San Francisco General Hospital & Trauma Center

Delivery System Reform Incentive Pool (DSRIP) Plan

February 18, 2011

OVERVIEW:

San Francisco General Hospital and Trauma Center (SFGH) is a general acute care hospital, owned and operated by the City and County of San Francisco, Department of Public Health (DPH). As San Francisco's public hospital, SFGH's mission is to provide quality health care with compassion and respect to patients that include the City's most vulnerable. Since its establishment in 1854, SFGH has evolved into a major academic medical center. SFGH has gradually expanded and modernized its hospital facilities, providing the community with a complete range of emergency, trauma, inpatient, primary care, specialty medical and surgical services, diagnostic and rehabilitation services. In addition to being the only trauma center (Level 1) in the City and County of San Francisco, serving 1.5 million residents of San Francisco and northern San Mateo County, SFGH has a full complement of mental health care from psychiatric emergency services, acute inpatient psychiatric care, to mental health rehabilitation and post-hospitalization care.

Perhaps most importantly, SFGH serves as a key component of the city's integrated safety net delivery system. The foundation of this system consists of a network of 5 hospital-based primary care clinics, 14 SFDPH community-based public primary care clinics, and 10 non-profit community clinics. These safety net clinics serve as medical homes, and rely on SFGH to provide hospital, diagnostic, and specialty care services for their uninsured patients, as well as for many of their Medicaid and Medicare patients. Over the past five years, there have been multiple initiatives that have strengthened the network, including the development of a system-wide chronic disease registry; development of standardized primary care metrics and reports for all SF DPH Primary Care Clinics that encompass access, productivity, clinical and patient experience measures; development of an electronic referral system that enhances communication between primary care providers and specialists; and investment in health information technology to enhance off-campus access to SFGH's EMR. Importantly, these efforts have been synergistic with San Francisco's universal access to health care initiative (Healthy San Francisco) and our local Medicaid managed care plan's efforts to improve access and quality across the City's safety net providers. With the advent of national health reform and the prospect of an additional 32 million insured Americans, our efforts in San Francisco can hopefully serve as a model.

In Fiscal Year 2009-2010, 101,440 individuals were treated at SFGH.

Patients served were 51% male and 49% female. Mirroring the demographics of the City of San Francisco, SFGH's patient population consists of a large percentage of ethnic minorities: Caucasians 24%, Latinos 31%, African-Americans 18%, Asian/Pacific Islanders 21%, Native American <1%, and Others/Unknown 5%. Thirty-two percent of SFGH's patients' primary language is not English.

SFGH's patient population is younger than the general population of San Francisco: 13% under age 18, 10% between 18 and 24, 34% between 25 and 44, 34% between 45 and 64, and 8% over the age of 65.

The payer mix of SFGH's patients differs from inpatient to outpatient. The following table shows activities by payer type for fiscal year 2009-2010.

Payer Sources	Inpatient Days	Outpatient Encounters
Uninsured	33%	35%
Commercial	3%	1%
Medi-Cal	39%	29%
Medicare	19%	16%
Others (Healthy Families, Research, Jail, Workers' Comp)	6%	19%

SFGH is also one of the nation's top academic medical centers, partnering with the University of California, San Francisco on clinical training and research. Currently, SFGH has on staff 260 attending physicians, 900 residents, 350 3rd and 4th year medical students, and 60 clinical fellows.

SFGH is licensed by California Department of Public Health for 509 acute beds and 89 Skilled Nursing beds and by the California Department of Mental Health for 47 beds. SFGH maintains 529 physical beds. In Fiscal Year 2009-2010, SFGH had 15,935 acute admissions and 100,380 acute days. Additionally, there were 459 SNF admissions totaling 57,031 patient days. In fiscal year 2009-2010, there were 488,865 SFGH ambulatory care visits; and 62,044 emergency visits (Medical and Psychiatric Emergency). Twenty-three percent of emergency visits resulted in an admission.

Executive Summary:

Since 2007, with the advent of the Healthy San Francisco (HSF) program, San Francisco's integrated safety net delivery system has experienced a significant increase in demand in services, and in particular, primary care. In anticipation of increased demand for primary care, SFGH enhanced access to primary and preventive care (see above). Evidence indicates this is resulting in a significantly reduced demand for high-cost emergency and inpatient care; since 2007, SFGH has experienced a 27% decline in emergency room visits and a 40% reduction in hospitalizations per 1,000 HSF participants. At the same time, while there has been some expansion of primary care capacity, it has not been sufficient to meet the demand. Among patients who have an established medical home, access to necessary specialty care continues to be a problem, as are transitions in care between inpatient and outpatient settings and between primary care and specialty providers. Additionally, the need for linkages between behavioral health and primary care is key to effectively care for people with both behavioral health and medical conditions.

As we move forward in implementing national health care reform, SFGH will need to demonstrate clear outcomes for improving quality of care and patient safety while also ensuring operational efficiencies and increasing patient-centered care. Focus will be placed on improving performance in clinical indicators including severe sepsis detection and management, central line associated blood stream infections, surgical site infections and venous thromboembolism prophylaxis and treatment. Clear focus needs to be placed on improving our administrative and clinical data collection, coding and analysis systems so that accurate data is utilized for improvement initiatives. Also, ensuring that staff in all positions are trained in key components to drive a Culture of Excellence. A Culture of Excellence exists when staff are engaged - in partnership with patients and families — with ongoing performance improvement and patient safety initiatives that achieve excellence in communication, patient-centered care, operational efficiency, and quality patient care.

In this proposal, we aim to address the following challenges:

- 1. Patients are not consistently receiving proactive and timely preventive, primary and specialty care services in the ambulatory setting.
- 2. Patients with behavioral health and medical health needs may not be managed in the most effective, patient centered manner.
- 3. Health care services may not be coordinated for patients as they transition between different services and providers.
- 4. Reliable data systems and processes are needed in order to drive health care quality and patient safety improvements.
- 5. An investment in human capital is needed by providing ongoing performance improvement and patient safety training to our staff and patients/families that achieves excellence in communication, patient-centered care, operational efficiency, and quality patient care.

SFGH has determined that by investing in the following four major categories of delivery system reform, we can position our integrated safety net delivery system to focus more on the outpatient setting, thereby increasing access to preventive and primary care and decreasing inappropriate hospitalizations. Additionally, improving the coordination of care across our delivery system will improve patient experience and safety:

1. Infrastructure Development

- a. Increase and Enhance Training of Primary Care Physicians
- b. Increase Primary Care Capacity
- c. Increase Specialty Care Capacity
- d. Enhance Performance Improvement and Reporting Capacity Through a Learning Center and Quality Data Management Center

2. Innovation and Redesign

- a. Transform Primary Care Clinics into Patient Centered Medical Homes
- b. Integrate Behavioral Health with Primary Care Medical Homes
- c. Redesign Delivery of Specialty Ambulatory Care Through eReferral and Telemedicine

3. Population-Focused Improvement

- a. Patient Experience
- b. Care Coordination
- c. Patient Safety
- d. Preventive Health
- e. At-risk Populations (targeting those with hypertension, heart disease, diabetes, etc)

4. Urgent Care Improvement

- a. Sepsis Early Detection & Management
- b. Central Line Associated Blood Stream Infection Prevention
- c. Surgical Site Infection Prevention
- d. Deep Vein Thrombosis (DVT) Prevention

To address these challenges, we have already begun work to make sure that all patients will receive the right care in the right place at the right time. This is a strategic priority for SFGH and Healthy San Francisco because by providing more patients with coordinated care services grounded in their primary care medical homes, patients can stay healthier and manage their chronic conditions, including behavioral health conditions, thereby reducing avoidable emergency visits, admissions, and readmissions. Patients will receive this care in a proactive, planned manner so that they are able to receive evidence-based interventions.

CATEGORY 1: Infrastructure Development

<u>Project 1: Increase Training of Primary Care Workforce</u>

<u>Project Goal</u>: As the nation begins to implement health care reform, the state faces a major shortage of primary care physicians and a decline in the number of medical students choosing primary care careers. California barely meets the nationally recognized standard for the supply of primary care physicians, with shortages being most acute for safety net providers. California's Section 1115 Medicaid waiver provides an important opportunity to strengthen the state's primary care workforce with an emphasis on a dedicated physician workforce pipeline for safety net clinics and hospitals.

The first project goal will be to increase the number of physicians graduating from our Family Medicine and Primary Care Medicine Residency Programs at SFGH—programs that have a superb track record in training outstanding physicians who go on to careers as primary care clinicians in safety net settings. A second goal will be to enhance the training experiences of Family Medicine and Primary Care Medicine Residents at SFGH to emphasize the key competencies needed to help lead safety net primary care Medical Homes, including team care, care coordination, timely access, chronic care models, utilization of health information technology, development of quality measures that ensure patient safety, and enhanced patient involvement and experiences.

<u>Expected result</u>: Over 5 years, SFGH will recruit 16 additional residents into the Family Medicine and Primary Care Medicine Residency Programs beyond the baseline enrollment number and graduate more family physicians and primary care internists equipped to lead high performing safety net medical homes.

Relation to Categories 2,3 and 4: Residents will be trained in the new team models and chronic care models that will be implemented in all DPH primary care clinics as part of Category 2 – Innovation and Redesign: Primary Care Redesign. The skills will also allow residents to contribute more effectively to the goals of Category 3 – Population Focused Improvement for milestones focused on improving processes and outcomes in preventive and chronic care.

	Category 1- F	Project 1: Increase and Enh	ance Training of Primary Ca	re Physicians	
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into
1. Milestone: Obtain approval from the Accreditation Council for Graduate Medical Education (ACGME) to increase the number of primary care residents by adding at least 8 new Primary Care Internal Medicine and 8 new Family Medicine residents over years 2-5 Metric: Documentation of ACGME approval for residency position expansion Data Source: DPH Administrative records	2. Milestone: Develop and implement a curriculum for residents to utilize their practice data to demonstrate skills in quality assessment and improvement Metric: Curriculum in quality improvement Data Source: Curriculum for residency training program 3. Milestone: Recruit 4 additional first year residents into SFGH family medicine and primary care medicine residency training programs, relative to baseline enrollment Metric: First year resident class size Data source: Documented enrollment by class by year by primary care training program	 4. Milestone: Train primary care residents in Medical Home model Metric: Curriculum in Medical Home Data Source: Curricular content in residency program training manuals 5. Milestone: Recruit 4 additional first year residents into SFGH family medicine and primary care medicine residency training programs, relative to baseline enrollment Metric: First year resident class size Data source: Documented enrollment by class by year by primary care training program 	6. Milestone: Train primary care residents in Medical Home model Metric: Curriculum in Medical Home Data Source: Curricular content in residency program training manuals 7. Milestone: Recruit 4 additional first year residents into SFGH family medicine and primary care medicine residency training programs, relative to baseline enrollment Metric: First year resident class size Data Source: Documented enrollment by class by year by primary care training program	8. Milestone: Recruit 4 additional first year residents into SFGH family medicine and primary care medicine residency training programs, relative to baseline enrollment Metric: First year resident class size Data Source: Documented enrollment by class by year by primary care training program 9. Milestone: Evaluate curricular components and implement changes based on evaluative feedback Metric: Resident ratings of curriculum using standardized quantitative and qualitative assessment instruments	Redesign Primary Care (Cat. 2) Improve Cancer Screening Rates (Cat. 3) Improve Chronic Care Management and Outcomes (Cat. 3) Reduce Readmissions (Cat. 3)

Category 1 - Project 2: Expand Primary Care Capacity

Project Goal: The foundation of the DPH's integrated delivery system is its network of 5 hospital-based and 14 community-based public primary care clinics. Since 2007, when San Francisco implemented its universal health care program, *Healthy San Francisco*, the DPH has attempted to link all Healthy San Francisco participants to a medical home. Although the DPH has made significant strides towards the goal of every patient served in its system having an identified primary care medical home and receiving timely access to care at their medical home, primary care access is not yet optimal. Nearly half of patients seen in the SFGH Urgent Care Clinic in FY 09/10 did not have an identified primary care medical home. Analysis of encounter data among Medi-Cal SPD patients who use SFGH acute, emergency, and/or specialty services suggests that at least 5,000 of these patients have not had a visit in the past 2 years to a DPH or SF Community Clinic Consortium primary care clinic. For some DPH patients who do have an assigned DPH medical home, waiting times for a non-urgent primary care appointment fail to meet the Low Income Health Program standards for timely access. Very few of the DPH primary care clinics currently offer evening or weekend sessions.

Our main project goal is to increase primary care capacity in DPH clinics. To accomplish this goal we will hire additional primary care physicians and nurse practitioners and support staff, and add primary care clinic sessions on weekday evenings and weekend days. A related goal will be to more promote more appropriate use of primary care services by implementing a centralized nurse telephone advice line and appointment scheduling service.

<u>Expected result</u>: By the end of year 5, annual visit volume at DPH primary care clinics will be 10,000 greater than at baseline (FY10), and 2,500 new patients will have established care at DPH primary care medical homes.

<u>Relation to Categories 2 and 3</u>: Increasing patient access to DPH primary care medical homes is an essential infrastructure for achieving the project goals in Category 2 – Innovation and Redesign for Primary Care Redesign and Category 3 – Population Focused Improvement for milestones focused on improving timely primary care access and processes and outcomes in preventive and chronic care.

		Category 1 - Project 2: Exp	and Primary Care Capacity		
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into
Milestone: Pilot opening of weekend clinic sessions at one DPH primary care clinic Metric: Increased number of hours at primary care clinic over baseline by at least 2 hours	3. Milestone: Open weekend or evening sessions at least 1 additional DPH primary care clinics (total of 2 clinics) Metric: Increased number of hours at primary care clinic over	6. Milestone: Open weekend and evening sessions at least 1 additional DPH primary care clinics (total of 3 clinics) Metric: Increased number of hours at primary care clinic over	9. Milestone: Open weekend and evening sessions at least 1 additional DPH primary care clinics (total of 4 clinics) Metric: Increased number of hours at primary care clinic over	12. Milestone: provide 10,000 more visits at DPH primary care clinics relative to FY10, and establish care for 1,000 new patients in DPH medical homes in FY15 Metric: Number of patient encounters	 Redesign Primary Care (Cat. 2) Improve Cancer Screening Rates (Cat. 3) Improve Chronic Care Management and Outcomes (Cat. 3) Increase timely access (Cat. 3)
Data Source: Clinic schedule records 2. Milestone: Establish a	baseline Data Source: Clinic schedule records	baseline Data Source: Clinic schedule records	Data Source: Clinic schedule records	Data Source: DPH administrative encounter data.	
centralized nurse advice line and primary care patient appointment unit, train initial staff for this unit, and pilot operation with at least 2 DPH primary care clinics	4. Milestone : provide 2,500 more visits at DPH primary care clinics relative to FY10, and establish care for 500 new patients in DPH medical homes	7. Milestone : provide 5,000 more visits at DPH primary care clinics relative to FY10, and establish care for 500 new patients in DPH medical homes in FY13	10. Milestone : provide 7,500 more visits at DPH primary care clinics relative to FY10, and establish care for 500 new patients in DPH medical homes in FY14	13. Milestone: Increase by 5% over Year-4 total (10% increase over Year-3 Baseline) the number of DPH patients who utilized the nurse advice line and were given an urgent medical	
Metric: Number of nurses designated to staff a nurse advice line, training records, and number of calls; Data Source: DPH administrative reports	Metric: Number of patient encounters; Data Source: DPH administrative encounter data.	Metric: Number of patient encounters Data Source: DPH administrative encounter data.	Metric: Number of patient encounters Data Source: DPH administrative encounter data.	appointment via the nurse advice and appointment line when needed Metric: Number of urgent medical appointments	

	Category 1 - Project 2: E	xpand Primary Care Capacity		
	<u> </u>	repaired in the same supposity		
Year 1	Year 2 Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into
5. Milesto	ne: Include at 8. Milestone: Include at	11. Milestone: Increase by	scheduled via the nurse	
	OPH primary care least 5 additional DPH	5% over Year-3 Baseline	advice line:	
clinics in	service scope primary care clinics in	the number of DPH	 Numerator- of 	
for centr	ralized nurse service scope for	patients who utilized	patients who	
advice lii	ne and patient centralized nurse	the nurse advice line	were	
appointr	ment unit advice line and patient	and were given an	scheduled for	
	Number of appointment unit (total	_	an urgent	
	patients who of 12 clinics)	appointment via the	medical	
	se advice line;	nurse advice and	appointment	
Data Sou	urce: Nurse Metric: Number of	appointment line when	via the nurse	
	ne call center enrolled patients who	needed	advice line	
reports.	call nurse advice line;			
		Metric: Metric: Number	 Denominator- 	
	Data Source: Nurse	of urgent medical	Total Number	
	advice line call center	appointments	of patients	
	reports.	scheduled via the nurse	assigned to a	
		advice line:	DPH Medical	
		o Numerator- of	Home	
		patients who		
		were	Data Source: Nurse	
		scheduled for	advice line data reports	
		an urgent		
		medical		
		appointment		
		via the nurse		
		advice line		
		Donomisstan		
		o Denominator-		
		Total Number		
		of patients		
		assigned to a DPH Medical		
		Home		
		nome		

	Category 1 - Project 2: Expand Primary Care Capacity									
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into					
			Data Source: Nurse advice line month data reports							

Category 1 - Project 3: Expand Specialty Care Capacity

Project Goal: Physician capacity constraints in the DPH are not only a problem in primary care. The DPH specialty clinics at SFGH have inadequate specialist physician staffing to meet demand for specialty care consultations from the DPH's extensive network of primary care clinics, resulting in long waiting times for scheduling new appointments and lack of timely access to care. The Accountable Care Act calls for provision of "support necessary for local primary care providers to...provide access to appropriate specialty care and inpatient services." As Elliott Fisher, one of the principal proponents of Accountable Care Organizations, has suggested, patients require both good medical homes and good medical neighborhoods—meaning not only a solid foundation of primary care but also all the other specialty and ancillary services that constitute the full scope of services needed by a population cared for by an Accountable Care Organization. In examining the mismatch between specialty clinic capacity and patient demand in the DPH, we have found wide variation in this mismatch as measured by median waiting times for next available new patient routine appointments. The waiting time ranges from a 184 calendar days in gastroenterology clinic to 16 days in breast surgery clinic. Half (15 of 30) of the adult specialty clinics have median waiting times for routine appointments of more than 50 days. The DPH has not fully used these waiting time data to inform prioritization of investments in specialist physician time in the ambulatory sector, resulting in the wide variation in access to specialty clinics. Nor has there been careful analysis of specialty clinic service patterns and care models to determine whether specialty services are being delivered with adequate productivity and a rational care model. For example, many patients are routinely scheduled for return visits to specialty clinics when their follow-up care could be effectively managed in their primary care medical homes without the need for further visits to a sp

We propose to increase specialty clinic capacity and rationalize staffing and care models at SFGH specialty clinics to enhance patient access to appropriate specialty services. The first goal will be to develop a data-driven process for systematically assessing current capacity, productivity, and care models at the SFGH specialty clinics. This assessment will include analysis of waiting times for new patient appointments, specialist attending physician work effort devoted to ambulatory care practice in the specialty clinics, visit productivity, practice patterns regarding scheduling follow up clinic appointments in specialty clinics, and related metrics. This assessment will then inform prioritization of hiring additional attending physicians and support staff in the specialty areas having the greatest mismatch between specialty capacity and appropriate patient demand, in addition to informing efforts to redesign care models in the specialty clinics (discussed in Category 2, Project 3 below).

<u>Expected result</u>: Specialty clinic capacity, productivity, and efficiency will be increased to enhance patient access to timely, appropriate specialty clinic services.

Relation to Categories 2 and 3: The assessments of specialty clinic capacity and productivity, and the hiring of additional specialist physicians, will directly support Category 2 – Innovation and Redesign: Specialty Care Redesign. This project will also indirectly support the goals of Category 2— Innovation and Redesign: Primary Care Redesign by increasing the capacity of the specialty clinics to accept referrals from PCMHs (e.g., referrals for colonoscopy for patients who have positive fecal occult blood test screening performed in primary care). The enhanced specialist capacity will also contribute to the goals of Category 3 – Population Focused Improvement for milestones focused on improving processes and outcomes in preventive and chronic care, enhancing the coordination between primary care and specialty care to achieve these improved patient outcomes.

Category 1 – Project 3: Expand Specialty Care Capacity									
	Category 1 - Project 3. Expand Specialty Care Capacity								
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into				
1. Milestone: Appoint task	3. Milestone: The Task	5. Milestone: The Task	7. Milestone : The	9. Milestone: Increase the					
force consisting of hospital executive staff and medical staff representatives under direction of CMO and COO to assess SFGH specialty clinic timeliness of access, capacity, productivity, and efficiency and make recommendations for targeted investment in outpatient specialty capacity and care	Force will assess SFGH specialty clinic timeliness of access, capacity, productivity, and efficiency and set goals for targeted investment in outpatient specialty areas. Metric: 1) time to eReferral response, 2) time to specialty clinic visit, 3) number of	Force will continue to provide oversight on SFGH specialty clinic timeliness of access, capacity, productivity, and efficiency and set goals for targeted investment in outpatient specialty areas. Metric: 1) time to eReferral response, 2) time to specialty clinic	Task Force will continue to provide oversight on SFGH specialty clinic timeliness of access, capacity, productivity, and efficiency and set goals for targeted investment in outpatient specialty areas. Metric: 1) time to eReferral response, 2)	number of outpatient encounters by at least 5% in 2 additional targeted specialty clinics where an encounter is defined by (1) an eReferral that does not require a scheduled specialty visit, (2) a specialty education or group visit, (3) a visit to the specialty clinic, (4) a telemedicine consultation, or (5) a	 Redesign Specialty Care (Cat. 2) Redesign Primary Care (Cat. 2) Improve Cancer Screening Rates (Cat. 3) Improve Chronic Care Management and Outcomes (Cat. 3) 				
models	eReferrals, 4) number of clinic visits, and 5)	visit, 3) number of eReferrals, 4) number	time to specialty clinic visit, 3) number of	directly scheduled procedure.					
Metric: Task Force membership and objectives	specialist FTE available for clinic visits.	of clinic visits, and 5) specialist FTE available for clinic visits.	eReferrals, 4) number of clinic visits, and 5) specialist FTE available for clinic visits.	Metric: o Numerator: number of					
Data Source: Task Force minutes.	administrative records. 4. Milestone: Increase the	Data Source: DPH administrative records.	Data Source: DPH administrative records.	outpatient encounters for a particular					
2. Milestone: Conduct	number of outpatient	6. Milestone: Increase		specialty in year 5					
initial assessment of	encounters by at least	the number of		(2014-15) minus					
specialty clinic timeliness of access,	5% in 2 targeted specialty clinics where	outpatient encounters by at least 5% in 2	8. Milestone: Increase the number of outpatient	the number of outpatient					
capacity, productivity,	an encounter is	additional targeted	encounters by at least	encounters in year					
and efficiency.	defined by (1) an	specialty clinics where	5% in 2 additional	1 (2010-11)					
Selected specialties will be identified based on	eReferral that does not require a scheduled	an encounter is defined by (1) an eReferral that	targeted specialty clinics where an	Denominator: number of					

Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Project This Project Feeds Into
evidence-based need	specialty visit, (2) a	does not require a	encounter is defined by	outpatient	-
for targeted investment	specialty education or	scheduled specialty	(1) an eReferral that	encounters for a	
in outpatient specialty	group visit, (3) a visit	visit, (2) a specialty	does not require a	particular	
capacity and care	to the specialty clinic,	education or group	scheduled specialty	specialty in year 1	
models.	(4) a telemedicine	visit, (3) a visit to the	visit, (2) a specialty	(2010-11)	
	consultation, or (5) a	specialty clinic, (4) a	education or group		
Metric: 1) time to	directly scheduled	telemedicine	visit, (3) a visit to the	Data Source: DPH	
eReferral response, 2)	procedure.	consultation, or (5) a	specialty clinic, (4) a	Administrative	
time to specialty clinic		directly scheduled	telemedicine	encounter data.	
visit, 3) number of	Metric:	procedure.	consultation, or (5) a		
eReferrals, 4) number	 Numerator: number 	Metric:	directly scheduled		
of clinic visits, and 5)	of outpatient	o Numerator:	procedure.		
specialist FTE available	encounters for a	number of	Metric:		
for clinic visits.	particular specialty	outpatient	o Numerator:		
	in year 2 (2011-12)	encounters for	number of		
Data Source: DPH	minus the number	a particular	outpatient		
administrative records	of outpatient	specialty in	encounters for		
	encounters in year	year 3 (2012-	a particular		
	1 (2010-11)	13) minus the	specialty in		
	o Denominator:	number of	year 4 (2013-		
	number of	outpatient	14) minus the		
	outpatient	encounters in	number of		
	encounters for a	year 1 (2010-	outpatient		
	particular specialty	11)	encounters in		
	in year 1 (2010-11)	o Denominator:	year 1 (2010-		
		number of	11)		
	Data Source: DPH	outpatient	o Denominator:		
	Administrative	encounters for	number of		
	encounter data.	a particular	outpatient		
		specialty in	encounters for		
		year 1 (2010-	a particular		
		11)	specialty in		
		-	year 1 (2010-		
		Data Source: DPH	11)		

	Category 1 – Project 3: Expand Specialty Care Capacity									
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into					
		Administrative encounter data.	Data Source: DPH Administrative encounter data.							

Category 1 - Project 4: Enhance Performance Improvement and Reporting Capacity

DPH Learning Center, Culture of Excellence and Quality Data Management Center:

<u>Project Goal:</u> To expand quality improvement capacity through people, processes and technology so that the resources are in place to conduct, report, drive and measure quality improvement.

Implement a Performance Improvement and Patient Safety Training Center (Learning Center). To implement a system-wide process for training staff and providers in essential performance improvement and patient safety curricula, a space at SFGH will be renovated to become suitable for a training center, and training staff will be hired and consultants retained. The Training Center's first task will be to define and disseminate a clear and consistent organizational vision for a Culture of Excellence in Performance Improvement and Patient Safety, which includes partnering with patients and their families in improvement initiatives. We will subsequently implement training programs on the key areas essential to achieve a Culture of Excellence, including Performance Improvement Theory and Practice, Team Training and Communication, Just Culture, Human Behavior Management and Leadership Development and Effective Partnering with Patients and Families. Staff in all positions, from clerical staff to physicians and hospital administrators, will participate in the training. We will also implement training in Lean Management for staff and providers leading performance improvement teams. Identifying value-added and non-value-added steps in every process will be the beginning of the journey toward lean operations. The Training Center will also incorporate patients and families into trainings to prepare them to become active members of performance improvement teams.

Create a centralized Data Management Center. We will centralize data collection and analysis staff that currently reside in disparate organizational units into a centralized Data Management Center to support the performance improvement work proposed for our waiver program, particularly the Urgent Improvements in Care. We will also increase the number of data analysts working on patient improvement activities. The Data Management Center will work in tandem with the performance improvement leadership teams, identifying relevant data, analyzing these data, and organizing the data into dashboards, data walls, run charts, and other formats to provide real-time feedback and guidance to performance improvement activities. The analyses will also stratify patients into different groups to indicate whether disparities exist in key clinical or related outcome metrics, based on factors such as patient race-ethnicity, English fluency, or insurance status. These types of analyses will inform efforts to eliminate health care and health disparities among the patients served by the DPH as an integral part of all DPH performance improvement activities.

Expected Result:

Centralized staff training and education model that drives innovation and change management to meet organizational goals.

Relation to Categories 2, 3, 4:

In order to accomplish the redesign in care, innovation and expected clinical outcomes in categories 2, 3 and 4, investing in staff education and training is a must. A key component to achieving a patient-centered culture of excellence, we must effective engage with patients and families through collaborative training and learning.

				-	: 4: Enhance Perform :er, Culture of Excelle	•			-	
	Year 1		Year 2		Year 3	Υ	'ear 4		Year 5	Other Category Projects This Project Feeds Into
2.	Milestone: Develop a plan for the development of a DPH Training Center at SFGH. Metric: Training Center Plan Data Source: DPH Quality Council Minutes / Executive Committee Minutes Milestone: Establish a hospital-wide Administrative Data Task Force to assess data accuracy and areas for improvement. Metric: Administrative Data Task Force minutes and membership Data Source: DPH Quality Council Minutes/ Executive Committee Minutes	 4. 5. 	Milestone: Renovate and equip space for Training Center Metric: Facilities Advisory Board Minutes Data Source: Facilities Advisory Board Minutes Milestone: Develop plan for training needs to achieve Culture of Excellence and identify consultants for Culture of Excellence curriculum. Metric: Culture of Excellence Plan Data Source: Quality Council Minutes Milestone: Train at least 50 staff on Culture of Excellence curriculum Metric: Number of	9.	Milestone: Train 70% new employees on Culture of Excellence curriculum Metric: Numerator: Number of new employees trained Denominator: Total Number of new employees Data Source: DPH Employee Training Records Milestone: Train at least 200 additional existing staff on Culture of Excellence curriculum Metric: Number of	75% r on Cu Excell curric Metric Metric O O O O O O O O O O O O O O O O O O O	Numerator: Number of new employees trained Denominator: Total Number of new employees source: DPH yee Training	Data Emp Reco 19. Miles existi Cultu curric addit and f	Numerator: Number of new employees trained Denominator: Total Number of new employees a Source: DPH bloyee Training	 Redesign Primary Care (Cat. 2) Integrate Physical and Behavioral Health Care (cat 2) Quality Data reporting on population health measures (Cat 3) Urgent Care Improvement (Cat 4)

Category 1 - Project 4: Enhance Performance Improvement and Reporting Capacity

	DPH Learning	g Center, Culture of Excelle	ence and Quality Data Man	agement Center	
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into
	Staff Trained	Staff Trained	Staff Trained	Staff Trained	
	Data Source: Training attendance record 6. Milestone: Establish a program for trained experts on process improvements to mentor and train other staff for safety and quality care improvement	Data Source: Training attendance record 10. Milestone: Train at least 20 additional staff on process improvements to mentor and train other staff for safety and quality care improvement	Data Source: Training attendance record 15. Milestone: Train at least 20 additional staff on process improvements to mentor and train other staff for safety and quality care improvement. Metrics: Metric:	Data Source: Training attendance record 20. Milestone: Train at least 20 additional staff on process improvements to mentor and train other staff for safety and quality care improvement Metrics: Metric:	
	Metric: Number of Staff Trained Data Source: Training attendance	Metric: Number of Staff Trained Data Source: Training attendance record	Number of Staff Trained Data Source: Training attendance record	Number of Staff Trained Data Source: Training attendance record	
	7. Milestone: Develop a plan for a Quality Data Management Center that focuses on improving processes and environmental	11. Milestone: At least 5 patients and family members participate in Culture of Excellence training program	16. Milestone: Patients and/or Family members are involved in at least two performance improvement projects Metric: Number of patients and family	21. Milestone: Patients and/or Family members are involved in at least two performance improvement projects Metric: Number of patients and family	
	changes to enhance coding and documentation of	Metrics: Number of patients and family members trained	members trained Data Source: Training	members trained Data Source: Training	

Category 1 - Project 4: Enhance Performance Improvement and Reporting Capacity DPH Learning Center, Culture of Excellence and Quality Data Management Center Other Category Projects Year 1 Year 2 Year 3 Year 4 Year 5 This Project Feeds Into diagnoses, 12. **Milestone:** Create attendance record attendance record procedures, and a quality dashboard 17. **Milestone:** Maintain 22. **Milestone:** Maintain or scoreboard to be process and and update a quality and update a quality outcome measures shared with dashboard or dashboard or organizational **Metric:** Quality Data scoreboard to be scoreboard to be leadership on a Management Center shared with shared with regular basis that Plan organizational organizational includes patient leadership on a leadership on a satisfaction **Data Source:** Quality regular basis that regular basis that measures. Council Minutes includes patient includes patient Metric: satisfaction measures. satisfaction measures. Presentation of **Metric:** Presentation **Metric:** Presentation quality dashboard of quality dashboard of quality dashboard to Quality Council to Quality Council at to Quality Council at at least biannually least biannually least biannually **Data Source: Data Source:** Quality **Data Source:** Quality **Quality Council Council Minutes Council Minutes** Minutes

CATEGORY 2: Innovation and Redesign

Project 1: Expand Medical Homes

Project Goal: In addition to increasing capacity, DPH primary care clinics must fundamentally redesign their model of care to transform themselves into high performing, Patient Centered Medical Homes (PCMHs). A review of recent US PCMH initiatives in the private and public sector found that redesigned PCMH care models were successful in achieving the "triple aims" of health reform: better clinical outcomes, better patient experiences, and lower costs. This review found that investment in primary care innovation yielded an excellent return on investment by reducing use of expensive emergency department and inpatient hospital services through well-coordinated and accessible primary care and better management of chronic conditions. Three key elements of PCMHs emerged from this review as having particularly high value for the triple aims of health reform: 1) proactive panel management, 2) primary-care embedded case managers for high risk patients, and 3) medical assistants and other staff trained for new teambased models of primary care. The DPH, with technical assistance from the SFGH-based UCSF Center for Excellence in Primary Care directed by Drs.

Tom Bodenheimer and Kevin Grumbach, has piloted innovative PCMH team-based models in its primary care clinics. These pilots have provided many lessons about the facilitators and impediments to implementing innovative PCMH models in safety net settings, positioning the DPH to now launch a much more systematic and ambitious program in transforming all its primary care clinics into PCMHs. In addition, the DPH has developed a robust, automated empanelment process that accurately reflects the medical home assignment of all patients seen in a SFDPH primary care clinic, and also built a patient registry using the i2i registry program that includes up to date demographic and clinical information on these empanelled patients. As a result, the DPH has the necessary technical tool in place for full adoption of panel management, and is well positioned to move on to staffing and t

We propose to expand medical homes at UCSF, using the following two strategies: 1) Expand and redefine the roles of the primary care team members, focusing on training medical assistants to function in an expanded role as panel managers and training RNs in care management of high risk patients in all DPH primary care clinics, and 2) Perform population health management by identifying and reaching out to patients who need preventive and chronic care services, with an emphasis on newly trained panel managers and RN care managers using the i2i registry as a tool for more effective population management and outreach.

<u>Expected result</u>: DPH primary care clinics will become high performing PCMHs, featuring innovative team models with personnel well-trained in panel management, patient health coaching, care management, and teamwork that will improve clinic productivity, patient-centeredness, and quality of care.

Relation to Categories 1, 3 and 4: The increased number of primary care residents and providers proposed in Category 1, Projects 1 and 2, will support the innovative team models called for in this proposal for Category 2. Transforming clinics into PCMHs will also advance the goals of Categories 3 and 4 through implementing Improvements focused on improving processes and outcomes in inpatient clinical care, improving patient experience with care, and chronic care management.

		Category 2 - Project 1:	Expand Medical Homes		
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into
1. Milestone: Appoint coordinating group to plan and implement system wide PCMH transformation in DPH primary care clinics Metric: Documentation of coordinating group membership and objectives Data Source: Coordinating Group minutes. 2. Milestone: Develop training materials for panel managers/health coaches and care managers Metric: Documentation of Training Curriculum Data Source: Primary Care Performance Improvement Committee Minutes	3. Milestone: 5 MEAs/ health workers trained in panel management and health coaching, deployed at 2 DPH primary care clinics Metric: Documentation of staff responsibilities, training and assignments Data Source: DPH HR records 4. Milestone: 1 RN case managers trained in case management of high risk patients and deployed at 1 DPH primary care clinics Metric: Documentation of staff responsibilities, training and assignments Data Source: DPH HR records	5. Milestone: 5 additional MEAs/health workers trained in panel management and health coaching, deployed in DPH primary care clinics Metric: Documentation of staff responsibilities, training and assignments Data Source: DPH HR records 6. Milestone: 1 additional RN case manager trained in case manager trained in case management of high risk patients and deployed at DPH primary care clinics Metric: Documentation of staff responsibilities, training and assignments Data Source: DPH HR records	9. Milestone: Panel managers/health coaches will actively manage registries for colorectal cancer screening for at least 1,500 DPH primary care patients and registries for chronic care for 1,000 SFGH primary care patients with diabetes Metric: # of primary care patients managed through registries for colorectal cancer screening and diabetes Data Source: Automated i2i patient registries for preventive services and diabetes management, and panel manager case load logs	11. Milestone: Panel managers/health coaches will actively manage registries for colorectal cancer screening for at least 1,750 DPH primary care patients and registries for chronic care for 1,200 SFGH primary care patients with diabetes Metric: # of primary care patients with diabetes Metric: # of primary care patients managed through registries for colorectal cancer screening and diabetes Data Source: Automated i2i patient registries for preventive services and diabetes management, and panel manager case load logs and panel manager case load logs	 Primary Care Capacity (Cat. 1) Enhance Performance Improvement and Reporting Capacity (Cat 1) Integrate Physical and Behavioral Health Care (Cat 2) Reporting on Population Health Measures (Cat. 3)

		Category 2 - Project 1:	Expand Medical Homes		
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Project This Project Feeds Into
		7. Milestone: Panel managers/health coaches will actively manage registries for colorectal cancer screening for at least 1,000 DPH primary care patients and registries for chronic care for 500 DPH primary care patients	 Milestone: 100 high risk DPH primary care patients have assigned care manager teams Metric: # of high risk DPH primary care patients assigned to care manager teams; Data Source: Care manager registries 	12. Milestone: 150 high risk DPH primary care patients have assigned care manager teams Metric: # of high risk DPH primary care patients assigned to care manager teams; Data Source: Care manager registries	
		with diabetes Metric: # of primary care patients managed through registries for colorectal cancer screening and diabetes			
		Data Source: Automated i2i patient registries for preventive services and diabetes management, and panel manager case load logs			
		8. Milestone: 50 high risk DPH primary care patients have			

	Category 2 - Project 1: Expand Medical Homes					
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into	
		assigned care				
		manager teams				
		Metric: # of assigned patients				
		Data Source: Care manager registries				

Category 2 - Project 2: Integrate Physical and Behavioral Health Care

Project Goal: One of the key issues to emerge nationally in discussions of primary care transformation is how to effectively integrate behavioral health services into Patient Centered Medical Home (PCMH) models. Conditions such as anxiety, depression, and substance use are prevalent among patients cared for in DPH primary care clinics, and these conditions often co-exist with chronic medical conditions. Care of behavioral health conditions in primary care settings is far from optimal, and many barriers exist in coordinating primary care and behavioral health services. These challenges are especially prominent for patients with serious mental illness who have disproportionate rates of chronic medical illness and early mortality. The need for linkage between behavioral health and primary care is evident on several fronts: 1) People with chronic medical illnesses are more likely to experience mental illness; 2) Individuals with severe mental illness have higher rates of hypertension, cardiovascular disease, HIV/AIDS, metabolic syndrome, obesity, and diabetes; 3) Co-morbidity of mental health issues and chronic illness is associated with poor medication adherence, inability to follow treatment regimens and increased use of emergency rooms; 4) Anti-psychotic medications have been linked with side effects such as obesity, high blood glucose levels, and diabetes; and 5) People who have mental illnesses are more likely to have sedentary lifestyles and/or abuse alcohol, cigarettes, and/or drugs, leading to exacerbated health conditions. Other factors that put people with serious mental illness at higher risk for health problems include unsafe sexual behavior, residence in homeless shelters and group care facilities (increased exposure to TB as well as inability to modify diet), and higher rates of victimization and trauma, incarceration, and social isolation. Analysis of DPH service use data suggests a mismatch in both directions. Many patients with behavioral health conditions using DPH primary care medical homes do not receive co-management from a behavioral health professional. At the same time, many patients receiving care at DPH mental health clinics do not have a primary care medical home. For example, during Fiscal Year 2008, 56% of the 1,042 unduplicated clients seen at the DPH South of Market Mental Health Services did not have a visit to a DPH or SF Clinic Consortium primary care clinic.

We propose to improve the integration of behavioral health and primary care services in the DPH. This integration will occur in a "bidirectional" manner. First, we will integrate behavioral health professionals into DPH primary care clinics to promote on-site co-management of patients with behavioral health conditions. This will include video telepsychiatric services for consultation and patient care. Second, we will enhance coordination of primary care services for patients with severe mental illness cared for at DPH behavioral health clinics by embedding primary care nurse practitioners at these sites, while also having these nurse practitioners work at DPH primary care clinics to help some of these patients transition their primary care services to a DPH PCMH site.

<u>Expected result</u>: Patients with concomitant mental health and primary care needs will receive care in a more integrated model, resulting in improved patient outcomes and experiences. In addition, this integration will also enhance the work life of providers and staff at both DPH primary care and mental health clinics by facilitating their ability to obtain needed services for their patients in a more coordinated and accessible manner.

Relation to Categories 1 and 3: The increased number of primary care residents and providers proposed in Category 1, Projects 1 and 2, will support the integration of behavioral health and primary care called for in this proposal for Category 2. Integrating behavioral health and primary care will also advance the goals of Category 3 – Population Focused Improvement for milestones focused on improving processes and outcomes in preventive and chronic care and reducing unnecessary duplication of services.

	Category 2 - Project 2: Integrate Physical and Behavioral Health Care								
			catego	. y <u>~</u>	- 1 Toject 2. mtegrate 1	iiys	ical and Benaviolal fied	itti Carc	
	Year 1		Year 2		Year 3	Year 4		Year 5	Other Category Projects This Project Feeds Into
1.	Milestone: Pilot colocation of behavioral health personnel (behaviorists) in 4 out of 12 DPH Primary Care Clinics Metric: Documentation of assignment, workplans, processes, roles/responsibilities, and behaviorist program descriptions.	2.	of behavioral health personnel in an additional 2 DPH Primary Care Clinics (total 6 out of 12) Metric: Documentation of assignment, rotation schedules roles/responsibilities, and behaviorist program descriptions	4.	Milestone: Co-location of behavioral health personnel in an additional 2 DPH Primary Care Clinics (total 8 out of 12). Metric: Documentation of assignment, rotation schedules, roles/responsibilities, and behaviorist program descriptions	7.	Milestone: Continue co-location of behavioral health personnel in an additional 2 DPH Primary Care Clinics (total 10 out of 12) Metric: Documentation of assignment, rotation schedules roles/responsibilities, and behaviorist program descriptions.	co-location of behavioral health personnel to all 12 DPH Primary Care Clinics (total 12 out of 12) Metric: Documentation of assignment, rotation schedules, roles/responsibilities and behaviorist program description	 Primary Care Capacity (Cat. 1) Enhance Performance Improvement and Reporting Capacity (Cat 1) Improve Population Health (Cat. 3) Improve Chronic Care Management and Outcomes (Cat. 3) Reduce Avoidable ED use and hospitalizations
	Data Source: DPH administrative and Human Resource records	3.	Data Source: DPH administrative and Human Resource records Milestone: Implementation of telepsychiatric consultation/care in an	5.	Data Source: DPH administrative and Human Resource records Milestone: Implementation of telepsychiatric consultation/care in	8.	Data Source: DPH administrative and Human Resource records Milestone: Implementation of	Data Source: DPH administrative and Human Resource records 12. Milestone: Implementation of	
			additional 1 out of 12 DPH Primary Care Clinics (virtual colocation of psychiatrists) Metric: Documentation of		an additional 1 DPH Primary Care Clinics; total 2 out of 12 (virtual co-location of psychiatrists) Metric: Documentation of		telepsychiatric consultation/care in an additional 1 DPH Primary Care Clinics; total 3 out of 12 (virtual co-location of psychiatrists) Metric:	telepsychiatric consultation/care in an additional 1 DPH Primary Care Clinics total 4 out of 12 (virtual co-location of psychiatrists)	;

Year 1	Year 2	Year 3		Year 4		Year 5	Other Category Project This Project Feeds Into
	assignment, rotation	assignment, rotation		Documentation of		Metric:	,
	schedules, clinic tele-	schedules, clinic tele-		assignment, rotation		Documentation of	
	psychiatric	psychiatric		schedules, clinic tele-		assignment, rotation	
	consultation	consultation		psychiatric		schedules, clinic tele-	
	encounter	encounter		consultation		psychiatric	
	documentation	documentation		encounter		consultation	
				documentation		encounter	
	Data Source:	Data Source: DPH				documentation.	
	DPH administrative	administrative and		Data Source: DPH			
	and Human Resource	Human Resource		administrative and		Data Source:	
	records	records		Human Resource		DPH administrative	
				records		and Human Resource	
		6. Milestone: Co-				records	
		location of primary	9.	Milestone: Co-			
		care Nurse		location of primary	13.	Milestone: Continued	
		Practitioner (NP) at 1		care NP at 1 additional		co-location of primary	
		out of 11 behavioral		behavioral health		care NP's at 3 out of	
		health clinics		clinic (total 2 out of		11 behavioral health	
				11)		clinics	
		Metric:					
		Documentation of		Metric::		Metric:	
		assignment, rotation		Documentation of		Documentation of	
		schedules/templates		assignment, rotation		assignment, rotation	
				schedules /templates		schedules or patient	
		Data Source:				panels	
		DPH administrative		Data Source:			
		and Human Resource		DPH administrative		Data Source:	
		records		and Human Resource		DPH administrative	
				records		and Human Resource	
						records	
			10.	Milestone: Increase by			
				10% the number of	14.	Milestone: Increase by	
				patients with a		an additional 5% the	
				diagnosis of		number of patients	

	Category 2 - Project 2: Integrate Physical and Behavioral Health Care						
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into		
			depression as identified by the primary care provider, who have access to behavioral health care Metric: Number of patients diagnosis of depression as identified by the primary care provider who have access to visits with behavioral health professionals over baseline Data Source: DPH administrative records and Care Manager data	with a diagnosis of depression as identified by the primary care provider, who have access to behavioral health care Metric: Number of patients diagnosis of depression as identified by the primary care provider who have access to visits with behavioral health professionals over baseline Data Source: DPH administrative records and Care Manager data			

Category 2 - Project 3: Increase Specialty Care Access/Redesign Referral Process

Project Goal: The assessment of specialty clinic supply and demand and enhancement of specialist capacity proposed in Category 1, project 3 is one important ingredient for improving specialty clinic services in the DPH. Equally important for achieving the goal of a high performing medical neighborhood is redesigning the specialty consultation delivery model to more efficiently provide consultations. SFGH CMO Dr. Hal Yee is the innovator who developed the SFGH eReferral system, a Web-based electronic referral system integrated into the DPH's electronic health record. The eReferral system has proved to be a very successful innovation to reduce unnecessary and inappropriate specialty care visits, while improving the timeliness of specialty care access. Evaluation of eReferral at SFGH has found high levels of specialty and primary care provider satisfaction with the system and improved timeliness of specialty consultation. eReferral is now being used by the majority of specialty clinics at SFGH. A related strategy for redesigning delivery of specialty consultations is telemedicine. Telemedicine permits remote provision of specialty care by real-time video or store-and-forward of images. Consultations requiring patient interviews, such as HIV and nephrology consultations, are particularly well –suited to real-time video telemedicine modalities, whereas store-and-forwarding of images is particularly useful for dermatological and ophthalmological consultations. DPH has received funds from a recent state bond to support capital improvements in telemedicine, and is in the process of reconfiguring space and installing equipment for a DPH-wide telemedicine network. While these capital improvements will equip DPH for telemedicine operations between a specialty "hub" at SFGH and community based DPH primary care clinics, these bond funds cannot be used to pay for the actual telemedicine operating costs and DSRIP funds will be critical to making the telemedicine operation "go live."

We propose to build on the existing assets in innovative specialty care delivery in the DPH by expanding and improving eReferral and initiating telemedicine consultations in the DPH. The first goal will be to expand eReferral to all specialty clinics at SFGH, and add enhancements to the eReferral system. These enhancements will include implementation of a system for rating the quality of the bilateral communication between PCPs and specialists in near real-time that will permit targeted interventions to improve care coordination; greater embedding of evidence-based and local system-respecting guidelines for specialty care within eReferral to improve efficiency and consistency of care coordination; and integration of specialty trainees in the eReferral review process which will add resources for specialty care, but also enhance the education of our trainees. A second goal will be to implement telemedicine consultations in several specialty areas using both real-time video and image store and forward modalities.

<u>Expected result</u>: Specialty consultation redesign will result in improved patient-satisfaction and specialty care access, more efficient use of DPH specialists, and greater integration of specialty and primary care.

Relation to Categories 1 and 3: The specialty ambulatory care redesign will build on the specialist capacity expansion and specialty clinic supply and demand assessment conducted for Category 1, Project 3, and will also advance a more integrated medical neighborhood to enhance specialty service coordination with the primary care medical homes developed through Category 2, Project 1 PCMH Transformation. This project also aligns with the integration of behavioral health and primary care proposed in Category 2, project 2, towards a more comprehensive model of full-service integration using innovative models for co-management and primary care-specialty care collaboration. This project will also advance the goals of Category 3 — Population Focused Improvement for milestones focused on improving processes and outcomes in preventive and chronic care.

	Category 2 - rioject J. Neu	Constituting of opecially	Amountary care imough	eReferral and Telemedicine	<u>-</u>
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Projects This Project Feeds Into
1. Milestone: Bring 2	2. Milestone: Bring 2	5. Milestone: At least 70%	7. Milestone: At least 75%	9. Milestone: At least 80%	
additional specialty clinics online on eReferral Metric: Number of	additional specialty clinics online on eReferral (total of 4 additional clinics)	of all eReferral consultation request submissions are reviewed and responded to by a	all eReferral of all eReferral consultation request bmissions are submissions are viewed and		 Specialty Clinic Capacit (Cat. 1) Primary Care Redesign (Cat. 2) Integration of
eReferrals performed for the 2 additional specialty clinics	Metric: Number of eReferrals performed for the 2 additional specialty clinics	specialist within 3 business days of submission	pecialist within 3 specialist within 3 usiness days of business days of		Behavioral Health and Primary Care (Cat. 2) • Improve Cancer Screening Rates (Cat. 3
Data Source: eReferral		Metric:	Metric:	Metric:	Improve Chronic Care
data system.	Data Source: eReferral data system 3. Milestone: At least 65% of all eReferral consultation request submissions are reviewed and responded to by a specialist within 3 business days of submission Metric: O Numerator: number of eReferral submissions reviewed and responded to by a	 Numerator: number of eReferral submissions reviewed and responded to by a specialist within 3 business days of submission. Denominator: number of total eReferral submissions. Data Source: eReferral data system. 6. Milestone: Fully	 Numerator: number of	Numerator: number of eReferral submissions reviewed and responded to by a specialist within 3 business days of submission. Denominator: number of total eReferral submissions. Data Source: eReferral data system 10. Milestone: Provide at	Management and Outcomes (Cat. 3)
	responded to by a specialist within 3 business days of	6. Milestone: Fully implement telemedicine projects	8. Milestone: Provide at least 100 real-time video specialty	10. Milestone: Provide at least 100 real-time video specialty	

	_		,	,	
Year 1	Year 2	Year 3	Year 4	Year 5	Other Category Pro This Project Feeds
	submission. Denominator: number of total eReferral submissions. Data Source: eReferral data system 4. Milestone: Pilot telemedicine real-time video consultation in 1 specialty service line	from FY12 and expand real-time video consultation to 1 additional specialty service line and image store-and-forward telemedicine to 1 additional specialty service line Metric: # and location of telemedicine	consultations to DPH primary care clinics and deliver at least 200 consultations using image store and forward telemedicine for ophthalmology and/or dermatology Metric: # and location of telemedicine consults;	consultations to DPH primary care clinics and deliver at least 200 consultations using image store and forward telemedicine for ophthalmology and/or dermatology Metric: # and location of telemedicine consults	Timo Froject i ecus
	and image store-and- forward telemedicine in 1 specialty service line Metric: # and location of telemedicine consults; Data Source: DPH administrative records	consults Data Source: DPH administrative records	Data Source: DPH administrative records	Data Source: DPH administrative records	

Category 4: Urgent Improvement in Care

Key Challenges:

A driving force behind San Francisco General Hospital's (SFGH) mission is to improve patient safety and the quality of care for our patients. In recent years we have implemented a variety of performance improvement activities which have resulted in measureable gains on several indicators of inpatient safety and quality. However, we recognize that further improvement is needed. Fundamental to making the leap across the quality chasm is creating an institutional culture that fully embraces patient safety and quality of care and "hardwiring" systems of performance improvement into all SFGH operating procedures. We have identified three key challenges to urgent improvement of quality and patient safety at San Francisco General Hospital:

- 1. Need for greater attending physician involvement in all facets of patient care and performance improvement. While teaching hospitals such as SFGH have many assets that promote quality of care, the historical tendency to rely on residents as a key component of physician labor has presented some challenges for optimizing patient safety and quality. Transformation of the culture of SFGH into one that fully promotes patient safety and quality will require an amplified, 24/7 presence of attending physicians to provide and supervise the delivery of inpatient care. This amplified involvement of attending physicians as first-line providers will also need to be coupled with efforts to address one of the key issues that threaten patient safety and quality, which are the gaps that often occur during transitions of care. These transitions include changes of shift and the need for better processes of physician-to-physician sign out, transitions between units within the hospital such as from intensive care unit to medical-surgery ward, and transitions from hospital to home or skilled nursing facilities. Another key challenge for optimizing quality and safety in the acute care sector at SFGH has been the need for greater attending physician involvement in leadership of performance improvement and patient safety activities. Although SFGH has developed interdisciplinary performance improvement and patient safety teams, greater involvement of attending physicians on these teams is needed to enhance hospital-wide initiatives on performance improvement projects.
- 2. Need for structured learning for all providers and staff in performance improvement processes [connection to Category 1: Infrastructure Development]. SFGH has not achieved a culture that fully promotes patient-centered care, performance improvement, patient safety, and innovative models of care delivery. The relatively low HCAHPS Patient Experience scores at SFGH are an indicator of the need for this type of culture change. SFGH has a decentralized staff training and education model that is not optimal for systematically driving innovation and change management to meet organizational goals. SFGH does not have a clearly articulated and disseminated customer service model or a standardized training program for employees in customer service, patient-centeredness, patient safety, and performance improvement. Moreover, the work of organizations such as the Institute for Patient- and Family-Centered Care has made it clear that involving patients and families as members of performance improvement teams is another critical ingredient for advancing patient-centered efforts in performance improvement. SFGH has to date had very limited inclusion of patients and families on these teams.
- 3. Need for centralized data management [connection to Category 1: Infrastructure Development]. Just as training has traditionally been decentralized at SFGH, so has data management and analysis. Achieving more transformative gains in patient safety and quality will require a

more centralized approach to data collection, analysis, and tracking to inform the improvements proposed for the San Francisco Department of Public Health waiver program.

Proposed solutions:

DPH will implement the following measures to achieve Urgent Improvement in Care and address the challenges outlined above. While the aims for Urgent Improvement in Care will focus most intensively on four specific improvement areas, improve severe sepsis detection and management, Central Line-Associated Bloodstream infection (CLABSI) prevention, prevention of Venous Thromboembolism and Surgical Site Infections, these specific projects will be nested within a cross-cutting plan to transform the culture of SFGH into one that promotes patient-centeredness, patient safety and performance improvement in all facets of operations.

Increase the number of attending physician hospitalists and their leadership role on interdisciplinary performance improvement teams: We will recruit additional attending hospitalists in a variety of specialties to achieve more consistent and continuous attending physician involvement in all inpatient care activities and enhance the level of direct supervision of the care provided by residents on all hospital services, especially during evening and night-time shifts.

New acute inpatient care teams will be developed that include non-physician clinicians (NPs, PAs, CNMs, and Social Workers) working in more collaborative and cohesive team models that reduce reliance on resident physicians as first-line providers in the hospital setting. In addition, several hospitalist attending physicians will become members of an interdepartmental Hospitalist Performance Improvement Leadership Group and help to co-lead interdisciplinary performance improvement teams focused on <u>Severe Sepsis Early Detection and Management</u>, <u>Central Line-Associated Blood</u> Stream Infections, VTE Prophylaxis, Prevention of Surgical Site Infections, and other areas of needed improvement.

We will provide leadership training in performance improvement and create a learning community among these physicians to enhance physician ownership and leadership in performance improvement activities at SFGH.

Evidence-based guidelines will be utilized to help guide reliable care across the organization. Concurrent data management will be conducted to best guide care and correct errors in a timely fashion. Accurate Quality and Patient Safety data will be made available to improvement teams and hospital leadership in order to monitor performance and best guide improvement activities.

These proposed solutions will provide the key delivery system reform ingredients for implementing the specific patient safety and performance improvement activities to achieve the milestones proposed below for severe sepsis detection and management, CLABSI prevention, prevention of Venous Thromboembolism and Surgical Site Infections in addition to advancing goals for improvement in other areas.

A. Required Interventions:

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. Our current sepsis mortality is 38% (Q3 2009 – Q3 2010). For the past 18 months SFGH has actively participated in the Gordon and Betty Moore Foundation's Integrated Nurse Leadership Program (INLP) Sepsis Collaborative.

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

In support of SFGH's commitment to continuous quality improvement so that patients receive the safest and highest quality health care possible, we propose to make improvements in care provided to patients. We propose to improve severe sepsis detection and management to reduce unnecessary death and harm attributable to sepsis. Our interventions and improved processes are based upon the IHI recommended Surviving Sepsis Campaign to establish reliable detection and treatment for severe sepsis. This includes implementing both the Sepsis Management and Resuscitation Bundle and supporting interdisciplinary improvement teams to work collaboratively on implementing the bundle.

		Improve Seve	re Sepsis Detection and Manag	gement (required)	
	Year 1	Year 2	Year 3	Year 4	Year 5
1.	Create an interdisciplinary team that will work to improve severe sepsis detection and management Enlist physician(s) to	 4. Implement the Sepsis Resuscitation Bundle, as evidenced by: Train sepsis team on process 	6. Achieve X% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data	9. Achieve X% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data	12. Achieve X% compliance with Sepsis Resuscitation Bundle, where "X" will be determined in Year 2 based on baseline data
3.	champion sepsis improvement work	improvement and patient safety best practices.	7. Share data, promising practices, and findings with	10. Share data, promising practices, and findings with	Share data, promising practices, and findings
	data collection on Sepsis Resuscitation Bundle to SNI for purposes of establishing the baseline and setting	 Assign a RN to conduct concurrent chart reviews of sepsis patients. 	SNI to foster shared learning and benchmarking across the California public hospitals	SNI to foster shared learning and benchmarking across the California public hospitals	with SNI to foster shared learning and benchmarking across the California public hospitals
	benchmarks.	Continue participation in the Bay Area Patient Safety Collaborative Sepsis program to learn and share best practices related to improving severe sepsis and septic shock detection and management	8. Report Sepsis Resuscitation Bundle and Sepsis Mortality results to the State	11. Report results to the State	14. Report results to the State
		 Coordinate strong partnerships among emergency department, critical care, and medical- surgical units measured by a written agreement. 			

Improve Severe Sepsis Detection and Management (required)						
Year 1	Year 2	Year 3	Year 4	Year 5		
	5. Report the Sepsis Resuscitation Bundle results to the State					

Intervention #2: Central Line Associated Blood Stream Infection (CLABSI) Prevention

Key Challenge: Reducing harm or death to patients seeking care due to CLABSI.

Central Line Associated-Bloodstream Infections 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. In 2008 SFGH formally established a multidisciplinary task force to develop and implement solutions to reduce the rate of Central Line Associated -Bloodstream Infections. Key interventions included the implementation of the Central Line Insertion Practice (CLIP) Bundle form with placement into the central line kits; the creation of a standardized central line insertion kit; and the use of CHG antiseptic solution in all patients unless medically contraindicated. Additionally a CLABSI/CLIP awareness campaign was initiated that included an educational overview via computer-based training systems to all clinical care providers and targeted "live" education to clinical staff that played critical role in caring for central line patients. Through these measures the SFGH rate for CLABSI has shown consistent decrease since 2007; in the Critical Care areas a decrease from 2007 rate of 2.8 per 1000 CL days to 1.21 per 1000 CL days in 2009. SFGH has performed "total house" surveillance for Peripherally Inserted CLABSI with reported data back to 2007, for this we have shown a decrease from 0.9 per 1000 PICC Line days to 0.6 per 1000 PICC Line days.

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 further improve SFGH's CLABSI based upon our year 1 baseline. Our interventions and improved processes are based upon improving compliance with the central line insertion bundle.

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

	Central Line-Associated Bloodstream Infection (CLABSI) Infection Prevention (required)							
	Year 1	Year 2		Year 3		Year 4		Year 5
2.	Create an interdisciplinary team that will work to improve CLABSI prevention Report at least 6 months of data collection on CLIP	 Implement the Central Line Insertion Practices (CLIP), as evidenced by: Develop an accurate electronic process for identifying all patients 	7.	Achieve X% compliance with CLIP, where "X" will be determined in Year 2 based on baseline data Share data, promising	10.	with CLIP, where "X" will be determined in Year 2 based on baseline data	14.	with CLIP, where "X" will be determined in Year 2 based on baseline data
	to SNI for purposes of establishing the baseline and setting benchmarks	who have central lines placed throughout the facility. • Develop a standardized method	O.	practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals		Bloodstream Infections by X%, where "X" will be determined in Year 2 based on baseline data		Bloodstream Infections by X%, where "X" will be determined in Year 2 based on baseline data
		of physician documentation that addresses all the components of the central line insertion bundle measures. • Develop educational	9.	Report CLIP and CLABSI results to the State	12.	Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospital.	16.	Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals
		materials (in five different languages) for in and out patients on central line care and maintenance.			13.	Report CLIP and CLABSI results to the State	17.	. Report CLIP and CLABSI results to the State
		4. Report at least 6 months of data collection on CLIP to SNI for purposes of establishing the baseline and setting benchmarks.						

	Central Line-Associated Bloodstream Infection (CLABSI) Infection Prevention (required)						
Year 1	Year 2	Year 3	Year 4	Year 5			
	5. Report at least 6 months of data collection on CLABSI to SNI for purposes of establishing the baseline and setting benchmarks.						
	6. Report CLIP results to the State.						

Intervention #3: Surgical Site Infection

Key Challenge: Reducing harm or death to patients seeking care due to Surgical Site Infection

Surgical site infections can harm and kill patients if not prevented or 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.

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 surgical site infection prevention to reduce unnecessary death and harm attributable to sepsis. Our interventions and improved processes from are based upon:

Intervention #3 Surgical Site Infection Prevention

	Surgical Site Infection Prevention						
Year 1 / \$1.271M	Year 2	Year 3	Year 4	Year 5			
1. Create an interdisciplinary team that will work to improve Surgical Site Infection Prevention	2. Report at least 6 months of data collection on SSI to SNI for purposes of establishing the baseline and setting benchmarks 3. Report results to the State	 4. 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 5. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals 6. Report results to the State 	 7. 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 8. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals 9. Report results to the State 	9. 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 10. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public hospitals 11. Report results to the State			

Intervention #4: Venous Thromboembolism Prevention & Treatment

Key Challenge: Reducing harm or death to patients seeking care due to Venous Thromboembolism.

Venous Thromboembolism (VTE) 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. In 2010, SFGH conducted a pilot of VTE Prophylaxis physician order sets to assess feasibility of assuring all patients are screened and provided prophylaxis as appropriate.

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

In support of our commitment to continuous quality improvement so that patients receive the safest and highest quality health care possible, we propose to make improvements in care provided to patients. We propose to improve the quality of care at SFGH by implementing a VTE prevention program. Pulmonary embolism resulting from VTE is the most common preventable cause of hospital death and the risk is often not recognized until it is too late. Methods to prevent VTE and PE have been advocated as safe, effective, and cost-effective by numerous clinical authorities and guidelines. However, preventive methods are underutilized and no single strategy has proven to be effective at ensuring optimal prevention. Through this proposal we intend to analyze and redesign our care delivery and performance tracking by embedding evidence-based medicine within our local context. We will build upon our Anticoagulation Therapy Program (based upon the National Patient Safety Goals) as well as our SCIP Core Measure and Joint Commission Certified Stroke Center Program, by implementing the VTE Core Measure. Our aim is to develop a hospital-wide VTE Prophylaxis program that pulls together the various patient safety initiatives into a coordinated effort to reduce mortality and morbidity associated with VTE.

		Venous Thromboembolism (VTE) Prevention and Treatment	
Year 1	Year 2	Year 3	Year 4	Year 5
1. Create an interdisciplinary team to work on VTE Prevention and Treatment.	2. Report at least 6 months of data collection on the VTE process measures to SNI for purposes of establishing the baseline and setting	4. Increase the rate of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission by X, where "X" will be determined in Year 2 based on baseline data.	11. Increase the rate of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission by X, where "X" will be determined in Year 2 based on baseline data.	18. Increase the rate of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission by X, where "X" will be determined in Year 2 based on baseline data.
	benchmarks. 3. Report the 5 VTE process measures data to the State.	5. Increase the rate of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer) by X, where "X" will be determined in Year 2 based on baseline data.	12. Increase the rate of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer) by X, where "X" will be determined in Year 2 based on baseline data.	19. Increase the rate of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer) by X, where "X" will be determined in Year 2 based on baseline data.
		6. Increase the rate of patients diagnosed with confirmed VTE who received an overlap of parenteral (intravenous [IV] or subcutaneous [subcu]) anticoagulation and warfarin therapy by X, where "X"	13. Increase the rate of patients diagnosed with confirmed VTE who received an overlap of parenteral (intravenous [IV] or subcutaneous [subcu]) anticoagulation and warfarin therapy by X, where "X"	20. Increase the rate of patients diagnosed with confirmed VTE who received an overlap of parenteral (intravenous [IV] or subcutaneous [subcu]) anticoagulation and warfarin therapy by X, where "X"

	Venous Thromboembolism (VTE) Prevention and Treatment					
Year 1	Year 2	Year 3	Year 4	Year 5		
		will be determined in Year 2 based on baseline data.	will be determined in Year 2 based on baseline data.	will be determined in Year 2 based on baseline data.		
		7. Increase the rate of patients diagnosed with confirmed VTE who received intravenous (IV) UFH therapy dosages AND had their platelet counts monitored using defined parameters such as a nomogram or protocol by X, where "X" will be determined in Year 2 based on baseline data.	14. Increase the rate of patients diagnosed with confirmed VTE who received intravenous (IV) UFH therapy dosages AND had their platelet counts monitored using defined parameters such as a nomogram or protocol by X, where "X" will be determined in Year 2 based on baseline data.	21. Increase the rate of patients diagnosed with confirmed VTE who received intravenous (IV) UFH therapy dosages AND had their platelet counts monitored using defined parameters such as a nomogram or protocol by X, where "X" will be determined in Year 2 based on baseline data.		
		8. Increase the rate of patients diagnosed with confirmed VTE that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions by X, where "X" will be determined in Year 2 based on baseline data.	15. Increase the rate of patients diagnosed with confirmed VTE that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions by X, where "X" will be determined in Year 2 based on baseline data.	22. Increase the rate of patients diagnosed with confirmed VTE that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions by X, where "X" will be determined in Year 2 based on baseline data.		
		9. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public	16. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public	23. Share data, promising practices, and findings with SNI to foster shared learning and benchmarking across the California public		

Venous Thromboembolism (VTE) Prevention and Treatment					
Year 1	Year 2	Year 3	Year 4	Year 5	
		hospitals. 10. Report the 5 VTE process measures results to the State.	hospitals. 17. Report the 5 VTE process measures and incidence of potentially-preventable VTE data to the State.	hospitals. 24. Report the 5 VTE process measures and incidence of potentially-preventable VTE data to the State.	