

Environment of Care Annual Report Fiscal Year 2019-2020

Approvals:

Environment of Care Committee:

Medical Executive Committee:

Nursing Executive & Patient Care Services Committee:

PIPS Committee:

Presentation & Review Schedule:

Joint Conference Committee:

San Francisco Health Commission:

INTRODUCTION

The goal of the Zuckerberg San Francisco General Hospital & Trauma Center (ZSFG) Environment of Care (EOC) Program is to provide a safe, functional, and effective environment for the care of patients, as well as for staff and visitor use. The EOC Program encompasses the following seven programs/areas:

- I. Emergency Management (Lann Wilder – Director of Emergency Management)
- II. Fire & Life Safety Management (Greg Chase – Director of Facilities Services)
- III. Hazardous Materials and Waste Management (Mike Harris – Safety Officer)
- IV. Medical Equipment Management (Elkin Lara-Mejia – Manager of Biomedical Engineering)
- V. Safety Management- (Mike Harris - Safety Officer)
- VI. Security Management (Basil Price – SF DPH Director of Security)
- VII. Utility Systems Management (Greg Chase –Director of Facilities Services)
- VIII. Unsung Heroes- (Additional Members)

The EOC Program is managed by the EOC Committee. The EOC Committee is a multi-disciplinary group which is focused on the continuous improvement of all aspects of the Environment of Care.

Activities of the EOC Committee include:

- Identifying risks and implementing systems that support safe environments,
- Working to ensure that hospital staff are trained to identify, report, and take action on environmental risks and hazards,
- Setting and prioritizing the hospital's EOC goals and performance standards and assessing whether they are being met, and
- Working to ensure the hospital is compliant with the EOC-related requirements of all applicable regulatory bodies.

Membership of the EOC Committee is comprised of:

- Program managers for each of the seven EOC Management Programs, as listed above
- Representatives from:
 - Clinical Laboratories (Andy Yeh),
 - Dept. of Education & Training (Kala Garner),
 - Environmental Services (Francisco Saenz),
 - Infection Prevention & Control (Elaine Dekker),
 - Nursing (Andrea Chon),

- Quality Department (Tom Holton, Susan Brajkovic, etc, al),
- Pharmaceutical Services (Julie Russell),
- Linen and Messenger Department (Philip Anih), and
- Food Nutrition Services (Katherine Merriman)

EOC projects and initiatives include opportunities for improvement identified during ongoing hazard surveillance, risk assessment, and other EOC activities to promote a culture of safety awareness.

As of August 2020, Greg Chase and Val Barnett serve as co-chairs of the EOC Committee.

The EOC Annual Report highlights the activities of the EOC Program during Fiscal Year 2019-2020. For each of the seven EOC chapters, it is organized as follows:

- Scope,
- Accomplishments,
- Program Objects,
- Performance Metrics, and
- Goals and Opportunities for Improvement

This year's additional chapter ("Unsung Heroes of the Environment of Care Committee") details contributions, accomplishments, and challenges from Departments (Education & Training, Environmental Services, Infection Prevention & Control, and Pharmaceutical Services) who devote time and resources to ZSFG EOC activities, but do not have traditional Joint Commission mandated chapters in the report.

I. EMERGENCY MANAGEMENT

SCOPE

The Emergency Management Program provides information, planning, consultation, training, resources, and exercises for hospital staff and leadership to ensure that Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) effectively mitigates the impact of, prepares for, responds to, and recovers from emergencies and disasters and therefore is able to sustain its Mission of providing quality healthcare and trauma services with compassion and respect. These efforts support ZSFG's core value of patient and staff safety as well as the accountability goal of complying with regulatory standards. The Director of Emergency Management develops and implements policies, procedures, protocols, standard work and other job aids in accordance with:

- California Administrative Code Disaster and Mass Casualty Program (Title 22);
- The National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS);
- The Joint Commission Standards and Elements of Performance; and
- The Centers for Medicare and Medicaid Services (CMS) Conditions of Participation.

The Emergency Management Program encompasses all departments and areas of the ZSFG campus, including those at the Behavioral Health Center.

ACCOMPLISHMENTS

- Worked with Nursing Administration and Clinical Informatics to test business continuity policies and procedures for planned downtime for Epic and network maintenance.
- Updated the ZSFG Emergency Response quick reference "Rainbow Chart" to include Code Tan and updated phone numbers.
- Worked with DPH PHEPR and Facilities Services to improve overall hospital response to extreme heat (over 85°F) and poor air quality.
- Worked with Violence Prevention Team and Nursing Administration to improve staff knowledge and response to Code Tan incidents to ensure patient, visitor and staff safety and compassionate and equitable care during traumatic incidents.
- Continued to provide HICS Basics training for ZSFG managers and supervisors.
- Clinical and HICS Incident Management Teams effectively and successfully managed one full-scale mass casualty incident exercise, departmental earthquake preparedness drills for the Great California ShakeOut, three extreme heat events, two City-wide Medical Surge Tabletop Exercises, a labor action impacting UCSF staffing at ZSFG, several planned computer system downtime incidents, and the prolonged response to the Covid-19 pandemic with significant improvements and adjustments made to the ZSFG Surge Plan.

PROGRAM OBJECTIVES FOR FY 2019-2020

Objectives	Met/ Not Met	Comments and Action Plans
The hospital conducts an annual hazard vulnerability analysis (HVA) to identify potential emergencies that could affect demand for the hospital's services or its ability to provide those services, the likelihood of those events occurring, and the potential impact and consequences of those events. The HVA is updated when significant changes occur in the hospital's services, infrastructure, or environment.	Met	Updated 7/13/20 and shared with SFSD, SFFD, SFPD, DPH, the SF Department of Emergency Management and other SF hospitals in August, 2020.
The hospital develops and maintains a written all-hazards Emergency Operations Plan that describes the response procedures to follow when emergencies occur. The plan and associated tools facilitate management of the following critical functions to ensure effective response regardless of the cause or nature of an emergency: <ul style="list-style-type: none"> • Communications • Resources and Assets • Safety and Security • Staff Responsibilities and Support • Utilities and Critical Systems • Patient Clinical and Support Activities 	Met	ZSFG's Emergency Operations Plan and Hazard Specific Plans were revised to more closely align with updated CMS and TJC standards.
The hospital implements its Emergency Operations Plan when an actual emergency occurs.	Met	Extreme Heat and Covid-19 Responses.
ZSFG's emergency response plan and incident command system facilitate an effective and scalable response to a wide variety of emergencies and are integrated into and consistent with the Department of Public Health Disaster Plan and the City and County of San Francisco Emergency Operations Plan, and are compliant with the California State Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).	Met	Demonstrated plan scalability and effectiveness during Extreme Heat and Labor Action incidents, Citywide Table Top MCI Exercises, the Statewide Disaster Exercise, internal activations for downtime procedures, and Covid-19 Response.
The hospital trains staff for their assigned emergency response roles.	Met	<ul style="list-style-type: none"> • New Employee Orientation • Annual Emergency & Disaster Response Training • HICS Basics Training
The hospital conducts exercises and reviews its response to actual emergencies to assess the appropriateness, adequacy and effectiveness of the Emergency Operations Plan, as well as staff knowledge and team performance.	Met	Completed After Action Reports and performance evaluations of all actual emergencies, planned downtime events, and three exercises.
Annual evaluations are conducted on the scope, and objectives of this plan, the effectiveness of the program, and key performance indicators.	Met	Annual Evaluation by Disaster Committee completed 8/13/20.

The Disaster Committee and the Environment of Care Committee have evaluated these objectives and determined that they have been met. The program continues to direct emergency management preparedness and response in a positive and proactive manner.

PERFORMANCE METRICS

An analysis of the program objectives and key performance indicators is used to identify opportunities to improve performance and evaluate the effectiveness of the program. This analysis provides the Disaster and Environment of Care Committees with information that can be used to update the Emergency Management program activities. The following are current performance metrics:

Performance Metrics	2019-2020 Goal	2019-2020 Results	Comments & Action Plan
Specific Staff Will Complete Required Training in HICS. Current designated Staff who have completed HICS Basics – Baseline 88%	90%	90%	Met.
Ensure that Staff, Patient and Visitor Communication is Distributed During Drills and Actual Incidents.	95%	100%	Met. Signage and ongoing messaging during Statewide Exercise and Covid-19 Response.
Conduct and Evaluate at Least Two (2) Code Tan Drills or Actual Incidents, Focusing on Response.	100% 2	100% 6	Met. Six actual incidents. Staff response remains poor. Updated Rainbow Chart.
During Disaster Exercises and Actual Incidents, the Incident Management Team will Complete Critical Functions.	95%	100%	Met. Statewide Exercise and Covid-19 Response.
During Disaster Exercises and Actual Incidents, HICS Staff will Complete Appropriate Documentation. <ul style="list-style-type: none"> • HICS Job Action Sheets • HICS Forms • Communication of Incident Action Plan 	95% 95% 95%	100% 100% 100%	Met. Statewide Exercise and Covid-19 Response.
During Code Pink Drills and Actual Incidents, ZSFG Staff will cover designated posts and report appropriate information. <ul style="list-style-type: none"> • Designated Posts Covered • Sightings of Child Reported to 64911 • Search Results Reported 	90% 100% 90%	89% N/A 91%	Partially Met. Long gap in drills due to Covid-19 response.
Decrease Everbridge Undeliverables. Baseline 0.11%	< 0.1%	0.09%	Met. Updated contact information.
Assess Staff Knowledge of Emergency Procedures.	95%	97%	Met. New measure implemented January 2020.
Implement at Least 90% of Corrective Actions Identified in FY 2016-2019 Exercises and Actual Incidents by 6/30/20.	90%	91%	Met. Most issues have been completed or are implemented and ongoing.

EFFECTIVENESS

The Emergency Management program has been evaluated and is considered to be effective by both the Disaster Committee and the Environment of Care Committee. The program continues to direct and promote emergency and disaster preparedness and response capabilities in a proactive manner.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2020-2021

- Continue providing training on the Hospital Incident Command System (HICS) for all Incident Management Team members, department supervisors and management level staff.
- Continue to improve Code Tan response.
- Ensure effective and efficient incident management and documentation.
- Evaluate and improve disaster and emergency responses in terms of equity.

The proposed performance metrics for these goals include:

Emergency Management Proposed Performance Metrics for 2020-2021	Target	Comments & Action Plan
Specific Staff Will Complete Required Training in ICS.	90%	Driver Metric. Will renew focus on ICS compliance after 8/01/20.
Ensure that Staff, Patient and Visitor Communication is Distributed During Drills and Actual Incidents.	95%	Driver Metric. Communication will include Incident Action Plan and talking points to share with patients and visitors.
During Disaster Exercises and Actual Incidents, the Incident Management Team will Complete Critical Functions.	95%	Watch Metric. Continuing focus on standard work to ensure training of Incident Management Team members.
During Disaster Exercises and Actual Incidents, Staff will Complete Appropriate Documentation. <ul style="list-style-type: none"> • HICS Job Action Sheets and Forms • Communication of Incident Action Plan 	95% 95%	Watch Metric. Continuing focus on standard work and required check-out procedures to ensure training of Incident Management Team members and thorough documentation.
During Code Pink Drills and Actual Incidents, ZSFG Staff will cover designated posts and report appropriate information immediately. <ul style="list-style-type: none"> • Designated Posts Covered • Sightings of Child Reported to 64911 • Departmental Search Results Reported 	90% 100% 90%	Watch Metric. Decoy Drills Only.
Re-Evaluate Code Tan Response and Revise as Needed.	100%	Driver Metric. Evaluation criteria will include equity and family support.
Implement CDC and DPH Equity Strategies for Covid-19 Response by incorporating key activities and monitoring results and patient outcomes. Re-Focus Response Priorities as needed. Expand to other categories of response (Mass Casualty Trauma, Natural Disaster, etc.) as further developed.	90%	New Measure – Driver Metric.

II. LIFE SAFETY MANAGEMENT

The Life Safety Management Plan demonstrates comprehensive understanding, application, and adherence to the latest life safety codes of the National Fire Protection Association (NFPA), State & local authorities, and as required by various other regulatory bodies, e.g., CMS & The Joint Commission, et. al. The Life Safety Management plan is designed to ensure an appropriate, effective response to fire emergencies that could endanger the safety of patients, staff & visitors, and affect the Zuckerberg San Francisco General care environment (ZSFG).

SCOPE

The Life Safety Management Program applies to all 15 buildings on the ZSFG campus (approximately 1.8m sqft of floor space), including all construction projects. Notification and response to any event includes the ZSFG Fire Marshal, Facility Services staff, and hospital leadership.

ACCOMPLISHMENTS

- Completed annual test, inspection, and repairs to fire and smoke dampers on the 1st & Ground floors in Bldg 5 per NFPA standards: required every four years. The intent is to test and inspect two floors per year to maintain compliance at a minimal care impact and predictable financial cost. The ZSFG HVAC crew has made repairs per the inspection report, and provided damper access to previously inaccessible dampers.
- Completed annual test, inspection, and repairs to fire and smoke dampers on the 3rd & 2nd floors in Bldg 25 per NFPA standards: required every six years. The intent is to test and inspect two floors per year to maintain compliance at a minimal care impact and predictable financial cost. The ZSFG HVAC crew has made repairs per the inspection report.
- Annual HVAC smoke control testing and repairs were completed in February. Smoke control testing, in addition to being an LS requirement, demonstrates a safe and reliable smoke control system.
- Assessed risks at and around various construction projects and assisted the project team implementing Interim Life Safety Measures (ILSM) as necessary. Continuous project monitoring enhances the care experience in addition to providing a quality, and safe patient care environment.

- Utilized False Fire Alarms on the ZSFG Campus, especially in Bldg 25 as an opportunity to train staff on fire life safety features of the Campus, inform the patient population that ZSFG is a no smoking campus, and familiarize responding crews with SFFD to our hospital.

PROGRAM OBJECTIVES

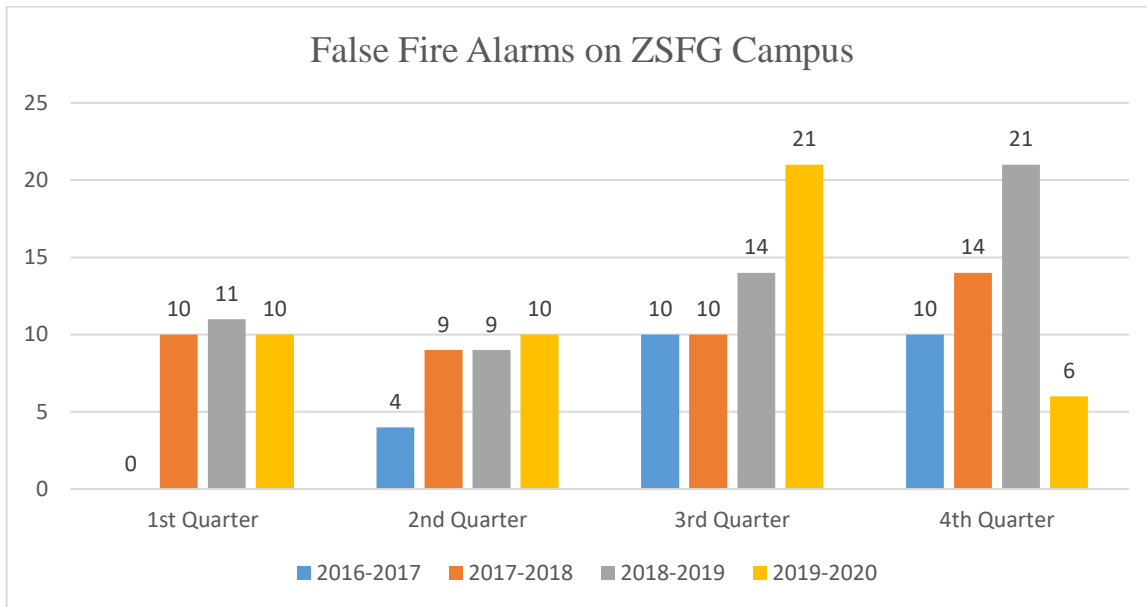
Objectives	Met/ Not Met	Notes/Action Plan(s)
The Fire Plan defines the hospital's method of protecting patients, visitors, and staff from the hazards of fire, smoke, and other products of combustion and is reviewed and evaluated at least annually.	Met	At a minimum, annually review the SFGH Fire Plan. Problems are assessed, and addressed for impact to the hospital's core values of safety, and responsibility.
The fire detection and response systems are tested as scheduled, and the results forwarded to the EOC Committee quarterly.	Met	The Campus Fire Alarm system serving SFGH is routinely maintained, tested and repaired as necessary.
Summaries of identified problems with fire detection, NFPA code compliance, fire response plans, drills and operations in aggregate, are reported to the EOC Committee quarterly.	Met	Any problems or deficiencies of the fire alarm system are repaired in a timely fashion or is reported in the quarterly Environment of care (EOC) report.
Fire Prevention and Response training includes the response to fire alarms at the scene of the fire alarm, critical locations of the facility, the use of the fire alarm system, processes for relocation and evacuation of patients if necessary, and the functions of the building in protection of staff and patients.	Met	All fire drills required for the facility have been conducted per schedule. Staff training in response, and system device functionality are covered as part of the drill.
Fire extinguishers are inspected monthly, and maintained annually, are placed in visible, intuitive locations, and are selected based on the hazards of the area in which they are installed.	Met	Fire extinguishers are inspected and maintained as required. All extinguisher types are appropriate to their use and location.

Annual evaluations are conducted of the scope, and objectives of this plan, the effectiveness of the programs defined, and the performance monitors.	Met	Items monitored in the annual report and fire drills are assessed for effectiveness and improvement.
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PERFORMANCE METRICS

Life Safety Management Performance Metrics	2019 3 rd Qtr.	2019 4 th Qtr.	2020 1 st Qtr.	2020 2 nd Qtr.	Target	Comments and Action Plan
Quarterly Fire Drills; a minimum of 6 per quarter - one fire drill per shift, w/ completed department evaluation forms.	7	7	7	9	Minimum of 6 drills per quarter; 2 per shift	Target achieved; extra drills due to interim life safety measures, or for training purposes. Discussed issues uncovered during drills and took corrective actions.
False fire alarms	10	10	21	6	25 or less false alarms per year	Target not met - monitor for trends. False fire alarms goal at less than 25 for the year.
Post Drill knowledge test score	99%	99%	99%	99%	95%	Test scores exceed target expectations for emergency response procedures. Reflect that staff understand proper emergency response procedures.

Aim: For FY 2019-2020, false fire alarms on campus were maintained at 25 per year or fewer.



Target of 25 or fewer false fire alarms for FY 2019-2020 has been not been met.

The rise in false fire alarms is directly related to smoking in Bldg 25 patient care bathrooms.

EFFECTIVENESS

The Life Safety Management Program is effective, however, improvement in the number of false fire alarm is needed.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2020-21

- Monitor and manage false fire alarms for a quality and safe care experience in Bldg 25. Note: the dramatic drop off in false fire alarms in the 4th quarter of the FY is a sad positive aspect of the Covid pandemic.
- Continue monitoring construction projects on the ZSFG Campus. Ensure that the appropriate Risk Assessments for a quality, and safe care experience are filed for the projects.

- Continue implementing fire alarm upgrade funded by the 2016 bond.
- Engage staff and contractors to implement projects funded by the 2016 bond measure.

Proposed Performance Metrics for 2020-20	Target	Comments and Action Plan
AIM: manage and reduce false fire alarms in Bldg 25 to a more acceptable level through staff training.	25 or fewer false fire alarms per year.	Continue staff training and engagement on the fire alarm system in Bldg 25.
AIM: Engage staff and contractors to review & implement the 2016 bond measure projects pertaining to the fire alarm system.	Provide ZSFG staff oversight for all projects.	Involve stake holders in project implementation.

III. HAZARDOUS MATERIALS & WASTE MANAGEMENT

The Hazardous Materials and Waste Management Program is designed to minimize the risk of injury and exposure to hazardous materials through proper selection, use, handling, storage and disposal. The program also works to control the risk of exposures to hazardous components such as asbestos and lead in existing building materials which may be disturbed during construction and renovation activities. The program assures compliance with all applicable local, State, and federal codes and regulations.

SCOPE

The Hazardous Materials and Waste Management Program applies to the entire campus of Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) apart from UCSF research activities. The Hazardous Materials and Waste Program also works to ensure that construction activities do not result in patient, staff, or visitor exposures to potentially hazardous materials or processes.

ACCOMPLISHMENTS

- Continued to work with Capital Projects, ZSFG Facilities, and Infection Control to allow construction within operating hospital buildings as well as in very close proximity to staff, patients, and visitors without significant incidents or exposure concerns.

- Maintained ZSFG Environmental Permits, and acted as liaison between regulatory agencies including the TJC, SF PUC, DPH Hazardous Materials Unified Program Agency, and Cal/OSHA and ZSFG. Continued to work with ZSFG management and staff regarding Cal/OSHA regulations, policies, and practices and assisted in responding to inquiries from Cal/OSHA regarding concerns about working conditions.
- Worked with Materials Management, Infection Control and DOC Logistics to identify alternate cleaning and disinfection products to address COVID-related supply shortages.

PROGRAM OBJECTIVES/PERFORMANCE METRICS FOR 2020-2021

Objectives	Met / Not Met	Comments and Action Plans
Ensure that current pharmaceutical waste disposal risks are mitigated.	Met	Established new bin disinfection/reuse guidelines to minimize the possibility of dirty bins being reused in the hospital
Ensure that pandemic/disaster supplies are adequate for Ebola preparedness and wildfire	Partially Met	Identified and disposed of expired stock. Took inventory of remaining supplies. Actual pandemic hit before we could assess the need for additional supplies.
Reduce and/or eliminate exposure to a hazardous material on campus.	Met	Banned the use of highly flammable spray glue in construction projects on campus.

EFFECTIVENESS

Effectiveness is based on how well the scope fits current organizational needs and the degree to which current performance metrics result meet stated performance goals. The Environment of Care Committee has evaluated the Hazardous Materials and Waste Management Program and considers it to be effective.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2020-2021

- **Conduct RFP for pharmaceutical waste disposal.** We have had many issues with our current pharmaceutical waste disposal contractor. With the contract expiring in FY2020-2021, we want to ensure that we are using the best contractor to meet our hazardous waste disposal needs.
- **Rebuild pandemic/disaster stockpile.** With most of the stockpile being utilized for COVID-19, we need to evaluate our needs and ensure that we will have adequate supplies for the next disaster.
- **Reduce and/or eliminate exposure to a hazardous material on campus.** The most

effective ways to minimize exposure to a chemical are to limit/eliminate the chemical’s use or to implement engineering controls. In 2020-2021 EH&S will seek to reduce employee exposures to a hazardous material using these control methods.

The proposed performance metrics for these goals will include:

Hazardous Materials & Waste Management Proposed Performance Metrics for 2019-2020	Target
AIM: Conduct RFP for pharmaceutical waste disposal contract.	<ul style="list-style-type: none"> • Conduct RFP for pharmaceutical waste disposal contract.
AIM: Rebuild pandemic/disaster stockpile	<ul style="list-style-type: none"> • Work with stakeholders to establish minimum quantities. • Determine cost of initial purchase and ongoing maintenance/replacement. • Identify funding source and department(s) responsible for oversight of supplies.
AIM: Reduce and/or eliminate exposure to a hazardous material on campus.	<ul style="list-style-type: none"> • Eliminate a hazardous substance currently used at ZSFG or reduce exposure to a substance through the implementation of engineering controls.

IV. Medical Equipment Management

The purpose of the Medical Equipment Management Program is to support a safe patient care and treatment environment at Zuckerberg San Francisco General Hospital (ZSFG) by managing risks associated with the use of medical equipment and clinical engineering technology. The program includes processes for selection and maintenance of equipment that are based on the risks associated with the equipment.

SCOPE

The program applies to all personnel, patients, and occupants of ZSFG that includes its main campus. The Biomedical Engineering Department will collaborate with the clinical staff to promote a culture of safety, identify medical equipment located on the main campus, and assign a maintenance strategy.

ACCOMPLISHMENTS

Activities:

- The following Biomedical Engineering policy was updated and approved:
 - 11.01 Medical Equipment Management Plan (MEMP)
- Hired a Clinical Systems Engineer to lead the Biomed cybersecurity and to identify medical equipment technology
- Hired an Administrative Supervisor to elevate duties and focus on customer service
- Assisted Respiratory Therapy in bringing the disaster Zoll Eagle ventilators (total: 12) back to service and ready for patient use
- Four Smiths Medical Level 1 H-1200 fast flow fluid warmers were returned successfully with a full refund of \$33,435.36
- Communicated with Belmont Medical Technologies to purchase a Rapid Infuser RI-2 blood warmer for the ED Department

Developing People (Completed Training):

- Iradimed MRI Infusion Pump: 1 Biomedical Technician
- GE Healthcare Giraffe Incubator: 1 Biomedical Technician
- GE Healthcare Panda iRes Warmer: 1 Biomedical Technician
- B. Braun Medical Perfusor Space Syringe Infusion Pump: 5 Biomedical Technicians
- Steris Amsco 3085P Surgical Table: 5 Biomedical Technicians
- Steris 5085 Surgical Table: 5 Biomedical Technicians
- Draeger Apollo Anesthesia Machine: 1 Biomedical Technician
- Philips Healthcare V60 Ventilator: 1 Biomedical Technician
- Philips Healthcare Telemetry PIIC IX: 1 Clinical Systems Engineer, 1 Manager
- Philips Healthcare MX400-800 Patient Monitor: 1 Clinical Systems Engineer, 1 Manager

Safety:

- Medtronic PB980 (ventilator): It was decided on 8/20/19 by ZSFG executive leadership that 48 units would be pulled from service.
 - ZSFG leadership and city attorney are currently in the process of communicating with Medtronic to request a full refund.
- Baxter Prismaflex (continuous renal replacement therapy): Software was upgraded to reduce the frequency of communication error alarms.
- GE Healthcare Giraffe Omnibed and Bedded Warmer (incubator and warming unit): Safety labels were applied to devices since the manufacturer reported that bedside panels and portholes can appear closed without being latched.

- Draeger JM-105 (jaundice meter): Label instructions were applied to devices since it was report that taken measurement is out of range (high than the measuring range of the device).
- Philips Healthcare MR400 (vital signs monitor): The device instructions were updated to reflect a change in the device's software on how to access the O2 sensor calibration menu.

PROGRAM OBJECTIVES

The Objectives for the Medical Equipment Management Program are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance measures, information collection and environmental tours.

Objectives	Met/Not Met	Comments and Action Plan
Key Performance Metrics <ul style="list-style-type: none"> • Manage 100% of high risk (life support) medical equipment • Manage 100% of non-high risk medical equipment 	Met	Biomed managed 100% of high risk and non-high risk medical equipment during FY19-20.
Realignment of medical devices per PM base month	Met	Continue to align medical devices by PM base month based on department in order to effectively complete all maintenances within the allotted time
Reduce cost for maintenance and repair services	Met	Increase the number of medical device that can be service in-house and depend less on manufacturers and third-party vendors
Biomedical technicians to complete 25% of monthly PMs each week	Met	Biomedical technicians completing 25% of their monthly PMs each week in order to hit 100% completion by the end of the month
Perform incoming inspection of medical equipment within 24 hours (during business hours)	Met	Holding each biomedical technician accountable to complete an incoming inspection within a time period to make sure accurate data is uploaded in Biomed's database

PERFORMANCE METRICS

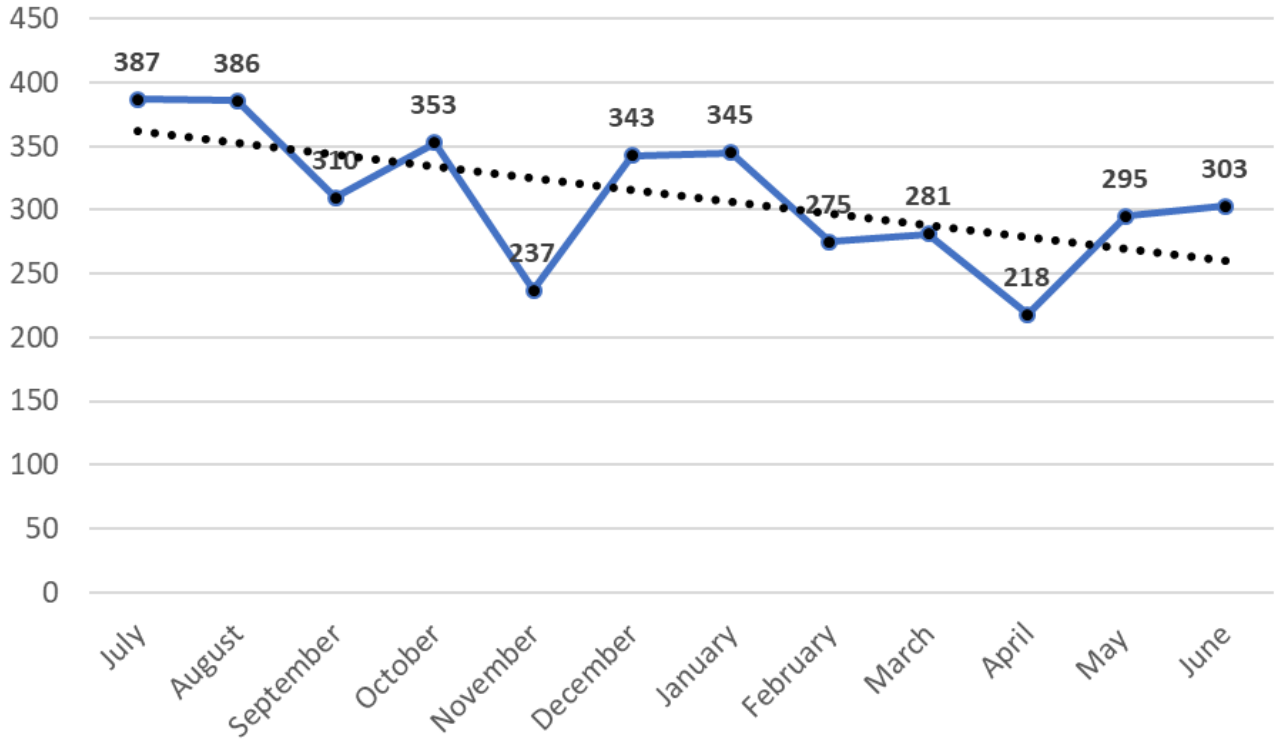
Preventative Maintenance:

Service Request Activities:

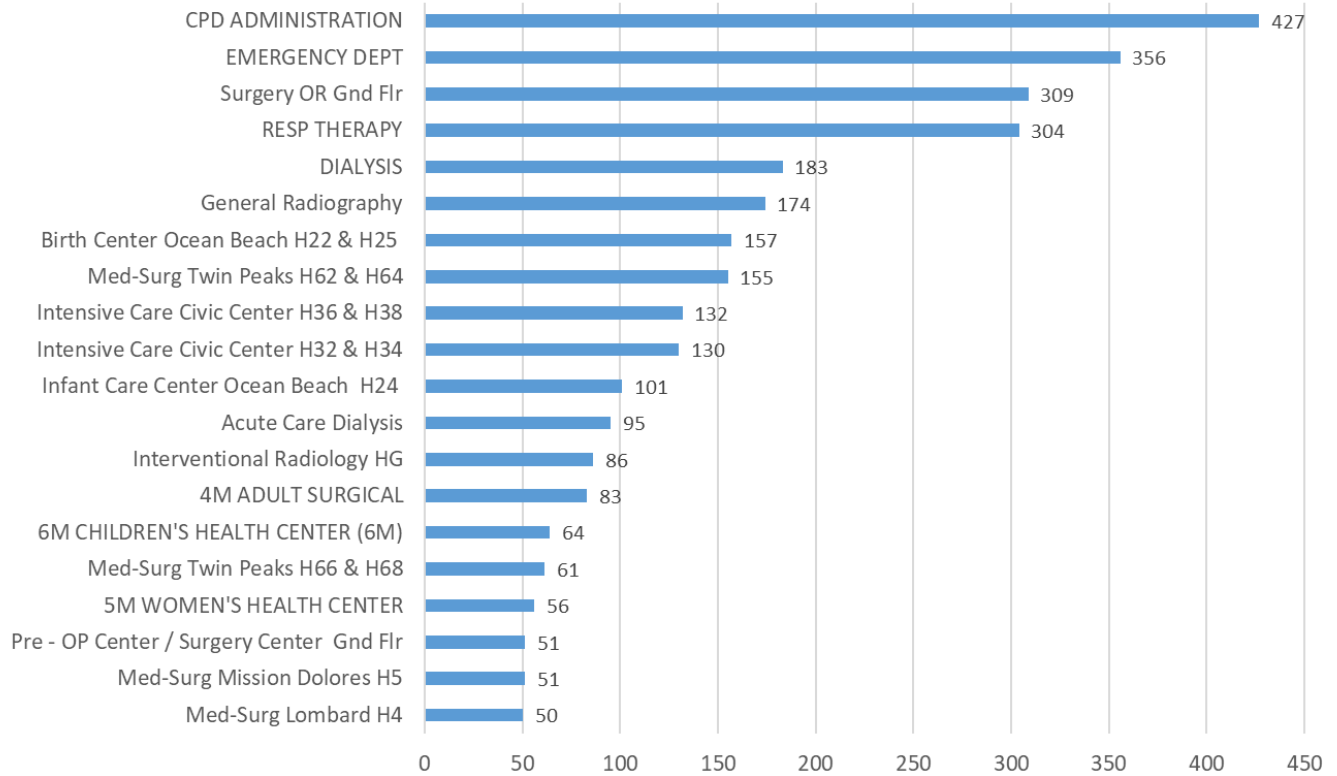
	July	August	September	October	November	December	January	February	March	April	May	June
High Risk (Life Support)												
Number of PMs	173	62	12	17	35	121	104	57	22	25	36	32
Completion Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94.44%	100%
Number of Devices Not Located	0	0	0	0	0	0	0	0	0	0	0	0
Number of Devices Being Serviced	0	0	0	0	0	0	0	0	0	0	2	0
Non-High Risk												
Number of PMs	446	583	556	420	966	600	486	576	1806	761	430	424
Completion Percentage	100%	100%	100%	100%	97.72%	100%	100%	100%	99.94%	99.87%	100%	99.76%
Number of Devices Not Located	0	0	0	0	11	0	0	0	0	0	0	1
Number of Devices Being Serviced	0	0	0	0	0	0	0	0	1	1	0	0
Percentage Managed (Goal: 100%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Categories	Jul y	Augu st	Septem ber	Octob er	Novem ber	Decem ber	Janua ry	Februa ry	Marc h	Apr il	Ma y	Jun e
Number of Service Request	387	386	310	353	237	343	345	275	281	218	295	303
Number of devices retired	1565	85	50	41	53	42	86	44	47	37	44	52
Number of initial inspections performed	22	73	52	107	18	17	79	52	123	78	67	54
Number of UO reports	21	7	4	8	4	3	2	3	1	7	4	3
EOC rounds survey	40	28	36	10	6	36	13	2	3	0	4	6

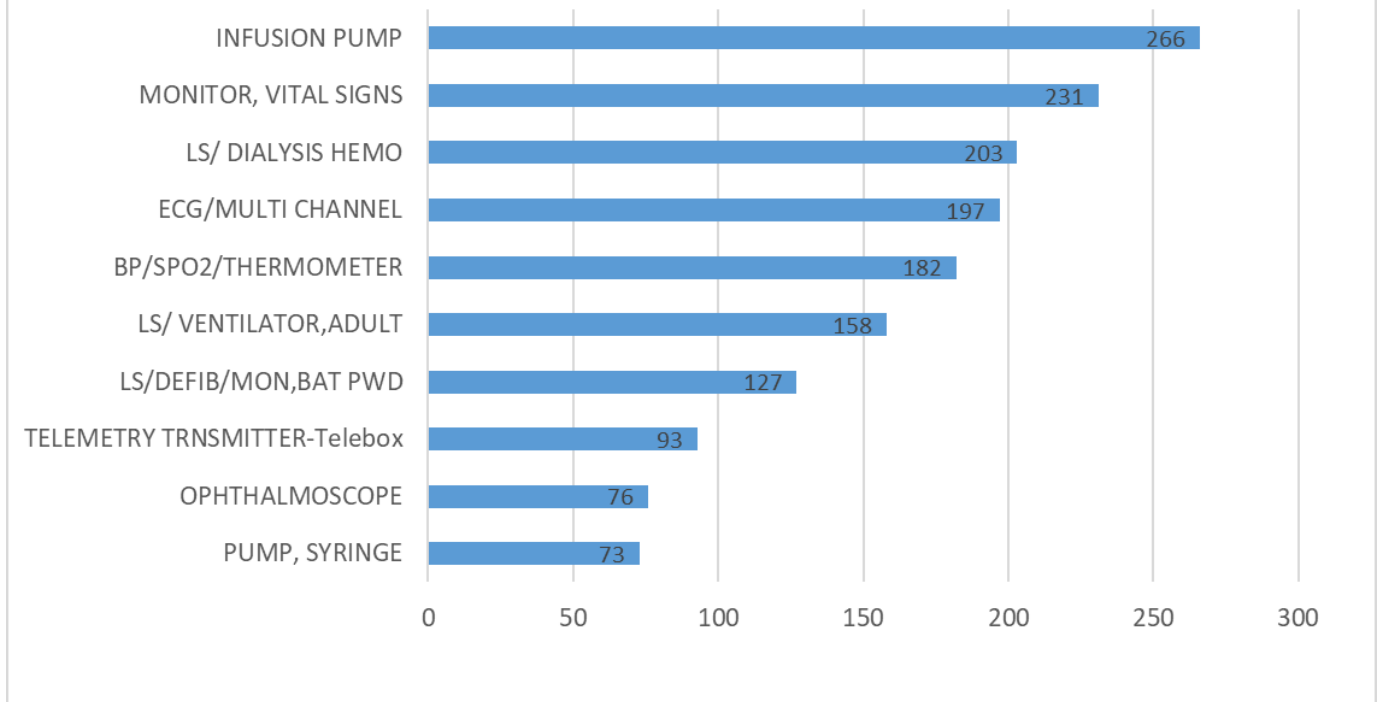
Number of Service Requests by Month



Number of Service Requests By Department (Requests ≥ 50)



Number of Service Requests By Device Type (Top 10)



Medical Device Recalls/Hazard Alerts:

Device type/ Problem	Manufacturer	Status
Hypothermia Unit – Manufacturer sent urgent notification on the warning to clarify that exceeding 40°C for extended periods of time may cause tissue damage.	Gentherm Medical Blanketrol III	Completed, 2 work orders
Radiofrequency Generator – Manufacturer provided an update to the operation manual.	Medtronic ClosureRFG	Completed, 1 work order
Patient Transfer Lift – ECRI sent a communication that ArjoHuntleigh patient lifts installed before March 2016 may have protective blue plastic tape on their casters. The blue tap must be removed by an ArjoHunteligh representative upon installation.	ArjoHuntleigh Sara Stedy	Completed, 6 work orders
Continuous Renal Replacement Therapy (CRRT) System – Upgrading the software	Baxter Prismaflex	Completed, 7 work orders

on Prismaflex control units to reduce the frequency of communication error alarms.		
Infant Incubator and Warming Unit – Bedside panels and portholes can appear closed without being latched.	GE Giraffe Omnibed and Bedded Warmer	Completed, 16 work orders
Jaundice Meter – Users have concerns about the method used by JM-105 to indicate that a taken measurement is out of range (higher than the measuring range of the device).	Draeger JM-105	Completed, 4 work orders
CT Scanner – The system may sporadically crash during a 3D interventional procedure when using a 3D I-spiral or a 3D I-sequence with an active 3D layout. After the software crash, a system restart is needed. The system may crash during an interventional workflow using the “Cut functionality”. The issue was already presented in the previous software version syngo CT VB10, was improved with software version syngo CT VB20 but unfortunately was not completely rectified.	Siemens Medical Solutions Somatom Definition Flash, Somatom Definition Edge, and Somatom Definition AS	Completed, 4 work orders
Analyzer – Manufacturer is asking customers to discontinue use of the analyzer if it is running software 2.3.4 using the export function LIMS. Even if you are not using the LIMS function, they are recommending to upgrade to the latest version 2.3.5.	Qiagen Rotor-Gene Q	Completed, 1 work order
Radiographic/Fluoroscopic System – Microsoft released details about a critical vulnerability that exists in the Windows component crypt32.dll. Microsoft has released patches for this vulnerability and Carestream is working to deploy these patches.	Carestream Health 7500 (DRX Evolution)	Completed, 2 work orders
Radiographic/Fluoroscopic System – Microsoft released details about a critical vulnerability that exists in the Windows component crypt32.dll. Microsoft has released patches for this vulnerability and Carestream is working to deploy these patches.	Carestream DRX-Evolution	Completed, 3 work orders

<p>Vital Signs Monitor – Manufacturer discovered that the instructions had not been updated to reflect a change in the device’s software. This error could affect users’ ability to ensure that the device performs as intended.</p> <p>Manufacturer provided the correct instructions for accessing the O2 sensor calibration menu, as well as other updated product information. A Biomedical Technician added instructions for Use Addendum in equipment instruction for use manual.</p>	<p>Philips MR400</p>	<p>Completed, 2 work orders</p>
<p>Incubator/Radiant Warming Unit, Infant, Mobile – Units manufactured before 2012 can deliver a different environmental oxygen level than what is displayed by the device, if a certain optional component referred to as the Servo Oxygen Module is installed in device.</p> <p>A Biomedical Technician visually checked if Service Oxygen module is installed. It was confirmed that the module is not installed, so the device can be used (no further action).</p>	<p>GE Healthcare Giraffe Omnibed</p>	<p>Completed, 2 work orders</p>

<p>Proposed Performance Improvements, FY19-20</p>	<p>Met/ Not Met</p>	<p>Results</p>
<p>The Biomedical Engineering Department to identify 100% of the medical devices that are connected to the ZSFG network or that store ePHI. Record the software version, IP address, and MAC address of these devices.</p>	<p>Met, Not Met</p>	<p>It was identified that 1,552 medical devices/systems (100% identification) are connected to the DPH network or store ePHI. Out of these devices, a total of 1,506 devices had their mac address and software version collected and entered into TMS (Biomedical Engineering’s inventory management software) which translates into 97.04% completion. The remaining 46 medical</p>

		devices/systems will be collected as they are serviced on-site by the vendor.
Collaborate with the IT Security and Network Operations teams to develop a standard procedure for adding medical devices to the network on the ZSFG campus.	Not Met	A Biomed Optimization group has been formed to discuss and write up a standard procedure.
For existing medical equipment that is already connected to the DPH clinical network, get 100% up to current IT security standards either by updating necessary software or working with IT Security to put in a security mitigation plan in place.	Met	<p>Collaboration in a series of meetings with DPH IT and Clinical Informatics to secure 100% of various medical devices/systems currently on the ZSFG network. The following patching standard procedures took place in which Biomedical Engineering verified full functionality:</p> <ul style="list-style-type: none"> • Zoll R Series defibrillators • Philips Healthcare PIIC IX telemetry system • Baxter Sigma Spectrum infusion pumps
Collaborate with the CEC (Capitol Equipment Committee) to develop process for purchasing new medical equipment to meet regulatory and maintenance guidelines.	Met	Biomedical Engineering collaborated with the Capital Equipment Committee (CEC) to revise the Capital Equipment Form. An equipment maintenance section was added that asked requestors to provide information on service maintenance contract pricing, if the manufacturer recommended a PM, and if there would be any in-house Biomedical Engineering costs. Other questions that were added, were if they would be connecting to the DPH network and/or Epic. This would give the CEC and DPH IT more insight in determining what the total

		ownership cost would be to bring on a medical device/system on campus. This would define if any would need middleware to connect to Epic and to request a manufacturer disclosure statement for medical device security.
Create a policy and procedure for new medical equipment that is brought on the ZSFG campus that will connect to DPH network and/or stores ePHI.	Not Met	This is still a work in progress and further meetings will need to take place with DPH IT/Network team.
Obtain purchase/install dates for 100% of Biomedical Engineering's inventory.	Met	100% of the purchasing/install dates of the devices listed in Biomedical Engineering's inventory were obtained. This information has been inputted in TMS (Biomedical Engineering's inventory management software) and an excel spreadsheet has been created. By creating a spreadsheet with this data, it allows to define the age of each device as well as list the life expectancy in order to categorize the age and priority of each medical device/system.
Obtain End of Life dates for 100% of the inventory in order to implement a medical equipment lifecycle plan. In capturing this information, this will lead to a 5 to 10 year replacement/cost plan.	Met	100% of The End of Life dates have been obtained and were entered into TMS (Biomedical Engineering's inventory management software). This information is updated as frequently as the manufacturers provide an official letter. This information has also been entered into an excel spreadsheet that will be incorporated with the purchase/install data to determine what medical equipment/systems are a priority and need to be replaced first.

<p>Define a capital strategy that would involve communication with ZSFG senior/executive leadership as to when a device(s) will need to be replaced. Having a proper plan in place would help leadership in determining what device(s) should be included in their annual budget and if any requests need to be submitted to the capital equipment committee.</p>	<p>Not Met</p>	<p>Initial communication was started with the Value Analysis Committee (VAC) in which medical devices/systems that will be reaching End Of Life or will no longer be supported by the manufacturer would be discussed on a replacement plan. The goal is to present on a monthly/quarterly basis in order to allow committee members from different levels of the organization to discuss the need and what the replacement options would be.</p>
<p>Develop ongoing plan that verifies that 100% of new medical equipment that is purchased or installed at ZSFG has an EOL listed and there is an EOL plan for replacement. Perform yearly audits of equipment to ensure plan is being followed.</p>	<p>Met</p>	<p>Biomedical Engineering has setup a plan in place to review the inventory database on a semi-annual basis to make sure no medical device/system is missing EOL information if the manufacturer has provided it. We want to make sure this information is up-to-date and accurate in order to plan for a lifecycle equipment replacement plan. The capital replacement strategy plan is still an ongoing project.</p>

EFFECTIVENESS

The Medical Equipment Management Program has been evaluated by the multi-disciplinary Environment of Care Committee and is considered to be effective.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2020-2021

- Complete a preventative maintenance (PM) workload realignment for each Biomedical Technician in order to balance the number of PMs assigned on a monthly basis for the year. This will improve the productivity of each Biomedical Technician by not having to visit a specific department or touching the same medical device/system more than once (unless recommended by the manufacturer) in the year.
- Reduce the number of Philips MX40 (wearable patient monitor) devices from being misplaced or removed from campus which could affect patient care in Medical-Surgery Department.

- Develop a medical equipment lifecycle plan to replace medical devices/systems every 3-5 years.
 - Define a capital strategy that would involve communication with ZSFG senior/executive leadership as to when a device(s) will need to be replaced. Having a proper plan in place would help leadership in determining what device(s) should be included in their annual budget and if any requests need to be submitted to the capital equipment committee.
- Continue communication with DPH IT Security and Network Operations teams to develop a standard procedure for adding medical devices to the network on the ZSFG campus.
- Continue developing a definite path to identify medical technology that will bring ZSFG to the forefront of health care and overall to improve the rate of change at ZSFG when it comes to medical equipment technology.

V. SAFETY MANAGEMENT

SCOPE

Safety Management is designed to identify and address potential safety risks in the ZSFG environment. At ZSFG, Safety Management is shared by two complementary programs, Patient Safety and Environmental Health and Safety:

- Patient Safety is a function of Quality Management and oversees the organization's patient safety plan and national patient safety goals. Patient Safety reports via Process Improvement and Patient Safety Committee (PIPS).
- Environmental Health & Safety (EH&S) focuses on staff health, safety, and well-being. The Environmental Health and Safety Department provides consultation, resources and training to create, maintain and improve the hospital's working environment. The goals of EH&S are to reduce or eliminate staff injuries and illnesses, and create a safe environment for all persons including staff, patients, clients, and visitors at the ZSFG site. EH&S reports their activities through the Environment of Care Committee in both this chapter and the Hazardous Materials and Hazardous Waste Chapter.

The Safety Management Program's scope encompasses all departments and areas of the ZSFG campus, except for UCSF research activities, which fall under UCSF management.

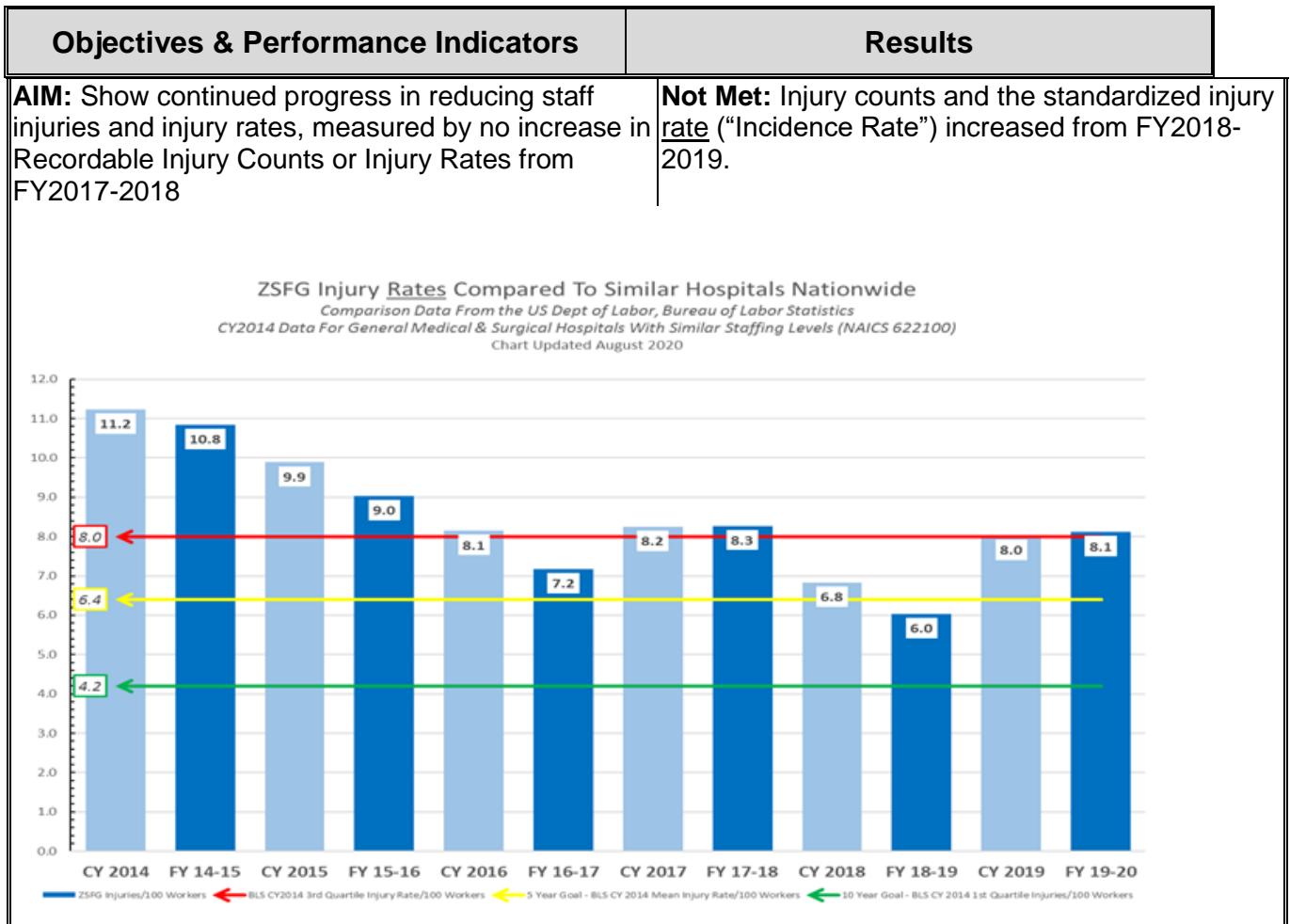
ACCOMPLISHMENTS

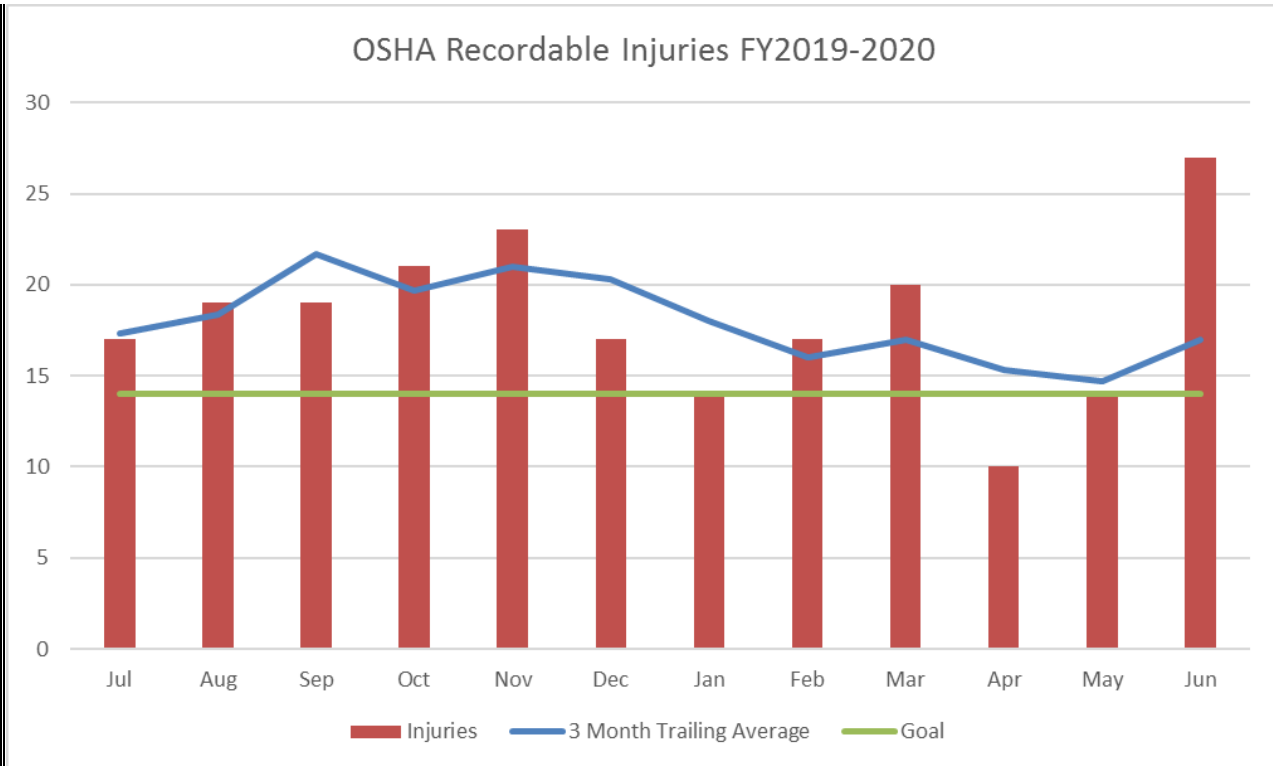
- Worked with Materials Management, Infection Control and DOC Logistics to identify alternate PPE to address COVID-related supply shortages.

- Worked with UCSF and DPH partners to develop workflows for disinfection and reuse of PPE: UV disinfection of N95s, cleaning of shared elastomeric respirators. While these have not needed to be put into practice, they can quickly be deployed should severe PPE shortages occur.
- In coordination with DHR, developed guidance for extreme heat events and wildfire smoke that is used citywide.

PROGRAM OBJECTIVES/PERFORMANCE METRICS

The following metrics provide the Environment of Care Committee with information needed to evaluate performance of the Safety Management Program activities and to identify further opportunities for improvement:





<p>AIM: Develop no less than two new initiatives specifically targeted at reducing staff injuries/illness.</p>	<p>Met: Developed initiatives to address extreme heat events, and wildfire smoke events.</p>
<p>AIM: Create database of EH&S concerns and departmental actions.</p>	<p>Not Met: Due to staffing shortage, COVID-19 and our Safety Officer being on leave, there were not available resources to start this effort.</p>
<p>AIM: Restart Full Ergonomics Program.</p>	<p>Not Met: We were not able to find any interested candidates to run the Ergonomics Program from the expiring eligible list. A new list will be created in FY2020-2021.</p>

EFFECTIVENESS

Effectiveness is based on how well the goals are met and how well the scope of the performance metrics fit current organizational needs. Recognizing the significant challenge of reducing staff injuries and the limited resources available, the Environment of Care Committee has reviewed the Safety Management Program and found it to be effective, but needs improvement based on the objectives and performance metrics indicated in the Plan.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2020-2021:

- Safety: Continue efforts to reduce the number of staff injuries. See Proposed Performance Metrics for 2020-2021 for additional details.
- Safety: Continue to identify and develop countermeasures for activities and areas where significant numbers of staff injuries occur.
- Safety: Create a log of EH&S concerns that are reported as well as how these were resolved.
- Safety: Hire two staff members to increase EH&S bandwidth.

The proposed performance metrics for these goals are:

Safety Management Proposed Performance Metrics for 2020-2021	Target	Comments & Action Plan
AIM: Show continued progress in reducing staff injuries and injury rates.	Reduce recordable injury counts and injury rates below FY2019-2020 levels.	Want to reverse the increases seen in FY2019-2020.
AIM: Develop no less than two new initiatives specifically targeted at reducing staff injuries.	Two initiatives by end of FY2020-2021	Focus on high injury rate activities and workgroups.
AIM: Create database of EH&S concerns and departmental actions.	Create database and track 2020-2021 data	EH&S needs a formalized way of tracking complaints and our responses to them. Resulting data may be a helpful leading indicator.
AIM: Fully staff the EH&S Department.	Hire 6138 and 6139	Staffing issues have hindered our abilities to take strategic, proactive measures to address safety issues. By achieving full staffing, we will improve the EH&S Department's effectiveness.

VI. SECURITY MANAGEMENT

SCOPE

The scope of the Security Management Plan is to assure the ongoing provision of a safe, accessible, and secure environment for staff, patients, and visitors at Zuckerberg San Francisco General Hospital Campus. To that end, it is the overall intent of this plan to establish the framework, organization and processes for the development, implementation, maintenance, and continuous improvement of a comprehensive Security Management Program. This program is designed to provide protection through appropriate staffing, security technology, and physical barriers.

The scope of the Security Management Program includes:

- Continuous review of physical conditions, processes, operations, and applicable statistical data to anticipate, discern, assess, and control security risks, and vulnerabilities
- Ensure timely and effective response to security emergencies
- Ensure effective responses to service requests.
- Report and investigate incidents of theft, vehicle accidents, threats, and property damage
- Promote security awareness and education
- Enforce various hospital rules and policies
- Establish and implement critical program elements to include measures to safeguard people, equipment, supplies, medications, and traffic control in and around the hospital and the outlying medical offices.

Each management objective is listed in the table below and is marked as met or not met. If an objective is not met, the DPH Director of Security will review the objective, and develop a corrective action plan.

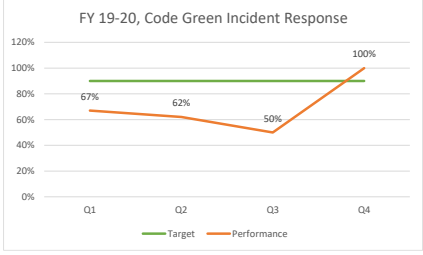
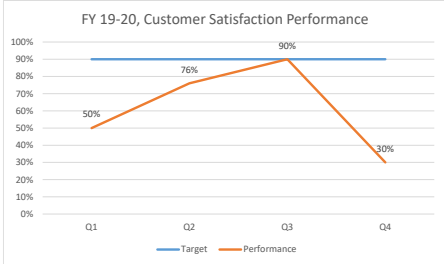
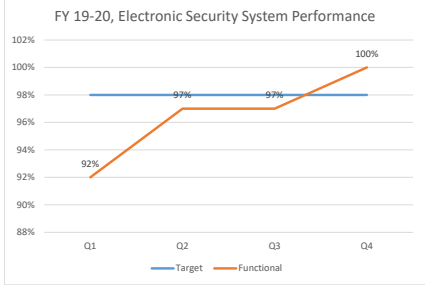
ACCOMPLISHMENTS

- Installation of security technology in Campus Building Clinics, Psychiatric Emergency Services and Emergency Department reception and treatment pods.
- In response to COVID-19, in collaboration with Facility Services addressed campus building access control, resulting in an 88% reduction in loitering and illegal lodging incidents.
- In response to 13,339 patient related service calls, less than 1% resulted in use-of-force.
- Responded to 564 calls to address homelessness related incidents.
- Confiscated 3,394 weapons and contraband through Emergency Department Security Weapons Screening.
- Investigated 23-moderate/high risk workplace violence threat incidents, and developed security plans to address the threat and protect the individuals involved.
- Workplace Violence Awareness efforts resulted in 95% increase in workplace violence reporting.

PROGRAM OBJECTIVES

Objectives	Met / Not Met	Comments and Action Plans
<p>An annual review of the physical conditions, processes, operations, and applicable statistical data is conducted to anticipate, discern, assess, and control security risks, and vulnerabilities.</p> <p>A security management plan is developed, and monitored, quarterly to address security vulnerabilities, and minimize risk.</p>	Met	<p>A 2019-2020 security risk assessments was completed, and the security risks, vulnerabilities, and sensitive areas were identified and assessed through an ongoing facility-wide processes, coordinated by the DPH Director of Security, and hospital leadership. These processes were designed to proactively evaluate facility grounds, periphery, behaviors, statistics, and physical systems.</p>
<p>Ensure timely and effective response to security emergencies, and service request, including the enforcement of hospital rules and policies.</p>	Met	<p>Security emergency response times are monitored weekly, and the outcomes are reported to the Security Leadership Committee. Service request are responded to in accordance with the Security Response Standard Operating Procedures.</p>
<p>Report and investigate incidents of theft, vehicle accidents, threats, and property damage.</p>	Met	<p>SFSD quarterly call-for-service data, incident reports: Unusual Occurrence reports, and Threat Management and Workplace Violence data supports that time investigations are initiated for all crimes against persons and facility property.</p>
<p>Promote security awareness and education.</p>	Met	<p>Through Environment of Care Rounds, employees are provided security awareness training. Additionally, security awareness and education programs include: Non-violent Crisis Intervention, and Security Alert publications.</p>
<p>Establish and implement critical program elements to include measures to safeguard people, equipment, supplies, medications, and traffic control in and around the hospital and the outlying medical offices.</p>	Met	<p>The Director of Security in partnership with the San Francisco Sheriff's Department, collaboratively establishes, and maintains communication and mutual ownership for outcomes, identification and troubleshooting of emergent safety concerns.</p>

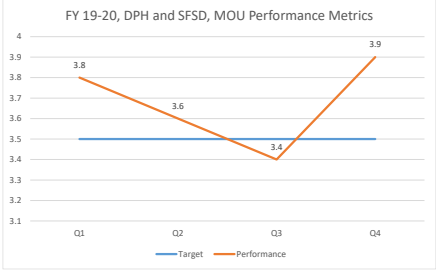
PERFORMANCE

Performance Metrics #1 Code Green, "At Risk" Patient Alert Response Incidents/Drills	
<p>Performance Metric:</p> <p>The contract security provider will be measured on their ability to effectively respond to 90% of Code Green incidents according to the procedure i.e. initial perimeter search, and notification of SFPD, BART, and MUNI as applicable, and documenting the search activity.</p> <p>Response-rate Threshold – 80% Response-rate Target – 90% Response-rate Stretch – 100%</p>	 <p>The Code Green performance was 70%. During this period, search activity was not documented in 58% of the incident reports.</p>
Performance Metrics #2 Customer Satisfaction	
<p>Performance Metric:</p> <p>The Security Department is measured on its ability to achieve 90% satisfaction on monthly customer service surveys. The surveys are completed by 100-customers consisting of patients, visitors, employees/physicians their experience.</p> <p>In 5-performance areas, customers will respond, Very Satisfied, Satisfied, Somewhat Satisfied, Dissatisfied, and Very Dissatisfied.</p> <p>Threshold - 80% Target - 90% Stretch – 98%</p>	 <p>Overall customer satisfaction performance was 62%. The Q4 survey responses reflected the current climate toward law enforcement, coupled with conflicting views regarding patient elopement response.</p>
Performance Metrics #3 Electronic Security System Functionality	
<p>Performance Metric:</p> <p>The electronic security systems are inspected monthly. The Security Services Maintenance Planner is measured on their ability to keep on security devices 98% functional.</p> <p>The system evaluation includes the following security devices:</p> <ul style="list-style-type: none"> • Video Recorders • Alarm Panels • Cameras • Card Readers • Alarm Input/output • Emergency Phones • Other Alarms 	 <p>The overall performance for functioning electronic security systems is 97%.</p>

EFFECTIVENESS

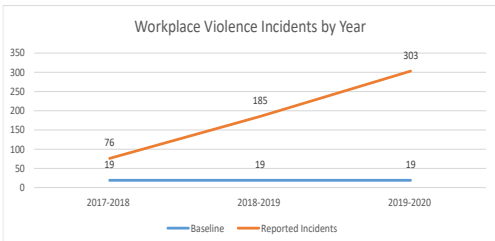
The 2019-2020 significant reporting metrics measure the effectiveness of the Security Management Plan, the metrics include: MOU Compliance, Workplace Violence Threats, Battery and Assault Incidents, Crimes Against Persons and Property, Use-of-Force, and Campus Tunnel and Stairwell Rounding.

SIGNIFICANT REPORTING METRICS

DPH and SFSD, MOU Performance Metrics	
<p>Performance Metric:</p> <p>A monthly security provider performance survey is completed and submitted to DPH and SFSD Leaders. The assessment is intended to validate the security provider's compliance with MOU obligations, operational performance, management responsibilities, and finance provisions.</p> <p>The provider is expected to maintain scores in the 3.5-5 range.</p>	 <p>The Sheriff's Department met the MOU compliance target, measuring an average 3.6 for the fiscal year.</p>

Workplace Violence – Threats and Physical Violence Incidents

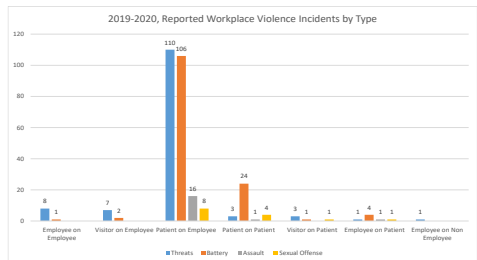
Standard: In accordance with Cal/OSHA Workplace Violence Prevention in Health Care Standard, Title 8 Section 3342, Security Services and Risk Management maintains records of Unusual Occurrence Threats and Physical Violence Reports.



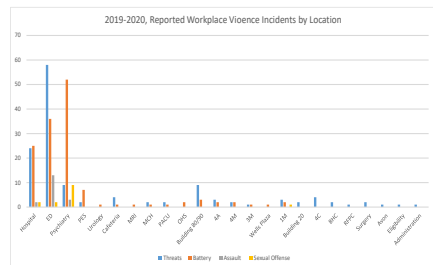
In 2019-2020, there were 303 incidents of workplace violence reported through the Unusual Occurrence Reporting Process.

Nineteen moderate/high risk threat incidents were investigated and resolved by security measures to address the threat and protect the individuals involved.

The Emergency Department reported 35% of workplace violence incidents followed by Psychiatry at 24%.



Battery incidents accounted for 45% of workplace violence followed by 43% threats incidents. Violence committed by patients against employees account for 71% of workplace violence reports.



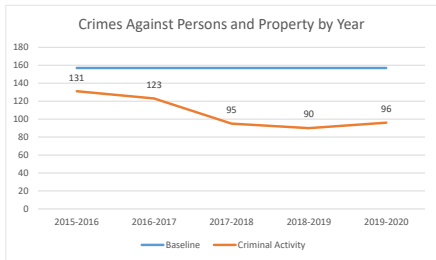
Significant Event Reporting: Crimes Against Persons and Property

Yearly Comparison	2018-2019	2019-2020
SFSD - Facility Property Thefts Reports (>\$900)	5	6
SFSD - Burglary Reports	6	9
SFSD - Battery Reports	64	55
SFSD - Sexual Offense Reports	3	4
SFSD - Assault Reports	12	20
SFSD - Robbery Reports	0	2
SFSD - Homicide Reports	0	0
Total	90	96

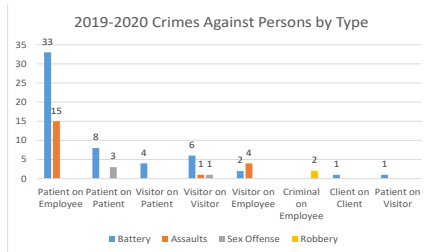
There was a 7% increase in crime reports from 2018-2019 response to criminal activity:

- Citations Issued – 10
- Arrest – 17
- Placed on 5150 – 3
- Citizen's Arrest – 6
- Under Criminal Investigation – 4

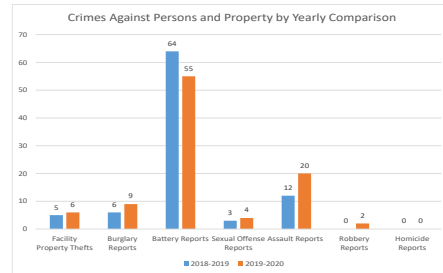
Significant Event Reporting: Crimes Against Persons and Property Analysis



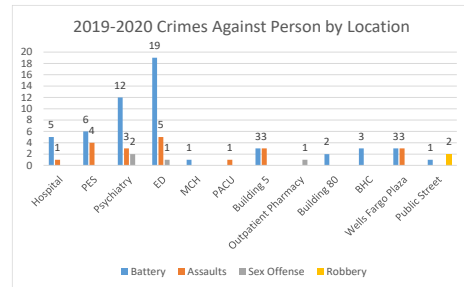
Since 2017-2018, the campus criminal activity has averaged 94 incidents.



Battery and assaults committed by patients against employees accounted for 59% of reported crimes on campus.



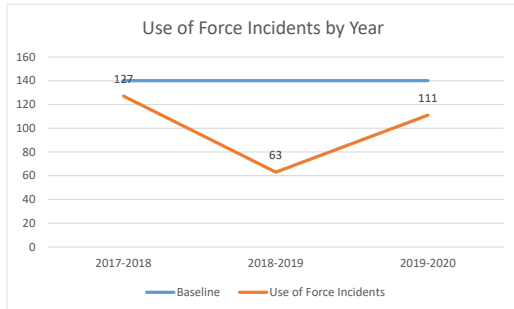
Reports of crimes against persons increased 3% from the previous year and accounted for 84% of campus criminal activity.



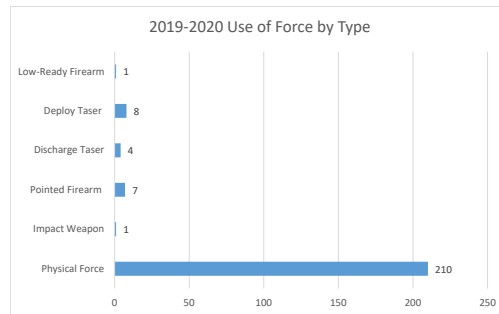
More than 31% of crimes against persons were reported by the Emergency Department.

2019-2020 Use of Force Statistics

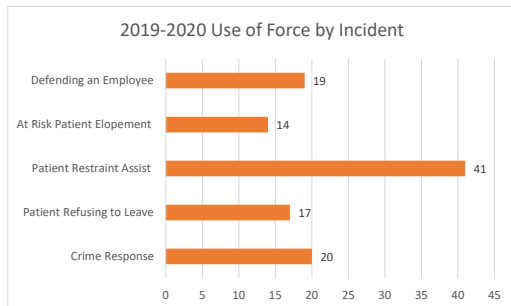
Use-of-force data is tracked of all SFSD incidents occurring on ZSFG campus. In 2019-2020, there were 111 incidents involving use-of-force, analyzed by the number of incidents each year, types of force, type of incidents, location, cases, and demographics.



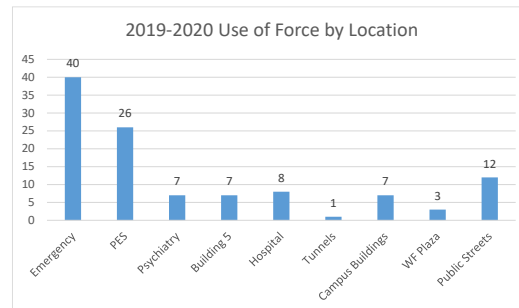
Use-of-force increased 76% from the previous year. An increase in service calls to address workplace violence incidents contributed to the increase in use-of-force.



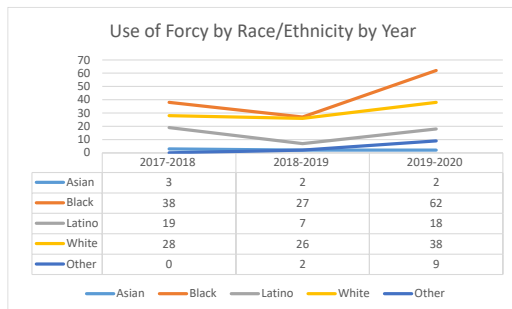
Of the 111-use-of-force incidents, there were 231 types of force used in response. Physical force accounted for 91% of force used.



Deputies assisting with patient restraints accounted for 36% of use-of-force incidents.

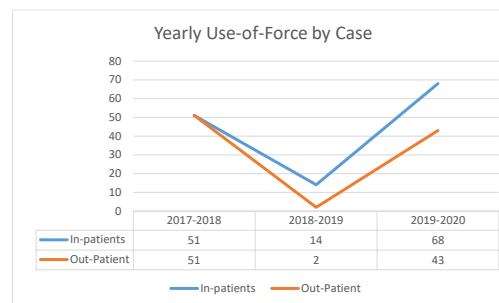


Thirty-six percent of use-of-force incidents occurred in the Emergency Department followed by 23% in Psychiatry Emergency Services (PES.)



Over a 3-year period, Black/African Americans were subjected to force more than (45%) any other race/ethnicity.

Note: In addition to the PES Department, behavioral health patients are treated in the

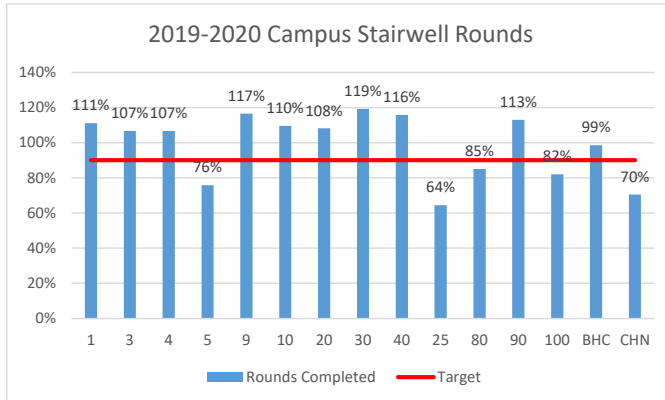


Since 2017-2018, 58% of use-of-force incidents occurred in outpatient settings, including Emergency Department. From the previous year, use-of-force increased 385% in the inpatient settings, 2,050% percent in outpatient settings.

Campus Tunnel and Stairwell Rounding

Standard:

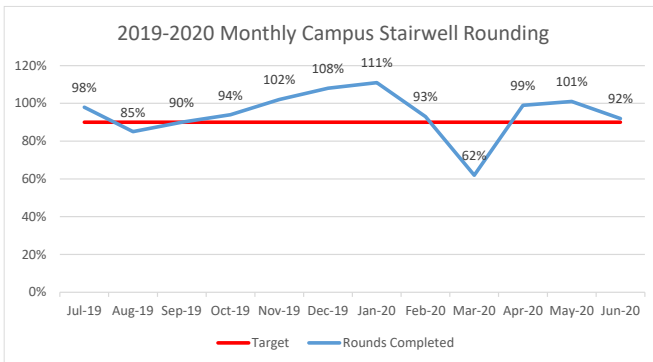
To demonstrate the effectiveness of the crime prevention program to address unauthorized access to the campus tunnels and stairwells. In 2019-2020, there were 5,742 rounds conducted, patrol data was analyzed for frequency of stairwell patrols per building, findings, and criminal activity.



*Numbers are based on supporting documentation provided by SFSD.

Stairwell Rounding Analysis

In 2019-2020, 95% of the campus stairwells were patrolled. The Security Leadership Committee continues to monitor quarterly rounding results. Due to staffing challenges and circumstances associated with COVID-19, not all building stairwells were patrolled to 90%.



Other Campus and Tunnel Rounding Activity:

During 2019-2020, there were 6-findings related to campus tunnels, and 569 service calls related to homelessness.

VII. UTILITY SYSTEMS MANAGEMENT

SCOPE

The Zuckerberg San Francisco General Hospital Facility Services Department implements and maintains the Utility Management chapter of the Environment of Care. The Utility Management Program ensures the operational reliability and assesses the special risks and responses to failures of the utility systems which support the facility’s patient care environment. The major utility systems include but are not limited to: electrical distribution, domestic water and waste water systems, vertical transportation, communication systems, HVAC, and medical gases.

ACCOMPLISHMENTS

- Installation of the temporary chiller to support the chiller replacement project.
- Supported Bldg 5 projects including, Urgent Care Clinic phase I, UCC phase II (in process), 6H surge space (in process), Bldg 5 Seismic upgrade (in progress), Bldg 5 Dialysis center (in progress), Bldg 5 Physical Therapy move (in progress), Bldg 5 Electrical distribution upgrade (opening phase), Bldg 5 Mechanical systems upgrade (opening phase), ZSFG Fire Alarm system upgrade as part of the aforementioned projects, et al.
- Completed re-roof of “D” section on Bldg 5 and began re-roof on the “M” section of Bldg 5.
- Supported the many projects associated with the City’s response to Covid-19.

PROGRAM OBJECTIVES FOR FY 2019-2020

Objectives	Met / Not Met	Comments and Action Plans
The hospital maintains a written inventory of all operating components of utility systems or maintains a written inventory of selected operating components of utility systems based on risks for infection, occupant needs, and systems critical to patient care (including all life support systems.)	Met	Inventory of equipment for major utility systems maintained in equipment database.
The hospital identifies, in writing, inspection and maintenance activities for all operating components of HVAC systems on the inventory	Met	Documentation of activities is entered into the automated work order system.

The hospital labels utility system controls to facilitate partial or complete emergency shutdowns.	Met	Utility isolation information located at the Engineering Watch Desk.
The hospital inspects, tests, and maintains emergency power systems as per NFPA 110, 2005 edition, Standard for Emergency & Standby Power Systems.	Met	Testing and inspection of this new system per NFPA 110, 2005 edition
The hospital inspects, tests, and maintains critical components of piped medical gas systems, including master signal panels, area alarms, automatic pressure switches, shutoff valves, flexible connectors, and outlets. These activities are documented.	Met	The medical gas system is certified annually. Area alarm panels are checked monthly. Documentation is provided by separate report.
Annual evaluations are conducted of the scope, and objectives of this plan, the effectiveness of the programs defined, and the performance monitors	Met	Scope and objectives derived from quarterly report data.

Report Indicator	FY 2019-2020 Totals					
	5	25	80	90	100	SB
Systems						
Emergency Power Failures	0	0	0	0	0	0
Commercial Power Failures	2	0	0	0	0	0
Water System Failures						
Domestic	0	0	0	0	0	0
Waste	2	1	0	0	0	0
Communication Failures	0	0	0	0	0	0
HVAC Failures	0	0	0	0	0	1
Med Gas Failures	0	0	0	0	0	0
Elevator Failures	10	5	2	2	0	0
High Voltage Electric Switchgear	1	0	0	0	0	0

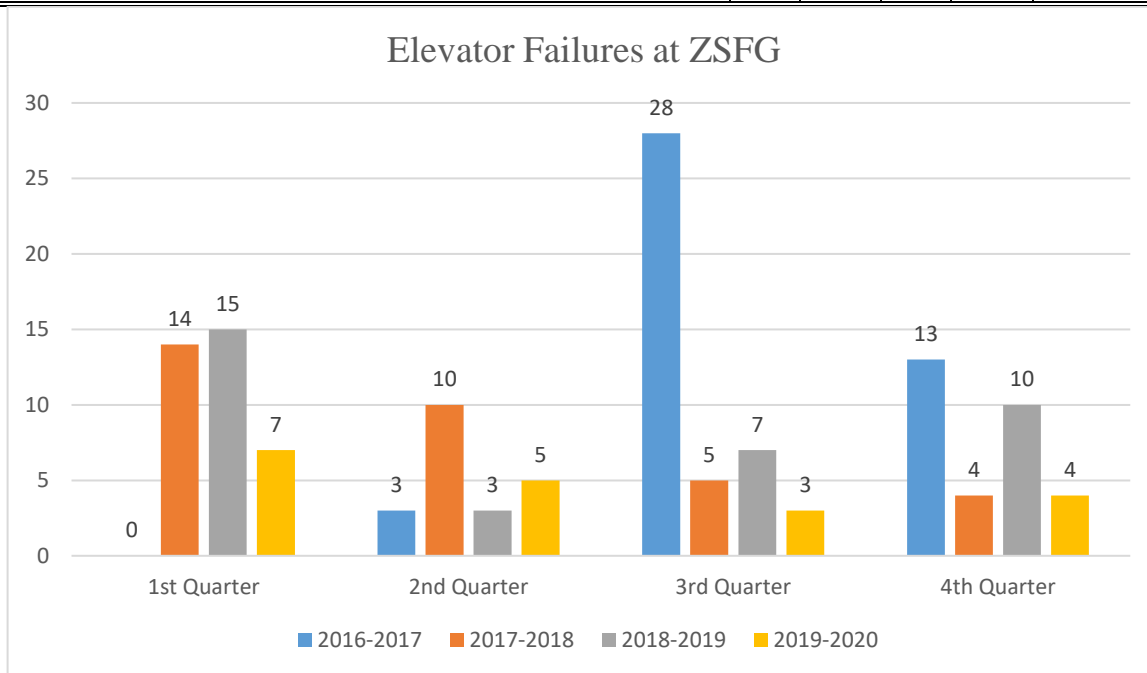
The Environment of Care Committee has evaluated the objectives and determined that they have been met. The Program continues to direct utilities management awareness in a proactive manner.

PERFORMANCE METRICS

AIM: For FY 2020-2021, continue the reduction in elevator failures on Campus. Target met. 19 elevator outages in FY 2019-2020 vs 35 for 2018-2019.

Elevator Failures

Elevator Failures	1 st	2 nd	3 rd	4 th	Action
Elevator outages of 4-hours plus in duration, or passenger entrapment of any duration, (19 total cars)	7	5	3	4	Monitor for trends



AIM: For FY 2020-21 continue to manage and monitor outage trends with an overall goal to manage elevator outages.

EFFECTIVENESS

The Utility Management Program is considered effective.

Proposed Performance Metrics for 2020-2021	Target	Comments and Action Plan
AIM: manage elevator failures at ZSFG to a minimum through contract unification	Reduce outages from 2019-20 level.	Manage and monitor elevator outage trends.
AIM: Engage staff and contractors to review & implement the 2016 bond measure projects pertaining to the utility system.	ZSFG staff engaged in all project work.	Involve stake holders in project implementation.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2020-21

- Implement the chiller replacement project in Bldg 2.
- Implement the cooling tower replacement project in Bldg 2.
- Further develop with the assistance of the project management team the replacement project for the main switchgear, and electrical distribution system in Bldg 5.
- Complete the Bldg 5 re-roof in FY 2020-2021.

VIII. Unsung Heroes of the Environment of Care Committee

Traditionally, the Environment of Care (EOC) Annual Report consists of seven chapters which align with Joint Commission requirements for management of a hospital's EOC. Reflecting ZSFG's strong emphasis on collaboration and a shared mission and vision, EOC activities at ZSFG include far more than these seven-chapter heads and their programs, with other program participants working hard behind the scenes, without getting recognition for their valuable contributions. This section identifies some of these participating groups, their EOC activities in the past year, their accomplishments, and challenges:

Department of Education and Training (DET):

Major EOC Activities

- DET continues to manage all education and training activities related to Workplace Violence Prevention (WVP). This includes development of curriculum, implementation; managing multi-discipline training teams; tracking compliance and training evaluation.
- DET incorporated WVP questions into EOC Rounding Tool to identify education and training gaps.
- DET continues to collaborate with EOC stakeholders to develop Annual Education material for staff.

Accomplishments

- Redesigned & implemented ZSFG's Workplace Violence Prevention (WVP) training plan. All departments/units providing patient contact activities will have a training team. Incorporating this model allows for curriculum to be modified to meet department/unit needs to focus on specific Crisis Prevention Intervention (CPI) strategies, such as deceleration techniques.

Challenges

- Due to COVID-19, in-person training is limited to adhere to social distancing guidelines. Training schedule for department/unit WVP trainers will be extended until fall 2021.

Department of Environmental Services (EVS):

Major EOC Activities

- EVS maintains the built environment of the facility where healthcare services are provided, following regulations and guidelines, i.e., OSHA, TJC, CDC, AORN, APIC, and AHE. The EVS works in collaboration with Infection Control preventionists to review and revise policies and procedures for environmental cleaning that includes proper use of PPEs. Also ensures safe and effective chemicals selection and use for achieving disinfection. The policies include essential items such as checklists, timelines, and frequencies, and develop a mechanism by which to assess and improve consistency and quality. We develop and update new Porter orientation program and maintain a standard of cleanliness by providing a reporting methodology for tracking compliance and effectiveness of cleaning processes (ATP tests).
- EVS is responsible for pest control activities, by implementing an integrated pest management program (IPM) to mitigate exposure to pests in the facility.
- EVS collects, transports, separates, and discards waste streams, such as Regular and Regulated Medical Waste, Recycle and Compost, etc. We Train staff in the proper handling and separation to minimize landfill waste.
- EVS participates in the twice a month EOC Rounds to make sure Porters follows proper protocols during their tour of duty. Also, to minimize the risk of accidents by following proper cleaning standards.
- EVS completes on-line work orders/requests for cleaning projects; requests for tables, chairs, trashcans and segregated containers for compost/recycling/confidential.

Accomplishments

- Worked in collaboration and guidance of IC for the participation in a joint San Francisco Chapter of the Association for Professionals in Infection Control and Epidemiology (APIC) and Association for the Healthcare Environment (AHE) pilot project. The project aims to standardize environmental cleaning practices in local healthcare facilities, and to decrease HAI. A group of Porters and Supervisors were trained and certified in CHEST (Certified Healthcare Environmental Services Technician). The project was successfully completed, resulting in an increase in patient and staff satisfaction, HCAHPS and e-Videon (patient satisfaction) scores.
- Monitored and complied with all trainings and provided key information to IT for the proper creation of the EVS module for the new Electronic Health Record (EHR), to be used at ZSFG. Worked to implement Epic Electronic Health Record system in our department. Implementation was successful and we have eliminated most of the manual work to provide cleaning services to ZSFG.
- Collaborated with the Department of Human Resources, early in the new year, to hire and train the large number of employees necessary to replace the retirees and long-term leave of the previous season. Following this, with the advent of the Covid-19 crisis, worked again with HR Dept. to acquire a number of new DSW workers, kindly provided by SFO and the Public Library, needed to deal with the ongoing pandemic.

Challenges

- The department is dealing with an increase in Capital project work cleaning across campus and Extended Leave of Absence of front-line staff that resulted in a substantial increase in OT hours used. We are working with HR Operations to expedite hiring EVS staff and reduce OT.

Department of Infection Prevention & Control (IC):

Major EOC Activities

- IC provides technical guidance and oversight to the Environmental Services Department. This includes the review and revision of policies and procedures, ensuring safe and effective chemicals are selected/used for achieving disinfection, and providing a reporting methodology for tracking compliance and effectiveness of cleaning processes.
- IC obtains input from EOC stakeholders to develop and update annual infection prevention and control educational material for staff.
- In addition to daily IC rounding, IC participated in the twice a month EOC Rounds to identify infection prevention and control issues and process gaps until COVID-19 safe work practices required their temporary suspension.
- IC has worked with six of the seven EOC chapters to establish standard work that incorporates infection prevention and mitigation strategies in critical aspects of their work with the Security Management chapter being the exception.

Accomplishments

- IC, EH&S, Facilities Management and Capital Projects collaboration on development of standard work for construction projects. This successful collaboration continues to find opportunities for improvement to include participation in the development of a master planning document for ongoing seismic safety upgrade projects and renovation of building 5 from inpatient to outpatient setting.
- IC increased efficiency for Facilities Management by modifying the IC permit process for small scale renovation and construction projects. The combined contractor work permit now allows projects whose IC risk assessment places in a no or low risk to patients category to proceed without an additional stand-alone IC permit.
- IC worked with Facilities Management to assess and improve workplace environments to meet the needs of COVID-19 social distancing practices.

Challenges

There are multiple competing “high priority” issues and projects which make it difficult for IC to establish stable partnerships with the various departments, e.g. nursing, EVS, Facilities and the ORs, to allow for CQI activities. The primary focus for IC department since February 2020 has been the COVID-19 pandemic. The activities done in response

to COVID-19 include the development of a COVID-19 FAQ intranet site that is maintained by IC program manager, multiple site visits to majority of campus to assess safe work practices, creation and implementation of multiple COVID-19 specific policies in addition to modification of existing policies, primarily related to use of PPE and development of appropriate COVID-19 patients based on their phase of diagnosis, illness and exposure status. Other examples of on-going issues include high patient census, implementation of the new electronic healthcare record (EHR) system with its new processes for managing infection and isolation needs, and the multiple current and planned construction activities across the campus.

Department of Pharmaceutical Services (DPS, “Pharmacy”)

Major EOC Activities

- DPS is responsible for ensuring the safety and integrity of pharmaceuticals in medication rooms to comply with the various regulatory requirements (eg. Board of Pharmacy, CDPH-Title 22, TJC). This includes checking the medication room for proper labeling and storage, security & documentation of compliance for emergency drug supplies, access to pertinent information (eg. LASA list, High Alert medications list, Do Not Crush list).
- DPS participates in the twice a month EOC Rounds to identify medication labeling and storage issues and gaps.

Accomplishments

- Provided medications and staffing to COVID Command Center, Containment sites and alternate care sites throughout the city during the COVID-19 pandemic
- Medication-related information (eg. LASA list, High Alert Med List, Hazardous Drugs, Do Not Crush list) is now readily available electronically on the VDI desktop
- Continued to work with Materials Management to transition from multi-pack IV fluid bags to single pack thereby mitigating the repeat findings of undated bags that were deemed "expired."

Challenges

- Medication room size and configuration variations from one nursing unit to another, making it difficult to standardize storage processes.
- Continuing to optimize EPIC functionalities to improve workflow for Nursing and Pharmacy

In addition to the listed groups, Andrea Chon, RN, MSN, the nursing liaison for EOC activities requires special recognition for actively and aggressively participating in EOC rounds, and taking information and issues raised at EOC Committee meetings back to her peers with

nursing management and leadership. Other persons supporting EOC activities on a routine basis include:

- Annette Munoz, Security
- Josie Huang, Regulatory Affairs
- Eunice Santiago, Biomedical Engineering
- Gemma Cohen, Bloodborne Pathogen/Safe Device Committee
- Jessica Galens, Pharmaceutical Services
- Louis Moreno, Environmental Services
- Manuel Catam, Patient Safety
- Mariel Lontoc, Infection Prevention & Control
- Priyanka Karki, Dept. of Education & Training
- Reyland Manatan, Environmental Services
- Sandra Ladley, Quality Management
- Vilma Barrera, Infection Prevention & Control