specifically:
  - Add professional and paraprofessional staff to the Performance Improvement department
  - Develop quality dashboards to enhance awareness of organization processes and relevant scores related to national and local benchmarks.
  - Train staff to perform Kaizen events (change project process). Conduct Kaizen to address Performance Improvement projects in a synergistic manner resulting in enhanced patient care, lower costs, and better outcomes.
- ii-1. As with all public hospital systems, VCMC faces a growing number of patients with diabetes. We have focused our efforts on developing a multidisciplinary approach that will include treatment, life style changes by the patient and their family, and reduction in complications. Specifically:
  - Development of a team to manage this patient population
  - Establish a referral process
  - Increase testing rates to identify problems and decrease complications.

- ii-2. VCMC is a diverse health care organization, with Primary care clinics, as well as behavioral health care clinics throughout our system. By co-locating these two disciplines we will integrate the services allowing for better care and outcomes for patients in need of collective care from these two specialties. Specifically:
  - Develop and expand co-located clinics (Primary and Behavioral Health)
  - Integrate Licensed Clinical Social Workers (LCSW) and psychiatrists within specific Primary care clinics to expand the care team.
- ii-3. Recognizing the increased need to address quality of life with patients who have chronic illness or are facing a terminal illness, VCMC has taken the challenge of developing a Palliative Care Program to assist our patients and their families in addressing physical, psychological and spiritual suffering related to their illness. Specifically:
  - Develop a plan with certified physicians as the champions for this team, which will be multidisciplinary.
  - Educate internally in our health care system
  - Educate community providers and support groups.

Category 1: Per the California Section 1115 Waiver Terms and Conditions, the purpose of Category 1: Infrastructure Development is "investments in technology, tools and human resources that will strengthen the organization's ability to serve its population and continuously improve its services." Therefore, VCMC Category 1 includes infrastructure development, including investment in people, places, processes and technology. This category is foundational to the success of Categories 2-3. This plan describes how the Category 1 infrastructure development will enhance capacity to conduct measure and report on quality/performance improvement, expand access to meet demand, and enable improved care with strong emphasis on building coordinated systems that promote preventive, primary care.

## i-1. Increase Training of Primary Workforce

Ventura County Medical Center has had a Family Medicine Residency training program since 1968. Currently 14 residents enter into the program annually for the 3-year curriculum leading to Board certification. Approximately one-third of the graduates remain in Ventura County annually. A shortage of Primary Care physicians exists nationally. Increasing the supply of primary care doctors has become a focus through Health Care Reform.

*Goal:* Train more Family Physicians to serve as primary care providers. As a result of expanding the Family Medicine residency-training program, we will train more primary care physicians to work in our community. Having more Family Physicians will provide improved access to care for people who live, work and vacation in our county. To accomplish this increase we will:

- o Submit a residency complement increase request to the Accreditation Council for Graduate Medical Education (ACGME).
- o Add two additional core faculty members over the next three years.
- o Expand the curriculum to include rotations at Santa Paula Hospital and expand specialty care clinic rotations.

*Expected Result:* The increase in the number of Family Medicine Residents by six at end of year four will allow for increased primary care access both locally and nationally.

**Relation to Category 3 Population-Focused Improvement:** Expanded primary care capacity provides for the expansion of patient centered medical homes with more organized care delivery, capacity for increased volume of health care delivery, expanded prevention and management of chronic conditions, integrated physical-behavioral health care, and increased utilization of health care resources. With expanded primary care capacity, patients can have increased access to primary and preventive care, which allows for opportunities for early disease detection and prevention. Patients upon discharge from the acute care setting will be scheduled for follow-up medical care at a primary care clinic, reducing the risk and consequences of worsening health conditions.

	i-1. Increase Training of Primary Workforce					
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into	
1. Milestone: Develop a plan for expansion of the Family Medicine Residency program Metric: Provide submitted residency complement expansion request to the Accreditation Council for Graduate Medical Education (ACGME) which will increase the number of residents to be Matched in the first	2. Milestone: Implement the first phase of the residency expansion by increasing the size of the PGY-1 class from 14 to 16 (12.5%)  Metric: Provide documentation of increased residency PGY-1 class from 14 to 16, by providing the PGY-1 roster.	3. Milestone: Increase the total Family Medicine resident complement from 44 to 46. PGY-1 and PGY-2 will now have 16 residents per class year. Metric: Provide documentation of the increased resident complement to a total of 46, by providing the PGY-1 and PGY-2 roster.	4. Milestone: Increase the total Family Medicine resident complement from 46 to 48. PGY-1, PGY-2, and PGY-3 class will now each have 16 residents per class year.  Metric: Provide documentation of the increased resident complement to 48 by providing the PGY-1, 2, 3 rosters.	5. Milestone: Consolidate the residency curriculum expansion into the Santa Paula service area (rural care) increasing the number of residents training in Santa Paula. Metric: Provide documentation of resident rotations at the Santa Paula Hospital, a rural health-training site.	<ul> <li>Enhance performance improvement and reporting capacity (Cat i)</li> <li>Expand Chronic Care Management Models (cat ii)</li> <li>Use Palliative Care Programs (Cat ii)</li> </ul>	

	i-1. Increase Training of Primary Workforce							
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into			
year class in the National Resident Matching Program (NRMP) from 14 to 16, starting in July of 2011.								

## i-2. Enhance Interpretation Services and Culturally Competent Care

The County of Ventura has a diverse population. Besides English, other predominant languages spoken are Spanish and Mixteco. The Mixtec are a unique service population, having no written language and a tendency to avoid Western medicine. VCMC plans to conduct a focus group and convene a forum with patients/families, community organizations, non-profit organizations, and health care providers to analyze and address the unique needs of this population and the resources available. We will develop programs to improve staff cultural competency, awareness, and availability of translation services in a healthcare setting. California public hospital systems use a unique combination of qualified medical interpreters, bilingual clinicians, trained bilingual staff, remote technology and an automated video/voice call center system called Health Care Interpreter Network (HCIN)<sup>1</sup>. California hospitals and health care providers will share trained healthcare interpreters through videoconferencing devices and all forms of telephones. HCIN is available to network hospitals that will connect interpreters within seconds on the HCIN system, either at their own hospital or one of their colleague hospitals. By pooling hospital-based staff, routing calls from video devices and telephones, and linking to external interpreting resources, HCIN enables clinicians and front-end staff at every point of patient contact to reach an interpreter on demand, 24/7, in 170 languages, at a very manageable cost. VCMC is collaborating with HCIN to become a facility that both uses and provides translation through their technology.

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<sup>&</sup>lt;sup>1</sup> www.hcin.org

*Goal:* To provide patients with access to timely, qualified health care interpreter services in their primary language, thereby increasing the likelihood of safe and effective care, open communication, adherence to treatment protocols, and good outcomes. This will create adherence to policy to provide appropriate interpretation to LEP patients. To achieve this we will:

- o Utilize proven technology to enhance interpretation quality and encounters
- o Invest in the additional human resources for face to face interpretation services
- o Measure, sustain and improve impact of increased interpretation services.

Expected Result: Increase the number of staff who are trained/certified as health care interpreters by 10%.

Relation to Category 3 Population-Focused Improvement: Reduce Disparities

i-2. Enhance Interpretation Services and Culturally Competent Care					
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into
6. Milestone: Collaborate with HCIN to install technology (dual phones and video conferencing) for interpretation at VCMC Metric: Number of locations in the hospital with HCIN terminals (see. Pp. 22 of superset)  7. Milestone: Designate one trilingual (English, Spanish, Mixteco) translator and train/certify as a healthcare interpreter, to provide direct interpretation services to OB patients in VCMC. Metric: Documentation of translator personnel, as evidenced by HR documentation	8. Milestone: Establish a baseline for utilization data to use to measure expansion of the availability of technology for health care interpretation service to Santa Paula Hospital (SPH) Metric: Development of utilization baseline for the interpretation technology for SPH campus  9. Milestone: Improve language access at VCMC. Metric: Analyze and report improved utilization of interpreter services to show an increase of 10% at VCMC, as measured by the average number of remote video/voice interpreter encounters recorded per month.  10. Milestone: Designate an additional trilingual (English, Spanish, Mixteco) translator and	11. Milestone: Expand the availability of technology for health care interpretation service to two Primary Care Clinics in the Health Care Agency (HCA).  Metric: Number of primary care clinics with HCIN terminals (see. Pp. 22 of superset) 12. Milestone: Improve language access at VCMC and SPH.  Metric: Analyze and report improved utilization of interpreter services to show an increase of 20% at VCMC (baseline year) and 10% (over baseline year) at SPH, as measured by the average number of remote video/voice interpreter encounters recorded per month.  13. Milestone: Develop methodology to identify number of face-to-face interactions that occur with trilingual	14. Milestone: Expand the availability of technology for health care interpretation service to two additional Primary Care Clinics in the HCA.  Metric: Number of primary care clinics with HCIN terminals (see. Pp. 22 of superset) 15. Milestone: Improve language access at VCMC and SPH.  Metric: Analyze and report improved utilization of interpreter services to show a sustained usage of interpreter services at VCMC (baseline year); and increasing utilization of 20% (over baseline year) at SPH; and an increase of 10% utilization at the two primary care clinics, as measured by the average number of remote video/voice interpreter encounters recorded per month.  16. Milestone: Conduct	17. Milestone: Achieve improved language access. Metric: Sustain results and continue to trend utilization of interpreter services, as evidenced by 20 % over baseline as the average number of remote video/voice interpreter encounters recorded per month.	Reduce     Disparities (Cat     iii)     Enhance PI and     reporting     capacity (Cat i)

	i-2. Enhance Interpretation Services and Culturally Competent Care							
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into			
	train/certify as a health care interpreter, to provide direct interpretation services to patients in VCMC and through the HCIN network.  Metric: Documentation of designation, as evidenced by HR records	interpreting services.  Metric: Submission of methodology.	evaluation of number of interactions that occur with trilingual interpreting services required, using the methodology developed in year 3.  Metric: Submission of evaluation, including findings					

## i-3. Enhance Performance Improvement and Reporting Capacity

VCMC will develop and implement a sustainable quality improvement process through dedicated staff, improved technology, collaboration between key departments, and utilization of validated quality data that will collectively result in improved outcomes.

*Goal*: To provide for timely and accurate quality measure reporting that will prioritize areas of change, facilitate improvement of delivery of care for a cross section of our patient population. We will hire a Performance Improvement Manager and enhance the Performance Improvement Coordinating Council that is a multi-divisional group within the Health Care Agency.

**Expected Result:** Through the utilization of accurate and timely data collection and application, we expect to improve patient care, clinical outcomes and enhanced fiscal efficiencies.

## Relationship to category iii: Improve quality

	i-3. Enhance Performance Improvement and Reporting Capacity				
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into
18. Milestone:	<b>19. Milestone:</b> Perform	<b>21. Milestone:</b> Perform	<b>23. Milestone:</b> Perform		Improve Quality
Restructure the	four Lean Kaizen rapid	four Lean Kaizen rapid	two Lean Kaizen rapid		(Cat iii)
Performance	PI events, with at least	PI events, with at least	performance		
Improvement (PI)	one Kaizen focusing on	one Kaizen focusing on	improvement events,		Expand Chronic
department to manage	a Core Measure related	care in the Primary Care	with at least one Kaizen		Care
data, improvement	to care in the hospital.	Clinics.	focusing on care in the		Management
trajectory and	Metric: Documentation	Metric:	Specialty Care Clinics.		Model (Cat i)
improvement activities	of the Kaizen cycles	Documentation of the	Metric:		
(Lean) across the Health	performed	Kaizen cycles	Documentation of the		
Care Agency.		performed	Kaizen cycles		
Metric:	Milestone: Development		performed		
Documentation of a	of a quality dashboard	Milestone: Report			
dedicated PI manager,	that allows real time	quality dashboard that	Milestone: Report		
who is trained in Lean,	improvement reporting	allows for real time	quality dashboard or		
to conduct Kaizen	of the Core Measure	improvement reporting	scoreboard that allows		
events.	selected process	for Primary Care	for real time		
	improvement.	Clinics.	improvement reporting		
	Metric: Submission of	Metric: Submission of	for Specialty Care		
	the dashboard	the dashboard	Clinics.		
			Metric: Submission of		
	20. Milestone:		the dashboard		

	i-3. Enhance Performance Improvement and Reporting Capacity					
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into	
	Designate a physician, who is dedicated to the PI department, to engage the medical staff in the PI process.  Metric: HR documentation of physicians' role.	22. Milestone: Designate additional physicians to participate in performance improvement processes, in focused areas to ensure sustained compliance in meeting National Benchmarks.  Metric: HR documentation of physicians' role				

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

## ii-1. Expand Chronic Care Management Models

We propose to implement a Chronic Care Management Model. The Care Model includes a multidisciplinary care team, the utilization of clinical practice guidelines and engagement by the patient in their own care and outcomes. The multidisciplinary care team will be composed of physicians, physician extenders, such as educators, behavioral health professionals, pharmacological advisors, dieticians, nursing, and health care navigators. By implementing the Care Model, patients will be better able to manage their chronic conditions. A disease registry for patients with diabetes will be established, so that their care can be tracked and managed in a preventive manner. The disease registry requires technology and adequate staffing to support it. Entering this data can be time intensive, but ultimately enhances patient care

*Goal*: To decrease complications related to diabetes due to lack of collaborative management and lack of understanding, by the patient. Promoting self awareness and self-management demonstrate improved outcomes and increase continuity of care.

**Expected Result:** A centralized approach to diabetes management based upon clinical practice guidelines, which will result in improved overall health for diabetic patients.

Relationship to category iii: Improve quality, reduce harm from medication errors

	ii-1. Expand Chronic Care Management Models						
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into		
24. Milestone: Develop a plan for a comprehensive care management program related to diabetes care. Metric: Submit the written plan.	25. Milestone: Formalize multidisciplinary teams. Team will consist of Physician, mid-level provider, Certified Diabetic Educator, Dietician, Licensed Clinical Social Worker and others as needed. Metric: Documentation of program. Submit program materials.	26. Milestone: Expand Diabetes registry to include 50% of patients seen in diabetes center Metric: Denominator: Patients seen/referred into diabetes center Numerator: Patient in Registry	27. Milestone: 50% or more of the patients in registry will have two of the three tests completed, LDL drawn, Retinal Screening completed and HgbA1C drawn. Metric: Resulting data from tests/patient registry  28. Milestone: At least 50% of the patients in the registry will have established selfmanagement goals, as documented in patient record. Metric: Numerator: # of pts with a selfmanagement goal. Denominator: # of pts in the Diabetic Registry.	29. Milestone: Patients enrolled in diabetes center and tracked in the registry will demonstrate a 10% improvement in LDL levels and a 10% increase in the frequency of retinal screening from baseline testing.  Metric: Numerator: Baseline data for patients in registry Denominator: Same patients who have had LDL and Retinal Screening.	Improve Quality (Cat iii)  Integrate Physical and Behavioral Health (Cat ii)		

## ii-2. Integrate Physical and Behavioral Health Care.

The purpose of this program is to facilitate collaboration between primary care and behavioral health, to improve behavioral health care within the primary care setting.

*Goal:* Improve integration between primary and behavioral health care, establish psychiatric consultation, as referred by the primary care physicians. Establish collaborative care within the primary care setting for individuals with mental health needs. As a result, behavioral health conditions will be evaluated and treated in primary care settings, thus improving patients' health outcomes.

*Expected Result:* Patients will receive timely assessment and treatment for mental health issues, recognizing the synergy between physical and mental health, and they will be managed in a collaborative manner which affords the best link to overall health.

**Relation to Category 3 Population:** Improve quality in behavioral health outcomes, increase access to services, and reduce disparities.

	ii-2 Integrate Physical and Behavioral Health Care					
DY6	DY7	DY8	DY9	DY10	Other Category Projects	
D10	D17	D18	DITY	D110	This Project Feeds Into	
30. Milestone: Co-locate a primary care clinic to include adult and pediatric behavioral health services.  Metric: Number of Primary Care Clinics with co-located Behavioral Health.  31. Milestone: Provide training for and adopt an evidence based treatment practice utilizing the IMPACT Collaborative Treatment Model (Prevention and Early Intervention [PEI]) for depression, anxiety,	32. Milestone: Develop a plan to co-locate another Primary Care clinic to include adult and pediatric behavioral health services.  Metric: Documentation of plans for co-located clinic.  33. Milestone: Adopt an evidence based treatment practice utilizing the IMPACT Collaborative Care Treatment Model for depression, anxiety, or traumatic stress disorder in 4 primary care sites,	34. Milestone: Co-locate a second primary clinic to include adult and pediatric behavioral health services Metric: Number of Primary Care Clinics with co-located Behavioral Health will increase by one.  35. Milestone: Adopt and evidence based treatment practice, utilizing IMPACT Collaborative Care Treatment Model for depression, anxiety, or	36. Milestone: Maintain IMPACT PEI program. Metric: Fifteen percent of patient's who score in the moderately severe range (16-19) in the PHQ-9, will show at least a 40% improvement in their depression score on successful completion of the IMPACT/PEI program.	37. Milestone: Maintain IMPACT PEI program. Metric: Twenty percent of patient's who score in the moderately severe range (16-19) on the PHQ-9, will show at least a 40% improvement in their depression score on successful completion of the IMPACT/PEI program.	Improve quality (Cat iii) Reduce Disparities (Cat iii) Expand Chronic Care Management model (Cat ii)	

	ii-2 Integrate Physical and Behavioral Health Care					
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into	
or traumatic stress disorders.  Metric: Provide Documentation of evidence of processes (MOU) including training, roles/responsibilities and program description.	with 4 assigned LCSW or other master's level prepared clinicians.  Metric: Number of patients referred to assigned clinicians within the primary care sites.	traumatic stress disorder in 2 additional primary care sites, with 2 assigned LCSWs or other master's prepared clinicians. Patients with a diagnosis of depression, anxiety, or traumatic stress disorder, enrolled in the IMPACT program will be offered treatment as prescribed by the Evidence Based Practice being utilizes. Metric: After an assessment has been completed, 30% of patients seen in this program will have a completed plan of care after the second visit.				

## ii-3. Use Palliative Care Programs

VCMC will endeavor to design and create a sustainable Palliative Care Consultation Service comprised of an interdisciplinary team which will place, at its highest priority, the improvement of "quality of life" in patients and their families by expertly addressing their physical, social, mental, and spiritual pain while educating healthcare professionals within our healthcare system and community in order that we may positively impact families' lives in an exponential manner.

*Goal:* To increase quality of life of patients living with a chronic or terminal condition through a multi-disciplinary care team, through education and engagement of care providers internally and throughout the community in palliative care.

*Expected Result:* Patients who have chronic or terminal conditions, who are at risk for experiencing physical or psychological suffering, will have the enhanced care option offered through a palliative care program.

**Relation to Category 3 Population:** Reducing re-admissions, improved ER and in-patient care, improve chronic care management.

	ii-3 Use Palliative Care Programs					
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into	
38. Milestone: Develop plan for a palliative care team.  Metric: Identify and train 4 individuals in palliative care model.  39. Milestone: Achieve Palliative Care Certification for two physician champions Metric: Documentation of physician certification.	40. Milestone: Implement a palliative care program and develop consult service so that palliative care consultation will be available for inpatients. This will include education to our Resident physicians.  Metric: Documentation of training program in Palliative Care for family medicine residents.  41. Milestone: Develop a plan to identify	42. Milestone: Develop consult service so that palliative care consultation will be available for outpatients, this will include education to our staff physicians and community providers Metric: Documentation of training program for primary care and specialty physicians, as well as community providers.	43. Milestone: Number of palliative care consults Metric: Palliative care consults meet targets established by the program. Numerator: Number of palliative care consults Denominator: Target number of palliative care consults.	44. Milestone: Implement a patient/family experience survey regarding quality of care, pain and symptom management. Metric: Survey developed and implemented; scores increased over time.	Improve Quality (Cat iii)  Increase Training of Primary Care workforce (Cat ii)	

	ii-3 Use Palliative Care Programs							
DY6	DY7	DY8	DY9	DY10	Other Category Projects This Project Feeds Into			
	patients who will have the option of being enrolled in the palliative care program.  Metric: Documentation of plan and screening process of potential referrals.							

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## Category iv

VCMC has a long history of providing high quality, safe and compassionate care. We have consistently focused on the patient first in our hospital settings. Our focus for the Category iv milestones started many years ago. Although we did not have any idea we would be using our quality care processes as a method for calculating safety net funding, we have positioned ourselves to be the highest quality care provider in our county.

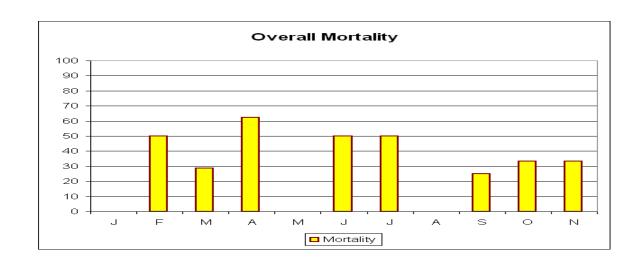
## **Sepsis Narrative:**

Intervention #1: Improve Severe Sepsis Detection and Management Key Challenge: Reducing harm or death to patients seeking care due to sepsis.

Sepsis can harm and kill patients if not treated quickly and increases ICU length of stay and its associated costs. While and after receiving hospital services, challenges remain regarding the provision of safe, high-quality health care. Furthermore, it is critical to avoid causing harm or death to patients seeking care. Currently, approximately a quarter of patients with severe sepsis or septic shock die in public hospitals. Over 18 million cases of severe sepsis occur each year and are expected to grow by 1.5% per annum form the current annual incidence of 3.0 cases per 1,000 of the population. This equals an additional 1 million cases per year in the US by 2020. Sepsis is a major cause of mortality throughout the world, killing at least 1,400 people every day. Death is common among sepsis patients with 28-50% of patients dying within 30 days of diagnosis. Highest risk populations are the elderly, cancer and HIV and other groups of immunocompromised patients, all of which are make up public hospital populations. Sepsis impacts the lives of many people including the patient and their families, doctors, nursing and care staff. The intense demands made on hospital staff, equipment and facilities to treat sepsis places a significant burden on healthcare resources, accounting for 40% of total ICU expenditure and totals as high as \$12.6 billion in the US. (Information taken from <a href="https://www.survivingsepsis.org">www.survivingsepsis.org</a>.)

In recognition of these facts, Ventura County Medical Center began a Sepsis Treatment and Mortality Reduction Taskforce in November 2010 based upon the international "Surviving Sepsis Campaign" guidelines. We began tracking monthly sepsis data in January 2010 for Performance Improvement purposes and are currently working on validating our data for benchmarking purposes to be used as we go forward into 2011 instituting the guidelines and bundles and measuring our progress starting January 1, 2011 as year 1. We will continue each year from 2 to year 5 by setting and revising our targets based upon our outcomes.

As illustrated in the attached graph, our primary measurement outcome will be mortality. Based upon January – November 2010 data, our present mortality benchmark averages at 30%.



Major Delivery System Solution: Reduce avoidable harm or deaths due to severe sepsis to patients receiving inpatient services.

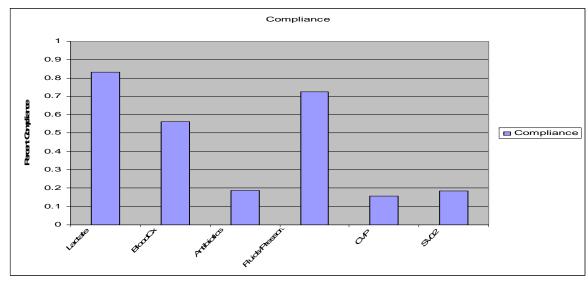
In support of our commitment to continuous quality improvement so that patients receive the safest and highest quality health care possible, we propose to make improvements in care provided to patients. We propose to improve severe sepsis detection and management to reduce unnecessary death and harm attributable to sepsis. Our interventions and improved processes from are based upon the IHI recommended Surviving Sepsis Campaign to establish reliable detection and treatment for severe sepsis. This includes implementing both the Sepsis Management and Resuscitation Bundle. In order to meet the goals of increased and timely recognition and treatment of sepsis in our patients and significant reduce sepsis mortality; we are following the Institute of Healthcare Improvement's Surviving Sepsis Campaign guidelines. Our ultimate goal is to decrease our severe sepsis and septic shock mortality by 25% over the course of this 5 year project.

Our plan is to incorporate an interdisciplinary taskforce to achieve the following objectives to meet this goal:

- 1) ID severe sepsis or septic shock immediately upon patient presentation
- 2) obtain serum lactate
- 3) obtain blood cultures before broad-spectrum antibiotics are administered
- 4) administer broad-spectrum antibiotics within 3 hours of ED admission or 1 hour of non-ED admission
- 5) administer fluids and/or pressors to maintain MAP > 65 mmHg
- 6) achieve/maintain CVP of > 8 mmHg within 6 hours of presentation
- 7) achieve/maintain SvO2 > 70 within 6 hours of presentation

Several areas will be addressed, including working with laboratory to purchase a POC lactate machine, instituting a Sepsis Rapid Response Team, developing severe sepsis/septic shock physician order sets, instituting widespread education outreach to attending and resident physicians, nursing staff.

As stated earlier, because we have been able to collect needed data from 2010 for benchmarking purposes, we will be able to measure our progress from year one throughout year five.



	Improve Severe Sepsis Detection and Management (required)							
DY6	DY7	DY8	DY9	DY10				
45. Designate multidisciplinary team to improve Severe Sepsis Detection and Management.	46. Implement the Sepsis Resuscitation Bundle, as evidenced by Bundle checklist completed 40% of time in ICU	49 Achieve X% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data.	52. Achieve X% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data.	55. Achieve X% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data.				
	47. Report at least 6 months of data collection on Sepsis Resuscitation Bundle to SNI for purposes of establishing the baseline and setting benchmarks.	50. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.	53. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.	56. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.				
	48. Report the Sepsis Resuscitation Bundle results to the State.	51. Report Sepsis Resuscitation Bundle and Sepsis Mortality results to the State.	54. Report results to the State.	57. Report results to the State.				

### Intervention #2- Central Line-Associated Bloodstream Infection (CLABSI) Infection Prevention

Key Challenge: Preventing infections to reduce the risk of dying and harm from getting other infections. Intravascular catheters are indispensable in modern-day medical practice, particularly in intensive care units (ICUs). Although such catheters provide necessary vascular access, their use puts patients at risk for local and systemic infectious complications, including local site infection, CLABSI, septic thrombophlebitis, endocarditis, and other metastatic infections. The majority of serious catheter-related infections are associated with central venous catheters (CVCs), especially those that are placed in patients in ICUs. A total of 250,000 cases of CVC-associated BSIs have been estimated to occur annually if entire hospitals are assessed rather than ICUs exclusively. In this case, attributable mortality is an estimated 12%-25% for each infection, and the marginal cost to the health-care system is \$25,000 per episode. (Information obtained from the "CDC Guidelines for the Prevention of Intravascular Catheter Related-Infections".)

Therefore, the cost of CVC-associated BSI is substantial, both in terms of morbidity and in terms of financial resources expended. To improve patient outcome and reduce health-care costs, Ventura County Medical Center is implementing strategies to reduce the incidence of these infections. This effort is multidisciplinary, involving health-care professionals who insert and maintain intravascular catheters, health-care managers who allocate resources and patients who are capable of assisting in the care of their catheters. We will be implementing multiple strategies concomitantly in an effort to reduce CLABSI.

According to historical data collected and reported in January to November 2010 to NHSN, VCMC had two CLABSIs, one in January and one in September for an overall rate of 2.34/1000 central line days. This process and data collection occurred only in the ICU in 2010. VCMC is moving this important improvement to address insertion of these types of line throughout both hospitals. We will provide education on the improvement process to reduce central line infections, including the use of the checklist/bundle. We will then begin collecting data on insertion process for hospital-wide central line insertion and care.

Our key measures will be:

- 1. CLABSIs per 1000 central line days
- 2. Compliance with reporting monthly data to NHSN, CAPH/SNI
- 3. Compliance with the central line bundle item

Major Delivery System Solution: Reduce avoidable harm or deaths and costs of care due to central-line associated blood stream infections.

In support of out commitment to continuous quality improvement to ensure our patients receive the safest and highest quality health care possible, we propose to make improvements care provision by reducing avoidable harm or deaths due to central line associated blood stream infections. Our interventions and improved processes are based on CDC and IHI recommended Central Line Bundle guidelines. We will reliably implement this bundle including; hand hygiene, maximal barrier precautions used during insert ions, Chlorhexidine skin antisepsis, optimal site selection, daily line necessity review, with prompt removal of unnecessary lines.

We also propose to make the process for delivering all bundle elements more reliable by:

- 1. keeping standard equipment for central line placement in a specialized cart available to all nursing units
- 2. using an insertion checklist that includes all bundle elements
- 3. include assessment for removal of central lines and line date daily
- 4. measure bundle compliance and report data to staff

59. Implement the Central Line Insertion	DY8 63. Achieve X%	DY9	DY10
Central Line Insertion	63. Achieve X%		2.10
Practices (CLIP), as evidenced by improvement of CLIP over baseline.	compliance with CLIP, where "X" will be determined in Year 2 based on baseline data.	65. Achieve X% compliance with CLIP, where "X" will be determined in Year 2 based on baseline data.	69. Achieve X% compliance with CLIP, where "X" will be determined in Year 2 based on baseline data.
60. Report at least 6 months of data collection on CLIP to SNI for purposes of establishing the baseline and setting	64. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.	66. Reduce Central Line Bloodstream Infections by X%, where "X" will be determined in Year 2 based on baseline data.	70. Reduce Central Line Bloodstream Infections by X%, where "X" will be determined in Year 2 based on baseline data.
benchmarks.  Report at least 6 onths of data collection CLABSI to SNI for proses of establishing e baseline and setting nchmarks.	65. Report CLIP and CLABSI results to the State.	practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.  68. Report CLIP and CLABSI results to the State.	71. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.  72. Report CLIP and CLABSI results to the State.
on Curp e b	establishing the caseline and setting cenchmarks.  Report at least 6 ths of data collection CLABSI to SNI for coses of establishing caseline and setting	California public hospitals.  CLABSI results to the State.  State.	California public hospitals.  CALABSI results to the State.  CALABSI results to the California public hospitals.  CALABSI results to the State.  CALABSI results to the State.

### **B.** Choose 2 From the Following Menu Set of Interventions:

# **Intervention #1: Surgical Complications Core Processes (SCIP)**

A brief example of a typical patient in the Ventura County Medical Center system is the Hispanic patient with uncontrolled or poorly controlled diabetes who needs a hip replacement. Considerable disability occurs when a hip needs to be replaced. A hip replacement may allow them to continue or resume working at their current place of employment. However a surgical site infection in such a patient has the potential to delay the return to work or potentially result in loss of employment due to prolonged absence. Diabetes is considered an epidemic nationally and Hispanic people are disproportionately affected. Forty eight percent of the patient population served at VCMC and SPH is Hispanic. The poorly controlled or uncontrolled diabetic is at increased risk for surgical site infection which may also entail repeated or prolonged hospitalization. VCMC and SPH serve a patient population that often does not have access to healthcare elsewhere and they rely heavily on the services offered here.

Good surgical outcomes established with scientifically sound and evidence based practice driven healthcare will help minimize a potentially devastating outcome in a vulnerable population. The challenge before us is to provide care that meets or exceeds national standards of practice. It is incumbent upon us as a healthcare institution to reduce the risk of acquiring a surgical site infection through careful examination of clinical practices, providing a safe environment, following national standards of practice and evidence based interventions. Cost savings realized from surgical site prevention can be directed to providing needed services.

Key Challenge: Preventing Surgical Complications Related to Infections- Surgical site infection is a major source of morbidity, economic cost, and even death in surgical patients. Studies on the financial impact of surgical site infection reveal an average cost of \$20,842 per infection and an increased length of stay of 9.7 days (American Journal of Infection Control, 2009). Studies have reported that patients with surgical site infection are twice as likely to die, five times more likely to require readmission after discharge from the initial hospitalization for the surgery and is associated with a 60% increased probability of the patient spending time in an intensive care unit.

Avoidance of the increased costs of surgical site infection which are often reflected in lower reimbursement or no reimbursement for surgical site infections is important. Preventing operative complications/infections allows monies that are saved to be spent on improvements in services or increasing the scope of services.

<u>Major Delivery System Solution:</u> Reduce harm related infections due to surgical complications—Surgical site infection rates for VCMC and SPH are well below the average (below the 50 percentile) when compared to the CDC National Health Safety Network Data. VCMC strives to perform all measures associated with lowering surgical site infection rates.

The benefits of a rigorous campaign to reduce surgical site infection and related complications in the VCMC and SPH population are compelling. Given that 18% of our patient population is considered "self pay" the financial benefits of a low surgical site infection rate become an imperative. For those patients on Medicare, reduced reimbursement is an ongoing process for healthcare associated complications with further reductions on the horizon.

Surgical Complications Core Processes (SCIP)							
DY6	DY7	DY8	DY9	DY10			
73. Develop a process to track and report SSI related to procedures reportable to the State of California.	<ul><li>74. Report at least 6 months of data collection on SSI to SNI for purposes of establishing the baseline and setting benchmarks.</li><li>75. Report results to the State.</li></ul>	76. Reduce the rate of surgical site infection for Class 1 and 2 wounds by X, where "X" will be determined in Year 2 based on baseline data.  77. Share data, promising practices, and findings with SNI to foster shared learning and	79. Reduce the rate of surgical site infection for Class 1 and 2 wounds by X%, where "X" will be determined in Year 2 based on baseline data.  80. Share data, promising	82 Reduce the rate of surgical site infection for Class 1 and 2 wounds by X%, where "X" will be determined in Year 2 based on baseline data.  83. Share data, promising			
		benchmarking across the California public hospitals.  78. Report results to the State.	practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.  81. Report results to the State.	practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.  84. Report results to the State.			

## **Intervention #2: Hospital-Acquired Pressure Ulcer Prevention**

Key Challenge: Preventing Hospital-Acquired Pressure Ulcers A pressure ulcer is a serious complication involving pain and suffering, decreased quality of life, and increased healthcare spending. The IHI estimates 2.5 million patients are being treated for pressure ulcers in US acute care facilities annually. Pressure ulcer incidence rates vary considerably — from 0.4 percent to 38 percent in acute care. All sedentary patients are vulnerable, but elderly and severely compromised patients are especially at risk. Pressure ulcers slow patients' recovery and prolong their hospital stays. Worse, nearly 60,000 US hospital patients are estimated to die each year from complications due to hospital-acquired pressure ulcers. The total annual cost for treating pressure ulcers in the US is estimated at \$11 billion. (Information from Institute of Healthcare Improvement.)

Research shows that most pressure ulcers are preventable. Introduction of an effective prevention program must include the key components of leadership, training, and relentless focus on making skin care a priority. Ventura County Medical Center has been collecting and reporting quarterly prevalence data on hospital acquired pressure ulcers (HAPUs) since 2008 via CalNoc (Collaborative Alliance for Nursing Outcomes). As of 3<sup>rd</sup> Quarter 2010 we began reporting this data on a monthly basis in order to obtain a better idea of our prevalence rates. During 2009 we had a quarter that had a prevalence rate of 3.85 of patients with HAPUs greater than Stage I. During 2010 our incidences decreased to 1.92 on average. The top quartile of California hospitals perform at or below 1.1%. This will be our year 5 goal.

## Major Delivery System Solution: Reduce hospital acquired pressure ulcers

In our desire to provide the highest qualify of care to our patient population and to decrease the incident of HAPUs at VCMC, we are currently working with Kaiser-Permanente's Southern California Nursing Research Department on a joint HAPU Partnership Project. In order to meet our goal of reducing our CalNoc HAPU rate to 1.1% or below, we are instituting in year one (2010) a HAPU prevention program which is based on NPUAP, IHI, and Kaiser prevention strategies including:

1. Skin assessment/inspection upon admission and then daily for all patients:

Revised shift assessment

Revised supervisors daily report

Braden scale as standardized tool

Standardized guidelines for treatment; standardized skin care products

Process for daily skin assessment and documentation (utilizing skin champions and nursing managers)

Wide-spread education for nurses and physicians

2. Manage moisture and incontinence

Hourly patient rounds and frequent toileting

Reduce diaper and underpad usage

3. Assess and optimize nutrition and hydration

Dietary consult for at risk patients

Hourly rounds to include assessment of hydration needs

4. Pressure Minimization

Implement turning rounds/schedule Algorithm to guide usage of pressure reducing beds, surfaces

These prevention interventions will be monitored by weekly skin rounds conducted by the Skin Champion Team which report monthly findings on every HAPU to the HAPU Oversight Committee which will consist of Skin Champions, WOCN, Physician Champion, and others by interest. (based on Woodland Hills and San Diego Kaiser Permanente models).

	Hospital-Acquired Pressure Ulcer Prevention							
DY6	DY7	DY8	DY9	DY10				
85 Join a collaborative related to decreasing the occurrence of hospital acquired pressure ulcers	86. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.	88. Achieve hospital- acquired pressure ulcer prevalence of less than 3.2 %.	91. Achieve hospital-acquired pressure ulcer prevalence of less than 2.5%.	94. Achieve hospital- acquired pressure ulcer prevalence of less than 1.1%.				
	87. Report hospital-acquired pressure ulcer prevalence results to the State.	89. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.	92. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.	95. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals.				
		90. Report hospital- acquired pressure ulcer prevalence results to the State.	93. Report hospital- acquired pressure ulcer prevalence results to the State.	96. Report hospital-acquired pressure ulcer prevalence results to the State.				