Performance Improvement Annual Report

July 2014 - June 2015

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Department of Patient Safety & Quality

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Chief Quality Officer

and

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Vice Dean for Clinical Affairs

UCSF Medical Center

UCSF Benioff Children's Hospitals

Dear UCSF Community:

We are pleased to share with you our FY2015 Performance Improvement Annual Report. This report reflects the substantial time and commitment of many people, teams, and committees that collectively help us strive to deliver the highest quality of care at UCSF. Organizing the report each year provides our organization an important opportunity to reflect on our accomplishments and identify areas for improvement. Our detailed report also aims to provide a transparent view into the quality of care we deliver.

The Quality Improvement Executive Committee (QIEC) for UCSF Health provides executive oversight of quality, safety, and performance improvement activities. The QIEC is responsible for the evaluation of a comprehensive Performance Improvement Plan and reports monthly to our Executive Medical Board.

A few key highlights from the past year include:

- UCSF Medical Center ranked #8 in U.S. News & World Report
- Benioff Children's Hospital with 9 specialties nationally ranked in the U.S. News & World Report
- California Department of Public Health fully licensed our new Mission Bay Hospital campus
- UCSF Medical Center's Organizational Quality Goals were achieved

It's an exciting time in healthcare and for UCSF Health with a growing emphasis on the quality—rather than quantity—of care we deliver. Leveraging the efforts captured in our annual report, we believe that we're well positioned to achieving the "quadruple aim" of providing high quality and cost-effective care with an outstanding patient, provider, and staff experience.

Dr. Adler and I would like to express our gratitude and admiration to the frontline providers and staff who allow us to provide the high-quality care reflected in this report. We also thank the many leaders and team members of the initiatives captured in the report. The improvements highlighted are a direct result of their commitment to excellence. Finally, we would like to personally thank Tina Mammone for all of her contributions as the Interim Executive Director for Patient Safety and Quality.

Sincerely,

Niraj Sehgal, MD, MPH
Chair, QIEC
Chief Quality Officer

Josh Adler, MD
Executive VP, Physician Services &
Vice Dean for Clinical Affairs

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EXECUTIVE SUMMARY

This table represents a high-level assessment of key performance indicators reported to Quality Improvement Executive Committee (QIEC) for work completed in Fiscal Year 2015. Details on each are contained in the body of the report.

OUTSTANDING PERFORMANCE	**NATIONAL AND CALIFORNIA STAGES** ▪ UCSF Medical Center ranked #8 in U.S. News & World Report's America's Best Hospitals ▪ UCSF Benioff Children's Hospital San Francisco (BCHSF) achieved National Ranking in 9 specialties in U.S. News & World Report's America's Best Children's Hospitals ▪ UCSF Medical Center's Moffitt/Long Hospital recognized by Leapfrog with a Hospital Safety Score "A"— the highest rating ▪ Seven primary care practices received the Patient-Centered Medical Home recognition by the National Committee for Quality Assurance ▪ UCSF Medical Center recognized by The American College of Surgeons National Surgical Quality Improvement Program for achieving a Meritorious Composite Quality score for combination of 8 surgical outcomes ▪ UCSF Influenza Program awarded the National Winner for Immunization Excellence-Healthcare Personnel by the National Adult & Influenza Immunization Summit ▪ The California Department of Public Health fully licensed our new Mission Bay Hospital ▪ Achieved all Delivery System Reform Incentive Pool (DSRIP) milestones for FY2015 **UCSF MEDICAL CENTER FOCUS** ▪ **Organizational Quality and Patient Satisfaction Goals for FY2015 were achieved** • Achieved >90% of inpatients screened and vaccinated for influenza • Achieved 64% vaccination rate (goal 51%) among primary care patients age 50 or older • Total compliance with influenza program for all faculty, staff, and residents was 98% ▪ **Quality and Safety Focus** • Lean efforts were galvanized to serve as our organization's improvement methodology. There have been 13 unique value streams and over 50 kaizen workshops to support these value streams. Significant accomplishments also achieved in the training and development of Lean-certified providers. • The Continuous Process Improvement (CPI) Hub supported the first wave of Unit-Based Leadership Teams in both the hospital and ambulatory setting; the teams have completed several improvement cycles focused on provider/staff engagement and experience as well as other organizational quality goals. A data portal, CPI 101 training modules, and the Caring Wisely initiative are other accomplishments this past year • More than 10,000 incident reports reviewed, 24 root cause analyses conducted, and 109 specific improvements implemented (e.g. communication, medication safety, etc.)

	• Achieved organizational goal for patient experience with 88% top box score for "Would recommend to family and friends" for hospital stay • Hand hygiene compliance rate increased again over the past year to 93% based on 41,424 observations • Incidence of catheter-associated urinary tract infection and ventilator-associated pneumonia cases were significantly lower than expected • Surgical site infection rates were significantly lower than predicted in 14 individual surgical categories • Improved performance compared to previous years on the National Cancer Database metrics for treatment of patients with breast and colon cancer • Immediate adult cardiopulmonary resuscitation (CPR) survival rates 76.1% compared to 48.5% national benchmark and hospital discharge rates after CPR 39.1% compared with 15.4% national benchmark • Immediate pediatric CPR survival rates 87% compared to 53% national benchmark, and hospital discharge rates after CPR 53% compared with 27% national benchmark • The Virtual Glucose Management Service demonstrated improved glucose management with an increase in the number of patients in target glucose range and a reduction in patients experiencing hyperglycemia • BCHSF implemented an innovative electronic surveillance system called the Pediatric Early Warning Scores ▪ **Nursing Focus** • Hospital-acquired pressure ulcer prevalence rates reduced to 0.95% • Falls with injury prevalence rates reduced to 0.31% • Bar code medication administration scanning and medication compliance greater than 96% ▪ **Utilization and Throughput** • Length of stay (LOS) index reduced to 1.07; discharge before noon >20% for 7/12 months • 30-day readmission rate and average LOS reduced in our Accountable Care Organizations patient populations due to targeted interventions (from Office of Population Health) • Operating room case volumes increased and average post-anesthesia care unit LOS decreased compared with previous years
STRIVING TO IMPROVE	**NATIONAL AND CALIFORNIA STAGES** ▪ Readmission rates for acute myocardial infarction, heart failure, pneumonia, total knee arthroplasty/total hip arthroplasty, and chronic obstructive pulmonary disease within national average rates ▪ Performance in the Centers for Medicare & Medicaid Services (CMS) Value-Based Purchasing (VBP) metrics *(care measures, patient experience, and 30-day mortality rates)* ▪ University Health Consortium rankings (UHC) only at 3 star level **UCSF MEDICAL CENTER FOCUS** ▪ *Clostridium difficile* infection rates are higher than benchmarks ▪ Ambulatory patient experience scores are below 50th percentile nationally ▪ Attending co-signature of discharge summaries is only 49% within 48 hours

UCSF HOSPITAL-WIDE QUALITY INITIATIVES

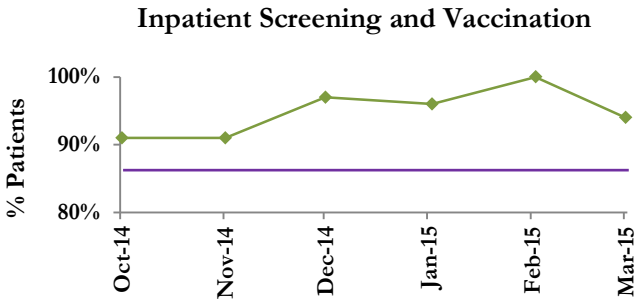
MEDICAL CENTER QUALITY GOALS

Each year the Medical Center sets organization-wide goals covering Patient Safety & Quality, Patient Experience, and Financial Performance for the employee Incentive Award Program. Three quality-focused goals were selected.

INCREASE INPATIENT VACCINATIONS TO 90% (3 OF 6 MONTHS)

ACHIEVED

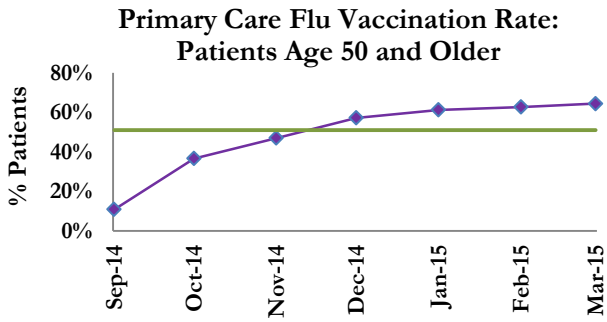
UCSF Medical Center exceeded the goal by achieving >90% of inpatients screened for influenza immunization status and vaccinated, if indicated, for the 2014 – 2015 flu season (6 of 6 months).



INCREASE PRIMARY CARE VACCINATIONS TO 51%

ACHIEVED

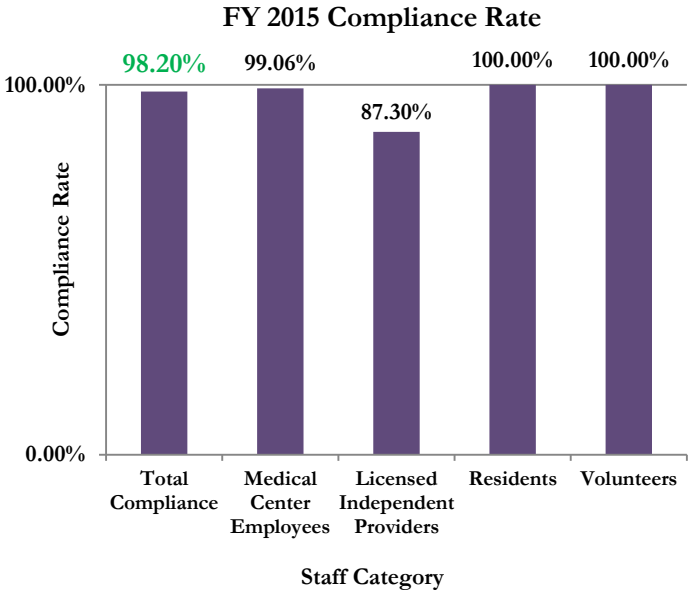
UCSF Medical Center exceeded the goal by achieving a flu vaccination rate of 64% among primary care patients age 50 and older.



MAINTAIN FACULTY, STAFF, AND RESIDENTS COMPLIANCE AT >95%

ACHIEVED

Total compliance (defined as vaccination given or formal declination and use of mask in patient care areas) for all staff categories at the end of the season was 98.2%. Actual vaccination rate was just over 90% which meets Healthy People 2020 target for healthcare personnel. The program was named the National Winner for Immunization Excellence – Healthcare Personnel by the National Adult and Influenza Immunization Summit.



THE QUALITY LANDSCAPE

CMS 30-DAY READMISSION MEASURES

Readmission measures are being followed in two CMS programs using Med PAR claims data. The programs differ in time periods and their selected methodologies for performance assessment.

1) The Hospital Readmissions Reduction Program (HRRP)[1]

- Focus population and measures include Risk-Standardized Readmission for acute myocardial infarction (AMI), heart failure (HF), pneumonia (PN), total hip/knee replacement (THA/TKA), chronic obstructive pulmonary disease (COPD) and stroke.
- Penalties of 3% for FY2015 are applied to all DRG payments when readmission rates for targeted populations are greater than expected. UCSF readmission penalties for FY2015 were $342,000.

2) The Inpatient Quality Report (IQR)

- Focus population and measures include Risk-Standardized Readmission for AMI, HF, PN, THA/TKA, stroke, COPD), and Hospital-Wide All-Cause Unplanned Readmission (HWR). FY2016 will include CABG.
- Rates are published on CMS Hospital Compare website: http://www.hospitalcompare.hhs.gov/

30-Day Readmission Measures	HWR	AMI	HF	PN	THA/TKA	COPD	Stroke
CMS Hospital Readmission Reduction Program (7/2011-6/2014)							
UCSF Risk Stratified Excess Readmission Ratio		1.0263	1.0666	1.0929	1.0849	1.0694	
UCSF Readmission Rate		17.8%	24.7%	19.3%	5.3%	23.1%	12.9%
Hospital Compare – 2015 IQR Program (7/2011-6/2014)							
UCSF Performance	Worse than the National Rate	No Different than U.S. National Rate	No Different than U.S. National Rate	No Different than U.S. National Rate	No Different than U.S. National Rate	No Different than U.S. National Rate	No Different than U.S. National Rate
UCSF Standardized Readmission Ratio (SRR)[2]	1.07						
UCSF Risk-Standardized Readmission Rate	16.3%	17.3%	23.4%	18.6%	5.2%	21.7%	13.3%
National Observed Readmission Rate	1.00	17.0%	22.0%	16.9%	4.8%	20.2%	12.7%

Quality efforts around readmission reduction are led by the UCSF Transitions of Care Steering Committee and have centered on improving hospital discharge practices, home discharge telephone follow-up, UC system-wide ongoing collaboration with shared best practices and goals, and implementation of our post-acute care strategy.

VALUE-BASED PURCHASING (VBP) – FY2016

- The VBP scores are calculated based on a baseline period of calendar year 2012 and the performance period of calendar year 2014.
- The CMS FY2016 VBP program reflects performance on select clinical process of care measures (Core Measure, 10%), patient experience measures (Hospital Consumers Assessment of Healthcare Providers and Systems, HCAHPS, 25%), outcome (mortality – AMI, HF, PN; AHRQ PSI-90; and CLABSI, 40%), efficiency measure (MSPB[3], 25%). Based on performance, 1.75% of the UCSF base DRG payment basket update is at risk.
- UCSF received a VBP score of 34.17 points; this resulted in a 0.091% decrease in DRG base payment. The highest performing domain was outcomes due to lower than expected mortality and fewer selected infections. The lowest performing domain is efficiency due to higher than expected Medicare spending per beneficiary.

[1] Published June 2015 for FFY 2015, with hospital discharges that occurred between July 1, 2011 and June 30, 2014.
[2] Standardized Readmission Ratio: Risk-Adjusted Observed versus Expected Ratio
[3] Medicare Spending per Beneficiary

The Quality Landscape (continued from previous page)

DSRIP PROGRAM

DSRIP refers to the CMS sponsored **D**elivery **S**ystem **R**eform **I**ncentive **P**ool in the demonstration waiver that provides federal matching funds up to $3.3 billion statewide over five years (FY2011 – FY2015) to help support efforts by county and University of California hospitals to improve quality. This program was set up with the intent to meet the demands associated with the increase in MediCal enrollment due to the Affordable Care Act.

Four focused intervention areas under DSRIP at UCSF are listed below, with quality of care at the center of the work. The following section describes the achievements and activities in FY2015[4]. All of DSRIP milestones were met in 2015, with an achievement value of $58,300,000.

Category	Elements	Achievements and Activities
Category 1: Infrastructure Development	Expanded Primary Care Capacity (Access)	▪ Visit volume target was achieved and exceeded, with 115,526 primary care visits. ▪ MyChart encounters have been analyzed and a portion is being counted as virtual visits. Work is ongoing to refine data and payment methodologies with payors. This year, primary care providers received over 113,741 requests for medical advice through the MyChart portal.
	Implement and Utilize Disease Management Registry Functionality (Quality)	▪ Diabetes, anticoagulation, pediatric asthma, colorectal, cervical cancer and pediatric immunization screening registries have been created and are in use in all primary care clinics, including pediatric primary care. ▪ These registries continue to drive population health performance improvement interventions at both the clinic and provider levels and provide data for us in our panel management program, for example colorectal cancer screening has over 19,200 being actively managed by panel managers.
	Enhance Performance Improvement and Reporting Capacity (Quality)	▪ QlikView dashboards, analytic and data display tools have been developed for real-time access for operational and quality measure data. The DischDash, QualDash FlashDash, SepsisDash, and the ReDash are operational and in use.
Category 2: Innovation and Redesign	Expand Medical Homes (Access)	▪ Care Support, our program to provide intensive care management of high utilizer and complex patients has enrolled over 441 high risk and complex patients to our registry. ▪ A total of seven primary care practices have received the Patient-Centered Medical Home (PCMH) recognition by the National Committee for Quality Assurance (NCQA). ▪ Over 1350 high risk seniors and people with disabilities (SPDs) have been assigned providers in UCSF Medical homes.
	Increase Specialty Care Access/ Redesign Referral Process (Access)	▪ E-referrals and smart phrase technology have been successfully implemented in eighteen(18)) specialty practices resulting in the redesign of the specialty referral process. ▪ Over 1400 E-consults have occurred between PCP and specialty providers in FY2014. E-consults account for 7% of all referrals from primary care to medical specialty providers.
	Implement/Expand Care Transition Programs (Quality)	▪ The centralized RN-led discharge telephone call program called over 20,000 patients within 48 hours of discharge, maintain a reach rate of 75%. Currently, 80% of all patients discharged home are enrolled in this program. ▪ The post-acute care strategy workgroup has signed quality care agreements with five (5) local SNFs. ▪ UCSF has entered into an affiliation with Hospice by the Bay.

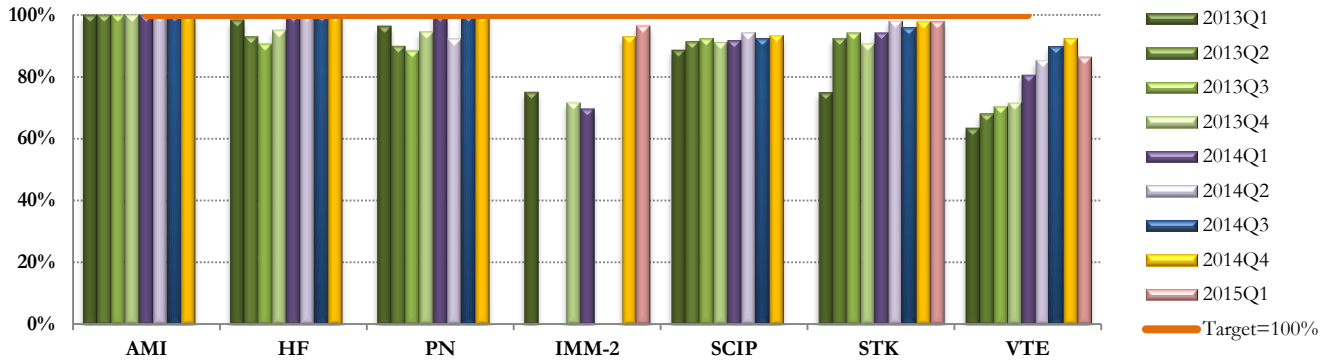
[4] FY 2014 = DY 9, Demonstration Year 9

Category	Elements	Achievements and Activities
Category 3: Population-Focused Improvement *UCSF reported new metrics reflecting population health*	Patient/Caregiver (PC) Experience (Patient Experience)	▪ UCSF Medical Center has been surveying a random sample of patients in all of the medical center's adult primary care practices since April 2, 2012. ▪ The PC strategies committee has incorporated patient experience metrics and performance targets into their integrated dashboard. Consensus was achieved across all of primary care to increase CGCAHPS scores. ▪ Courteousness of office staff was 91.5% in FY2015.
	Care Coordination (Quality)	**Between July 1, 2014-June 30, 2015:** ▪ 1.2% of our primary care patients with diabetes were admitted to UCSF with a primary diagnosis of a short term complication from diabetes ▪ 0.0% of our primary care patients with diabetes were admitted to UCSF with a primary diagnosis of uncontrolled diabetes ▪ 0.4% of our primary care patients were admitted to UCSF with a primary diagnosis of CHF ▪ 0.12% of our primary care patients were admitted to UCSF with a primary diagnosis of COPD
	Preventive Health (Quality)	**Between July 1, 2014-June 30, 2015:** ▪ 77% of our primary care patients were screened for breast cancer ▪ 65% of our primary care patients were immunized for influenza ▪ 88% of our pediatric primary care patients were weight screened (BMI) ▪ 28% of our pediatric primary care patients had a BMI > 85th percentile ▪ 45% of our primary care patients who smoke were given smoking cessation advice/counseling
	At-Risk Populations (Quality)	**Between July 1, 2014-June 30, 2015:** ▪ 44% of our primary care patients with diabetes had an LDL level <100mg/dl ▪ 65% of our primary care patients with diabetes had a Hemoglobin A1C level <8% ▪ 14.5% of our primary care patients admitted for CHF were readmitted within 30 days ▪ 60% of our primary care patients with hypertension had blood pressure control (< 140/90) ▪ 47% of our pediatric primary care patients with persistent asthma were prescribed at least one controller medication ▪ 21% of our primary care patients with diabetes adhered to all elements of the diabetes composite measure
Category 4: Urgent Improvement in Quality and Safety	Improve Severe Sepsis Detection and Management (Quality)	▪ Implemented SepsisDash, a robust BI analytic dashboard, which captures near real-time sepsis bundle compliance and mortality. ▪ Current bundle compliance rate on required elements of care on all units is 78% and overall adult hospital mortality from sepsis was reduced to 19% for FY2014. ▪ Operationalized a pediatric sepsis alert for the ED; and developing early warning sepsis criteria for OB patients.
	Central Line-Associated Bloodstream Infection (CLABSI) Prevention (Infection Control)	▪ UCSF achieved and exceeded DSRIP reduction targets for CLABSI rates: Acute Care, 1.28%, ICU, 1.34%, and neonatal ICU 1.1%. ▪ Ongoing education continues and re-education has been instituted within Nursing annual review. ▪ 99.8% CLIP rate was achieved.
	Surgical Site Infection (SSI) Prevention (Quality and Infection Control)	▪ UCSF has committed to SSI reduction via DSRIP in the following 7 procedures: colon, rectal, small bowel, C-section, knee and hip arthroplasty and appendectomy. ▪ A 22.4% reduction in SSI in these targeted populations was achieved over FY2014, with an aggregate SIR of 0.499 (p=0.0004; 95% CI 0.317, 0.750).
	Hospital Acquired Pressure Ulcer (HAPU) Prevention (Nursing Care)	▪ FY2015 HAPU rate was 0.88 %, significantly less than the DSRIP target of <1.1%.

The Quality Landscape (continued from previous page)

CORE MEASURES

The graph below reflects composite performance for each core measure set (CY quarters):



Acute Myocardial Infarction (AMI) Measures

- Excellent performance, 100% compliance in composite score continuously for 9 quarters. AMI measures, except AMI-7a, were retired in Q1 2015.

Heart Failure (HF) Measures

- Concurrent case review, staff education and template discharge language contributed to 100% compliance for 4 consecutive quarters. HF measures were retired in Q1 2015.

Pneumonia (PN) and Immunization Measures (IMM)

- IMM-2 measure compliance improved by 35% from prior season through implementation of two key initiatives: 1) New influenza vaccine order at discharge workflow requirement, and 2) Concurrent review processes for non-compliant cases with recommendations for corrective actions when applicable. Workflow for FY2016 was further refined to improve provider screening.
- PN and IMM-1 measures were retired in Q1 2015.

Surgical Care Improvement Project (SCIP) Measures

- Removal of urinary catheter on post-op day 1 or 2 provided the greatest compliance challenge through 2014. With staff education, concurrent review, implementation of APeX Best Practice Alerts and smart text templates for provider documentation, Inf-9 compliance reached 98.9% in Q4 2014.
- Five unusual instances of non-standard antibiotic selection occurred in Q4 2014. These events obscured the positive effect of Inf-9 improvements on the composite score.
- SCIP measures were retired in Q1 2015.

Stroke (STK) Measures

- Continued concurrent review and reinforced staff education
- Removed non-compliant stroke education templates in the nursing documentation flowsheets
- Implemented the Code Stroke Note
- Unit Based Leadership Team activity on 8S/8L helps to sustain focus on performance.

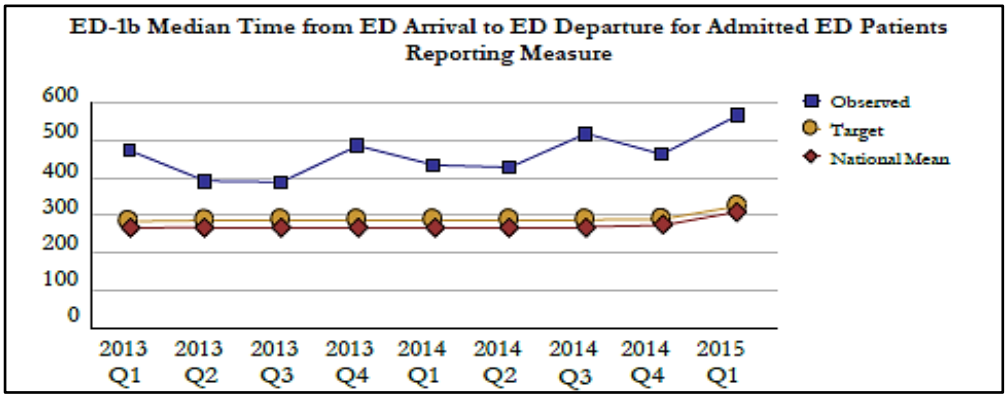
Venous Thromboembolism (VTE) Measures

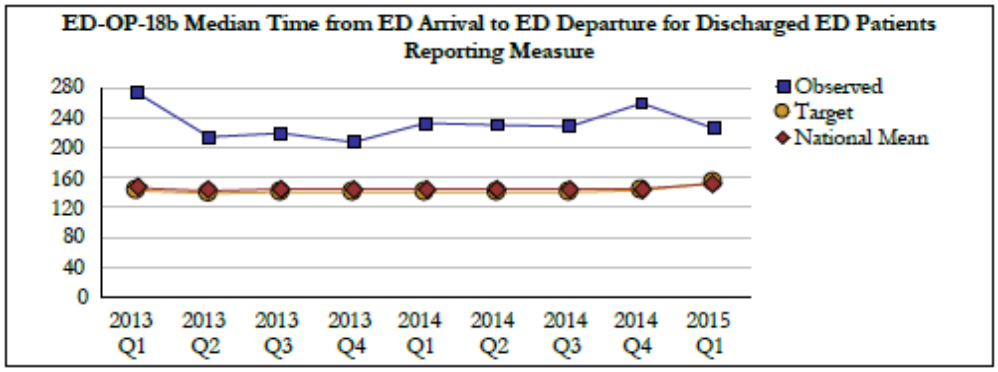
- Reassigned warfarin teaching responsibility to pharmacy.
- Built concurrent report of all admitted patients showing VTE-prophylaxis compliance of all eligible patients.
- On a daily basis, nursing leaders are notified of mechanical VTE-prophylaxis (Sequential Compression Device) application outliers on their units permitting them to make real time corrections.
- VTE committee welcomed ICU RN representative to focus on VTE-2 which is an ICU specific measure.
- Working with BCHSF clinical leaders to develop a VTE admission order set to address patients 21 and up admitted to the pediatric service.

The Quality Landscape (continued from previous page)

ED Throughput Measures

- ED-1b measures the median time from ED arrival to ED departure for admitted ED patients. Average national target is 287.3 minutes. UCSF average for the last 9 quarters was 433.62 minutes.
- ED-OP-18b measures the median time from ED arrival to ED departure for discharged ED patients. Average national target is 140 minutes. UCSF average for the last 9 quarters was 229.5 minutes.
- In FY2015, all of the efforts around patient throughput and ED door to floor for the past year have centered around 1) transition to Mission Bay and 2) opening ADDITIONAL beds in the adult hospital. There have been continued efforts around Lean and Discharge Before Noon at the UBLT and resident level. Patient flow and capacity issues continue to be challenging opportunities for improvement.





Target: *The Joint Commission target lower limit*
National Mean: *The mean of all comparison group observed rates obtained from the Core Measure National Comparison Group File.*

The Quality Landscape (continued from previous page)

UNIVERSITY HEALTHSYSTEM CONSORTIUM (UHC)

2005-2015 QUALITY & ACCOUNTABILITY STUDY RANKING

UHC Quality/Accountability Metric Rank	Ranking										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Overall Composite Rank[5]	2★ 61	3★ 39	5★ 10	3★ 34	4★ 18	4★ 30	3★ 57	3★ 63	3★ 67	2★ 82	**3★ 57**
Overall Composite Score *(higher is better **only** in this row)*	58.2	60.3	70.1	66.6	70.1	68.5	63.5	52.3	63.4	61	**64**
Mortality *O:E ratios of selected service lines*	58	29	13	20	36	55	62	63	72	60	**27**
Effectiveness *Core Measures and 30-day readmission rates*	12	56	18	21	51	23	41	80	83	92	**46**
Safety *Complications of Care : AHRQ PSIs and VTE, CLABSI, CAUTI, SSI*	22	26	16	22	5	11	6	14	4	49	**47**
Equity *No disparity of care based on race, gender, payor*	78	1	1	1	1	1	1	86	1	1	**1**
Patient Centeredness *Patient satisfaction scores; HCAHPS question + composite*	N/A	5	8	33	1	51	20	31	41	23	**31**
Efficiency	70	69	61	24	89	95	99	97	96	103	**100**

Key points regarding UCSF performance and the UHC methodology:

- With the exception of Star Ranking and Overall Composite Score, lower is better for ranking scores.
- Coding and documentation have a great influence on all observed to expected metrics. Since October 2012, much progress has been made in this area by the Clinical Documentation Improvement program.
- Mortality: This domain is scored using both system level and service-line level Observed: Expected (O: E) mortality ratios. New in 2015, The Mortality aggregate O/E now excludes 8 service lines (Cardiology, Cardiothoracic Surgery, Gastroenterology, Medical Oncology, Medicine General, Neurology, Neurosurgery and Surgery General) because these services lines are evaluated separately in this domain.
- Effectiveness: The score of this measure was adversely impacted 30 day readmission rate and Emergency Room flow metrics. Core measure component of this score included SCIP IP and SCIP OP, ED-IP and ED-OP, Stroke and VTE.
- Safety: New in 2015 is the addition of a new NHSN metric, the SIR for *Clostridium difficile* Infection (*CDI*) and the AHRQ metric PSI-13: Post-operative Sepsis Rate. The PSIs are based on the AHRQ v4.5a specifications. The Safety Domain consists of 5 AHRQ Patient Safety Indicators (pressure ulcer, iatrogenic pneumothorax, post-op hemorrhage/hematoma, post-op respiratory failure, and post-op sepsis) in addition to infection control measures submitted to NHSN (CLABSI, CAUTI, SSI, and CDI) and hospital acquired VTE rates from core measure abstraction.
- Equity: This reflects the composite scores for ED, SCIP, Stroke and VTE core measures, testing for statistically significant differences in outcomes in 3 equity –based dimensions: gender, race and socioeconomic status (by payor class). We achieved all possible credit in this domain.
- Patient Centeredness: Included 9 specific HCAHPS measures on nurse and physician communication, pain management, communications about medications, cleanliness and quietness, responsiveness of staff, transitions of care and discharge information. Discharge process achieved a score of 6/8, six indicators achieved 5/8 points and pain management and medication teaching both were scored at 4/8.
- Efficiency: LOS and direct cost O:E ratios were used for 10 service lines. Performance on this measure is significantly influenced by the Bay Area wage index. By this metric, UCSF is the highest in the UHC cohort. We achieved 1/8 points in this domain.

[5] Lower Ranking is better for all metrics except Composite Score. A star ★ designation describes five UHC performance groups (5★ is best)

THE AMERICAN COLLEGE OF SURGEONS NATIONAL SURGICAL QUALITY IMPROVEMENT PROGRAM (ACS NSQIP)

In July 2015, ACS NSQIP published its semi-annual report for period January through December 2014. In 2014, UCSF continued using the refined methodology of the NSQIP case selection, focusing on specific procedures which provided more useful outcomes data on selected high volume and high risk surgical procedures. This report is based on a total of 768,612 cases in the NSQIP comparative cohort, with 2,049 cases of January – December 2014 at UCSF. The report includes targeted high-risk procedures from *General Surgery, Vascular Surgery, Colorectal Surgery, Gynecologic Surgery, Neurosurgery, Orthopedic Surgery, Thoracic Surgery, and Urology*. As a result, more refined outcomes data are available this year.

Meritorious Composite Quality Score – For two consecutive years, UCSF Medical Center has been recognized by ACS NSQIP for achieving a *Meritorious Composite Quality Score* based on a combination of eight surgical outcomes: Mortality, Cardiac, Respiratory (pneumonia), Unplanned Intubation, Ventilator >48 hours, Renal Failure, SSI, and UTI for all surgery cases for the performance period of January 2014 through December 2014.

PROCEDURE-TARGETED MULTISPECIALTY NSQIP

ACS NSQIP
Semi-annual Report: January - December 2014
UCSF Medical Center

Outcome Rating	Definition	% of metrics in category	Type of Service or Procedure
Exemplary	Statistically better than expected outcomes ↓	**19%** (44 / 235)	**General Surgery**: Mortality, PNE*, Unplanned Intubation **Colorectal**: PNE, Unplanned Intubation, VTE*, UTI* **Vascular**: Mortality, Morbidity, Cardiac **Thoracic:** Morbidity, PNE*, Unplanned Intubation, ROR* **Neurosurgery**: Morbidity, Ventilator > 48hrs, VTE*, UTI*, ROR* **Urology**: Morbidity, PNE*, UTI*, SSI* **All Cases**: Mortality, Morbidity, Cardiac, PNE*, Unplanned Intubation, ROR* ***Selected Complex Procedures (Targeted)***: **Whipple Pancreatectomy**: PNE* **Colectomy**: Morbidity **Hepatectomy**: Morbidity, PNE* **Esophagectomy**: Morbidity, SSI* **Neurospine**: Ventilator >48 hrs, Sepsis **Cystectomy**: SSI* **Vascular Lower Extremity (open):** Morbidity, Bleeding, Wound **Thoracic Lung Resection**: Morbidity, Sepsis, ROR*
Low Outlier	Significantly better than expected outcomes *(best 10%)*	**18%** of Exemplary outcomes (8 / 44)	**General Surgery:** PNE* **All Cases:** Morbidity, PNE*, Unplanned Intubation, ROR* ***Selected Complex Procedures (Targeted):*** **Urology:** Morbidity **Thoracic Lung Resection**: Morbidity **Vascular Lower Extremity (open)**: Bleeding

Outcome Rating	Definition	% of metrics in category	Type of Service or Procedure
Needs Improvement	Statistically worst than expected outcomes ↓	**2%** (5 / 235)	***Selected Complex Procedures (Targeted):*** **Orthopaedic:** VTE* **Proctectomy:** Morbidity, Sepsis **Hepatectomy:** VTE* **Neuro Spine**: Renal Failure
High Outlier	Significantly worse than expected outcomes *(worst 10%)*	**0%** of Needs Improvement outcomes (0 / 5)	

The remaining 178 / 235 metrics were either "as expected" or "unscored" (the statistical model did not identify any outliers)

* PNE - Pneumonia
* ROR - Return to Operating Room
* SSI - Surgical Site Infection
* UTI - Urinary Tract Infection
* VTE - Venous Thromboembolism

In 2014, the results were exemplary with respect to overall Mortality, Morbidity, Cardiac complications, Pneumonia, Unplanned Intubation, and Return to Operating Room. The greatest success is presented by Low Outliers in Morbidity, Pneumonia, and Unplanned Intubation outcomes. The areas that offer opportunity for improvement are Venous Thromboembolism, as well as Sepsis and Renal Failure. Interdisciplinary teams are engaged in the Early Recovery After Surgery (ERAS) initiatives focused on reducing these occurrences among others.

In 2014, UCSF continued focusing on NSQIP-based initiatives for quality improvement:

- UC Colorectal Collaborative
- Flexibility In Duty Hour Requirements for Surgical Trainees Study - FIRST Trial

NURSING-SENSITIVE INDICATORS

Nursing-sensitive indicators reflect the structure, process, and outcomes of nursing care and are sensitive to the quality or quantity of nursing care. Examples of structure indicators are nursing skill level, turnover rates, and hours per patient day. Process indicators include assessments and nursing interventions such as Bar Code Medication Administration (BCMA) scanning of patients and medications. Examples of nursing-sensitive patient outcomes are hospital-acquired pressure ulcers (HAPU) and inpatient falls. Central line-associated blood stream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), and ventilator-associated pneumonia (VAP) are also influenced by nursing care but are reported in the Infection Control Committee section of this report.

The National Database of Nursing Quality Indicators (NDNQI) and the Collaborative Alliance for Nursing Outcomes Coalition (CALNOC) consolidate valid and reliable data on nursing-sensitive indicators as well as establish benchmarks. UCSF Department of Nursing patient outcomes data are benchmarked against participating hospitals in California and nationwide.

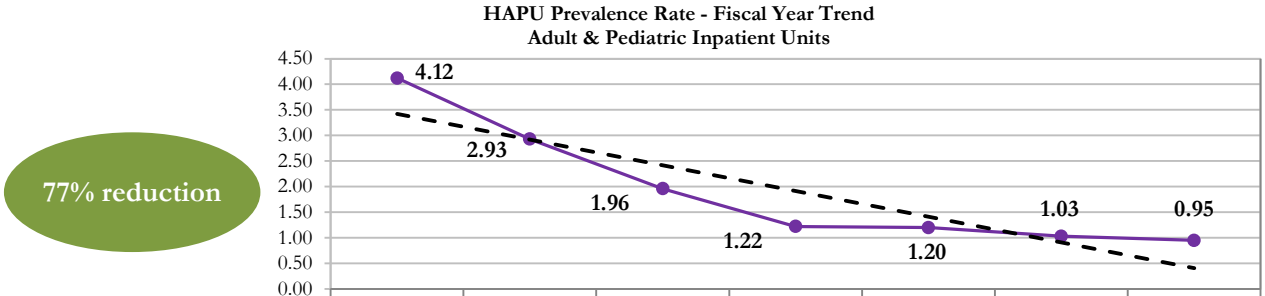
A. HOSPITAL-ACQUIRED PRESSURE ULCERS (HAPU)

IN THE AGGREGATE, NURSING INPATIENT UNITS OUTPERFORMED THE NATIONAL BENCHMARK FOR HAPUS STAGES 2 AND ABOVE IN 7 OF THE LAST 8 ROLLING QUARTERS.

PRESSURE ULCER PREVALENCE

One prevalence study is performed each quarter, four days a year. Pressure ulcers are assigned to the unit where the patient was physically located during prevalence study day, not necessarily the unit in which the patient developed the pressure ulcer. Pressure ulcer prevalence data is benchmarked according to the National Database of Nursing Quality Indicators (NDNQI) criteria. By the end of Fiscal Year 2015, UCSF Nursing Units had outperformed the NDNQI National mean for Pressure Ulcers Stages 2 and above in seven out of the last eight rolling quarters.

Both adult and pediatric Pressure Ulcer Prevention committees meet monthly to review HAPU cases and care practices. All nursing units have Nursing Quality Champions that work at the unit-level to reduce pressure ulcer incidence and participate in quarterly Prevalence Studies.



	2009	2010	2011	2012	2013	2014	2015
HAPU Prevalence Rate	4.12	2.93	1.96	1.22	1.20	1.03	0.95
HAPU Count	80	56	37	23	23	20	20

ACCOMPLISHMENTS:

- Achieved FY2015 goal of reducing HAPU prevalence rate to less than 1.1%.
- UCSF nurses visited their colleagues at UC San Diego and UC Davis to share best practices for pressure ulcer prevention in critical care and peri-operative areas.
- Focused review continues on all operating room-related HAPUs by perioperative services leadership.
- Research study for prevention of pressure ulcers in OR patients using Mepilex is in preliminary stage.
- Collaborated with the Safe Patient Handling department to reduce back and other nursing-related injuries with new turning and repositioning systems including wedges.
- Created automated daily summary report that pulls all patients with documented pressures ulcers into a one-page document providing a hospital-wide view for nursing leadership.

Nursing-Sensitive Indicators (continued from previous page)

B. FALLS

IN THE AGGREGATE, NURSING INPATIENT UNITS OUTPERFORMED THE NATIONAL BENCHMARK FOR FALLS WITH INJURY IN 7 OF THE LAST 8 ROLLING QUARTERS.

Since 2009, there has been a 38% reduction in fall rates for adult and pediatric units combined and a 59% reduction in the Falls with Injury rate.

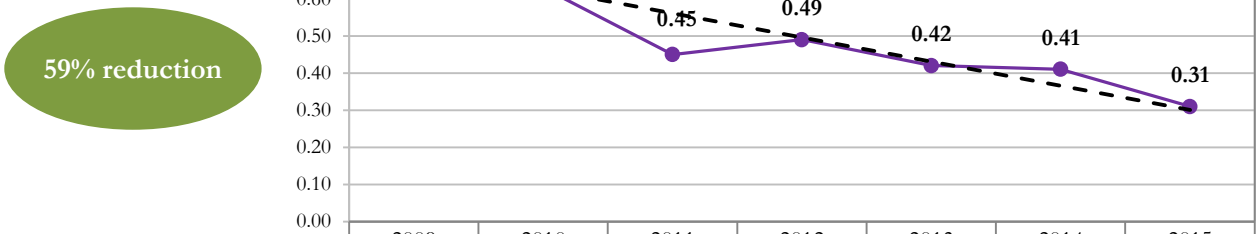
Inpatient falls data are reported out by unit as the incidence of falls per 1000 patient days. By the end of Fiscal Year 2015, UCSF Nursing Units had outperformed their NDNQI National mean for Falls with Injury in seven of the last eight rolling quarters.

Each nursing unit has Nursing Quality Champions who support fall prevention initiatives on their unit and ensure post-fall huddles have been incorporated into unit practice to determine cause and to initiate prevention of fall reoccurrence. The Fall Prevention Committee meets every month to review fall data, any fall with injury and to plan/revise interventions.

ACCOMPLISHMENTS:

- Nurses check on their patients every hour to anticipate their patients' needs in order to reduce the need for the patient to use their call light and as a key intervention to prevent falls. During hourly rounding, the nurse assesses and assists the patient for any needs related to toileting, reaching personal items, repositioning or pain.
- For patients assessed at risk for falls or for injury, nurses now also complete a screening for cognitive impairment or delirium prior to the application or removal of bed or chair alarm devices to assure a standardized assessment when determining if these interventions are indicated as a part of the patient's fall prevention program.
- A Language Board was implemented to help nurses to communicate with their patients regarding basic needs and essential safety with the use of graphic images. The Language Board can be used in conjunction with an interpreter to teach the patient about fall precautions and how to use the board to let the nurse know their needs. For example, the patient can point to the picture of a toilet to indicate that they need to use the bathroom. This is especially helpful for patients who cannot read or who have limited or no English. The Language Board is available in English, Spanish, Russian and Chinese languages.

Falls with Injury Incidence Rate - Fiscal Year Trend
Adult and Pediatric Inpatient Units



	2009	2010	2011	2012	2013	2014	2015
Falls with Injury Incidence Rate	0.76	0.63	0.45	0.49	0.42	0.41	0.31
Fall with Injury Count	144	114	81	88	90	85	61

Nursing-Sensitive Indicators (continued from previous page)

BAR CODE MEDICATION ADMINISTRATION (BCMA)

UCSF implemented Bar Code Medication Administration (BCMA) in February 2012 to provide a safer medication delivery system. BCMA provides a standardized administration process to ensure that the five rights of medication administration are met: right patient, right medication, right dose, right route, and right time.

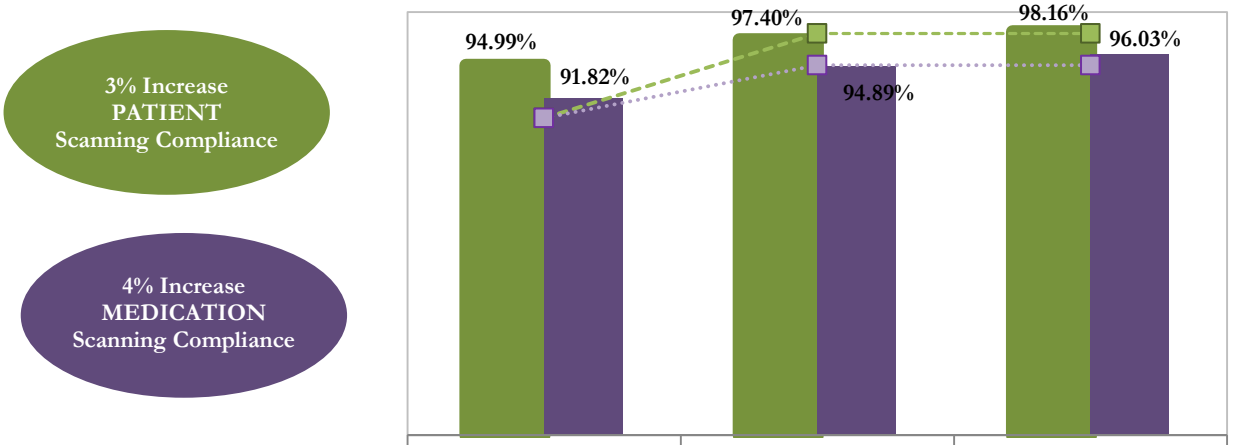
BCMA compliance data are collected via the electronic health record (APeX) and are reported out by unit as the percentage of the number of completed scans over the number of medications given. In addition, the reports provide an opportunity for managers to drill down to specifics at the patient- and nurse-level.

Each adult nursing unit has Medication Administration Accuracy Program (MAAP) Team Leads who support medication administration initiatives on their unit and ensure compliance with medication safety practices remains high and best practices are shared. The multidisciplinary BCMA Taskforce comprised of nursing, pharmacy, respiratory therapy and IT leaders, meets regularly to review both patient and medication scanning compliance data, identify potential problems and update interventions, as indicated.

ACCOMPLISHMENTS:

- Sustained high BCMA compliance rates for both patient and medication scanning
- Formed multidisciplinary BCMA Taskforce to continually improve the clinical components of the medication delivery process
- Collaborated with Pharmacy to ensure that medications were consistently delivered to the nursing units with a readable bar code

Bar Code Medication Administration (BCMA) - Fiscal Year Trend
Patient & Medication Scanning Compliance
Adult & Pediatric Inpatient & Procedural Areas



	2013	2014	2015
Patient Scanning Compliance	94.99%	97.40%	98.16%
Medication Scanning Compliance	91.82%	94.89%	96.03%
Goal Patient Scanning	90%	98%	98%
Goal Medication Scanning	90%	95%	95%

FAILURE MODE AND EFFECT ANALYSIS

A Failure Mode and Effect Analysis (FMEA) is a proactive methodology used to evaluate a high risk process with the aim to identify and reduce risk.

Two FMEAs were conducted prior to implementation of the Epic Beacon module in the adult inpatient oncology and ambulatory oncology areas in May 2015. Participation in both of these FMEAs included representation from Pharmacy, Nursing, providers, Information Technology (APeX Beacon team), and Patient Safety. Beacon was deployed in adult oncology on June 10, 2015.

The results of the ambulatory oncology FMEA identified a total of 60 potential failure modes. The severity, detectability, and frequency for each failure mode was evaluated and ranked. The interdisciplinary team developed mitigation plans for the top ranked 11 failure modes. Common themes for the highest ranking failure modes for which mitigation plans were developed included dose reductions, provider propagation treatment plan errors, and dose splitting.

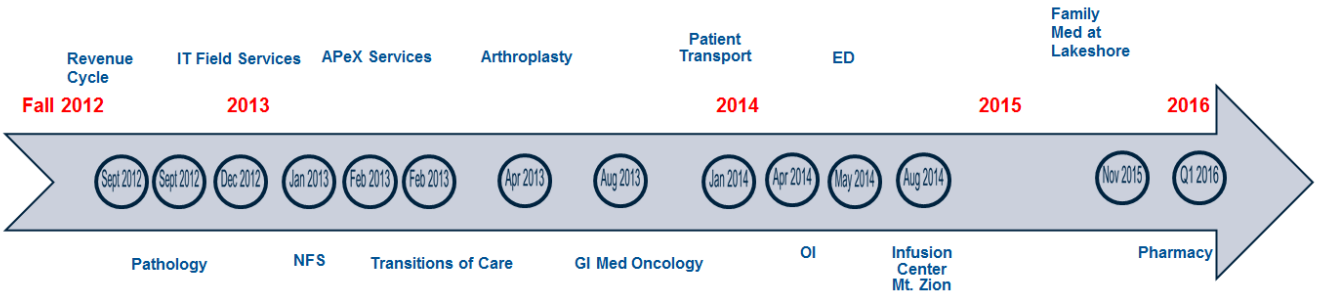
The results of the inpatient oncology FMEA identified a total of 72 potential failure modes. The severity, detectability, and frequency for each failure mode was evaluated and ranked. The interdisciplinary team developed mitigation plans for the top ranked 17 failure modes. Propagation treatment plan errors and patient weight issues were some of the common areas of highest risk for which mitigation plans were developed.

LEAN TRANSFORMATIONS ACROSS UCSF MEDICAL CENTER

UCSF has overarching goals around increasing access, improving population health, patient experience, and staff and clinician satisfaction. In order to meet these goals, we use Lean as UCSF Health's improvement methodology. Lean focuses on leveraging front line staff to look at their work from the patient's perspective and empowers them to make improvements to remove waste from the process.

ACTIVITIES AND ACCOMPLISHMENTS:

LEAN REACH ACROSS UCSF MEDICAL CENTER 2012 - 2015



Value stream work started in September 2012 with Revenue Cycle, and has expanded in the last three years, to 13 unique value streams. They are:

- **Front End Revenue Cycle**
  - Scope of work: Securing authorization (Medical Specialties and Rad Oncology)
  - Creation of universal authorization form
- **Pathology Services**
  - Scope of work: Gross room 5S, gross description dictation, histology flow Cell, histology recut process
  - Moved completely to Dragon for gross description dictation, created standard work and reduced handoffs for histology process, and organized and sequenced the recut work
  - Transcription cost of ~$18k eliminated. Weighted average turnaround time reduced by 1.02 days.
- **IT Field Services**
  - Scope of work: Hardware (laptop, phone) fulfillment
  - Eliminated non-standard procurement portals and created standard work for hardware and iPhone fulfillment
  - Reduced iPhone fulfillment from 16-24 days to 2-3 days and PC fulfillment from 8-19 days to 1-5 days.
- **Nutrition and Food Services**
  - Scope of work: Improving inpatient pantry supplies and distribution
  - Reduced assortment in pantries and added visual controls in both pantries and delivery assembly areas
  - Reduced inventory cost/week of top 5 highest cost items by as much as 24%
- **APeX Services**
  - Scope of work: ServiceNow ticket intake and resolution
  - Built templates for addressing most common issues customers call service desk about, reduced number of assignment groups, and assigned "on-call" APeX analyst as first point of contact to APeX team
- **Arthroplasty**
  - Scope of work: 5S, Prepare, pre-op, room turnaround, PACU
  - Earlier identification and communication of high-risk patients prior to Prepare visit, elimination of nerve blocks for primary total hip patients, standard work for OR turnover, and earlier assignment of floor beds
  - Reduced Prepare visit length by 23% and arthroplasty OR turnover times by 50%
- **Transitions of Care**
  - Scope of work: 5S, discharge, admissions, inpatient stay, procedures & consults, RN-RN hand-off, med reconciliation upon admission
  - Creation of standard work for residents and RNs at the time of admission to the unit (Admission Time Out), and at the time of discharge (Discharge Time Out).
  - Creation of Multi-disciplinary rounds and Tee Time rounds to facilitate discharge by noon.
  - Met UBLT goal of > 20% discharge before noon for 6 of the last 12 months
  - Reduced inventory in supply room by 30% after 5S
- **GI Med Oncology**
  - Scope of work: 5S, day of visit, first contact/navigation, care coordination, MD workflow, checkout
  - Clinic environment and operations improvements including: creation of a consult room to increase exam room utilization, flag system for exam room status, MA-MD pairing, APeX improvements, and streamlined new patient intake, check-in, rooming, and checkout.
  - Reduced median lead time check-in to check-out on day of service from 175 to 110 minutes

Lean Transformations across UCSF Medical Center (continued from previous page)

- **Patient Transport**
  - Scope of work: 5S, centralized staffing standard work, ED, staffing by demand, PACU workflows
  - Created centralized patient transport department with standard work for all types of transports. Used lean concepts to create staffing model.
  - Increased productivity from 4 to 12 jobs per shift per FTE. Reduced median lead time from 37 to 26 minutes.
- **Orthopaedic Institute**
  - Scope of work: 5S, pre-visit prep, arrival to rooming, provider standard work
  - Creation of standard work for schedulers, front desk staff, trainers, providers, and radiology techs to improve scheduling and day of service
- **Emergency Department Parnassus**
  - Scope of work: 5S, disposition to discharge, arrival to roomed, signaling and communication, work stoppages (codes, hand-offs), consults, and MD-RN communication
  - Creation of standard work for staff and providers to improve communication and hand-offs
  - Time for report during change of shift decreased from 30+ minutes to 15 minutes by removing interruptions and implementing standard work
- **Infusion Center Mt. Zion**
  - Scope of work: 5S, coordination of scheduling, protocols and orders, resources in pharmacy, day of service
  - Operations improvements including: creation of standard work for coordination of multi-clinic scheduling, creation of nursing pods to reduce patient wait times, change of many premeds from IV piggy back to IV push, definition of NP role, reduction of interruptions to pharmacy, and structured communication between nursing and pharmacy.
  - Reduced median lead time on the day of service from 250 minutes to 229 minutes
- **Family Medicine at Lakeshore**
  - Scope of work: day of Service, out of cycle work
  - Value Stream Mapping (VSM) workshop completed with schedule for Kaizen activities set for 2016
- **Pharmacy value stream** launching in January/February 2016

Over 50 kaizen (5-day rapid improvement) workshops were held in support of these value streams. Approximately 900 UCSF frontline staff, providers, managers, and senior leaders across the organization have participated in a kaizen or VSM workshop in the last 3 years.

LEAN EDUCATION

- **Just in Time (JIT)** teaching is offered to all Kaizen and VSM workshop members. It is 2 hours in length and taught by Performance Excellence staff or by lean certification candidates.
  - 900 UCSF frontline staff, providers, managers, and senior leaders across the organization have completed the workshops.
- **Lean Foundations** is either an 8-day or 5-consecutive-day boot camp curriculum that emphasizes key lean concepts. It is a didactic requirement to completing lean certification.
  - The topics for the 5 day boot camp are: Daily Management, VSM, 5S, A3 Thinking, Standard Work, and Mistake-Proofing. Lean candidates also have to complete Day 6: Kanban and Quick Set-up.
  - 160 UCSF managers, providers, and senior leaders across the organization have completed this course.
- **Lean Leader Development** is a 5-day curriculum (mix of didactic and practicum) over several months that emphasizes daily management of the work, empowering frontline staff to be problem solve, and making time for improvement. Coaching is supported by Performance Excellence and the CPI Improvement Specialist.
  - The topics are: Daily Stat Reports, Daily Huddle, Leader Standard Work, Process Observations, and Post-Assessment.
  - Hepatology unit-based leadership team (UBLT) has completed the course. The 2nd cohort (Infusion Center and 14M/L and 6L) will launch in December 2015.

LEAN CERTIFICATION

Performance Excellence supports lean certification candidates toward their journey to being lean certified. A lean certified individual is able to lead VSM and kaizen workshops relatively independently in their areas of responsibility, with coaching from Performance Excellence. The requirements to lean certification are:

- Completion of Lean Foundations: 160
- Completion of module marathon (oral exam of lean concepts): 40
- Completion of written exam: 21
- Team member on kaizen workshop: 900
- Workshop leader: 16
- Team leader: 12
- VSM participant: 45

There are 12 individuals that have completed lean certification across UCSF Medical Center.

CONTINUOUS PROCESS IMPROVEMENT (CPI) HUB

The **CPI Hub** was created as a result of the 2020 Strategic Plan to promote a culture of CPI across UCSF Health with the goal of establishing UCSF as the best place for patients to receive care, and the best place to work and learn. The 5 organizational dimensions that CPI focuses on are Safety/Quality, Patient Experience, Provider/Staff Engagement, Value, and Growth/Operations. Each of these dimensions has dedicated departments and people within UCSF Health that are charged with optimizing performance in these areas (i.e., CPI Partners). Therefore, the role of the CPI Hub is to leverage and enhance strategic improvement efforts between the CPI Partners and the front-line providers and staff – with a focus on the UCSF Health Organizational Goals and Priorities that are established annually by the senior leadership committee. Specifically, the CPI Hub is helping UCSF Health achieve its Organizational Goals through the implementation of 1) Unit-Based Leadership Teams, 2) an Improvement Specialist Program, 3) a Clinical Performance Data Portal, 4) Training Modules in CPI, and 5) the Caring Wisely Program.

The **CPI Hub Team** members that contributed greatly to this inaugural year include Maria Novelero, Miriam Gonzalez-White (Director), Michael Wang (Data Specialist), Erica Huie (Admin Analyst) and several Improvement Specialists (Todd Elkin, Jessica Chao, Sohrab Sohrabi).

ACTIVITIES AND ACCOMPLISHMENTS:

- **Unit-Based Leadership Teams** were launched in Winter 2014-15 across 5 inpatient and 5 outpatient units. Each UBLT completed and signed a joint leadership compact, completed 3 training workshops related to joint leadership principles and provider/staff engagement, change management, and hardwiring for change. The majority of leaders have also completed Lean Leader Certification or boot camp. One unit (Hepatology) served as the pilot unit for Lean Leader Development (active daily management). Improvement Specialists participated in weekly works-in-progress sessions (WIP) and completed additional training in data access and dashboard analytics:
  - 14 M/L (hospital medicine) (J Koppel, B Monash, S Morduchowicz)
  - 8 L/S (neurology/neurosurgery) (M Reid, A Kim, P Theodosopolous, S Imersheim)
  - 9/13 ICU (adult critical care) (A Garcia, M Aldrich, D Shimabukuro, M Szu)
  - PICU (pediatric critical care) (S Fitzpatrick, A Roy-Burman, J Chao)
  - PCICU (pediatric cardiac critical care) (B Reyes, S Tabbutt, J Chao)
  - Cardiology Clinic (MB) (B Mar, R Rao)
  - Hepatology Clinic (S Eppel, S Tgamol, B Hameed, T Elkin)
  - Lakeshore (Family Medicine) (J Laffey, Y Medhane, K Strelkoff/L Hill-Sakurai, L Bauer)
  - Multiple Sclerosis (MB) (G Laserson, D Juan, A Green, W Watson)
  - Pediatric Primary Care (MZ) (F Damian, A Devito, C Richardson, L Atkinson-McEvoy/J O'Brien)
- **Improvement Cycle** was completed in the areas of provider/staff engagement, patient experience and growth/operations between January and June 2015, with strong support and partnering from the Experience team (S Ritter, D Sliwka and EIN) and the Access team (N Gleason) and Discharge Before Noon team (A Green). For experience and growth/access, each improvement specialist/UBLT created two A3 project charters, as well as an action plan for responding to the results of the Pulse Survey for each unit. Some of the results from these improvement efforts included:
  - Discharge Before Noon $\geq$20%: 14 M/L, 8 L/S
    - Innovations Implemented: "tee-time" rounds; APeX report of patients being discharged home
  - Improving Likelihood to Recommend: 14 M/L, 8 L/S, Cardiology, Hepatology, Lakeshore, MS, Pediatrics
    - Innovations Implemented: MD and RN communication training + observation; nurse leader rounding; tablet-based experience in clinic; team huddles and action plans (staff engagement)
  - Improving % New Patients Seen $\leq$ 2 weeks: Cardiology
    - Innovations Implemented: supply:demand report to support new MD (add capacity)
- **Data Portal** was created and went live in Winter 2014-15. 38 data/analytic requests came through the CPI Hub/Data Portal, and 50% of these were able to be handled by the CPI Hub Data Specialist (M Wang). Average completion time for first response was < 5 business days. Vast majority of data requests were for Operations and Finance data.
- **CPI 101** is a series of introductory eLearning modules that serve to introduce front-line staff, trainees and physicians to CPI. The Introductory video (3 minutes) features Chancellor Sam Hawgood, CEO Mark Laret, CNO Sheila Antrum, CMO Joshua Adler, Chief of Staff Cynthia Chiarappa, and Chief Innovation Officer Ralph Gonzales. The lean module (15 min) has been completed. Both modules are available for viewing on the UCSF Learning Center. To be completed in FY2016 are modules on Quality, Safety, Experience and Value.
- **Caring Wisely 2.0** completed another successful year under the dedicated leadership of Chris Moriates and Victoria Valencia, with data science and implementation support from Alvin Rajkomar, Christy Boscardin and Priya Prasad. OR SCORE was a program led by C Zygourakis (neurosurgery resident) that provided surgeons in Orthopedic Surgery, OHNS, and Neurosurgery with individual profiles of their OR supply costs, with low cost alternatives where appropriate. FY2015 savings are estimated at $350,000, and annualized projected savings of $1.7M. OR TIME was a program led by L Hampson (urology chief resident) that partnered with anesthesiology and peri-op nursing to help improve patient flow and efficiency in the OR at Mt. Zion (and now Mission Bay). Median turnover time decreased from a baseline of 41 mins. to 35 mins. by end of FY2015. RADS was a program led by E Weber (Emergency Medicine) to implement a decision support tool for improving appropriate use of CT scan for suspected pulmonary embolus in the ED. Total utilization of CT thus far has not decreased, but there may be a positive effect on proportion of CT scans that are positive for PE (testing yield) that could reflect an increase in appropriateness. In addition, continued savings from **Caring Wisely 1.0** shows a $750,000 savings in red blood cell utilization and $74,120 savings in nebulizer utilization in FY2015 vs. FY2014.

SURVEY ACTIVITY

ACCREDITATION AND SURVEY ACTIVITY

The Department of Regulatory Affairs is responsible for directing all accreditation, licensure and certification activities, and patient care-related regulatory compliance of UCSF Medical Center and its licensed facilities (excluding financial and billing compliance activities). During FY2015, the Department of Regulatory Affairs helped to coordinate and respond to a number of Joint Commission and CMS Surveys which were required to maintain licensure and Medicare certification for the organization.

THE JOINT COMMISSION (TJC)

In November of 2014, UCSF Medical Center underwent a successful biennial survey by the Joint Commission for the Medical Center's Ventricular Assist Device (VAD) program. The survey included a surveyor here for two days reviewing VAD protocols and patient care practices in both the inpatient and ambulatory setting. The Medical Center remains fully accredited for the next two years.

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

In December of 2014, CDPH conducted a licensing survey of the new Mission Bay Hospital Campus. The new facility was fully licensed and the new beds added to the existing medical center facility license. The Pediatric Dialysis unit at Mission Bay subsequently underwent its own successfully licensing and certification survey in May of 2015. In addition to licensing visits related to the opening of the Mission Bay Campus, the medical center underwent a very successful Medication Error Reduction Plan (MERP) survey in late January of 2015.

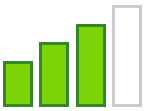
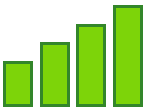
2015 GOLD SEAL OF APPROVAL

THE LEAPFROG GROUP SURVEY

The Leapfrog Group is a voluntary program aimed at promoting transparency in quality and safety and affordability among the nation's hospitals. The annual survey results are posted on the Leapfrog Group website (www.leapfroggroup.org). UCSF achievement ratings in key practices areas are represented below. The survey for this period is for Moffitt/Long Hospital. Due to data requirements, results for the Mission Bay Hospitals will be included in the survey beginning 2017.

	Practice	Leapfrog Metric	Rating
General Information	Preventing Medication Errors	Computerized Physician Order Entry (CPOE) implemented.	
	Appropriate ICU Staffing	24/7 attending coverage and 5 minute call backs.	
	Steps to Avoid Harm	13 National Quality Forum (NQF) Safety Practices – internal analysis of adherence.	
	Managing Serious Errors	Disclosure Policy meets standard.	
Maternity Care	Rate of Early Elective Deliveries	Normal newborn deliveries performed between 37 & 39 completed weeks gestation.	
	Rate of Episiotomy	Incision made in the perineum during childbirth.	
	Maternity Care Standard Precautions	Screening newborns for jaundice before discharge and preventing blood clots in women undergoing cesarean section.	
	High-Risk Deliveries	Births in which infants are predicted to weigh less than 1500 grams at birth.	
High-Risk Surgeries	Aortic Valve Replacement	Quality of Care- Outcomes Rank	
	Abdominal Aortic Aneurism Repair	Quality of Care- Outcomes Rank	
	Pancreatic Resection	Quality of Care – Survival Odds	
	Esophageal Resection	Quality of Care – Survival Odds	

	Practice	Leapfrog Metric	Rating
Hospital-Acquired Conditions	Reduce ICU infections	Based on 1000 central line days using the National Healthcare Safety Network (NHSN) standards	
	Reduce UTI infections	In ICUs	
	Reduce Hospital-Acquired pressure ulcers	Stage III and IV pressure ulcers (from coded billing data)	
	Reduce Hospital-Acquired Injuries	Falls and other traumatic injuries (from coded billing data)	
Resource Use	Length of Stay	Based on Common Conditions; AMI, HF, PN	
	Readmissions	Readmissions for Common Acute Conditions; AMI, HF, PN	
Safety Score	Hospital Safety Score	UCSF rating on the April 2015 Leapfrog Hospital Safety Score report card for Moffitt/Long Hospital	A

Progress Towards Meeting Leapfrog Standards			
			
Willing to Report	**Some Progress**	**Substantial Progress**	**Fully Meets Standards**

U.S. NEWS & WORLD REPORT

"AMERICA'S BEST HOSPITALS"

Every year *U.S. News & World* Report publishes an honor roll of hospitals in the country based on reputation, survival, patient safety and other care measures such as Magnet designation and the use of electronic records. Performance measures on 16 specialties are considered. Results for 2015-2016 were published in July of 2015. UCSF Medical Center was ranked **#8** in the National Top Ten List and is the ***only*** hospital in the top 10 Honor Roll in Northern California.

13 specialties were listed in the National Top 50 List	
#9	Cancer
#40	Cardiology & Heart Disease
#4	Diabetes & Endocrinology
#11	Ear, Nose & Throat
#15	Gastroenterology & GI Surgery (**up from #25 last year**)
#13	Geriatrics
#6	Gynecology
#4	Nephrology
#4	Neurology & Neurosurgery (**up from #5 last year**)
#13	Orthopedics (**up from #14 last year**)
#12	Psychiatry
#10	Rheumatology (**up from #17 last year**)
#5	Urology (**up from #6 last year**)

"BEST CHILDREN'S HOSPITALS"

The *U.S. News & World Report* survey of "Best Children's Hospitals" attempts to rank children's hospitals across the nation based upon 10 pediatric specialty programs that provide care for the most difficult to treat patients. The survey utilizes self-reported clinical and operational data, a limited amount of publicly reported data, and a reputational survey sent to 1,500 board-certified pediatric specialists selected from the American Board of Medical Specialties. U.S. News surveyed 184 pediatric centers.

In the 2015-16 rankings, UCSF Benioff Children's Hospital San Francisco achieved National Ranking in nine surveyed specialties. We have made significant improvements in the quality measures used in the survey, with an increase from 68% of total points in 2011 to 86% in 2015. US News results are significantly influenced by patient volumes. Despite our small size, UCSF BCH continues to advance in rankings.

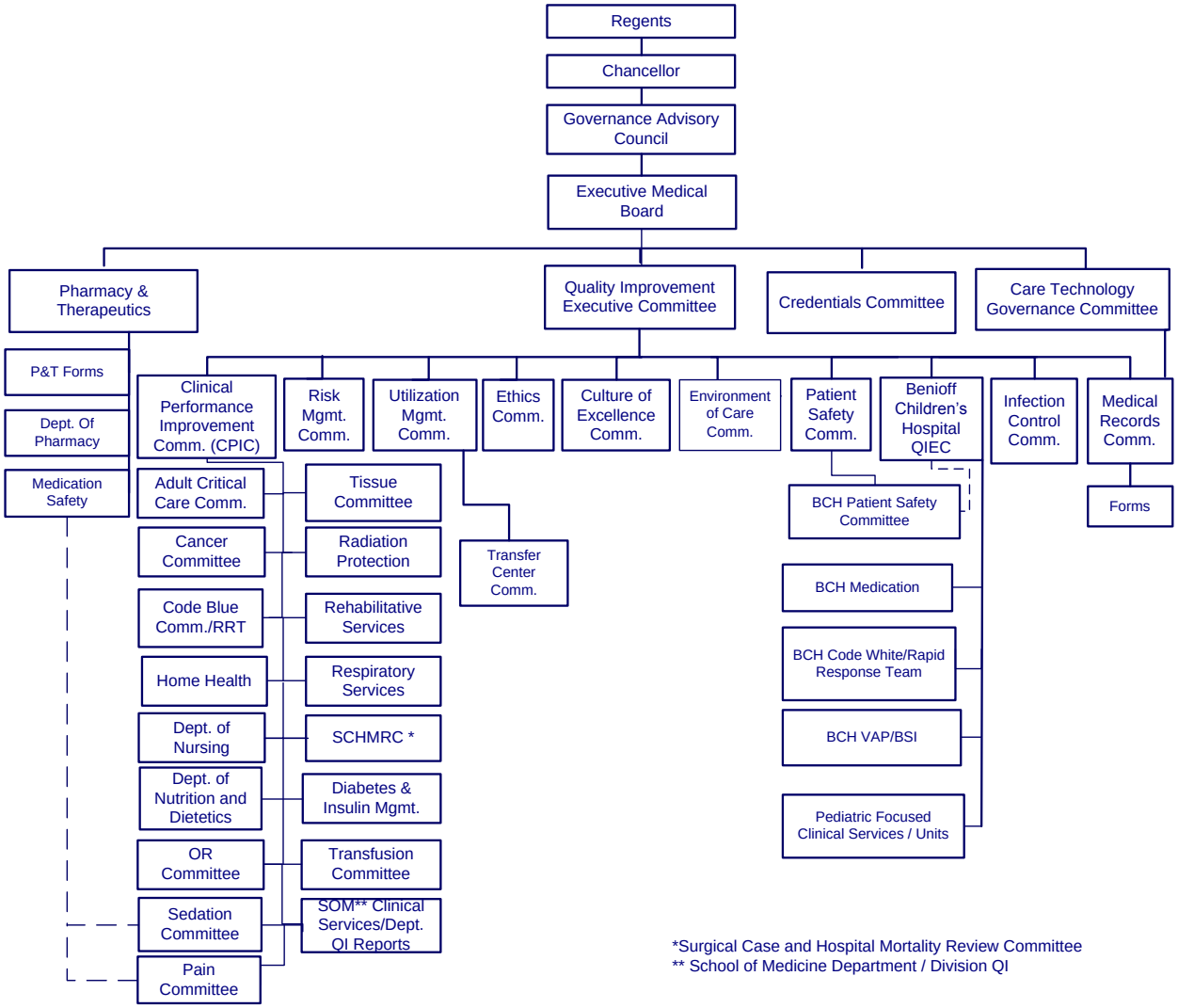
Nationally Ranked Specialties	
#12	Cancer
#25	Cardiology & Heart Surgery
#8	Diabetes & Endocrinology
#18	Gastroenterology & GI Surgery
#16	Neonatology
#10	Nephrology
#13	Neurology & Neurosurgery
#19	Pulmonology
#22	Urology

QUALITY COMMITTEES REPORTING TO QUALITY IMPROVEMENT EXECUTIVE COMMITTEE (QIEC)

QUALITY COMMITTEE STRUCTURE

The Quality Improvement Executive Committee (QIEC) provides executive oversight of the Medical Center's quality, safety and performance improvement activities. The QIEC is responsible for the development, implementation, and evaluation of a comprehensive Performance Improvement Plan (Policy 1.02.07), and the Patient Safety Plan (Policy 1.02.17) and regularly reports findings to the Executive Medical Board. The QIEC provides executive oversight and integration of the work of the quality committees: Clinical Performance Improvement Committee (CPIC), Risk Management Committee, Utilization Management Committee, Ethics Committee, Environment of Care Committee, Medical Records Committee, Patient Safety Committee, Infection Control Committee, BCH QIEC, and the Culture of Excellence Committee.

Committees reporting to QIEC include residents and fellows within their membership to seek input and engage housestaff in quality improvement.



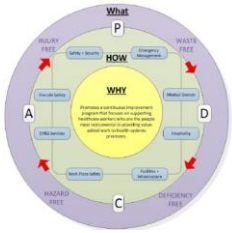
ENVIRONMENT OF CARE COMMITTEE

The EOC program reduces the risk of injury to patients, employees, and visitors through the EOC Golden "Circle."

EOC Why: To promote a continuous improvement program that focuses on supporting healthcare workers who are the people most instrumental in providing value-added work to health-system processes.

EOC How: This program is executed by many different safety disciplines, working groups, committees and programs.

EOC What: Injury Free, Waste Free, Deficiency Free, & Hazard Free Environment of Care.



EOC ROUNDING-MONITORING OUR ENVIRONMENT

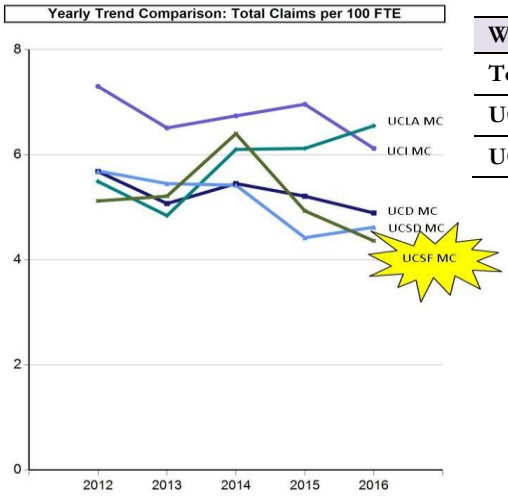
EOC Category	2014Q1 % Yes	2014Q2 % Yes	2015Q3 % Yes	2015Q4 % Yes
EM/Security	93%	97%	90%	91%
Facilities	92%	86%	93%	93%
Fire/Hazardous Materials	99%	95%	96%	95%
Safety	89%	92%	94%	98%

EBOLA VIRUS DISEASE COMMUNITY RESPONSE

In addition to many other UCSF Medical Center departments, the EH&S department played a critical role in developing UCSF's personal protective equipment system and provided over 400 donning and doffing trainings for over 180 different providers and support personnel working in our Highly Infectious Care Unit and other portals of entry.

INJURY AND ILLNESS REDUCTION PROGRAM

Overall, the goal remains to reduce work-related injuries and illnesses and to create a safer workplace for all UCSF Medical Center employees. To achieve that goal, the Medical Center has focused attention on injury types that make up the largest percentage of reported injuries as well as the top ten injury departments each fiscal year. The main priorities for injury prevention during FY2015 included efforts to reduce patient handling and workstation related injuries. One of the keys for this year's success was a weekly EOC injury review huddle, a great strategy for discussing and quickly implementing injury prevention solutions.



Workers Compensation Summary	2012/2013	2013/2014	2014/2015
Total WC Claims Costs	$9.1M	$7.7M	**$4.3M**
UCSF Medical Center Injury Rate (per 100 FTE)	6.1	5.9	**5.5**
UC Medical Center Injury Rate (per 100 FTE)	6.6	6.4	6.6

Incident Type (Rate/100 FTE)	FY 2012	FY 2013	FY 2014	FY 2015
Slips and Falls	0.90	0.85	1.04	**0.46**
Body Positioning or Mechanics	1.22	1.38	0.85	**0.45**
Incidents Related Patient Handling	1.15	0.80	1.23	**0.68**
Workstation Related Repetitive Stress	1.16	1.30	1.80	**1.27**
Other	5.38	5.70	5.82	**2.15**

EOC RISK PRIORITIES

Safe Patient Handling Program: Ceiling lifts can lead to a significant reduction in workers compensation and staffing costs, as well as improve staff satisfaction. They are critical in intensive care due to the large percentage of patients in these units that require frequent patient handling for turning and repositioning, as well as for transfers out of bed and standing activities. Construction of ceiling lifts needs on-going attention and focus as we continue to renovate UCSF Medical Center at Parnassus.

Workplace Violence Prevention Program: As part of SB 1299, Cal-OSHA will require all General Acute Care Hospitals to have a Workplace Violence Prevention Plan as part of their Injury Illness Prevention Plan by July 2016. This plan requires an administrative policy, physical security assessments for all patient care locations, initial and annual refresher training programs for all staff with patient contact activities, departmental/unit security plans, an incident review task force, an incident log, and an established mechanism for state reporting. Work is already underway to prepare for this new regulatory standard however; it will require on-going support from the QIEC and senior leadership to ensure the program's success and sustainability.

ETHICS COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

- Continued educational series at ethics meetings and with various staff and physician groups
  - Discussed ideas to increase awareness among patients and staff
  - Case-based discussions at departmental M+M
- Updated policies for Mission Bay transition
- Extensive Organ Donation policy and procedures discussion
- Began partnerships with UCSF Benioff Children's Hospital Oakland and LPPI regarding joint activities and group learning
- Ethics Consultations:
  - 51 consults May 1, 2014- May 1, 2015
  - 40 adults, 11 children/newborns
  - 7 Outpatient consults
  - Consults: Medicine 16, Hem/Onc 10, Peds 5, Cardiology 5, 9 other services

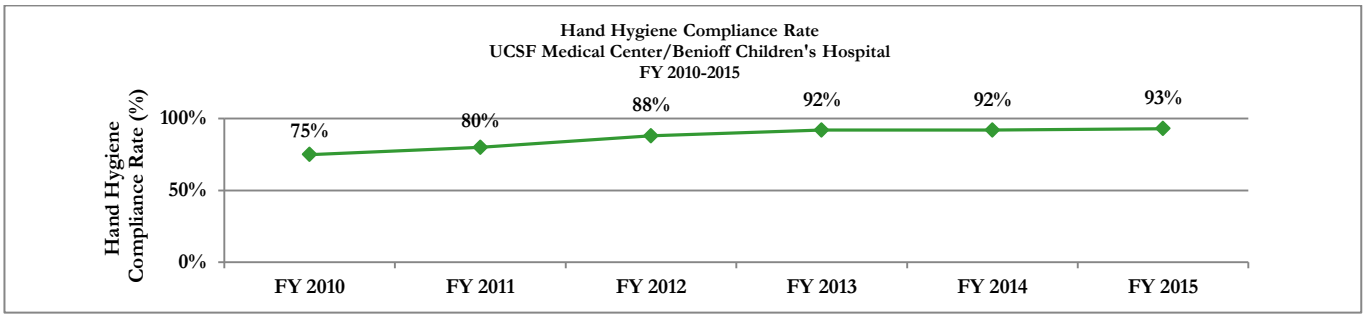
THEMES AND CHALLENGES:

- Limitation of life-sustaining therapies interpretation and education
- Involvement in discussions regarding utilization of resources in emergent situations (e.g. Ebola)
- Interactions with "difficult" patients and families
- Disposition issues and application to ethical quandaries

INFECTION CONTROL COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

- Maintained and augmented infection data for "QualDash", an interactive dashboard that includes device-related, surgical site, multi-drug resistant organism infection rates, and bundle compliance rates by unit and service.
- Directed hand hygiene compliance monitoring and improvement efforts. The average annual compliance rate was 93% based on 41,424 observations. Transitioned to new soap and alcohol foam product all inpatient and ambulatory locations.
- Oversaw infection prevention programmatic elements in Nutrition and Food Services, Sterile Processing, Facilities Management, Pharmacy, Hemodialysis, Hospitality, and Nursing.
- Participated in planning, building and opening the Mission Bay inpatient and outpatient facility.
- Advised and directed infection control aspects of Mission Bay planning pre-opening and successful movement of patients to Mission Bay.
- Participated in planning, renovating and transitioning previous pediatric units into adult units at the Parnassus campus, Ambulatory Surgery Center transition to Mount Zion, and Mount Zion units to 23-hour stay environments.
- Advised and collaborated with key facility and hospitality departments to remediate environmental issues at Mission Bay Campus to ensure a safe patient environment.
- Co-led establishment of the Highly Infectious Care Unit (HICU), training for in-room and support personnel and PPE requirement development. This effort resulted to UCSF being named 1 of 7 California Department of Health and CDC-designated Ebola Virus Disease Centers.
- Successfully achieved all infection related DSRIP milestones including reductions in central line-associated bloodstream infections (CLABSI) and surgical site infections (SSI), and maintenance of CLIP compliance.
- Tracked and reported *Clostridium difficile* infection (*CDI*) prevention bundle compliance; identified and targeted locations for more aggressive prevention efforts. An alternative environmental cleaning product, OxyCide, was trialed with results equivalent to sodium hydroxide (bleach); this cleaning product is now implemented system wide. A case-control study to identify risk factors for *CDI* among surgical patients was published that identified a significant association between ertapenem prophylaxis and development of *CDI*.
- Continued participation in UCOP Healthcare Epidemiology Collaborative SSI reduction grant. Pre- and post-operative wound care documents developed and programming for data extraction and submission developed and validated.



DEVICE-RELATED INFECTION SURVEILLANCE

Device-related infections (DRI) include Central Line-Associated Bloodstream Infection (CLABSI), Ventilator-Associated Pneumonia (VAP) and Catheter-Associated Urinary Tract Infection (CAUTI). The numbers of CLABSI and CAUTI at UCSF are statistically significantly lower than expected according to the National Healthcare Safety Network's (NHSN) Standardized Infection Ratio (SIR), a predictive, risk-adjusted modeling tool utilizing national comparative data. No SIR is calculated for VAP. Strategies to reduce DRI are derived from evidence-based national and professional guidelines and discoveries from UCSF investigations. The DRI Committee, a subcommittee of the Infection Control Committee, was renamed the Hospital Acquired Infection (HAI) Committee to reflect the broader scope that is inclusive of *C. difficile*. Adherence to "bundled" care elements is audited and reported to unit-based clinical leaders. Significant reduction strategies implemented in FY2015 include:

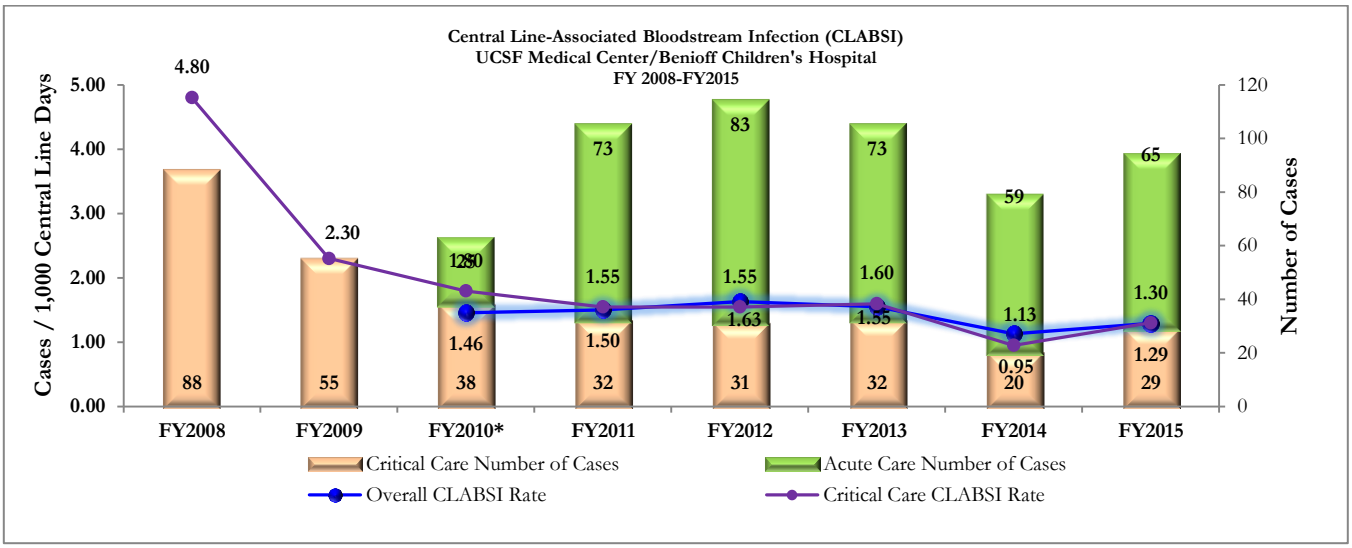
- **CLABSI**
  - Aggregate SIR (observed to expected ratio) for pediatric and adult in-patients was statistically significantly lower than expected: 0.573
  - CLABSI rate for BCHSF declined from FY2014
  - The incidence of CLABSI in the Neonatal Intensive Care (ICN) in FY2015 was half that of FY2014

Infection Control Committee (continued from previous page)

- DSRIP support for CLABSI reduction champions focused on high-rate, low-bundle compliance units
- Expansion of antimicrobial line locks to high-risk patient populations
- Peer audits of central line insertion practice by Adult PICC team
- CHG Bathing policy expanded to CHG showers
- Investigation of unusual patterns of pathogens associated with CLABSI led to recommended oral care improvements on units with CLABSI associated with oral pathogens
- Review and education for appropriate DTTP blood culturing
- Investigated antimicrobial-impregnated PICC and participated in developing pediatric PICC trial
- Periodic review of reports for insertion-related issues, including CLABSI by line type and unit, blood cultures associated with skin organisms, APeX reports programmed for # CL entries and CHG bathing compliance by unit

- **CAUTI**
  - Aggregate SIR (observed to expected ratio) for pediatric and adult in-patients was statistically significantly lower than expected: 0.613.
  - The aggregate pediatric and adult CAUTI rate, as well as the rate for adult patients, was 17% lower in FY2015 than FY2014 with the most significant decrease seen in adult acute care patients.
  - New nurse CAUTI champions and AN1 CAUTI champion workgroup established
  - Rigorously implemented urinary catheter audits, closed urinary catheter systems and CHG wipe for urinary catheter and perineal care
  - Added urinary catheter station to Nursing Annual Review with focus on inserting and care
  - Removed "epidural anesthesia" from accepted reasons for retaining urinary catheters
  - Reinsertion analyses included: 1) ANA: use bladder scan and straight catheterization prior to re-inserting indwelling urinary catheter; and 2) Reinsertion patterns in surgical patients

- **VAE/VAP:**
  - The Pediatric VAP rate continues to remain very low and decreased > 60% in FY2015.
  - The change in NHSN definition in January 2015 increased the number of reportable cases and is responsible for the apparent VAE rate increase for adult patients.
  - 2015 NHSN revisions to VAE surveillance criteria expanded to include Possible and Probable VAP
  - Revisions to ICN VAP bundle reviewed



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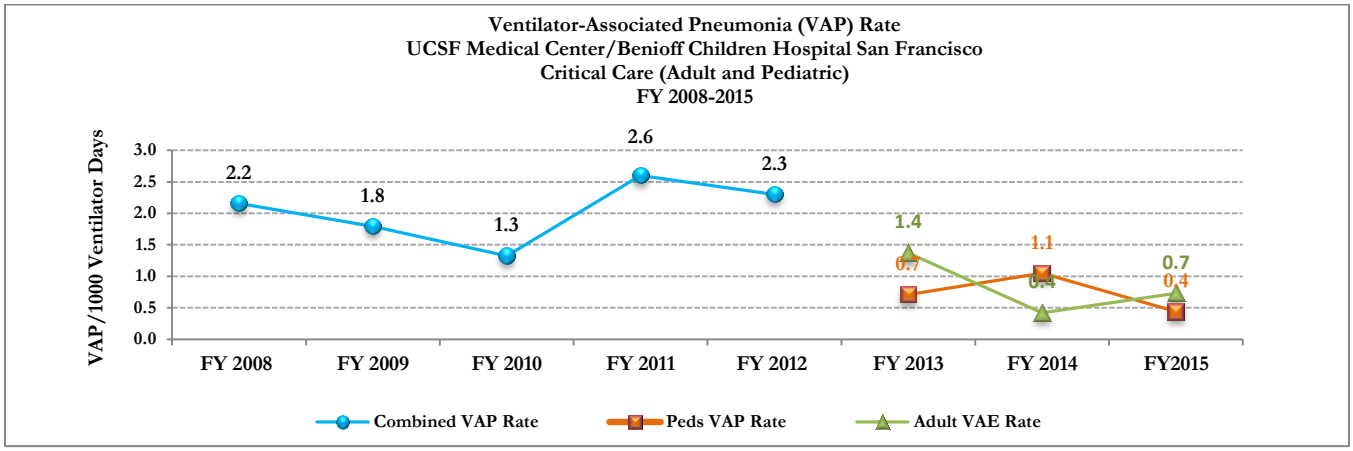
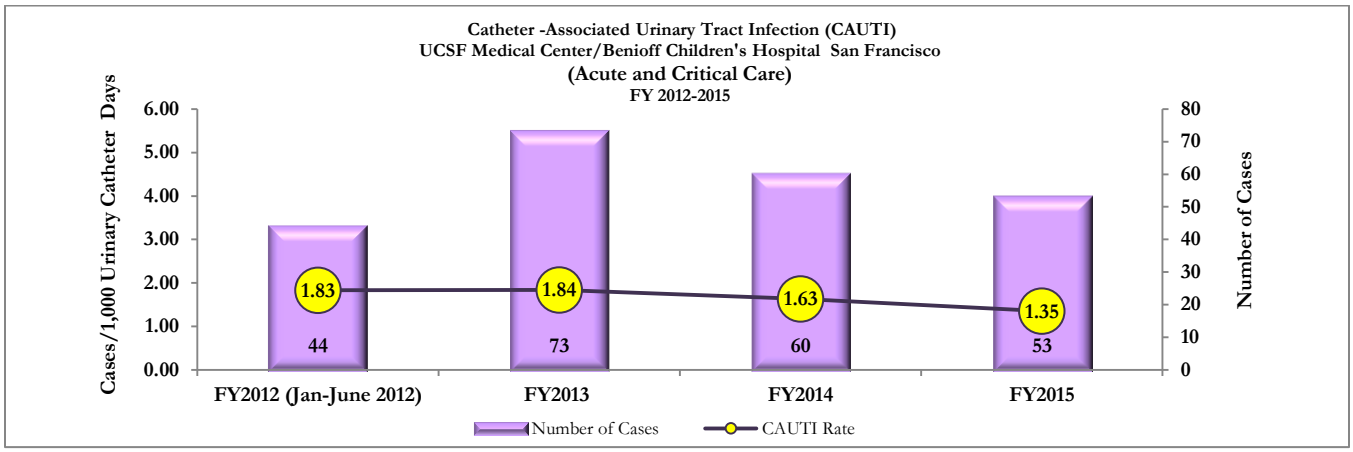
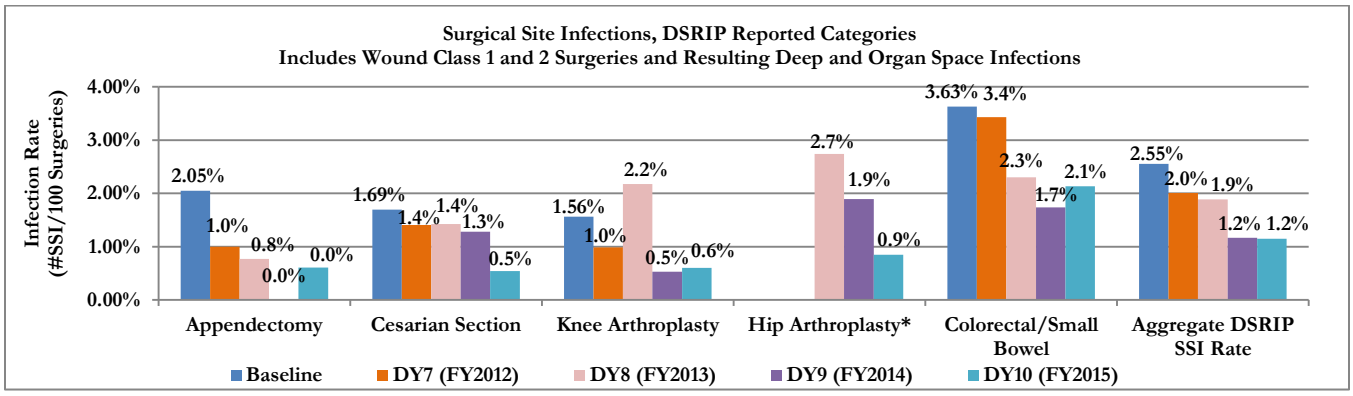


Ventilator Associated Event definition replaced VAP for adult patients beginning in FY2013. The VAE "Probable VAP" was reported in FY2013 and FY2014. NHSN collapsed "Probable VAP" and "Possible VAP" into one event category in January 2015 effectively doubling the number of qualifying cases.



SURGICAL SITE INFECTIONS (SSI) PER 100 SURGERIES FY2015

Surgical Site Infection (SSI) surveillance is conducted for 32 surgical categories, 29 of which are required by and reported to the California Department of Healthcare Services through NHSN. Performance, as measured by Standardized Infection Ratio (SIR), is significantly better than predicted in aggregate and in fourteen individual surgical categories for FY2015; performance in all other categories was not significantly different from predicted. FY2015 corresponded to DSRIP demonstration year 10. UCSF DSRIP milestone target was to continue to improve the aggregate SIR for selected categories of surgery relative to the DY9 performance. UCSF surpassed that milestone target, reducing the SIR by over 22% with significantly fewer SSI than predicted in the targeted categories.



Infection Control Committee (continued from previous page)

	AGGREGATE (PEDS AND ADULTS)						ADULT			PEDS (< 18 YEARS OLD)		
Category	# SSI	# Surgeries	Rate	SIR	p-value	95% Confidence Interval	# SSI	# Surgeries	SSI Rate	# SSI	# Surgeries	SSI Rate
Abd Aortic Aneurysm	0	29	0%	0	0.1743	, 1.715	0	22	0%	0	7	0%
Appendectomy	2	238	1%	0.289	0.0395	0.049, 0.956	1	199	1%	1	39	3%
Biliary Surgery	27	403	7%	0.658	0.0212	0.442, 0.944	27	379	7%	0	24	0%
Breast Surgery*	3	954	0%	0.159	0	0.041, 0.434	3	949	0%	0	5	0%
Cardiac Surgery	4	304	1%	0.783	0.6709	0.249, 1.888	3	194	2%	1	110	1%
CABG, 2 Incisions	1	81	1%	0.51	0.558	0.026, 2.517	1	81	1%	0	0	n/a
CABG, 1 Incision	0	4	0%	.	.		0	4	0%	0	0	n/a
Gallbladder Surgery	2	473	0%	0.388	0.1472	0.065, 1.281	2	446	0%	0	27	0%
Colon Surgery	30	392	8%	0.923	0.6845	0.630, 1.308	27	356	8%	3	36	8%
Craniotomy*	17	1316	1%	0.427	0.0001	0.257, 0.669	16	1249	1%	1	67	1%
C-Section	10	564	2%	0.678	0.21	0.345, 1.209	10	563	2%	0	1	0%
Spinal Fusion	8	1050	1%	0.284	0	0.132, 0.539	8	988	1%	0	62	0%
Fracture Reduction	2	317	1%	0.38	0.1366	0.064, 1.256	2	277	1%	0	40	0%
Gastric Surgery	3	251	1%	0.382	0.0624	0.097, 1.040	2	229	1%	1	22	5%
Hip Prosthesis	4	440	1%	0.603	0.3116	0.192, 1.454	4	439	1%	0	1	0%
Heart Transplant	0	15	0%	.	.		0	15	0%	0	0	n/s
Abd Hysterectomy	4	332	1%	0.543	0.206	0.172, 1.309	4	331	1%	0	1	0%
Knee Prosthesis	3	352	1%	0.698	0.5758	0.178, 1.901	3	350	1%	0	2	0%
Kidney Transplant	2	386	1%	0.184	0.0015	0.031, 0.606	2	372	1%	0	14	0%
Laminectomy	3	961	0%	0.261	0.0042	0.067, 0.712	3	950	0%	0	11	0%
Liver Transplant	4	177	2%	0.134	0	0.043, 0.323	4	165	2%	0	12	0%
Kidney Surgery	1	543	0%	0.138	0.0066	0.007, 0.681	1	533	0%	0	10	0%
Ovarian Surgery	1	510	0%	0.406	0.3795	0.020, 2.001	1	500	0%	0	10	0%
Pacemaker Surgery	0	66	0%	.	.		0	46	0%	0	20	0%
Rectal Surgery	5	166	3%	0.224	0	0.082, 0.496	5	153	3%	0	13	0%
Refusion of Spine	7	210	3%	0.662	0.2712	0.290, 1.310	7	207	3%	0	3	0%
Small Bowel Surgery	9	481	2%	0.227	0	0.111, 0.417	9	426	2%	0	55	0%
Spleen Surgery	0	62	0%	0	0.2358	, 2.074	0	59	0%	0	3	0%
Thoracic Surgery	1	402	0%	0.105	0.0009	0.005, 0.519	1	344	0%	0	58	0%
Vaginal Hysterectomy	1	91	1%	0.779	0.9101	0.039, 3.844	1	91	1%	0	0	n/s
Ventricular Shunt*	6	347	2%	0.394	0.0091	0.160, 0.820	3	287	1%	3	60	5%
Abdominal Surgery	14	961	1%	0.495	0.0034	0.282, 0.810	13	889	1%	1	72	1%
TOTAL	174	12878	1%	0.415	0	0.356, 0.480	163	12093	1%	11	785	1%

Rate = Number of SSI/100 Surgeries. Data shown are those reported to the National Healthcare Safety Network (NHSN) database per California requirement.
* SIR = Standardized Infection Ratio = # Observed SSIs / # Predicted SSIs.
(+) = significantly higher than predicted; (-) = significantly lower than predicted; (ND) = no statistically significant difference between observed and predicted.
No SIR is calculated when ≤ 1 SSI is predicted.
*Categories are excluded from state required reporting and are submitted to NHSN for SIR determination only.
Surgical categories are defined by NHSN based on ICD-9 codes. SSI identified using NHSN surveillance criteria; cases reviewed and confirmed as necessary by an Infectious Diseases physician.

MEDICAL RECORDS COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

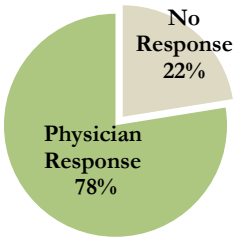
Discharge Summary Timeliness Improvement

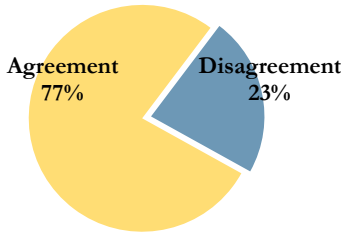
- Efforts have been undertaken to improve the timeliness of resident signature and attending co-signature of discharge summaries.
- The medical center has been providing monthly feedback to service leaders with targets for improvement

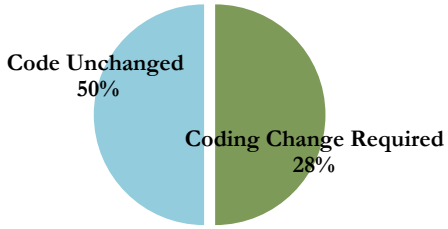
Time Frame	Resident Completion 48 hours	Attending Co-signature 48 hours
FY 2014	**87%**	**39%**
Jul-14	86%	36%
Aug-14	87%	38%
Sep-14	87%	38%
Oct-14	88%	40%
Nov-14	89%	40%
Dec-14	87%	34%
Jan-15	88%	45%
Feb-15	90%	52%
Mar-15	91%	66%
Apr-15	91%	70%
May-15	92%	68%
Jun-15	89%	62%
FY 2015	**89%**	**49%**

AHRQ Patient Safety Indicators

- Sustained physician engagement - cumulative response rate of 78% to queries regarding these potential complications
- Stable rates of physician disagreement with coding at 20%
- When physicians disagree, high rate of Patient Safety Indicators, 50% changed







- Maintained excellent compliance with required documentation

MEDICAL RECORD COMPLIANCE

Documentation	Metric	Performance
Operative Reports	Timely (30 min post-procedure)	89%
	Findings	100%
	Post-Operative Diagnosis	98%
	Estimated Blood Loss	98%
History and Physical	Performed before Surgery	100%
	History of Present Illness	100%
	Past Medical History	100%
	Review of Systems	99%
	Current Medications / Allergies	98%
	Plan of Care	100%
Discharge Summary	14-day Completion	100%
	Hospital course	100%
	Disposition	95%
	Diet/Activity	95%
	Discharge medications	95%
	Follow up plans	99%
	Discharge Diagnosis	98%

- Transitioned manual audit to automated audit for many of documentation requirements
- Working to create a Medical Records Committee Dashboard for feedback to Service Providers

PATIENT SAFETY COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

- Conducted 24 Root Cause Analyses (RCAs) with 109 action plans developed.

FY15 RCAs and Incident Reporting			Highlights
Root Cause Analysis			
	RCAs Conducted	24	Most common event types: medication error, unexpected death, treatment delay
	Improvements Implemented	109	Most common focus areas for improvement: communication, medication management, orientation/training, technology support
Incident Reports			
	Total Incident Reports	10328	Increased MD reporting by 56%
	Serious/High Risk Incident Reports	108	100% reviewed by PSC

- Provided oversight for Incident Reporting including:
  - Weekly review of serious and high risk events by Patient Safety Committee
  - Implemented system enhancements to encourage reporting and training
  - Standardized event severity ranking, created new trend reports, and dashboards
  - Added 367 new ambulatory locations and associated managers with the opening of Mission Bay
- Improved culture of patient safety with:
  - Implementation of **"Great Catch for Patient Safety"** program - 14 staff, faculty, and trainees recognized for stopping the line to prevent patient harm.
  - Wrote and distributed new monthly Patient Safety Bulletin to increase transparency about errors and to disseminate learnings from RCAs and adverse events.
  - Sponsored National Patient Safety Week celebration, including Patient Safety Grand Rounds and poster presentations.

Patient Safety Bulletins FY2015			
Central Line Errors	Disclosure	Heparin Error	Retained Foreign Items
Communication Errors	FMEA	Incident Reports	SNF Transfers
Discharge Phone Calls	Great Catch Awards	Vanco Errors & Protocol	Test Results

- Conducted assessment of organizational alignment with practices recommended in The Joint Commission Sentinel Event Alerts on Preventing Infection from the Misuse of Vials, Managing Risk During Transition to New Enteral Tubing Connector Standards, and Use of Health Information Technology.
- Partnered with the Patient Safety Fellows Council to support patient safety education for nurses through *"Stories From the Bedside"*.
- Facilitated multidisciplinary team to review events and improve handling of lab specimens.
- Partnered with GME on CLER survey readiness. Efforts increased MD incident report submissions by 56%.

RISK MANAGEMENT COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

- **CASE REVIEWS:** Reviewed 16 cases in litigation involving the following issues:
  - Attending supervision of residents at Highland Hospital
  - Procedural time-out process: Inadequate prep of catheter for tunnel catheter placement resulting in air embolus and death
  - Wound and decubitus ulcer care (2 cases)
  - Performance, informed consent, and complications related to sub-sternal colon interposition procedure
  - PCICU extubation of a 3-year-old post-CT surgery patient resulting in catastrophic brain injury
  - Intra-operative and post-operative management and discharge timing for laparoscopic prostatectomy patient that resulted in death 48 hours post-discharge
  - Test result management: Failure to advise ED patient of abnormal chest CT results resulting in a 4-year delay in diagnosis of lung cancer
  - Missed and delay in diagnosis, and transfer of pediatric patient resulting in death (Kaiser Affiliate)
  - Placement of left atrial pressure sensor resulting in right femoral arteriotomy injury
  - ERG safety related to eye protection to prevent seizures and delay in responding to patient emergency
  - Clinical judgment related to decision not to remove eye in a 3-year-old bilateral retinoblastoma patient
  - Management of patient with Vein of Galen malformation and surgical complication resulting in severance of ventricular drainage tube during g-tube placement
  - Delay in treatment of tumor in toe
- **RETROSPECTIVE REVIEW PROCESS:** A retrospective review involves developing a plan of correction to avoid a similar claim in the future. The committee reviewed and approved the retrospective review form and conducted retrospective reviews in two large loss cases:
  - **Post-Operative Management** of pediatric patient and coordination of care between Pediatric CT surgery, PCICU, Respiratory Therapy, and Anesthesia ($5.85 million settlement)
  - **Intra-Operative Management** related to airway management/use of bite blocks ($1 million settlement)
- **OVERSIGHT OF TRAINING RELATED TO PATIENT ADVOCACY REPORTING SYSTEM (PARS):** PARS is a reliable tool to identify unnecessary variations in safety and quality outcomes, and intervene to promote professional accountability among all healthcare professionals. UCSF is in its third year of this program and 20 physicians have been identified and received PARS intervention
- **E-CONSENT:** Reviewed proposal by vendor to introduce e-consent to UCSF.
- **REVIEW OF NEW UCOP REPORTING REQUIREMENT OF "PRECAUTIONARY INCIDENT NOTIFICATION":** A Precautionary Incident Notification (PIN) is: (1) an adverse event or complication resulting in death, brain damage, permanent paralysis, sensory deficits, partial or complete loss of hearing or sight, birth injury or disability, or other catastrophic damage or permanent disability; and (2) an incident anticipated to result in potential liability exposure or a claim.
- **POLICY REVIEW:** Reviewed and approved the following policies: Informed Consent, Consent for Blood Transfusion, Consent for Photography, Patient Elopement.
- **ALLOCATION OF PROFESSIONAL LIABILITY CLAIMS:** Reviewed and approved process for Allocation of Professional Liability settlements for purposes of licensing board reporting determination.
- Future planned work includes providing oversight of retrospective review for water and air management related to risk reduction for Legionella

UTILIZATION MANAGEMENT COMMITTEE

ACTIVITIES:

The primary areas of focus for UM committee in FY2015 were to 1) monitor length of stay and outlier patterns; 2) provide updates and clarification on the new Medicare "Two Midnight Rule" and UCSF's compliance with the new rule; 3) monitor the high risk discharges from UCSF as part of a California Department of Public Health complaint; 4) oversee the Discharge Before Noon initiative and its impact on patient flow; and 5) review system-wide efforts impacting patient flow and readmissions.

TWO MIDNIGHT RULE

On October 1, 2013 Medicare revised the standard for determining medical necessity for inpatient admission to a hospital. In general, if a physician believes, documents, and justifies that a patient will require at least two midnights of hospital-based care, that case is generally appropriate for an inpatient stay. UCSF has been through three separate Probe and Educate processes. Short stay Medicare cases continue to be reviewed concurrently and retrospectively by Case Management. UM Committee partnered with IT to implement decision logic in APeX to aid the physicians in selecting the appropriate patient classification prior to discharge.

PATIENT FLOW

DISCHARGE BEFORE NOON

Patient flow continues to be a challenge for UCSF, particularly during high census periods when flow is the most critical. Efforts to discharge 20% of patients before noon continued throughout FY2015. The goal was achieved for 7 months in FY2015.

	FY2014	FY2015
Discharge Before Noon	**>20% for 6 months**	**>20% for 7 months**
LOS index	**1.13**	**1.07**
30 Day Readmissions (UHC All Cause)	**11.8**	**11.83**

UNIT MOVES AND CREATION

UCSF opened the new Mission Bay Campus in February 2015. This created three new adult units at Mission Bay and prior pediatric units at Parnassus were converted to adult units to accommodate increased demand and volume. An outpatient Clinical Decision Unit for low acuity cardiac and medical patients opened July 1st in conjunction with a new peri-procedural unit.

POST-ACUTE STRATEGY

One of the 5 clinical enterprise strategic plan enabling tactics is to develop a post-acute strategy with the goal of improving outcomes and experience while decreasing total cost of care. In FY2015 the Post-Acute Strategy Team successfully established partnerships with three skilled nursing facilities in San Francisco and two on the Peninsula. Marin and East Bay partnerships are in process. An informal partnership has been established with the primary physician group responsible for care in these facilities. Multiple improvement efforts to improve continuity of care are underway. An affiliation has also been established with Hospice by the Bay and a Home Health strategy is being developed.

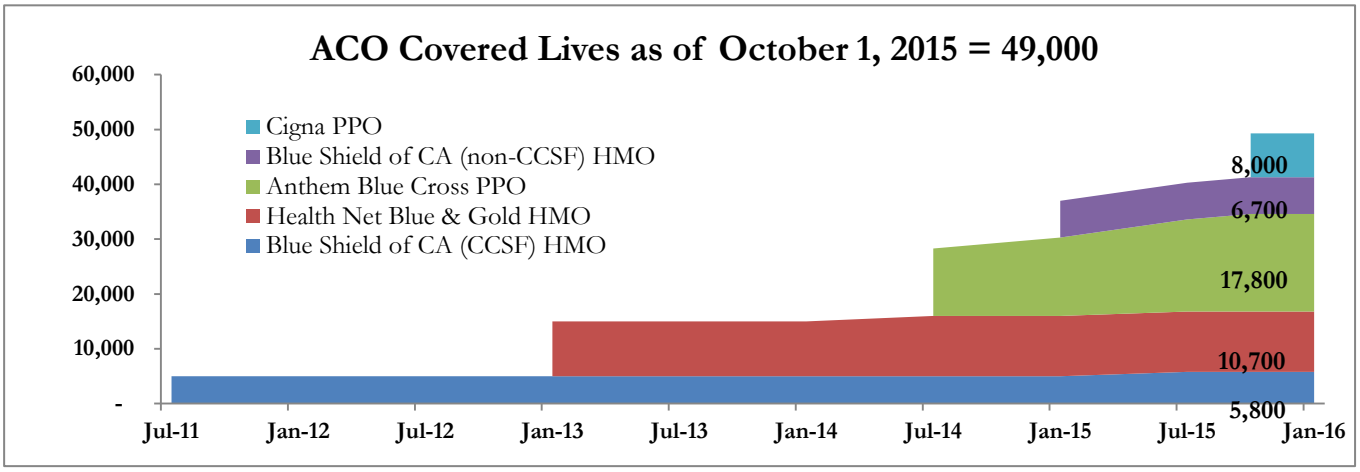
Utilization Management Committee (continued from previous page)

POPULATION HEALTH AND ACCOUNTABLE CARE ORGANIZATIONS (ACO)

UCSF has established 5 commercial ACOs for the following populations: 1) City and County of SF (CCSF) employees insured through Blue Shield of CA; 2) University of CA employees insured through Health Net Blue and Gold; 3) members of Anthem Blue Cross PPO in SF and the surrounding area who are attributed to us based on past utilization with primary care or specialty care; 4) Blue Shield HMO members who are assigned to a SF Hill PCP; and 5) as of Oct 1, 2015, Cigna PPO members who are attributed to UCSF based on their Primary Care and OB GYN visits in the past year. For our HMO based ACOs, our provider partners include UCSF Medical Center, Hill Physicians Medical Group, and Dignity Health. Our clinical associates, One Medical Group, Golden Gate Pediatrics and Mt. Tam Pediatrics are partners in all five ACOs. Through these ACOs we are caring for approximately 49,000 patients. Clinical interventions and performance for these initiatives are managed by UCSF Health's newly formed Office of Population Health and Accountable Care (OPHAC).

The goal in all of the ACOs is to provide higher quality care at a lower total cost for the population of patients. Interventions include:

- Care Transitions Manager for ACO inpatients to assist with LOS management, transitions of care, and coordination across the continuum of care
- Ambulatory Care Management and Navigation for patients with chronic conditions
- Increased PCP, urgent care and behavioral health access
- Increased involvement of pharmacists in the care of patients to improve quality of care and generic use



The Impact of Inpatient Based Care Transitions Management

Since we have started participating in ACOs, we have had a Care Transitions Manager work with all our admitted patients. Over the last year, we have been able to analyze the impact of this role and have found that the role is responsible for a significant reduction in Length of Stay and Readmissions.

Metric	ACO	Non-ACO	p-value
30 day Readmission (%)	11.0	17.4	p = 0.015
Average Length of Stay (days)	3.1	3.6	p = 0.025
30 day follow-up (%)	62.1	67.8	p = 0.141

Number of hospital days saved in one year = 109
(0.5 days x 219 managed admissions)

** Results adjusted for: gender, age, race, service, and severity of illness*

Utilization Management Committee (continued from previous page)

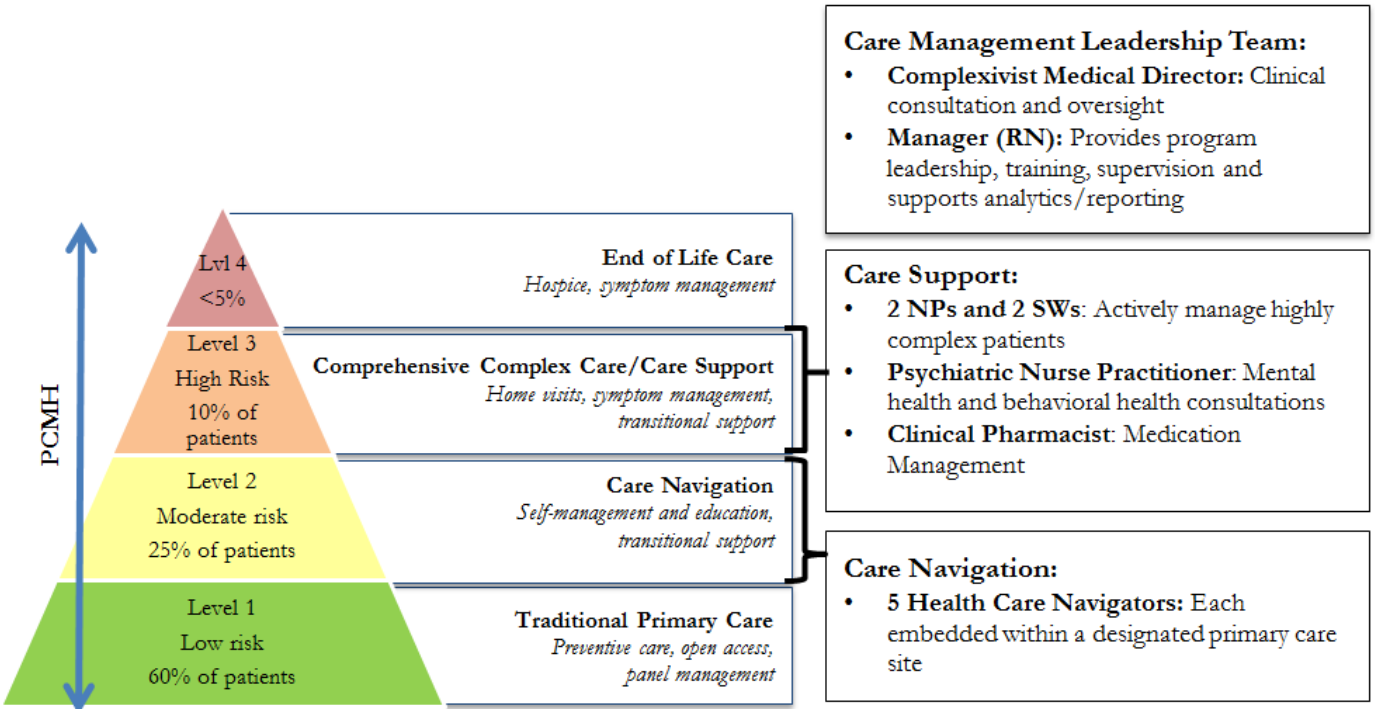
Admission
- Checklist to identify potential risks and barriers to discharge
- CTM follows up on every admitted adult patient every weekday (chart review, check-in with MD/RN). Visits with the patient on day of admission, every other day while in-house, day before expected discharge, and day of actual discharge.

Discharge Planning
- Discharge checklist to identify patient's special needs and referrals
- Medication reconciliation
- Teach back with patient on discharge instructions
- Schedule follow-up appointments and notify PCP of inpatient admission

Post-discharge care
- "Welcome Home" call and calls patient at least weekly for 30 days
- Coordinate between inpatient and outpatient providers/programs
- Refer to outpatient care management program if applicable
- Serves as patient's primary point of contact for any clinical issues post-discharge

Development of Outpatient Care Support Program

We have developed an outpatient Care Support program that will work with primary care patients, in-person and telephonically, to self-manage chronic conditions and to problem solve challenges in making behavioral and lifestyle changes and to be active participants in their own care. This team's goal is to enroll at least 700 high risk patients in personalized care plans during FY2016. The Office of Population Health and Accountable Care will be tracking quality and costs of care for these patients to assess impact of this program on overall outcomes.



QUALITY COMMITTEES REPORTING TO CLINICAL PERFORMANCE IMPROVEMENT COMMITTEE (CPIC)

ADULT CRITICAL CARE COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

Critical Care Division

- **Highly Infectious Care Unit (HICU**) established to care for patients with Ebola Virus Disease (EVD) and other highly infectious diseases. Comprehensive care plan developed for care of these patients. Volunteer physician and nursing staffing from Critical Care (CC).
- Opened an intensivist-managed Adult Intensive Care Unit (ICU) (current staffing level for 8 beds) at Mission Bay Hospital.
- **ICU 24-hour Readmissions** – Identify ICU patients that are transferred out of the ICU and require readmission within 24 hrs. The overall ICU 24-hr readmission rate for FY2015 was 1.35% as compared to 1.43% in FY2014.
- Developed the first **Unit Based Leadership Team (UBLT**) on 9 & 13 ICU with a goal of monitoring ICU 24-hour readmissions.
- **Post-arrest Hypothermia Protocol** – Revised protocol with input from Critical Care Nursing, Pharmacy, nurse practitioners, physicians, and Neurology. APeX order set created. New checklist to assist bedside providers developed.
- **Interventions to reduce Pressure Ulcers (PU) to zero**
  - Key components of Hospital-Acquired Pressure Ulcers (HAPU) intervention are adequate nutrition and wound care. A pilot protocol, Maximizing Enteral Nutrition Delivery MEND, will allow for "catch up" increases in enteral nutrition rates after interruptions for procedures.
- **Proning for Acute Respiratory Distress Syndrome (ARDS) –** Protocol developed for adult ICUs to implement early prone positioning for severe ARDS patients. Thus far, three patients have been proned with no significant complications.
- Developed a mobility scale for ICU patients that is now included in the APeX Comp report.
- Established a multidisciplinary **ICU Rounds Committee** that revised the process of rounds, including guidelines for ICU Nursing participation and further emphasis on ICU Liberation/A-F bundle.
- **Falls reduction** – Implementation of ICU Charge nurse rounds and multidisciplinary assessment of delirium during daily ICU rounds may explain the reduction in falls**.**
- **Continuous Renal Replacement Therapy (CRRT) Treatment Days** – UCSF has one of the largest volume CRRT programs in California. We have implemented a revised Citrate Anticoagulation protocol to reduce hypocalcemia and enhance safety features (Nephrology & Critical Care Nursing).

8/11 ICU

- **Catheter-Associated Urinary Tract Infections (CAUTI) reduction project**
  - All staff trained on sterile specimen collection, Foley catheter care, and CAUTI prevention measures.
  - Charge nurses round daily and review Foley catheter utilization.
  - Cases reviewed. Rate reduced to 3.51 for FY2015 vs. 3.91 for FY2014.
- **Falls reduction** – 8/11 ICU had a focused falls reduction program, Fall Rate (Total Falls) reduced to 0.13% for FY2015 from 1.43% in FY2014.

9/13 ICU

- **Project Emerge** – GB Moore grant funded PI project in 9/13ICU. Goals are to reduce preventable harms, increase patient and family engagement and reduce health care costs.
- **Patient Family Advisory Council (PFAC)** - Former 9/13ICU patients/families consulting to improve ICU family experience.
- **Comprehensive Unit Based Safety Program (CUSP)** – Safety program launching in 9/13ICU in November 2014.
- **Care Team Portal** and **Patient Family Portal** – Emerge Application/Portals being developed with the Applied Physics Lab at Johns Hopkins University; Go-live in 9/13 ICU November 2015.

Adult Critical Care Committee (continued from previous page)

- Initiated **Animal-Assisted Therapy Program** in 9/13 ICUs. This program is coordinated with SF SPCA and provides two 2-hour ICU visits per month. Surveys of patients, family members, and clinicians demonstrated feasibility and mild-moderate improvement in mood across all groups.

10 ICC

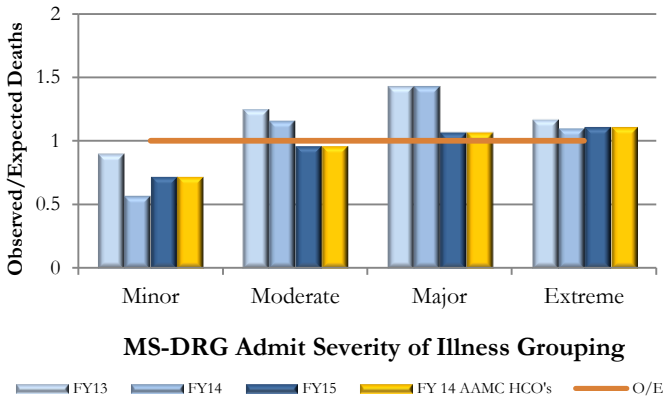
- **Interdisciplinary OR handoff** – Evidence-based fellowship project to improve interdisciplinary OR handoff at the bedside; implemented May 2015.

ONGOING MONITORING AND QI:

- The incidence of CLABSI (Central Line-Associated Blood Stream Infections) increased to 1.11 per 1000 line days, up from 0.58 in FY2014, similar to 1.2 in FY2013 and 1.1 in FY2012 & FY2015. Incidence of VAE [Ventilator-Associated Event: Probable Ventilator-Associated Pneumonia (PR-VAP)] has increased to 0.73 per 1000, up from 0.42 in FY2014 and 0.68% in FY2013.
- ICU mortality index (observed rate/expected rate) in all patients with an ICU stay has decreased for all severity of illness (SOI) groups. Mean ICU length of stay is similar to that of the AAMC teaching hospitals.

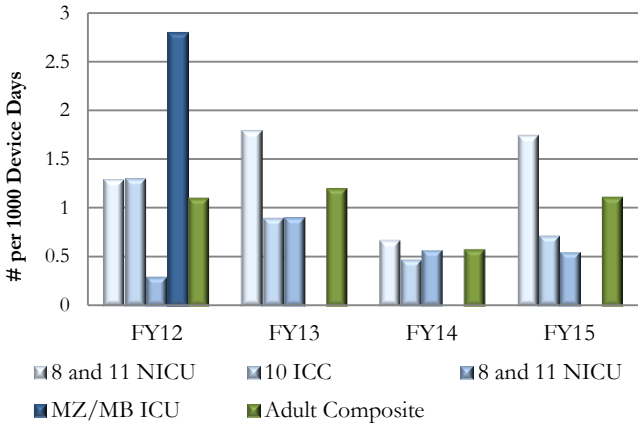
QI Metrics

ICU Mortality

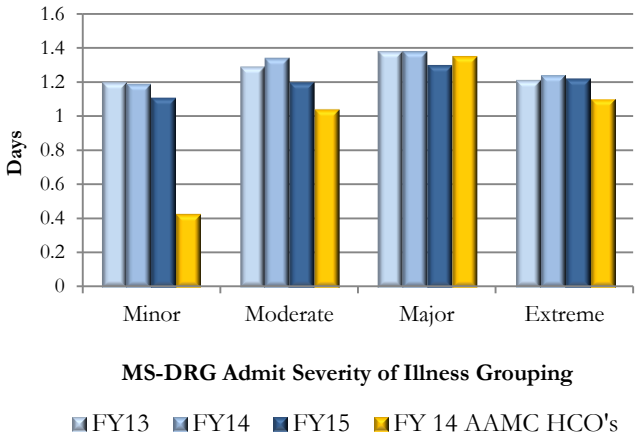


Infection Metrics

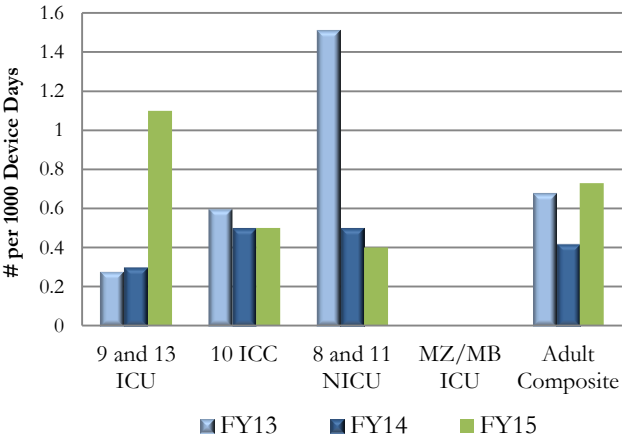
Central Line-Associated Blood Stream Infections



ICU Length of Stay



Ventilator Associated Event - Probable Ventilator Associated Pneumonia-(PR-VAP)



CANCER COMMITTEE

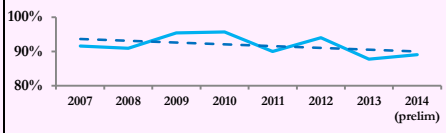
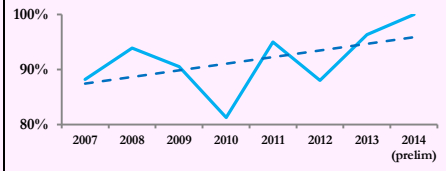
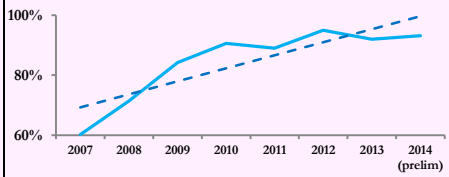
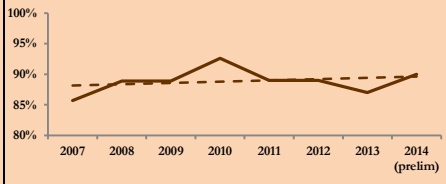
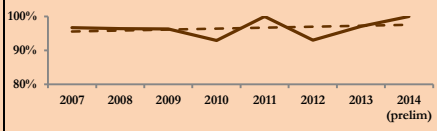
OVERVIEW:

Cancer Committee oversees compliance with Commission on Cancer (CoC) accreditation standards and has focused on the following goals in FY2015:

- Continued Cancer Committee progress and the incorporation of the new Mission Bay campus
- Implementation of new CoC standards: Patient Navigation, Psychosocial Distress Screening, Survivorship Care Planning
- Compliance with new Society of Gynecologic Oncology cervix, endometrial, and ovarian cancer quality metrics

NATIONAL CANCER DATABASE (NCDB) QUALITY METRIC PERFORMANCE

The National Quality Forum (NQF) brought public and private payers together with consumers, researchers, and clinicians to broaden consensus on performance measures for breast and colorectal cancer. The performance rates shown below from the Rapid Quality Reporting System (RQRS) match the specifications of the breast and colon cancer care measures endorsed by the NQF in April, 2007. The UCSF Cancer Registry submits cases to the RQRS on a monthly basis. The CoC has instituted the RQRS as a facility feedback mechanism to promote awareness of the importance of charting and coding accuracy in line with evidence based practice guidelines. In light of the national movement towards Pay for Performance, these reports provide CoC-approved programs with the ability to examine program-specific breast, colon and rectal cancer care practices. The goal at UCSF Medical Center is to achieve ≥90% compliance across all measures. New guidelines specific for Gastric, Lung, and Bladder cancers will be debuted in 2016.

	Select Breast & Colorectal Measures	Performance	2007	2008	2009	2010	2011	2012	2013	2014 (prelim)
BREAST	Radiation therapy is administered within 365 days of diagnosis for women < 70 receiving breast conserving surgery for breast cancer.		92%	91%	95%	96%	90%	94%	88%	89%
	Combination chemotherapy is considered or administered within 120 days of diagnosis for women < 70 with AJCC T1c N0 M0, or Stage II or III ERA and PRA negative breast cancer.		88%	94%	91%	81%	95%	88%	96%	100%
	Tamoxifen or third generation aromatase inhibitor is considered or administered within 365 days of diagnosis for women with AJCC T1c N0 M0, or Stage II or III ERA and/or PRA positive breast cancer.		60%	71%	84%	91%	89%	95%	92%	93%
COLON	Adjuvant chemotherapy is considered or administered within 120 days of diagnosis for patients < 80 with AJCC Stage III (lymph node positive) colon cancer.		86%	89%	89%	93%	89%	89%	87%	90%
	At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.		97%	96%	96%	93%	100%	93%	97%	100%

Cancer Committee (continued from previous page)

NOTABLE HIGHLIGHTS:

New CoC Continuum of Care Standards[6]:

- **Patient Navigation –** A patient navigation process is required to address health care disparities and barriers to care for patients. To meet this standard, our **Cancer Resource Center** has developed and implemented a **New Patient Orientation** program, which is available online.
- **Psychosocial Distress Screening** – To monitor psychosocial distress on-site, a **Distress Screening template** has been built into APeX which can trigger a referral to support services. Screening has been rolled out to the Breast Center, GYN Oncology, and is scheduled to be implemented in the OHNS Practice next.
- **Survivorship Care Planning** – Patients with cancer, who are completing cancer treatment, must have a **comprehensive care summary** and **follow-up plan**. Of the 3 new measures to implement, this standard has been the most challenging; phase-in has been extended over the next 5 years. Survivorship templates are in the process of being built into APeX; this process will be facilitated by the APeX upgrade in January 2016**.**

COMPLIANCE WITH NEW SOCIETY OF GYNECOLOGIC ONCOLOGY (SGO) TREATMENT METRICS

- The Cancer Center has continuously outperformed on all metrics when compared to not only teaching/research programs, but all programs within the CoC database.
- Amidst fluctuations in the number of patient cases, UCSF excels, particularly during times of increased volume.
- **Cervical Cancer** – Evidence has shown that adding cisplatin based chemotherapy to radiation therapy improves overall survival compared to treatment with radiation therapy alone.

Cervical Cancer						
Chemotherapy administered to cervical cancer patients who received radiation for stages IB2-IV cancer or with positive pelvic nodes, positive surgical margin, and/or positive parametrium						
	Benchmark All CoC Programs	**Benchmark Teaching/Research Programs**	**2011**	**2012**	**2013**	**2014**
Estimated Performance Rates	**86.00%**	**86.50%**	**94.10%**	**93.80%**	**90.00%**	**92.45%**
Performance Rate Numerator/Denominator	n/a	n/a	32/34	45/48	27/30	49/53

- **Endometrial Cancer** – When comparing results from minimally invasive surgery (MIS) with traditional laparotomy, it was found that women who underwent MIS have equivalent oncologic outcomes, reduced length of hospital stay, lower complication rates, improved short term quality of life, and decreased 30-day cost of care.

Endometrial Cancer						
Endoscopic or laparoscopic, robotic, or converted to open surgery performed for all endometrial cancer (excluding sarcoma and lymphoma), for all stages.						
	Benchmark All CoC Programs	**Benchmark Teaching/Research Programs**	**2011**	**2012**	**2013**	**2014**
MIS Compliance	**65.30%**	**63.50%**	**83.45%**	**84.84%**	**89.21%**	**85.41%**
Compliance Numerator/Denominator	n/a	n/a	116/139	112/132	91/102	82/96

- **Ovarian Cancer** – One third of patients with apparent early stage disease will be identified to have occult disease and upstaged after careful surgical staging.

Ovarian Cancer						
Salpingo-oophorectomy with omentectomy, debulking; cytoreductive surgery, or pelvic exenteration in Stages I-IIIC ovarian cancer.						
	Benchmark All CoC Programs	**Benchmark Teaching/Research Programs**	**2011**	**2012**	**2013**	**2014**
Surgical Compliance	**67.10%**	**65.00%**	**94.54%**	**95.12%**	**92.50%**	**83.33%**
Compliance Numerator/Denominator	n/a	n/a	52/55	39/41	37/40	20/24

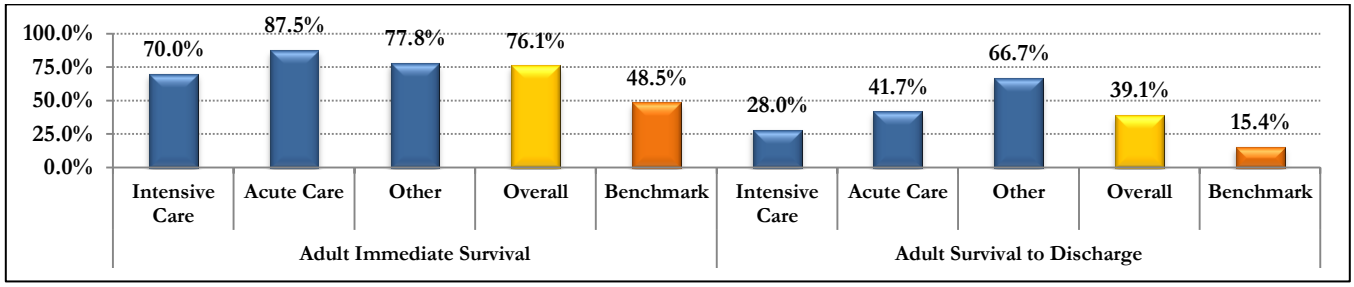
6 *Effective January 1, 2015*

CODE BLUE COMMITTEE AND RAPID RESPONSE TEAM

ONGOING MONITORING AND QI:

The Code Blue Committee provides oversight for the Clinical and Operational Code Blue Subcommittees, the Code Blue Debriefing Process, the Pediatric Emergency Team ("Code White"), and the Rapid Response Team (RRT), and closely monitors relevant QI metrics:

- UCSF CPA Incidence (patients that coded/1000 admissions) was 3.70, significantly better than the benchmark of 6.65.
- UCSF adult cardiopulmonary arrest (CPA) outcomes exceed the national benchmark. Immediate CPR success rate was 76.1%, compared with the benchmark of 48.5%.
- UCSF adult CPA survival to hospital discharge rate is 39.1%, significantly better than the benchmark of 15.4%.



ACTIVITIES AND ACCOMPLISHMENTS:

- The RRT team facilitates a debriefing for all code blue events that have significant systems issues.
- As of June, 2014, all Code Blue events reported by RRT in RL Solutions (Incident Reporting system) in order to have real-time communication of code blue system and process issues.
- Advanced Resuscitation Training (ART) - UCSF is participating with other UC campuses in a UCOP supported Quality Improvement Program.

RAPID RESPONSE TEAM (RRT)

- A monthly dashboard is produced for the Moffitt-Long and Mission Bay Adult RRT programs. Data elements reported are call volume, reason for call, outcome of call, calls by nursing unit, calls by shift and code team activations.
- FY2015 Moffitt-Long RRT call volume averaged 283 calls per month (increased 26% from 210/month in FY2014), not including vascular access related calls which averaged 176 calls per month.
- FY2015 MT Zion/Mission Bay RRT call volume averaged 73 calls per month, not including Vascular Access, Administrative and ICU Break Coverage calls.

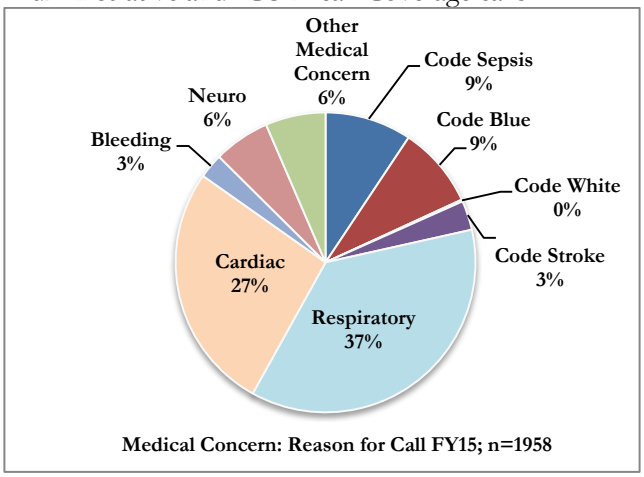


Figure 1 shows the distribution of the reasons for the Moffitt-Long RRT calls. Respiratory concerns continue to be the predominate reason, followed by cardiac concerns, Code Sepsis and Code Blue.

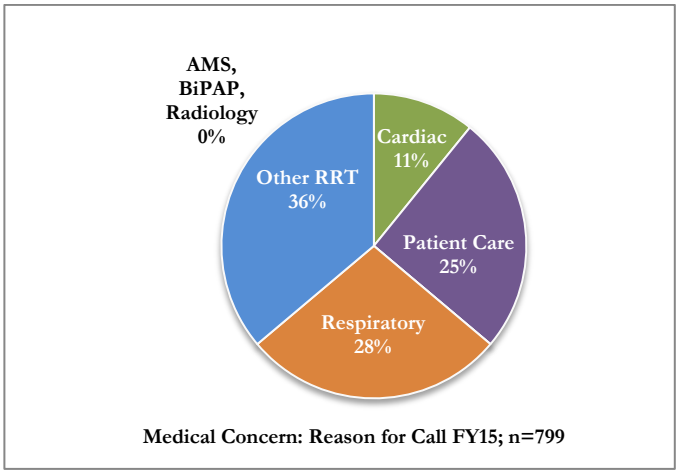


Figure 2 shows the distribution of the reasons for the MT Zion/Mission Bay RRT calls. Other RRT and respiratory concerns continue to be the predominate reason, followed by Patient Care and Cardiac.

DIABETES AND INSULIN MANAGEMENT COMMITTEE

MAJOR ACTIVITIES AND ACCOMPLISHMENTS:

- **Pre-Meal Blood Glucose Checks (POCT)** – Room service (on demand) meal delivery from Nutrition and Food Services for inpatients throughout the Medical Center began in May 2014, to align the provision of nutrition to the timing of each patient's appetite. To meet the challenges posed in coordinating appropriate and safe insulin administration, RNs developed an insulin decision tree visual aid to complement policy and education on the timing of pre-meal blood glucose checks for calculation of insulin dosing. Timeliness of blood glucose checks improved 24% during the first eight months following the inclusion of the insulin decision tree in policy and education.
- **Subcutaneous Insulin Algorithm** – Developed a subcutaneous insulin algorithm to titrate insulin doses to an individual patient's requirements when NPO, on total parenteral nutrition (TPN) or on enteral feedings. The algorithm automatically calculates insulin doses based upon electronically transmitted point of care test blood glucose values ensuring accurate and safe titration of insulin dosing. We anticipate implementation will occur following the APeX electronic health care record upgrade scheduled for January 2016.
- **Patient Education –** Standardized the education for adult patients to be discharged from the hospital with an insulin prescription, consolidating multiple patient education materials into one publication, and aligning the information with a new patient teaching plan and record. APeX teaching scripts for practitioners supplement the teaching plan to ensure critical information and skills are learned by patients for independent self-care post-hospitalization. Standardized education will go-live following APeX electronic health care record upgrade scheduled for January 2016 and addresses the following: 1) Insulin Injection Technique; 2) Insulin Dosing; 3) Blood Glucose Monitoring using a Glucose Meter; and 4) Recognition and Management of Hypoglycemia and Hyperglycemia
- **Insulin Supplies "Smart" Order Set** – Implemented the Insulin Supplies Order Set ensuring all adult inpatients discharged to home with insulin pen prescriptions, receive appropriate insulin prescriptions, equipment, and glucose monitoring supplies. A recent audit showed that the percentage of patients with new insulin pen prescriptions discharged with a pen and needles increased to 92% following implementation of the order set.
- **Virtual Glucose Management Service (vGMS) –** Launched in May 2013, the vGMS utilizes a Daily Glucose Report and a Glucose Management Note to remotely identify all adult inpatients with elevated blood glucoses and then remotely alert the patient's provider on recommended patient specific insulin dosing changes. The vGMS monitors and makes insulin dose recommendations daily. The program continued to improve glycemic control for patients this past year, its second in operation. The number of patients with elevated blood glucoses on the daily report decreased a further 14% following the dramatic 50% reduction the first year, and the number of days a patient remained on the list decreased a further 16%. Of note, during these two years, there was no change in the number of formal endocrinology consultations. In less than 20-30 minutes per day, the virtual Inpatient Diabetes Service enhances inpatient glycemic control, promotes patient specific insulin dosing changes, and decreases health care provider therapeutic inertia.

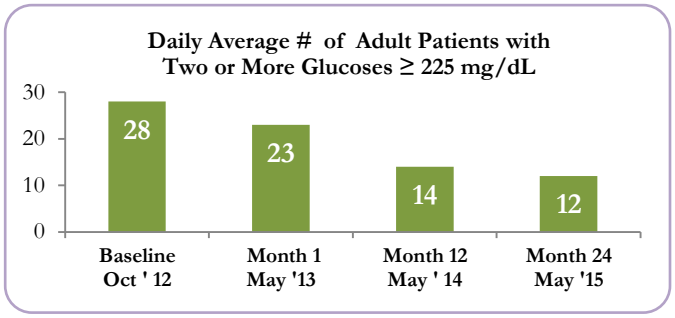
AUDITS AND MONITORING:

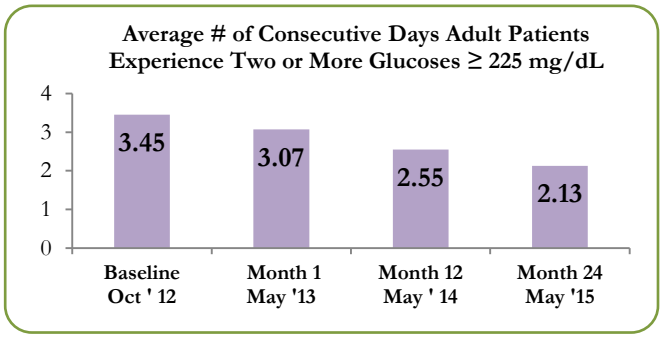
Glucometric Reports

Following are graphic representations showing continued performance improvement in management of blood glucoses in adult acute care and critical care patients receiving subcutaneous insulin. Largely attributed to the virtual Glucose Management Service (vGMS), there were both reductions in the average number of patients experiencing hyperglycemic excursion (defined as two or more glucoses ≥ 225 mg/dL) and the number of patient days with elevated glucoses, as well as sustained performance in the percentage of blood glucoses within the targeted range of 71 -< 181 mg/dL.

Diabetes and Insulin Management Committee (continued from previous page)

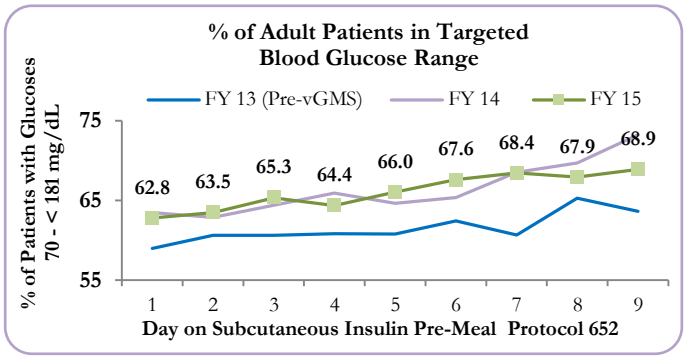
The average number of adult acute care and critical care patients per day experiencing hyperglycemic excursions* continued to decline during the second year of the vGMS program, with the **number of patients on the daily list reduced by 14% from the prior year.** This reduction occurred in all services including Medicine, General Surgery, Transplantation, and Hematology/Oncology. **Defined as two or more glucoses ≥ 225 mg/dL in 24 hours.*





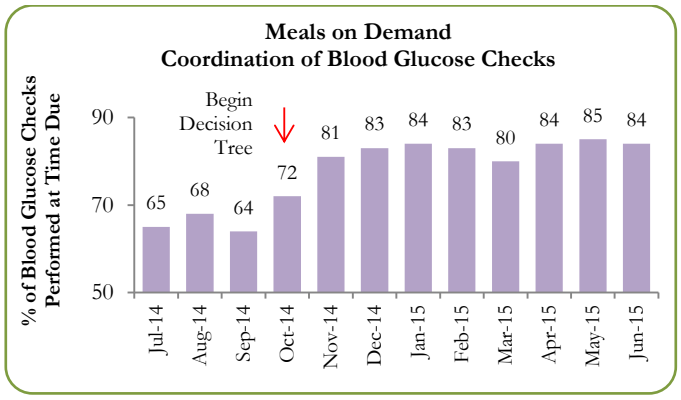
With vGMS insulin dosing recommendations adult acute care and critical care **patients spent fewer consecutive days with two or more glucoses ≥ 225 mg/dL.**

For adult acute care and critical care patients on Insulin Subcutaneous Pre-Meal Protocol 652, the **percentage of glucoses within the targeted range of 70 - <181 mg/dL** by day on protocol, was sustained during the second year of vGMS.



Pre-Meal Blood Glucose Checks

Monthly audits were conducted monitoring timeliness of pre-meal blood glucose sugar checks required for calculating insulin doses for patients participating in room service (on demand) meal delivery.



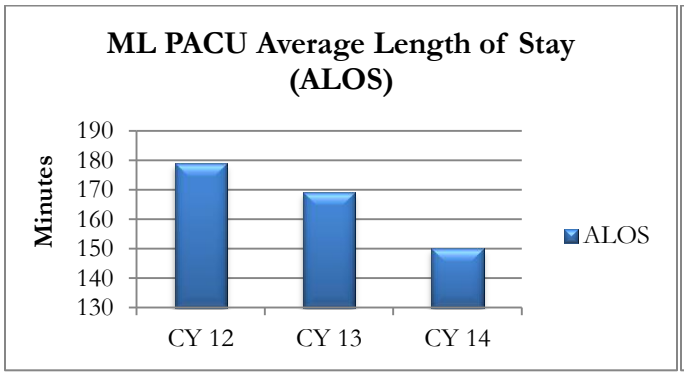
Timeliness of blood glucose checks for insulin dosing **improved 24% during the first eight months** following implementation of the SQ Insulin Decision Tree in October 2014.

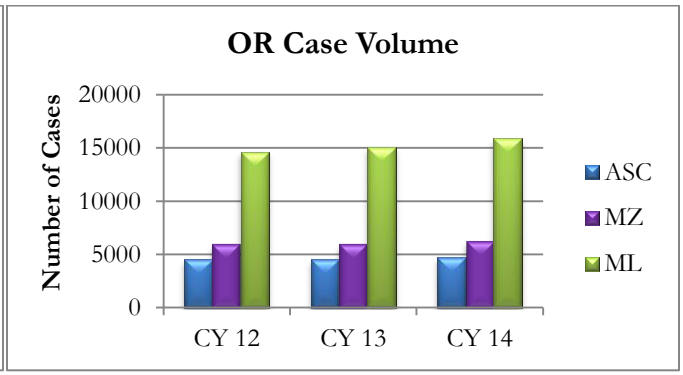
OPERATING ROOM COMMITTEE

PERFORMANCE IMPROVEMENT ACTIVITIES AND ACCOMPLISHMENTS:

- Defined block schedule for MB and MZ OR for go-live February 2015
- Flexible Endoscopes Process Standardization – all processed in Endoscopy
- Debriefing rolled out in MLOR Neurosurgery
- Approved Specimen Handling and Guidelines for Clinical Escalation in PACU policies
- Opened MB on February 1, 2015
- Closed ASC on June 24, 2015, and moved Ophthalmology to MZ on June 27, 2015
- Performed first Trans-catheter Aortic Valve Replacement (TAVR) on October 2014 – there are 50 cases to date
- Implemented Wise OR

MOFFITT/LONG OPERATING ROOMS - INCREASED PRODUCTIVITY





Surgical case volume has increased at all sites over the past 3 years, while the average length of stay (ALOS) in the Post Anesthesia Care Unit (PACU) at ML continues to decrease and has decreased for more than 3 consecutive years due to continuous improvements in patient management systems. PACU ALOS remained stable at Mount Zion and the Ambulatory Surgery Center.

POST-OP DEBRIEFING PILOT PROGRAM

Checklist driven, pre-operative multidisciplinary briefings are now standard practice with proven patient safety benefit. Neurosurgery and Pediatrics pilots were successful and the checklists for these services were standardized. Training began on the Cipher Health Orchid application that collects debriefing compliance data as well as efficiency issues. The debriefing expanded to a few surgeons outside Neurosurgery and Pediatrics and will is currently being introduced to MB Adult Services and MZ Operating Room. In February debriefing documentation will move into the Electronic Medical Record in APeX.

SUPPLY PROCESSING & DISTRIBUTION (SPD) SCORECARD

Operating Room equipment sterilization and reprocessing quality metrics are summarized in the SPD Scorecard. All measures met or exceeded target except one instance of missing documentation of monthly sterilizer cleaning.

SPD Scorecard			
Measure	**FY2014**	**Target**	
Immediate Use Steam Sterilization (IUSS)	8%	10%	
IUSS Loads with Implants	0%	0%	
# of Failed Biologic Tests Resulting in Recall	0%	0%	
Sterilizer Cleaning 1x/month	100%	100%	
OR Accuracy	97%	96%	
Case Cart QA	99%	97%	

PAIN COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

- Ramana Naidu, MD was appointed chair of the Pain Management Committee in January 2105. Dr. Naidu is an anesthesiologist and a pain management specialist. In addition to his work in the operating room, he serves as the medical director for the UCSF Acute Pain Service and cares for outpatients at the UCSF Pain Management Center.
- The Committee continues to focus its efforts on Medication Safety and Improved Pain Management Strategies.
- Medication Safety projects include:
  - Tracking reversal agent use by service with a weekly and monthly review of the "Opioid/Naloxone Use Report"
  - Review of all incident reports related to Pain Management and Reversal Agent use
  - The continued investigation and collaboration with nursing and pharmacy to identify the most accurate way to accurately capture Naloxone administration for respiratory depression
  - Methadone inpatient prescribing report
- The Acute Pain Consult Service has continued to expand as Parnassus has the highest volume consult service at UCSF, and The Mission Bay Pain Service continues to carry through ERAS pathways.
- The UCSF Inpatient Chronic Pain Consult Service is available 7 days a week, 24 hr/day, and is playing a greater role in patients coming through the UCSF system with intrathecal pumps.
- The Pain Resource Nurses (PRNs) – several members attend PMC meetings to represent nursing, disseminate information back to the larger PRN group.

CLINICAL ACHIEVEMENTS:

- Multimodal pathways and Enhance Recovery After Surgery (ERAS) pathways (analgesic pathways) are utilized in Colorectal, Gynecology Oncology, Orthopedic Oncology, Ortho Spine, Urology, and Radiation Oncology.
- Neuro-modulation program has been implemented and is growing.
- Opioid equivalency table was developed and approved for use.
- CADD-Solis infusion pumps were introduced for improved regional anesthesia and safety.
- OnQ (Elastomeric Infusion) Pump use will be expanded to 12L for use at discharge.
- Opioid Patient Provider Agreement has been developed to be available in APeX for use across UCSF outpatient clinics.
- Methadone order set was created that will guide the ordering of Methadone throughout the Medical Center

SEDATION COMMITTEE

ACTIVITIES AND ACCOMPLISHMENTS:

- The committee completed work with the UCSF APeX team modifying the Sedation Narrator for improved real-time documentation during procedural sedation. The Narrator was crafted to allow improved workflow with a streamlined interface. It rolled out in December 2014.
- The committee continues to evaluate sedation practice standards to ensure the safe administration of procedural moderate sedation.
- The committee revised the non-anesthesia physician and nurse practitioner training program. Key elements include: review of the Sedation Policy, review of Moderate Sedation Provider manual for non-anesthesia providers, APeX Sedation Narrator training, view ASA learning module, post-test competency, completion of sedation scenarios via computer simulation, and ACLS/PALS/NRP Certification.
- The committee continues to monitor quarterly sedation process and outcomes for all non-operating room areas performing procedural sedation. There were 14,044 sedation procedures performed during FY2015 in NORA areas with an overall adverse outcome rate of 0.00099% for FY2015, as compared to 0.0015% for FY2014, to 0.002% in FY2013, and to 0.0032% in FY2012.

SURGICAL CASE AND HOSPITAL MORTALITY REVIEW COMMITTEE (SCHMRC)

ACTIVITIES AND HIGHLIGHTS:

- 99.9% of all deaths (736) were reviewed and rated (One case is still under committee review).
- 95% of all deaths were reviewed within 3 months; 75% of cases reviewed within 2 months of event date.
- Continued successful use of an on-line case review database to capture ratings and systems issues.
- Membership now includes an additional physician from the Department of Medicine, as well as four fellows and residents representing a variety of services.
- Systems issues identified by the committee are referred to the Patient Safety Committee, operational departments, or department chairs for follow-up. Major areas of focus included:

  - *Concern:* High-risk patients not adequately assessed over the phone in PREPARE.
    Recommendation: Clearer guidelines about clinic vs. phone evaluation – referred to PREPARE director.

  - *Concern:* Communication of urgent Radiology results.
    Recommendation: Standardize process for communicating urgent Radiology results – referred to Radiology.

  - *Concern:* Radiology delay in identifying cervical dislocation.
    Recommendation: Enhanced educational component for training program: "Know Your Patient." – referred to Radiology.

  - *Concern:* Incomplete screening of patients receiving routine transfusions in Hematology/Oncology Clinic.
    Recommendation: Re-examine screening process for these patients, especially those with hemodynamic history – referred to Hematology/Oncology.

  - *Concern:* Known high-risk mother with malformed fetus leading to severe intra-partum trauma to fetus due to abdominal dystocia.
    Recommendation: Enhanced discussion and flexible planning about the delivery mode for high-risk mothers – referred to OB and MFH.

  - *Concern:* Anesthesia post-op sign-off to ICU RN only.
    Recommendation: Require physician member of the ICU team be present at hand-off – referred to Nursing, Anesthesia, and Critical Care.

  - *Concern:* Pre-op labs showing low platelet count missed by OR, Anesthesia, and Neurosurgery teams.
    Recommendation: Implement mandatory department-wide double and triple checks of labs to minimize the chance of oversight in the future.

  - *Concern:* Individual surgeons should not be the sole decision maker for high-risk surgical candidates.
    Recommendation: Implement multidisciplinary evaluation of high-risk surgical candidates and screening for patterns of high-risk surgical candidates – referred to division chiefs for CTS and Cardiology.

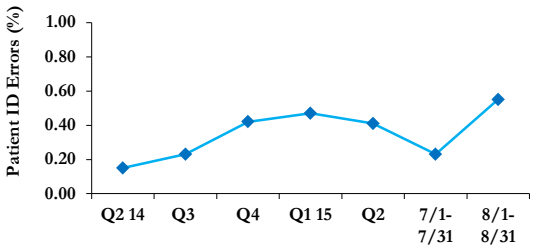
  - *Concern:* Critically ill patients with long waits in admitting.
    Recommendation: Ensure that there is a process for escalating care – referred to Patient Safety Committee.

PENDING PROCESS CHANGES FOR FY2016:

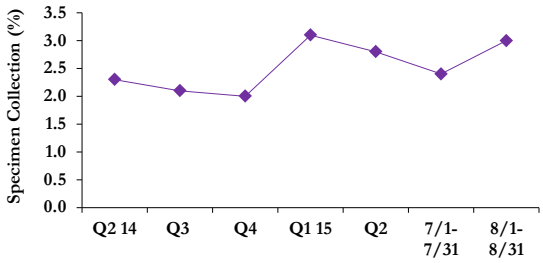
- Membership now includes the manager of Patient Safety to enhance reporting and follow-up of systems issues. We are encouraged by his participation in dealing with a variety of issues, including working with the medicine safety specialist in Pharmacy to explore the creation of a hard stop for immunosuppressive medications for patients at risk for infection and liver failure. He is also working with our committee members and APeX to explore enhancing team documentation in the medical record.

TRANSFUSION COMMITTEE

Transfusion Committee collaborated with the Clinical Performance Improvement Committee, Department of Nursing, and the Patient Safety Committee to implement electronic solutions. Collection Manager, an electronic module for specimen collection and labeling, was launched in a few areas in July 2014. All nursing units, with the exception of OR, ED and L&D use it now. Post-implementation data indicate that staffs sometimes bypass Collection Manager and label tubes manually. Errors made during this manual process are now the top reason for rejection of specimens. Nursing is working on improving compliance.



Labeling errors with potentially serious adverse impact to recipient, discovered prior to testing and blood product selection/issue.



Specimen errors e.g., unsigned specimens or the wrong tube type. Specimens are rejected by the Blood Bank.

BLOOD PRODUCT ORDERS IN APEX AND TRAINING ENHANCEMENTS

Massive Transfusion Protocol and Emergency Release of Blood Products: A multidisciplinary team from the Transfusion Service, APeX, Nursing, Critical Care, and Anesthesia made recommendations to standardize ordering process and improve workflow for MD, Nursing and Blood Bank. APeX order sets were redesigned, and other key enhancements and retraining was completed, before a successful launch in 2015. Ordering of blood products in APeX was also streamlined to allow orders only through order sets.

Training enhancements: Transfusion Service, APeX, and Nursing leadership collaboratively reviewed training materials for placing orders for blood bank tests and products (both inpatient and outpatient settings). The enhancements promote awareness of turn-around time and improve provider knowledge of blood bank workflows in APeX. New training materials, including tip sheets, transfusion guide, and Ambulatory Therapy Plans were developed. Blood Transfusion and Hematology reports in APeX will be available soon to all providers. New e-learning modules for providers will be launched with APeX upgrade in 2016 and training modules for housestaff will be ready by June 2016.

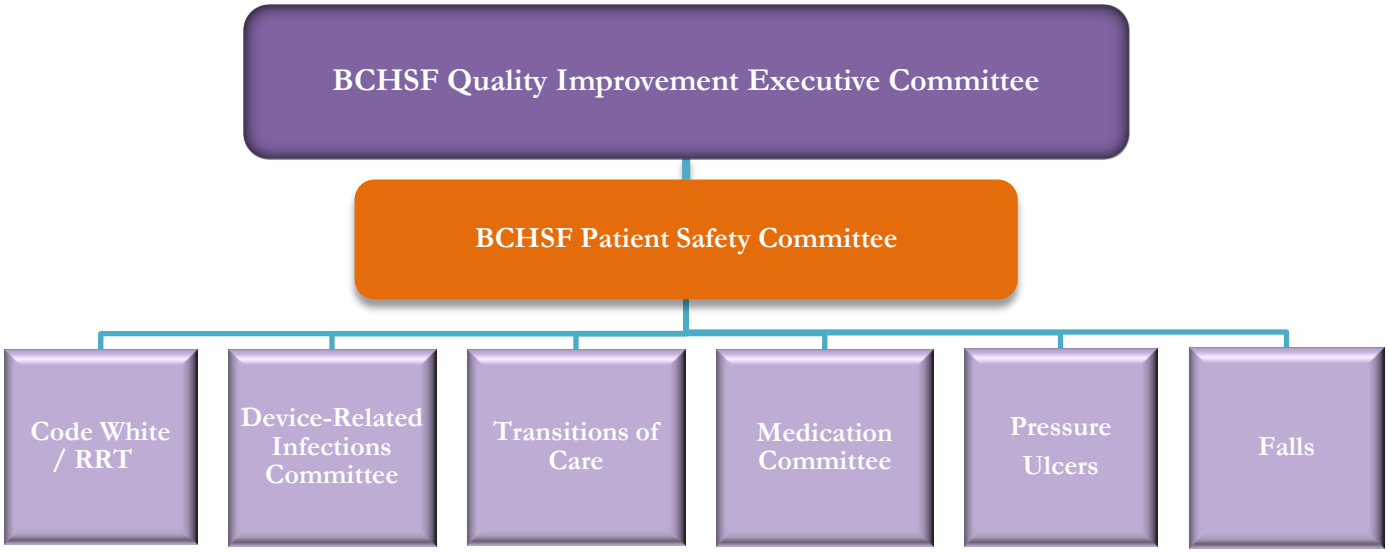
TRANSFUSION SERVICE

- **Mission Bay Hospital Blood Bank** – Transfusion Service successfully launched a fully operational blood bank, capable of independently supporting Mission Bay Hospitals. All licensing requirements were met and all inspections successfully completed. Mission Bay blood bank also supports the solid organ transplant program, and has implemented all protocols for storage, ABO-compatibility check, and issue of transplant organs and vessels. A quality plan, compliant with UNOS/CMS/CAP was also put in place in time for Mission Bay go-live.
- **Blood product labeling errors** – *Phase I:* monitoring of batch printing to decrease errors; *Phase II:* errors were further decreased by adopting "full face" labeling protocols for plasma products in November 2014; and *Phase III:* protocol for irradiated products was implemented at all facilities, including Mission Bay, in September 2015.
- **Master Control** – The document control and deviation management system, implemented at Moffitt-Long and Mt. Zion blood banks, in September 2014, was implemented at Mission Bay in October 2015.
- **Pre-surgical type and screen** – A new "appeal" process was implemented at all 3 sites. Allows anesthesiologists to update information on pregnancy/transfusion history and obtain an extension on specimen expiration date for patients that meet criteria. By minimizing same day testing, process decreases delays in the OR.

QUALITY COMMITTEES REPORTING TO UCSF BENIOFF CHILDREN'S HOSPITAL SAN FRANCISCO QUALITY IMPROVEMENT EXECUTIVE COMMITTEE (BCHSF QIEC)

BCHSF PATIENT SAFETY COMMITTEE

The UCSF Benioff Children's Hospital San Francisco Patient Safety Committee provides oversight for the full range of patient safety issues and initiatives impacting patients throughout BCHSF. The committee analyzes information and facilitates change to support continuous improvement, ensure patient safety, and improve patient outcomes.



BCHSF PATIENT SAFETY COMMITTEE – AREAS OF LONGITUDINAL FOCUS:

- Early Identification and Intervention for Acute Decompensation
- CLABSI Reduction
- Develop strategies to reduce risks associated with patients with behavioral health problems

FY2015 ACTIVITIES AND ACCOMPLISHMENTS:

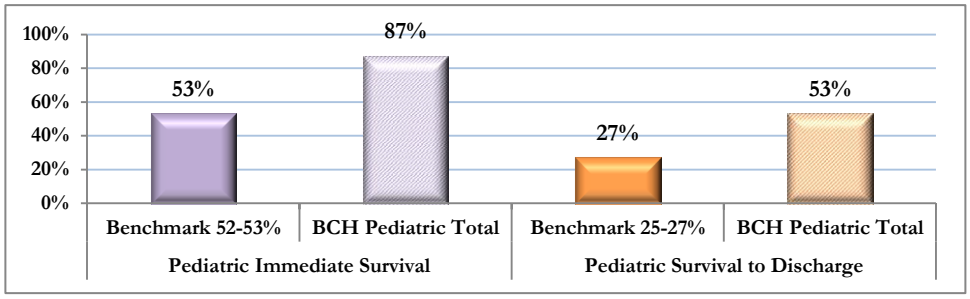
- Collaborated with Pediatric Endocrinology to develop an orientation program for housestaff writing insulin orders.
- Implemented an EMR-based Pediatric Early Warning Scoring (PEWS) system May 6, 2015. The UCSF PEWS demonstrates 90% sensitivity and 90% specificity, and is the only automated electronic warning system that includes co-morbidity indicators and provides real-time historical data to evaluate changes from baseline.
- Implemented a dedicated RN resource for providing on-going support for auditing compliance and providing staff coaching on central lines. CLABSI rates in BCHSF decreased from 1.95 to 1.80/1000 line days – an 8% reduction.
- A multidisciplinary taskforce from HEIC, BMT physicians, and C6 nursing leadership implemented strategies to target CLABSI reduction in the BMT population. Interventions included standardizing line maintenance practices, enhanced focus on meticulous care, hand hygiene, and just-in-time nurse coaching and employing animation to accentuate patient and family education. These efforts resulted in a decrease in CLABSI rate from 3.06 to 1.67/1000 line days.
- Reviewed hospital compliance with best practices associated with blind NG tube placements and placement monitoring, cutaneous fungal outbreak associated with hospital linen, and safety using scissors.
- BCHSF joined Solutions for Patient Safety, a national collaborative of children's hospitals focused on quality improvement and improving safety culture.
- Submitted proposal for a BCHSF Vascular Access Team.
- Implemented strategies for increased infant safety aimed at reducing falls and limiting parent/child co-sleeping.
- Behavior Health/Psych taskforce convened. Policy for triage and disposition of patients admitted with behavioral health problems developed. Developing multidisciplinary strategy for identifying patients at risk for harm and care planning.

BCHSF CODE WHITE AND RAPID RESPONSE TEAM

There are two teams at BCHSF that respond to acute changes in patients' conditions: Code White Team and Rapid Response Team (RRT). The Code White team responds to potentially life-threating medical emergencies such as cardiopulmonary arrest. It consists of a Pediatric Intensive Care Unit (PICU) attending physician, a PICU fellow, a PICU charge RN, a pediatric respiratory care practitioner (RCP), a pediatric resident, the pediatric RN supervisor, and a pediatric pharmacist. The Rapid Response Team responds to acute changes, which are assessed as not immediately life-threatening, but warranting urgent assessment and treatment. The team consists of a Pediatric Critical Care attending or fellow, Critical Care charge RN, and Critical Care RCP. The BCHSF RRT is an additional safety net that provides immediate assistance to any family/staff member who is concerned that a patient's condition may be deteriorating. The RRT is an adjunct and not a substitute for the patient's primary attending or team.

ONGOING MONITORING AND QI:

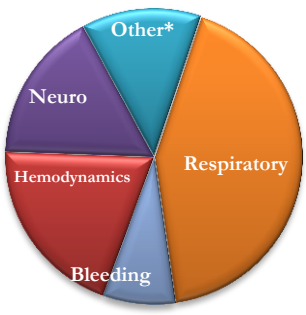
- The Code White/RRT Committee oversees the policies, procedures and performances of the Code White Team and the Rapid Response Team.
- The committee systematically tracks and evaluates performance on multiple quality metrics, including the number of code team activations by location and their outcomes, and the volume, reasons, and outcomes of RRT events.
- All codes are reviewed to identify any opportunities to improve the care process and reduce the likelihood of codes.
- We strive to minimize the numbers of serious, potentially life-threatening emergencies by encouraging early activation of the RRT team. We closely monitor the number of codes and RRT calls to evaluate this performance.
- In fiscal year 2014 there were no cardiopulmonary arrests in pediatric acute care units. Patient survival rates from cardiopulmonary arrest (CPA) at BCHSF exceed the National benchmarks both in the immediate success rate in returning spontaneous circulation in a patient who has suffered CPA and the survival rate at discharge.



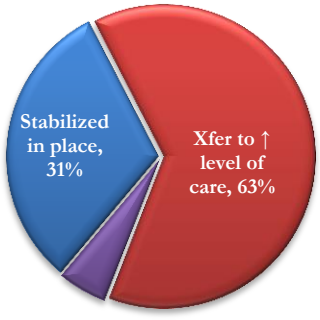
ACTIVITIES AND ACCOMPLISHMENTS:

- All codes are reviewed to identify any opportunities to improve the care process and reduce the likelihood of codes.
- Developing a family presence during codes policy for BCHSF to articulate that family may be present and specifies the support they will receive from staff.
- PCICU transitioned from internal codes to Code White activation.
- Zoll R series implemented offering CPR feedback and ETCO2 & oxygen saturation.
- Developed an RRT flowsheet to reduce the manual work of generating the RRT dashboard.
- Surveyed RRT customers to identify knowledge gaps and implemented measures to re-educate staff.
- Percent of RRT within 12 hours of admission has increased from an initial 17% in FY2012 to 32 % in 2015. Group will complete review these cases to identify issues and implement improvements.

Reason for RRT



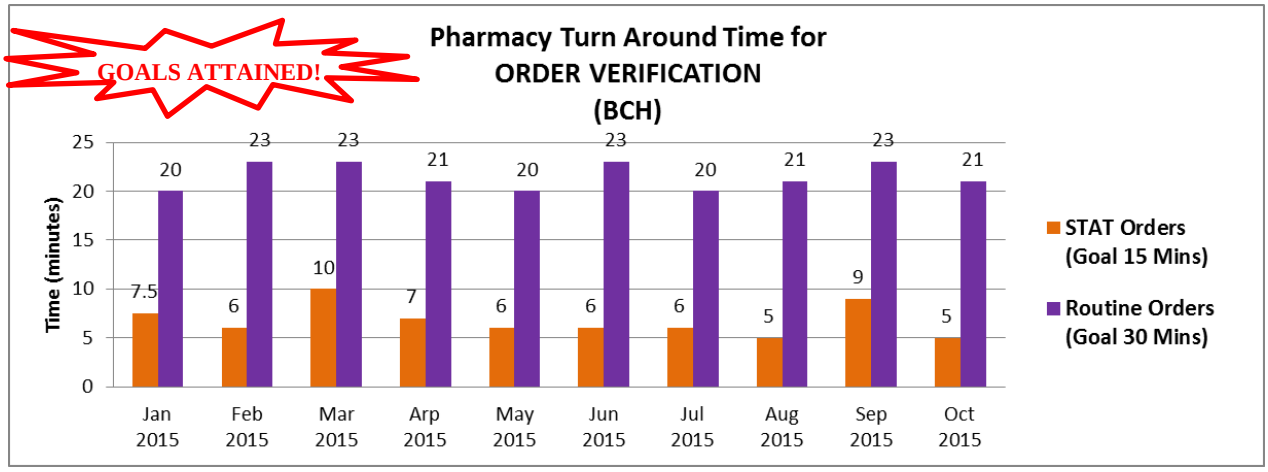
RRT Outcome



BCHSF MEDICATION COMMITTEE

KEY AREA OF FOCUS – MISSION BAY TRANSITION

To ensure a safe transition of all clinical and operational pharmacy services upon opening and post-opening. A measure of efficiency and safe practices post-opening of our new BCHSF was attaining the goals for pharmacist turnaround time for order verification.



ACTIVITIES AND ACCOMPLISHMENTS:

- Updated BCHSF TPN Guidelines, TPN Order Form, and TPN P&P to add Calcium to PPN in neonatal patients in accordance to approved maximum calcium gluconate concentrations of 200 mg/100 mL (2 g/1 L) or 1 mEq Ca^{+2}/100 mL
- Developed standardized procedures for the preparation and administration of low dose/low infusion rate Insulin in BCHSF
- Implemented availability of Low Dose Epinephrine (10 units/mL, 20 mL Syringe) in the PICU & PCICU
- Calcium Chloride Infusion in Critical Care Setting in Central Lines: Addition of 100 mg/mL as maximum concentration for patients < 2.5 kg
- Updated Pyxis Override List for neonatal, pediatric, and OB patients
- Updated BCHSF Smart Pump Drug Library

OTHER INITIATIVES IN PROGRESS:

- Initiated BCHSF Task Force to increase Alaris Guardrails® and Medfusion PharmGuard® SMART Pump Drug Library Compliance rates
- Development of standardized IV Push Medication Guidelines for neonatal and pediatric patients
- Improve STAT turnaround time to 30 minutes from time of provider order entry to time of antibiotic dispensing for the Hem-Onc/BMT patients presenting with fever and neutropenia in the ED
- Continued refinement of the UCSF & Walgreens Partnership Meds to Beds Program at BCHSF to ensure timely and accurate medication reconciliation and the provision of discharge medications with high customer and provider satisfaction

BCHSF INTEGRATED PEDIATRIC PAIN AND PALLIATIVE CARE: IP-3

IP-3 is a combined pain and palliative care service, staffed with pediatric anesthesiologists, integrative pain specialists, and palliative care specialists. There is a nurse practitioner who coordinates care and bridges services. The program has the support of Child Life Department and the Department of Pharmacy.

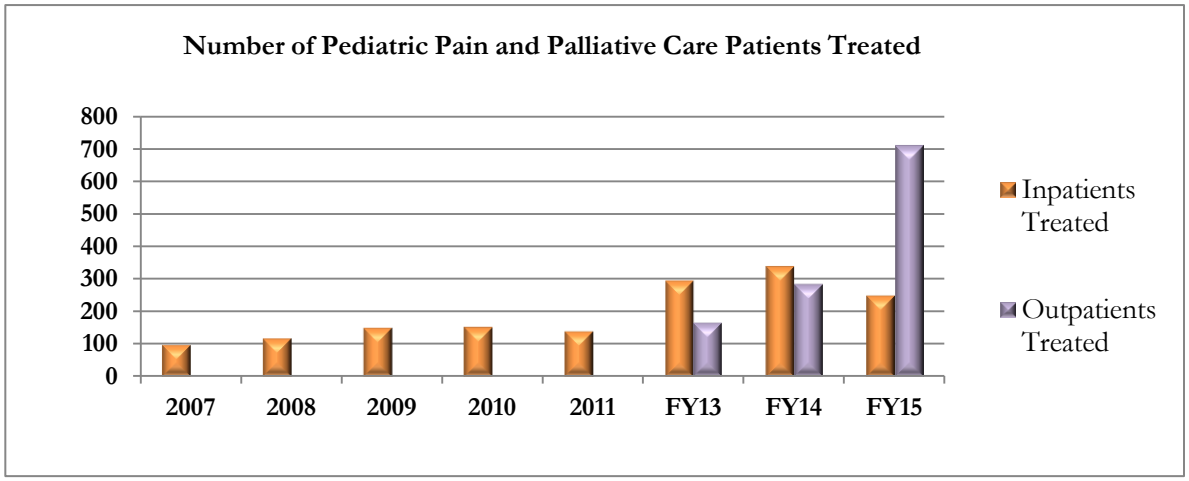
FIVE COMPONENTS OF IP-3:

- IP-3 Consult Service (inpatient pain and palliative care consults)
- Compass Care (longitudinal care coordination, bereavement, remembrance events, and staff education)
- Integrative symptom management (acupuncture, acupressure, biofeedback, canine therapy)
- Outpatient IP-3 Clinic (chronic pain and symptom management, complex care clinic)
- Sedation Service

The IP-3 program has seen steady growth in both volume and scope. It now offers comprehensive pain prevention and treatment, symptom management, care coordination, and bereavement services to pediatric and perinatal patients. Providing an innovative spectrum of services ranging from acute post-operative pain management to comprehensive care coordination services, IP-3 provides innovative multidisciplinary care across the continuum.

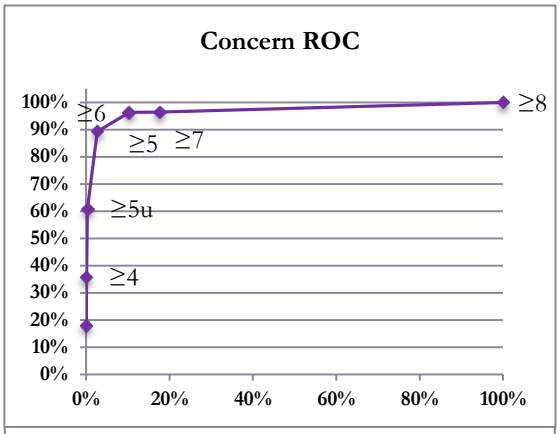
SCOPE OF SERVICES:

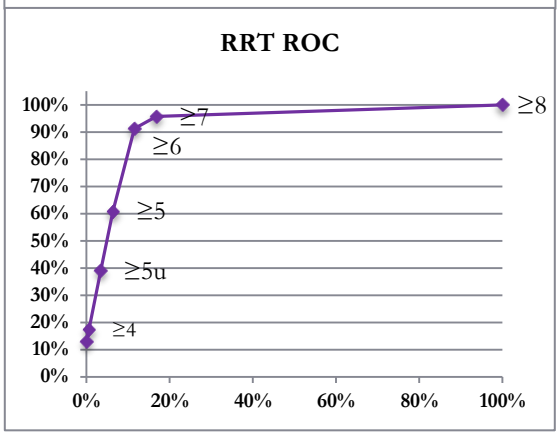
- Pain management
- Procedural sedation
- Palliative Care consultation
- Complex Care (outpatient)
- Family support
- Bereavement services
- Clinical guideline & policy development
- Education & training
- Community collaboration
- Integrative symptom management: acupuncture, acupressure, biofeedback, canine therapy, and other non-pharmacologic modalities

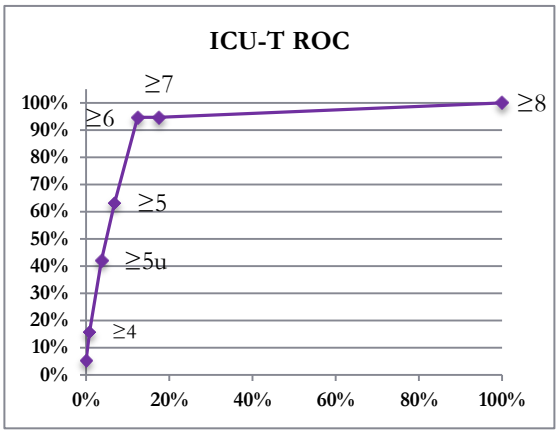


BCHSF PEDIATRIC EARLY WARNING SCORES (PEWS)

Early detection and response to clinical deterioration of patients' conditions is essential to safe care. The standards for monitoring of patients' conditions in the acute care areas have been routine vital signs measurements, nursing assessments, physician assessments and patient rounds. This has been augmented by laboratory and other diagnostic tests and limited physiologic monitoring by medical devices in select cases.







In 2015, BCHSF implemented an electronic surveillance system, built within the electronic health record, to continuously and automatically calculate a score for each patient in acute care that would assist caregivers in recognizing changes in patients' conditions and the risk of acute decompensation. The system is based upon published reports of pediatric early warning score (PEWS) scoring systems used by some children's hospitals. These systems typically use paper forms completed by bedside nurses at regular frequencies.

The BCHSF PEWS system was designed to automatically calculate the PEWS score using a combination of clinical assessments including neurological, cardiovascular and respiratory assessments, biochemical/lab values, signs of infection, recent surgery, stay in critical care, and baseline medical risk associated with cerebral palsy, prematurity, heart disease, tracheostomy or immunosuppressive or antiepileptic drugs. The scoring algorithm references an age-based, normal values table to identify normal ranges by age for respiratory rate and heart rate, including a reference to the normal value "baseline" for each patient so that trends in changes relative to normal values and relative to the "baseline" value for each patient can be detected.

This unique design was tested over a 3.5 month period looking for correlations with the care teams' perceptions of concerning patients, the correlation with rapid response team activations, and the correlation with a transfer to the ICU. 253 outcomes were evaluated with more than 2000 patient days. Analysis of the validation period data demonstrated high reliability of the system to detect patients at risk. Examining the receiver operating characteristics, a PEWS score of >5 was selected as an indicator of the need for team discussion of the patient. Following the validation period and staff training, the system was implemented in May, 2015.

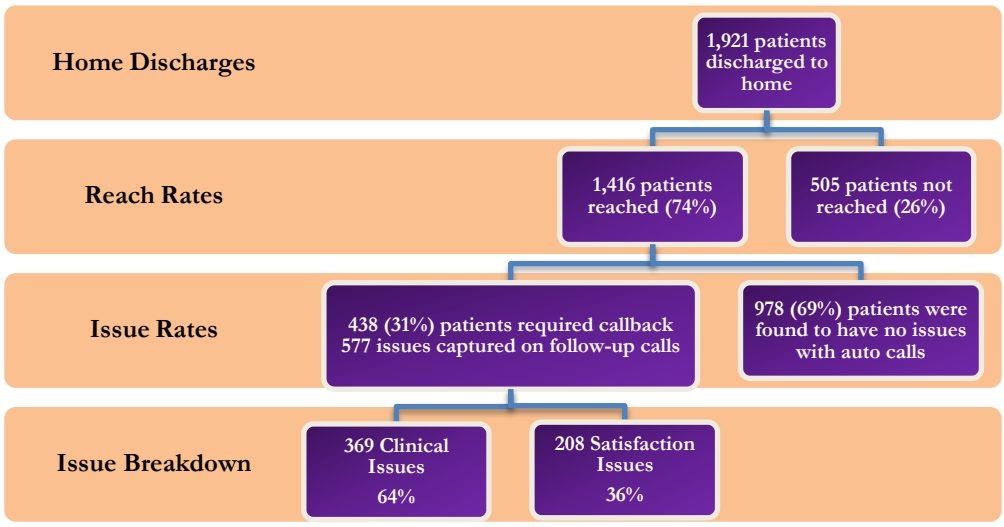
PEWS VALIDATION

Outcome Concern: largest AUC=0.93, score ≥5
Outcome RRT: largest AUC=0.90, score ≥5
Outcome ICU Transfer: largest AUC=0.91, score ≥5

BCHSF PEDIATRIC HOSPITAL MEDICINE DISCHARGE FOLLOW-UP

POST-DISCHARGE PHONE CONTACTS

BCHSF initiated a post-discharge telephone follow-up process with the goal of improving the transition of care from the hospital to home. The process focused on measuring both the incidence of clinical care concerns and patient experience concerns in patients treated by the Pediatric Hospital Medicine Division. Parents/caregivers are contacted by telephone within 24 hours following discharge. This program was expanded significantly in FY2015. Nearly 2,000 patients, discharged by the Division of Pediatric Hospital Medicine (PHM) in FY2015 were contacted. Seventy four percent were reached by telephone for follow-up.

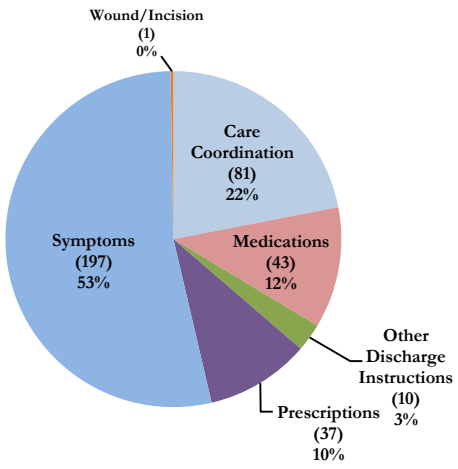


Sixty nine percent of the patients and/or guardians reached expressed no concerns. Thirty one percent conveyed concerns or questions regarding clinical care or satisfaction.

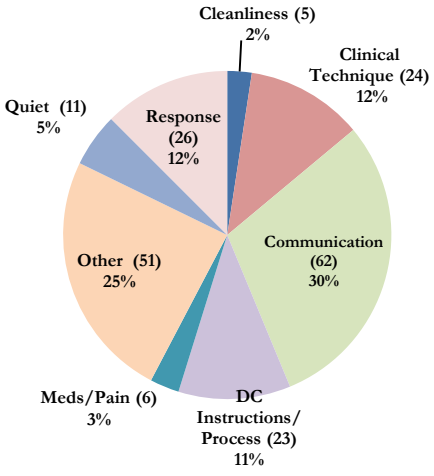
The most frequently expressed clinical issues were the presence of symptoms, care coordination issues, and medications/prescriptions issues. Most frequently expressed satisfaction issues were regarding communications, responsiveness, clinical techniques, and the discharge instructions process. All clinical and satisfaction concerns are triaged and resolved promptly by dedicated nurses.

The Division of PHM utilizes this feedback to evaluate the care from the patients' perspectives. With this feedback PHM is able to practice continuous process improvement with the goals of optimizing the care and experiences of our patients. The program will be further expanded this year to include all services in BCHSF.

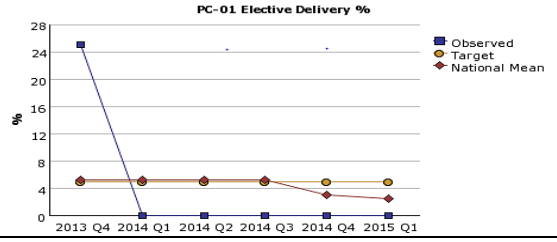
Clinical Issues



Satisfaction Issues

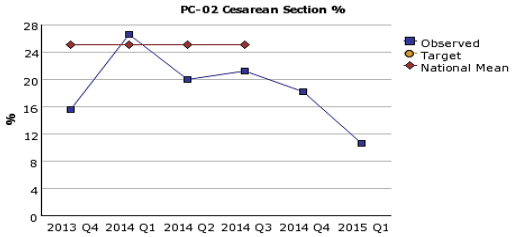


BCHSF PERINATAL AND PEDIATRIC CORE MEASURES



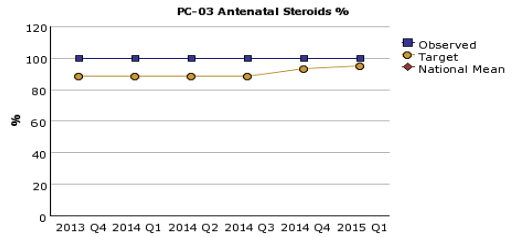
Elective Delivery %

- Patients with elective vaginal or cesarean deliveries at ≥37 and <39 completed weeks of gestation.
- Lower is better.
- The UCSF rate was 0% in 5 of 6 recent quarters.



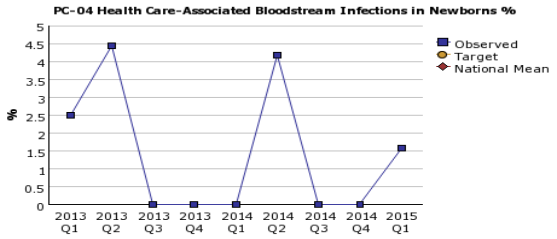
Cesarean Section % (nulliparous, term, singleton, in a vertex position)

- Lower is better.
- The UCSF target is ≤23.9%, same as Healthy People 2020.
- Performance has been better than the target and National Mean with the exception of the first quarter of 2014.



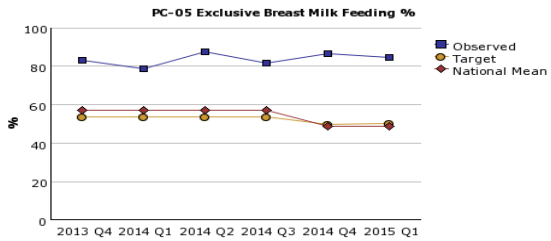
Antenatal Steroids %

- Steroids administered to patients at risk of preterm delivery of a fetus with an estimated gestational age of 24-32 weeks.
- Higher is better.
- UCSF has maintained performance at 100% over 6 recent quarters.



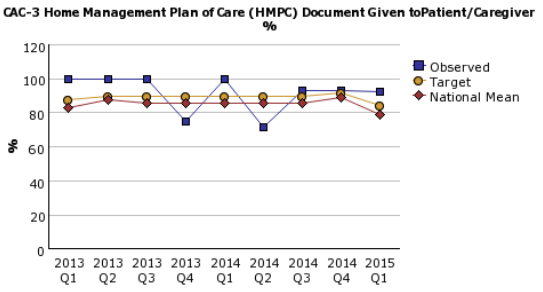
Health Care-Associated Bloodstream Infections in Newborns

- The goal of zero was achieved in only 5 of 9 quarters.
- Improvement work continues to increase reliability with central line maintenance bundles and to evaluate every occurrence.



Exclusive Breast Milk Feeding %

- Newborns having received breast milk exclusively from birth to discharge.
- Higher is better.
- UCSF performance is among the best reported to the UHC, far exceeding the UHC target and National Mean.

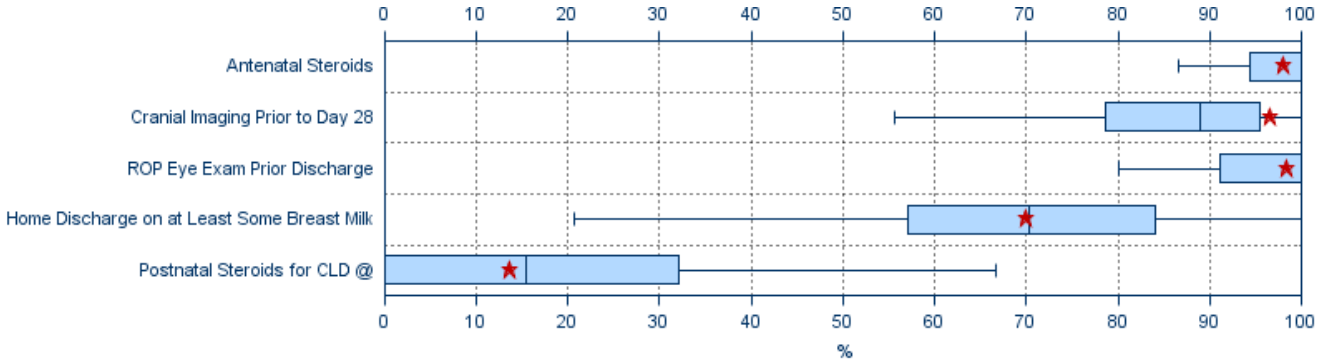


Asthma Home Management Plan of Care Document Given to Patient/Caregiver

- Higher is better.
- The UCSF target is 100%.
- Performance exceeds the UHC target and National Mean with 2 exceptions.
- Continued education to ensure that all components of the asthma action plan are communicated to patient/caregiver upon discharge.

THE CALIFORNIA PERINATAL QUALITY CARE COLLABORATIVE (CPQCC)

UCSF participates in the California Perinatal Quality Care Collaborative (CPQCC) which is an outgrowth of a 1997 initiative proposed by the California Association of Neonatologists. The initial focus of the Collaborative was the development of perinatal and neonatal outcomes and information, which allowed for data driven performance improvement and benchmarking throughout California. The Collaborative has expanded to include process metrics important to understand hospitals' performances in the care of infants with very low birth weights (400-1500 grams) and or extreme prematurity (22-29 weeks gestational age).



Measures followed by the @ symbol are based on events in reporting NICU only.

Source: CCPQCC, 2014.

This graph shows the percentage of infants who received the listed interventions/experienced the listed outcome. The distribution of the percentage across the CPQCC network is displayed as a horizontal box plot for each outcome. The box plot displays the lower and upper quartile of the percentage across the CPQCC network as the left and right boundary of the blue box. This means that 25% of CPQCC NICUs have a percentage that is lower than the lower left box boundary, and 25% of CPQCC NICUs have a percentage that is higher than the right box boundary. The median percentage across CPQCC NICUs is displayed as a vertical bar. The box plot also shows the minimum and maximum outcome percentage across the comparison group that is within the lower and upper fence. The red star represents the percentage of infants receiving the listed intervention/experienced the listed outcome at UCSF. Higher percentages indicate better performance for compliance in antenatal steroids, cranial imaging prior to day 28, retinopathy of prematurity (ROP) eye exam prior to discharge, and home discharge on at least some breast milk. BCHSF performs similar to or better than most CPQCC hospitals in these measures. Conversely, a lower rate indicates better performance for use of postnatal steroids for chronic lung disease. UCSF is similar to peer hospitals on this measure.

PATIENT EXPERIENCE

MEDICAL CENTER PATIENT EXPERIENCE SURVEYING

UCSF Medical Center and UCSF Benioff Children's Hospital San Francisco have been actively eliciting feedback from patients since the early 1980's and before it was commonplace. Today, UCSF sends approximately 350,000 patient experience surveys a year. The survey information is used to evaluate the patient's experience, track progress, and identify areas for improvement. The medical center partners with the survey firm, Press Ganey Associates, Inc. to conduct weekly surveys of all hospital and Home Health patients and to a sampling of clinic patients. Surveys are sent via email or mail by Press Ganey to patients within a few days after being discharged from the hospital or after a clinic visit.

UCSF Medical Center participates in the Hospital Consumer Assessment of Healthcare Providers & Systems (HCAHPS) survey process, sponsored by CMS. Starting July 2011, performance on the HCAHPS survey joined clinical quality outcomes as one of several factors determining Medicare reimbursement via CMS Value-Based Purchasing program.

The HCAHPS survey focuses on the following domains: communication with doctors, communication with nurses, responsiveness of hospital staff, cleanliness and quietness of hospital environment, pain management, communication about medicines, discharge information, and care transition. Two global overall assessment questions are also captured: recommend the hospital and overall hospital rating.

In 2012, UCSF began its participation of the Clinician & Group Consumer Assessment of Healthcare Providers & Systems (CGCAHPS) survey process to measure and monitor patient experience in the outpatient setting. Although UCSF utilized Press Ganey's proprietary survey prior to 2012, UCSF leadership felt that use of the CMS-sponsored survey was consistent with the trend of public reporting of organizational patient experience performance (already happening in the hospital side with the public reporting of HCAHPS). Beginning this year, UCSF will be reporting CGCAHPS officially as part of the Physician Quality Reporting System (PQRS) program.

The CGCAHPS survey focuses on the following domains: office staff quality, physician communication quality, access to care, and test results follow-up. Three global overall rating questions are also captured: recommend the provider's office, overall provider rating and see provider within 15 minutes.

MEDICAL CENTER PATIENT EXPERIENCE GOAL

For FY2015, the UCSF patient experience incentive award program (IAP) goal was based on combined hospital and outpatient performance on enhancing patient experience, each contributing 50% to the overall goal. The goal was based on 4th quarter achievement on the *"Would recommend to family and friends"* question on the HCAHPS and CGCAHPS surveys. Achievement was based on the "top box" score, which represents the percentage of patients who rate UCSF at the highest level. For HCAHPS, achievement was based on the percentage of survey respondents who answered "definitely yes" (Top Box) to the question: *"Would you recommend this hospital to your friends and family?"* CGCAHPS was based on the percentage of respondents who answered "yes, definitely" to: *"Would you recommend this provider's office to you family and friends?"*

For 4th quarter of FY2015, UCSF achieved an average top box score of 88% for the *"Would recommend to family and friends"* question on both surveys. This achievement met the target level of the IAP goal. Details of the results are below:

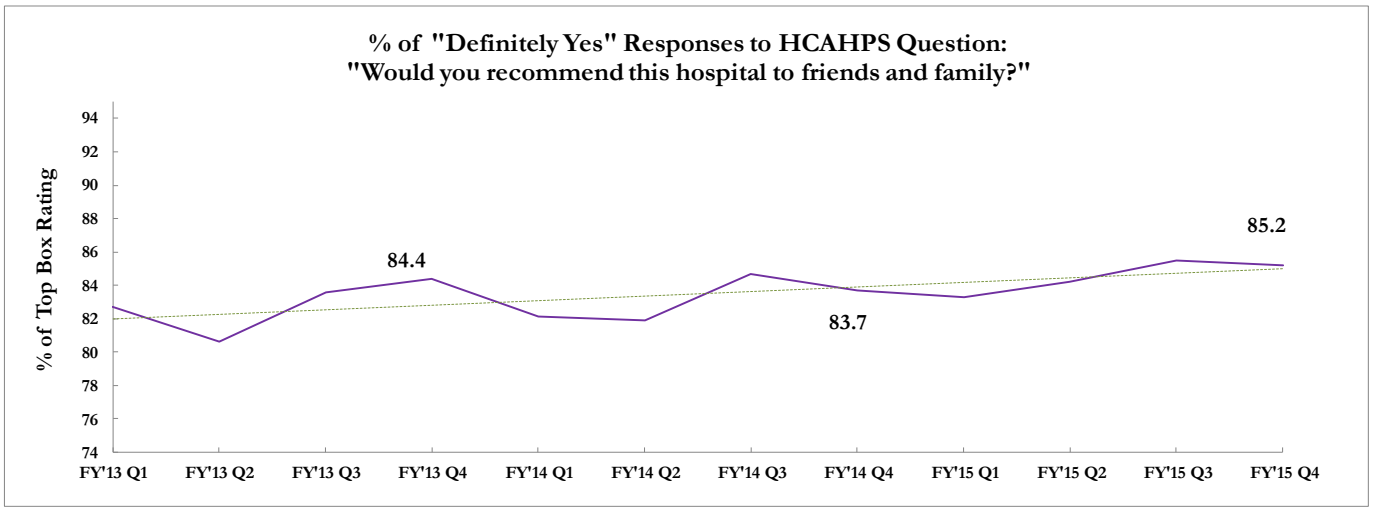
HCAHPS & CGCAHPS Top Box Performance on 'Would recommend to family and friends" Question

% of patients that rated "definitely yes" would recommend to family and friends	FY2015 Quarterly Performance							
	Jul-Sep14 (n=13,887) FINAL		Oct-Dec14 (n=12,898) FINAL		Jan-Mar15 (n=14,227) FINAL		Apr-Jun15 (n=12,989) FINAL	
	Mean	%ile	Mean	%ile	Mean	%ile	Mean	%ile
HCAHPS (inpatient)	**83%**	87	**84%**	89	**86%**	93	**85%**	92
CGCAHPS (outpatient)	**88%**	28	**88%**	27	**89%**	32	**90%**	36
Combined Performance (average)	**86%**	58	**86%**	58	**88%**	63	**88%**	64

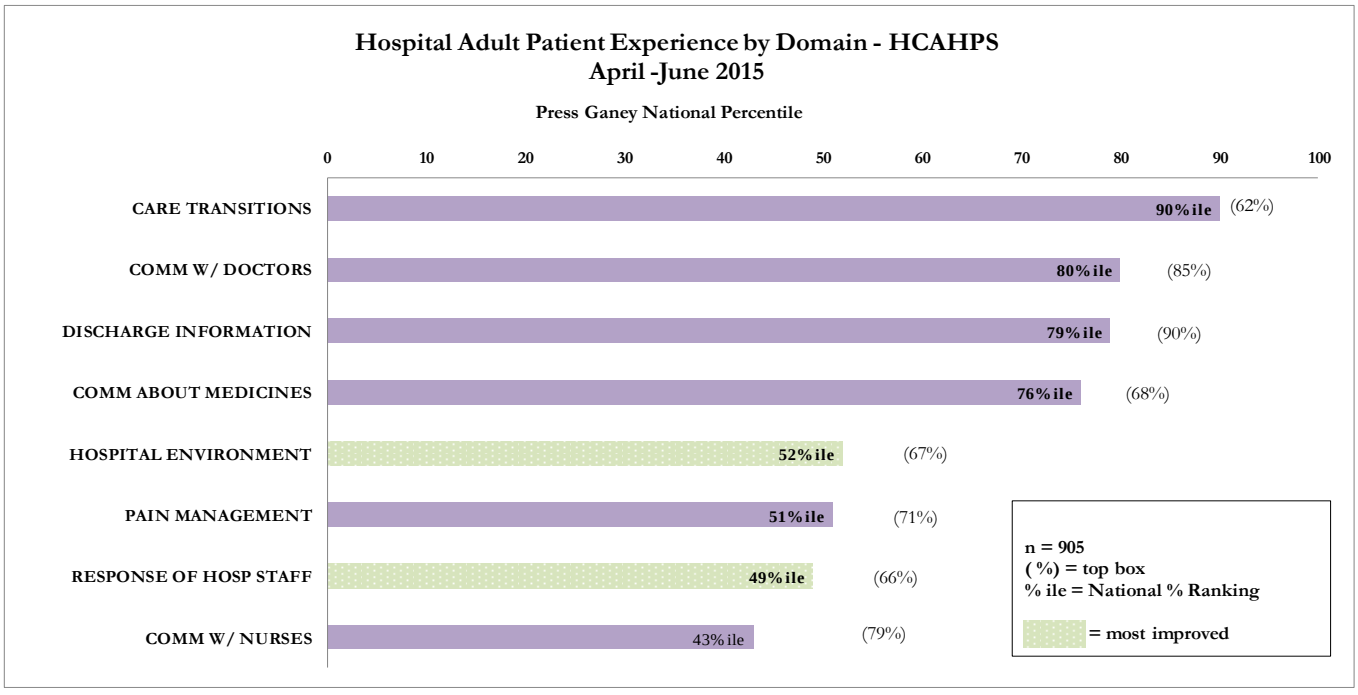
Medical Center Patient Experience Surveying (continued from previous page)

HCAHPS July 2014 – June 2015 Data Collection Summary of Performance

UCSF Medical Center has consistently scored above average on the Overall Hospital Rating and the Recommend Hospital questions when comparing performance of nearly 1,900 other hospitals across the nation. The past three years shows an upward trend for the Recommend Hospital question.



For each HCAHPS domain, top box performance can be ranked against nearly 1,900 other hospitals, resulting in a percentile score. Areas of strengths and opportunities can be gleaned when comparing each domain's percentile. In the chart below, although 62% of patients and families rated Care Transitions highly, UCSF's performance is 90% higher than all other national hospitals. In contrast, UCSF's performance in its nursing communication area ranks much lower compared to other hospitals (43rd percentile). It is worth noting that hospital environment and responsiveness of hospital staff, with relatively low rankings, have shown the greatest improvement over the past three years.

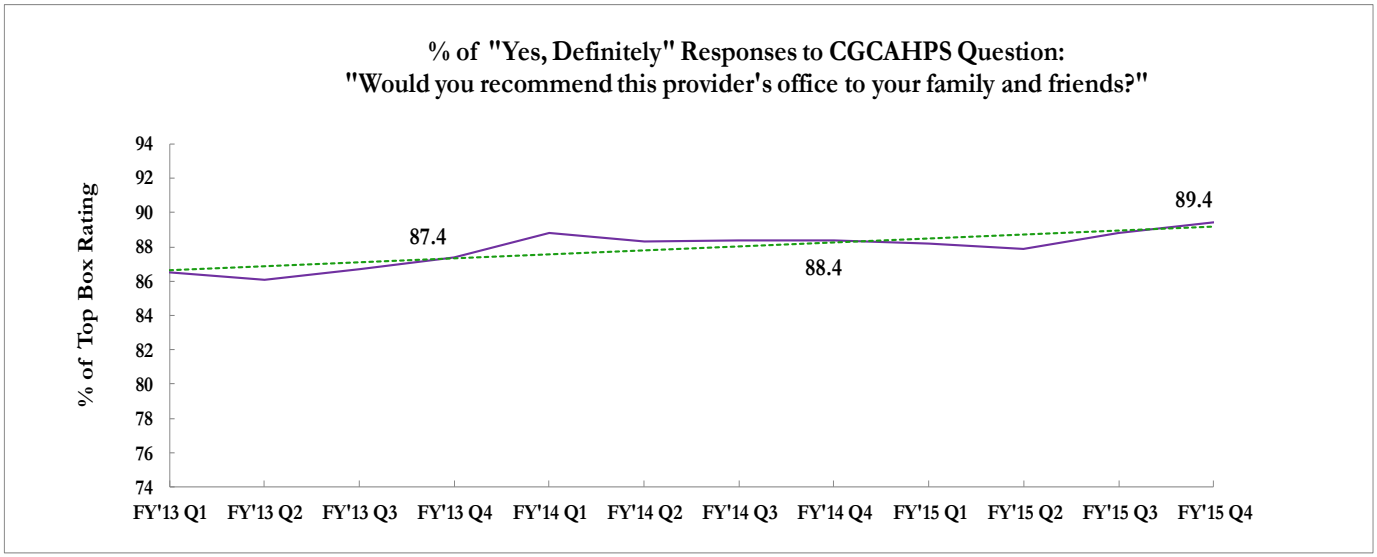


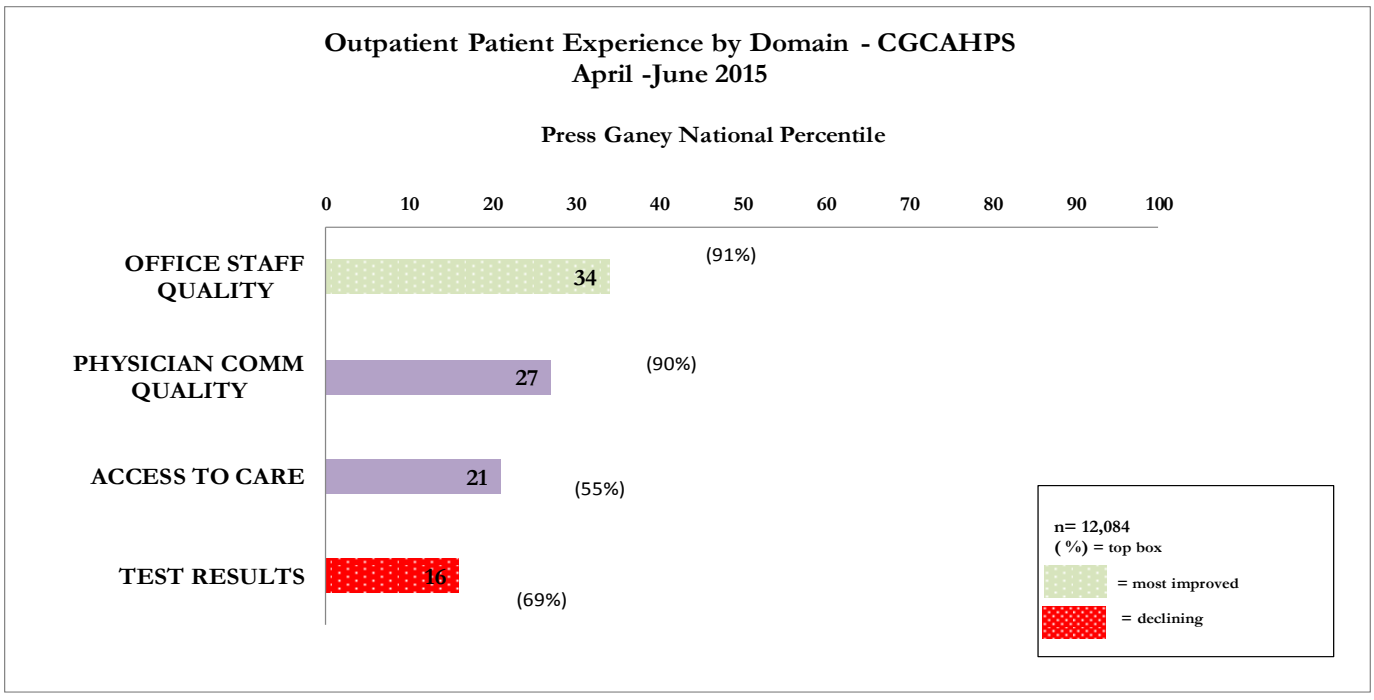
Medical Center Patient Experience Surveying (continued from previous page)

CGCAHPS July 2014 – June 2015 Data Collection Summary of Performance

As with the hospital side, outpatient's patient experience performance demonstrated improvement over the past three years. However, given that all of UCSF outpatient domains fell below the 50th percentile, when compared to approximately 16,000 other outpatient clinics, they have greater room for improvement.

The Office Staff Quality domain was the highest performing and most improved over the course of three years. Ironically, UCSF's commitment to improving patients' accessibility of their test results through the MyChart web-based tool correlates with a decline in the Test Results domain. The Test Results question asks if the provider's office gave the patient test results, a function that MyChart has rendered unnecessary due to its self-service model.

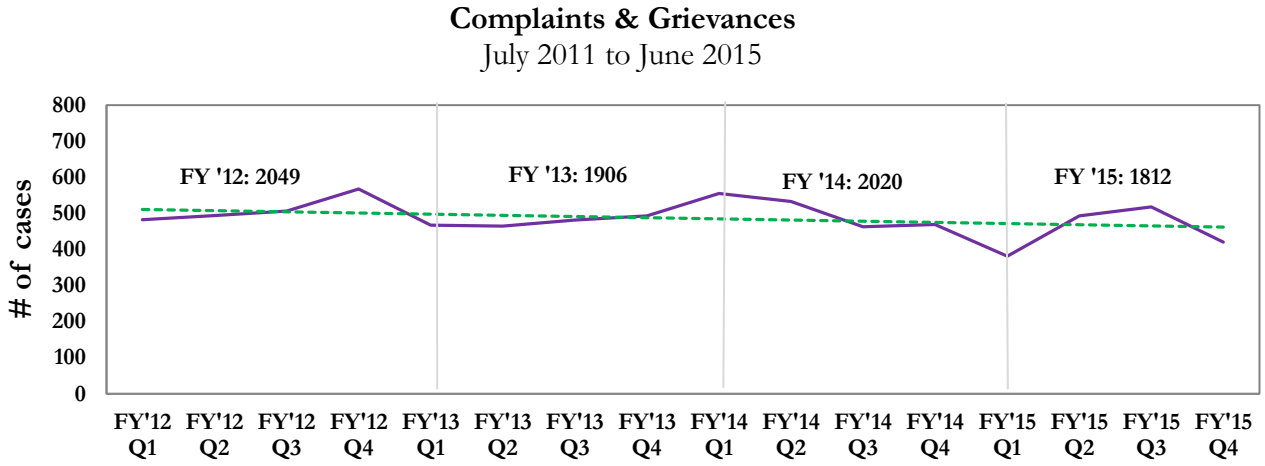




COMPLAINTS AND GRIEVANCES

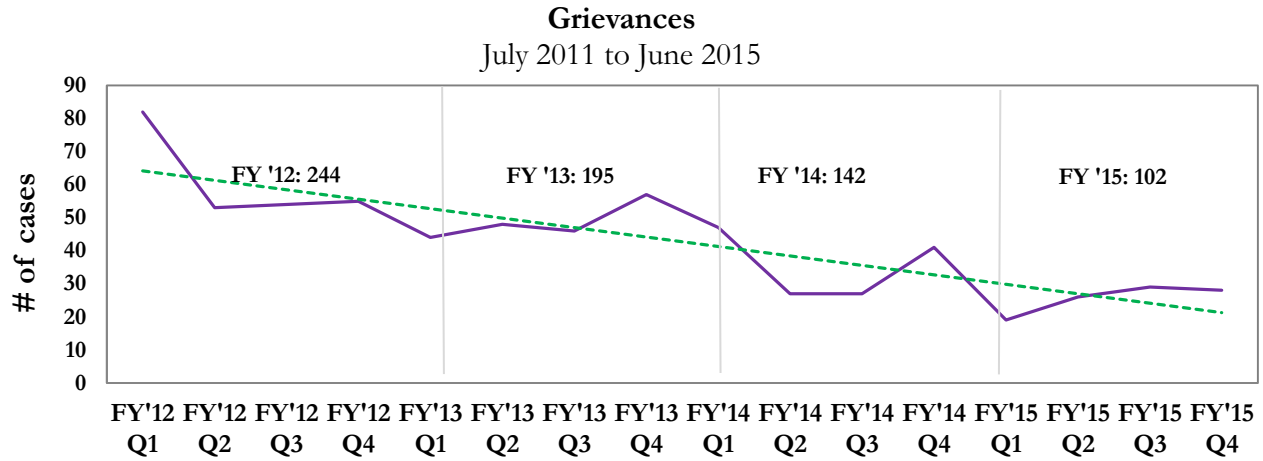
Complaints and grievance trends are based on patient feedback reported to the Patient Relations department directly from patients or their representatives or from patients who wish to discuss concerns after they have received a discharge call. They are tracked and reported to the Experience Excellence Committee, QIEC, and used for the Committee on Professionalism and Physician Advocacy Program (PARS), the physician ongoing professional performance evaluation, and other venues on a regular basis.

COMPLAINT/GRIEVANCE TRENDS BY VOLUME:



Above graph represents just Complaint and Grievance volume over 4 fiscal years. FY2015 began low, peaked at the first month of opening our new hospital at Mission Bay, leveled out, and continues on a downward trend.

GRIEVANCE TRENDS FY2015:



The above graph shows that grievances are on a downward trend. *A grievance by definition is a complaint or dispute conveyed orally or in writing involving care, neglect or abuse requiring further investigation and follow up within 30 days.* A *complaint involving care, neglect or abuse that is resolved at the time it is expressed, by staff present, remains a complaint*. Patient Relations has built strong partnerships with front-line managers to improve the process of addressing potential grievances at the time they are expressed, resulting in a reduction of grievance volume. Despite opening a new hospital FY2015 Q1 there continues to be a downward trend.

Complaints and Grievances (continued from previous page)

COMPLAINTS/GRIEVANCES BY CATEGORY TYPE FY2015:

Complaint/Grievances Categories	Complaints	Grievances	Total	%
Quality of Care	438	179	617	23%
Service Delivery	450	20	470	18%
Attitude/Courtesy	416	25	441	17%
Access to Care	347	2	349	13%
Communication	305	31	336	13%
Financial	233	15	248	9%
Administrative/Regulatory	65	10	75	3%
Physical Environment	56	2	58	2%
Privacy/Confidentiality	21	0	21	1%
Accommodation	18	0	18	1%
All Categories	**2349**	**284**	**2633**	

Source: RL Solutions – Feedback Module

The percent of complaints/grievances by category is displayed in the chart above (total volume of categories is higher than total number of complaints/grievances as there can be multiple categories assigned to a complaint or grievance). Grievances by definition comprise the majority of Quality of Care complaints (63% of grievances were coded as Quality of Care). Quality of Care concerns (treatment, comfort, coordination of care, delay in treatment, diagnosis and medication safety) and Service Delivery (responsiveness to patient needs, wait times, food) remain the highest sources of dissatisfaction at 23% and 18% of total volume respectively. Attitude/Courtesy is close behind at 17% of the total. Access to Care (timely appointment scheduling) and Communication (between care team members) each represent 13%. Financial issues (billing complaints, attitude of billing staff, phone access) make up 9%, though declined from the top 5 areas this year.

DISTRIBUTION OF COMPLAINTS/GRIEVANCES BY PATIENT TYPE:

Location	Complaints	Grievances
Ambulatory	58%	38%
Inpatient	29%	37%
ED	7%	21%
Ancillary	4%	3%
Other *	1%	1%

*includes non-patient visitors; Source: RL Solutions – Feedback Module

The table above displays the percentage of complaints and grievances by patient type (where patients received services). The majority of complaints and grievances are in the outpatient setting, followed by inpatient and then ED.

- **Compliance Rate FY2015:** Our goal is to close complaints and grievances within 30 days.
  - **93%** of Complaints/Grievances were closed within 30 days
- **Average number of days to close a grievance** = 29 Days
- **Average number of days to close a complaint** = 10 days

ACTIONS TO IMPROVE COMPLAINT AND GRIEVANCE RESOLUTION:

Individual complaints and grievances are thoroughly reviewed by the staff involved and their leaders as needed. Escalation to the multi-disciplinary Grievance Oversight Team (GOT) weekly meeting assures a higher level review and response to complex grievances. Individualized and automated reports are regularly distributed to departments.

CULTURE OF EXCELLENCE COMMITTEE

The goal of the committee is to create an environment and culture at UCSF Medical Center and UCSF Benioff Children's Hospital San Francisco where all employees feel valued and inspired, healthcare providers believe their patients are receiving the best care possible, and patients feel the quality of their care and service is excellent.

Living PRIDE is our organizational drive towards a Culture of Excellence focusing on patient, provider and employee experience.

ACTIVITIES AND ACCOMPLISHMENTS:

- Through Office of Population Health, expansion of Post-Discharge Phone Call Program to 80% of discharging areas. In FY2015, 16,361 patients were called by the program, and 13,049 patients were reached for a total reach rate of 80%. A channel to Patient Relations was created for further resolution of patient experience issues.
- Roll out of new Patient Experience Dashboard with enhanced transparency and data availability, including new specialty benchmarking and provider level data.
- Through Risk Management, 365% increase in use, now implemented in 50 areas.
- Gallup Employee Engagement survey conducted in Spring with action planning follow up in summer.
- First Provider Experience (PULSE) survey for physicians launched with follow up town halls, provider experience improvement portal creation for two way communication regarding ongoing improvements, and implementation of improvements (i.e. Launch of PEAK program to address ambulatory APeX proficiency and workflows for providers, scribe pilots, recognition program development for high volume my chart users among providers, water cooler planning for providers working in the Parnassus ORs, development of quality RVUs for providers, inclusion of providers in incentive award program).
- Formed the **Patient Advisory Council Governance Committee** with leaders from the existing advisory councils (Dept. of General Internal Medicine, Ambulatory Medicine, BCHSF, ICU, Women's Health, Palliative Care, and Cancer) in collaboration with leaders from the UCSF Health Experience to streamline efforts across the organization.
- Formed **CEC Recognition Subgroup,** a multidisciplinary group with a purpose to increase recognition across UCSF Health, as a key component of a broader strategy to increase workforce engagement.
  - Expansion of recognition programs (i.e. Chatter, a salesforce application that uses gaming to engage employees in recognition activities).
  - Revamped Honors and Awards program:
    - Restructured the Individual and Team PRIDE Award process
    - Developed an inter-disciplinary recognition champion selection committee
    - Created a new Redefining Possible Award given by a grateful patient to a physician
    - 22 awards in the following categories: Individual PRIDE, Team PRIDE, Exceptional Physician, Patient Safety, Voice of the Patient, Redefining Possible, and Leadership
- Initiated roll out of Orchid rounding tool for nurse leaders to round on patients, including improved processes for closing the loop on problems identified by patients.
- Rolled out face cards to all attending level providers, residents and fellows to improve recognition of the providers among patients and families.
- Engaged with American Academy on Communication in Healthcare to launch a train the trainer communication program for providers to launch in FY2016.
- Began steering committee for an Adult Life Program addressing the adult patient experience during hospitalization to roll out in FY2016.
- Created and launched the "You are the Key" cultural training for Mission Bay staff.
- Continued roll-out of Lean Reach for Excellence Training.
- Prepared for launch of Environmental Calming Crew to address the patient experience environment in clinical areas.

Culture of Excellence Committee (continued from previous page)

- Engaged with Unit-Based Leadership Teams to guide understanding of patient experience data and to plan and implement improvements to patient experience (i.e. letters to patients on neurosurgical and neurology inpatient services, communication coaching observations for providers).
- Provided over 200 consultations and presentations/training to departments on the patient experience.
- Patient Relations and Volunteer Rounding program expansion to additional nursing units and some medical practices.
- Standardized and revised Patient Satisfaction Reporting at Continuous Performance Improvement Committee (CPIC) for all departments with new consultation follow up for low performing departments.
- Improved provider communication scores in 3/4 clinical service areas targeted (adult inpatient 59 to 66th percentile, inpatient pediatrics 73rd to 90th percentile, ED 68 to 69th percentile.

PATIENT SATISFACTION SURVEYS

- E-survey expanded to adult and pediatric inpatient areas (in addition to ED, Outpatient practices, and Ambulatory Surgery). ED and Child CAHPS surveys launched to standardize surveying across the organization.

DIVERSITY AND INCLUSION

- Ongoing evaluation of UCSF processes and programs to ensure equal access and inclusion for protected groups and patients with special needs.
  - PAEI (Patient Access Equity and Inclusion Working Group): Focused work on identifying and adding necessary fields to APeX fields identified to achieve better gender identification and added "preferred language." Educated registration staff and others to access these fields.
  - TEACH (Transgender Experience & Access Committee for Health): Focused on equity issues for transgender inclusion. Educated staff on health needs. Piloted initiatives to better serve our transgender community.

OTHER

- EMMI (Expectant Management and Medical Information) has been expanded to more clinical areas and beginning to be used with OneView System at Mission Bay Hospitals.
- Continued Patient Advocacy Reporting System (PARS), a peer mentoring and messengering program that assists physicians who are at risk for malpractice claims based on patient complaint data
- The annual Voice of the Patient Awards recognized the following areas for their patient experience efforts in FY2014:

Highest performing units/practices:

Outpatient

- Neuro-Oncology
- Urologic Medicine – Cancer Center
- Cochlear Implant
- Post-Lung Transplant
- OHNS – Facial Plastic Surgery

Inpatient

- 11 North
- 5 Long Mt. Zion
- PICU

Most improved units/practices:

Outpatient

- Cardiothoracic Surgery
- Plastic Constructive Surgery – Parnassus
- Breast Surgery – Cancer Center

Inpatient

- 8 South
- 14 Long
- 7 North (now at Mission Bay Peds Cardiac Transitional Care Unit)

CONTACT INFORMATION AND ACKNOWLEDGEMENTS

This annual report was compiled from information presented at the Clinical Performance Improvement Committee (CPIC), Quality Improvement Executive Committee (QIEC), Patient Safety Committee, and the BCHSF Quality Improvement Executive Committee (BCHSF QIEC) meetings between July 2014 and June 2015.

For questions regarding report content, contact:

- QIEC: Patient Safety and Quality, Tina Mammone, Tina.Mammone@ucsf.edu and Niraj Sehgal, MD, Niraj.Sehgal@ucsf.edu
- CPIC: Quality Improvement (QI) Department, Julio Barba, Julio.Barba@ucsf.edu
- Benioff Children's Hospital San Francisco (BCHSF) QIEC: BCH QI, Paul Monsees, Stephen.Monsees@ucsf.edu
- Delivery System Reform Incentive Pool Program (DSRIP): Gina Intinarelli, Gina.Intinarelli@ucsf.edu

Referenced information within this report can be obtained from:

- Collaborative Alliance for Nursing Outcomes (subscription required), www.calnoc.org
- Centers for Medicare and Medicaid Services, www.cms.gov
- The Joint Commission, www.jointcommission.org
- The Leapfrog Group, www.leapfroggroup.org
- The Office of Statewide Health Planning and Development, www.oshpd.cahwnet.gov
- Press Ganey Associates (subscription required), www.pressganey.com
- National Database of Nursing Quality Indicators (NDNQI), a division of Press Ganey Associates, http://www.pressganey.com
- The University HealthSystem Consortium (subscription required), www.uhc.edu
- The California Perinatal Quality Care Collaborative (subscription required), www.cpqcc.org

The following committee chairs and staff contributed to this report:

- Accountable Care Organizations: Ami Parekh MD, JD, Adrienne Green MD and Sara Coleman
- Adult Code Blue Committee/Rapid Response Team: Matt Aldrich MD and Jenifer Twiford
- Adult Critical Care Committee: Matt Aldrich MD and Jenifer Twiford
- Cancer Committee: Lee-May Chen MD, Ann Griffin, Susan Nguyen, and My Nguy
- BCHSF Code Blue Committee: Steve Wilson MD, PhD and Shelley Diane
- BCHSF Medication Committee: Julie Wilson-Ganz PharmD, and Steve Wilson MD, PhD
- BCHSF Patient Safety Committee: Steve Wilson MD, PhD, Arpi Bekmezian MD and Jim Stotts
- BCHSF Pediatric Early Warning Scores (PEWS): Steve Wilson MD, PhD, Arpi Bekmezian MD and Paul Monsees
- BCHSF Pediatric Hospital Medicine Discharge Follow-Up: Arpi Bekmezian MD
- BCHSF Pediatric Pain and Palliative Care Program: IP-3: Karen Sun MD and Lisa Purser
- BCHSF Perinatal and Pediatric Core Measures: Paul Monsees
- BCHSF QIEC: Steve Wilson MD, PhD, Arpi Bekmezian, MD and Paul Monsees
- BCHSF Rapid Response Committee: Steve Wilson MD, PhD and Shelley Diane
- Clinical Performance Improvement Committee (CPIC): Ryutaro Hirose MD, Paul Brakeman MD, PhD, and Julio Barba
- Complaints and Grievances: Christine Diamond Santiago, Ken Fong, and Jason Phillips
- Culture of Excellence Committee: Diane Sliwka MD and Susan Ritter
- Diabetes and Insulin Management Committee: Robert Rushakoff MD, Janice Hull, and My Nguy
- Environment of Care Committee: Matthew Carlson
- Ethics Committee: S. Andrew Josephson MD
- Failure Mode and Effect Analysis (FMEA): Jim Stotts
- Infection Control Committee: Catherine Liu MD, Lynn Ramirez MD, Amy Nichols and Laurel Gibbs
- Leapfrog Group Survey: Ivy Kolvan
- Medical Records Committee: Michelle Mourad MD, Seth Bokser MD and SheRee Garcia

Contact Information and Acknowledgements (continued from previous page)

- National Surgical Quality Improvement Program (NSQIP): Mary McGrath MD, Tennille Parsons, and Yanina Stanislavskaya
- Nursing-Sensitive Indicators: Carrie Meer, Mary Moore, and Wendy Abbott
- Operating Room Committee: Nancy Ascher MD, PhD, Errol Lobo MD, PhD, Joann Rickley, and Erika Grace
- Pain Committee: Ramana (Ramo) Naidu MD and Jenifer Twiford
- Patient Safety Committee: Adrienne Green MD and Jim Stotts
- Patient Experience Surveying: Ken Fong and Jason Phillips
- Quality Improvement Executive Committee: Niraj Sehgal MD and Tina Mammone
- Quality Landscape: Julio Barba, My Nguy, Carla Graf, and Gina Intinarelli
- Risk Management Committee: Neal Cohen MD and Susan Penney
- Sedation Committee: Gail Shibata MD and Jenifer Twiford
- Surgical Case and Hospital Mortality Review Committee (SCHMRC): Philip Ursell MD and Rosanne Rappazini
- Transfusion Committee: Ashok Nambiar MD, John Feiner MD, and Patricia McKean
- UCSF Patient & Family-Centered Rounds (PFCR): Arpi Bekmezian MD
- Utilization Management Committee: Adrienne Green MD and Elizabeth Polek
- U.S. News & World Report: "America's Best Hospitals": Julio Barba
- U.S. News & World Report : "Best Children's Hospitals": Paul Monsees
- Technical Work and Report Production: Dhemy Padilla

FY2016 ORGANIZATIONAL GOALS
UCSF Medical Center and UCSF Faculty Practice

Quality and Safety (25%)

1) Reduce hospital onset clostridium difficile infection to 11.1/10,000 patient days.

2) Reduce all cause 30 day readmissions by 1.5% to 11.6%.

3) 61% of new patients will be seen within 14 days of appointment request.

- Threshold: Achieve 1 Quality and Safety goal
- Target: Achieve 2 Quality and Safety goals
- Outstanding: Achieve 3 Quality and Safety goals

BACKGROUND AND RATIONALE

Quality and safety are a top priority for UCSF Health. This year, one focus is on Clostridium Difficile (C.diff). UCSF rates are high in comparison to other CA hospitals and UHC benchmarks. C.diff infection is a hospital acquired infection with significant morbidity and mortality. It also increases length of stay (LOS) and cost.

Readmission is another area of focus and a UC Clinical Enterprise goal as well. In addition to quality implications, as a Value-Based Purchasing metric it also incurs financial penalties, is tied to bundled payments and ACO performance.

Finally, in the outpatient setting, providing timely access to patients seeking care remains a priority goal for the organization.

Patient Experience (25%)

1) For the survey question "would you recommend" UCSF to family or friends, achieve the following percentage of patients rating "yes definitely" (top box) or mean score for FY 2016:
   - Inpatient adult (HCAHPS): top box of 84.1%
   - Outpatient (CGCAHPS): top box of 89.2%
   - Pediatric (Press Ganey): mean score of 93.1
   - ED (Press Ganey): mean score of 85.2
   - Ambulatory Surgery (Press Ganey) mean score of 94.9
     - Threshold: Achieve at least 2
     - Target: Achieve at least 4
     - Outstanding: Achieve all 5

2) *Specific to physicians*, the goal will be as follows:
   For the composite of survey questions MD/Provider Communication Quality, achieve the following percentage of patients rating "always" (top box) or mean score for FY 2016:
   - Inpatient adult (HCAHPS top box): 83.2% baseline (82.8%)
   - Outpatient (CGCAHPS top box): 90.7% (baseline 90.2%)
   - Pediatric (Press Ganey mean): 92 (baseline 91.9)
   - ED (Press Ganey mean): 88.6 (baseline 88.2)
   - Ambulatory Surgery (Press Ganey mean): 93.3 (baseline 92.8)
     - Threshold: Achieve at least 2
     - Target: Achieve at least 4
     - Outstanding: Achieve all 5

BACKGROUND AND RATIONALE

Creating an outstanding patient experience is a top priority for UCSF Health. Consumers today are more engaged in their health than ever, and have choices for where to receive care. They seek the highest quality but also the best possible experience.

In FY 2015 we combined the Inpt Adult and Outpt CAHPS scores to determine our goal achievement. In FY 2016, we are adding three new service areas, which will be following their performance individually; these goals are intended to be a challenge in each area in order to incentivize making a significant improvement.

Finance and Operations (25%)

1) Discharges, adjusted for outpatient activity (50%):
   - Threshold: Budget: 65,003 adj. discharges
   - Target: Budget plus .5%: 65,328
   - Outstanding: Budget plus 1%: 65,653

2) Operating Cost per Case (50%):*
   - Threshold: Budget: $26,458 per adj. discharge
   - Target: Budget less .5%: $26,326
   - Outstanding Budget less 1%: $26,193

**Discharges adjusted for outpatient activity and acuity*

BACKGROUND AND RATIONALE

Improving the financial position of UCSF Health through growth and increasing value at UCSF Medical Center, UCSF Benioff Children's Hospitals, UCSF Faculty Practice and Langley Porter Hospital and Clinics is a top priority.

Core service growth will be accelerated through the execution of strategic initiatives. The FY2016 volume budget contains aggressive projections including a 5.7% increase in UCSF adult cases over FY2015 levels. This follows a year (FY2015) in which UCSF Health saw a 5.7% increase in overall discharges. Each 1% increase in adjusted discharges adds approximately $20 million in contribution margin.

Cost improvement is imperative to increase "value" for our patients and purchasers of healthcare services. UCSF Health will achieve cost improvements through increased patient throughput, improved utilization, shared service consolidations, labor productivity and expense management, and process improvement utilizing LEAN, Caring Wisely, UC Health Value for Scale and other techniques. Each 1% decrease in cost per adjusted discharge reduces cost by approximately $32 million.

FY2016 Operations Workplan

Quality and Safety: Continuously pursue actions that support safe care and quality outcomes

- Reduce Sepsis mortality to 11.37% (10% reduction from FY14 baseline)
- Reduce CLABSI to <1/1,000 central line days (FY15 baseline 1.29)
- Reduce CAUTI to 2.03/1,000 catheter days (10% reduction from FY15 adjusted baseline)
- Increase HPV vaccine rates for appropriate children by 10% from FY 15 to 25.5% (exceeding HEDIS 90th percentile)
- Increase colon cancer screening among adults from 67.5% to 72% (at HEDIS 90th percentile)
- Reduce blood utilization
- Improve hospital throughput with 20% patients discharged before noon for 9 of 12 months OR 22% of patients discharged before noon for 3 of 12 months.
- Improve hospital throughput with LOS management to LOS index <1
- Increase patient participation in EMMI by 25%

Experience: Improve the Patient Experience

Roll out an Adult Life Program to serve as a resource and referral center for adult patients and their families across the UCSF enterprise. Focus this year will be on the inpatient experience.

Roll out a comprehensive rounding program on patients and on staff via the Orchid rounding tool:

- Service recovery quick response system
- Patient experience rounding
- Employee engagement rounding
- Comprehensive feedback loop system across enterprise

Continue to support the UBLT improvement teams' development by aligning experience improvement efforts

Rollout communication learning programs: "communicating with empathy" (staff) and "relationship-centered communication" (providers)

People: Improve employee engagement and staff development

UCSF Health

- Integrate elements of UCSF Health's operating plan with Faculty growth plan in the School of Medicine
- Clarify operating decision-making matrix in new organizational structure
- Develop new communications strategies and methods to effectively communicate to stakeholders across UCSF Health

Continuous Process Improvement

- Rollout a re-branded New Employee Orientation
- Design Lean/CPI Management Curriculum. Train 50 managers and MDs by June 30, 2016
- Improve and expedite the Labor and Employee Relations performance management process to support managers
- Talent Acquisition: improve quality and timeliness of new hires
- Develop internal talent and succession planning

Improve Net Promoter Score among physicians from -11 to +10

Launch interactive physician experience portal

- Grow department/Unit Based Leadership Teams (UBLTs) focus
- Rollout organizational improvements (ambulatory prioritization)
- Enhanced communication strategy with providers
- Optimize APeX resulting in improved PEAK efficiency score by 15% within 3 months of each departmental site visit.

Value: Increase efficiencies and reduce costs

LPPCH

- LPPHC APeX go-live of clinical and revenue cycle applications to integrate with UC Health
- Initial implementation of 1-2 adult and/or pediatric mental health strategies

Children's Enterprise Integration:

- Integrate two support functions between BCHSF and BCHO
- Develop integrated financial modeling and service line reporting
- Integrate 4 physician divisions and 2 satellite outpatient clinic locations
- Benioff Children's Hospital Oakland Master Facilities Plan – break ground and steel built by June 2016
- Increase Children's Philanthropy to support Phase I Master Plan at BCHO ($22.6M)

Operations

- Evaluate first year results of Funds Flow Program
- Redesign and implement new processes and changes in perioperative services that results in a ten percent growth in OR cases and $3.5 million reduction in non-value added processes (
- Implement Caring Wisely and value improvement initiatives to achieve net savings of at least $2.6M annually
- Broad implementation of lean process improvement including deploying up to 13 new UBLTs and Active Daily Management to up to 6 UBLTs
- Plan and initiate for UCSF and BCH Oakland data center outsourcing
- Implement double upgrade to UCSF Epic by January 10, 2016
- Finalize IT Sourcing Plan and initiate transition to new model
- Complete ICD-10 go-live in October 2016

Growth: Grow services and Patient volume

Access

- Expand Primary Care – open an additional office in 2016. Expand Secondary Care – secure space for a 50,000 sq. ft. multispecialty practice at Mission Bay
- Complete Network Access Control security for wireless and remote access
- Develop and Implement capacity improvement plans for each practice (75% of patients seen within 14 days)
- Increase the number of physicians in the Benioff Children's Foundation through addition of at least three new primary care practices and one new specialty care practice.

Destination Programs

- Approve and Implement 1-3 additional Destination Programs for FY16.
- Achieve 176 additional admissions from existing designated destination programs
- Re-institute Service Line support for key medical center programs.

ACO/Affiliations

- In partnership with John Muir Health, secure Knox Keene license, secure provider agreements and start enrollment in ACO by June 1, 2016.
- Develop integrated IT capabilities to support Affiliation Strategies and Population Health.
- Develop infrastructure components to effectively manage population of contracted individuals for risk-based contracted lives.
- Finalize agreement with John Muir Physician Network and form Oakland Medical Group.
- Evaluate other ambulatory sites, including San Mateo, inner East Bay, Mission Bay secure at least one new primary care site and complete program plan for Oakland OPC.

Cancer

- Complete strategic plan and the related tactical/implementation plan. Resource the implementation.
- Complete multi-site plan and detailed programming for Precision Cancer Medicine Building.