ZUCKERBERG
SAN FRANCISCO GENERAL
Hospital and Trauma Center

Environment of Care

Annual Report

Fiscal Year 2021-2022

Approvals: September 2022

Environment of Care Committee: October 2022

Medical Executive Committee: September 2022

Nursing Executive & Patient Care Services Committee: September 2022

PIPS Committee: October 2022

Presentation & Review Schedule:

Joint Conference Committee: October 2022

San Francisco Health Commission: November 2022

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 2022, Greg Chase and Valerie Williams serve as co-chairs of the EOC Committee.

The EOC Annual Report highlights the activities of the EOC Program during Fiscal Year 2021-2022. 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.

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 can 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, Clinical Informatics and Convergent Technologies to test business continuity policies and procedures for planned downtime for Epic and network maintenance.
- Provided HICS Basics and FEMA ICS preparatory training for ZSFG managers and supervisors.
- Prepared for implementation of complete revision of The Joint Commission's Emergency Management Standards and Elements of Performance.
- Clinical and HICS Incident Management Teams effectively and successfully managed departmental earthquake preparedness drills for the 2021 Great California ShakeOut, four scheduled computer system downtime planned server patch events, one brief partial power failure, two Security Alerts, the Warriors NBA Championship Parade, the Pride Parade and related events, as well as the ongoing COVID-19 Response with multiple patient surges.

PROGRAM OBJECTIVES FOR FY 2021-2022

Objectives	Met/ Not Met	Comments and Action Plans
ZSFG 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 3/10/22 and shared with SFSD, SFFD, SFPD, DPH, the SF Department of Emergency Management and other SF hospitals in April, 2022.
ZSFG 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: • 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.
ZSFG implements its Emergency Operations Plan when an actual emergency occurs.	**Met**	Ongoing Covid-19 Response.
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 ongoing Covid-19 Response with multiple patient surges and activations for preplanned events.
ZSFG trains staff for their assigned emergency response roles.	**Met**	• New Employee Orientation • Annual Emergency & Disaster Response Training • HICS Basics Training
ZSFG 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 on all actual emergencies, scheduled information system downtime and other preplanned events.

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 8/11/22.

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	2021-2022 Goal	2021-2022 Results	Comments & Action Plan
Specific Staff Will Complete Required Training in HICS. Current designated Staff who have completed HICS Basics – Baseline 88% in 2019.	**90%**	**95%**	**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.
During Disaster Exercises and Actual Incidents, the Incident Management Team will Complete Critical Functions.	**95%**	**100%**	**Met.** Covid-19 Response.

During Disaster Exercises and Actual Incidents, HICS Staff will Complete Appropriate Documentation. • HICS Job Action Sheets • HICS Forms • Communication of Incident Action Plan	 **95%** **95%** **95%**	 **100%** **100%** **100%**	**Met.** Covid-19 Response.
Decrease Everbridge Undeliverables.	**< 0.10%**	**0.02%**	**Met.** Regularly updated contact information.
Assess Frontline Staff Knowledge of Emergency Procedures.	**95%**	**98%**	**Met.**
Implement at Least 90% of Corrective Actions Identified in FY 2013-2021 Exercises and Actual Incidents by 6/30/22.	**90%**	**95%**	**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 2022-2023

- Develop and implement updated plans and procedures to ensure compliance with new Joint Commission Standards and Elements of Performance.
- Develop and implement progressive Drills and Exercises for Security Emergencies Response, including Lockdown, Shelter in Place, and Active Assailant.
- Continue providing training on the Hospital Incident Command System (HICS) for Incident Management Team members, supervisors and managers.
- Ensure effective and efficient incident management and documentation.

The proposed performance metrics for these goals include:

Emergency Management Proposed Performance Metrics for 2022-2023	Target	Comments & Action Plan
Develop and Implement updated plans, procedures and monitoring mechanisms to address new Joint Commission Standards and Elements of Performance.	**100%**	**Driver Metric.** Nine new Standards and 60 new Elements of Performance.
Develop and implement progressive Drills and Exercises for Security Emergencies Response, including Lockdown, Shelter in Place & Active Assailant Exercise Program.	**90%**	**Driver Metric. Quarterly Activities and Specific Exercise Objectives**
Ensure that Up to date and Culturally Appropriate Talking Points and Other Information is made available to Staff,	**95%**	**Driver Metric.** Communication will include Incident Action Plan and talking points to share with patients and

Patients and Visitors During Drills and Actual Incidents.		visitors.
Specific Staff Will Complete Required Training in ICS.	**95%**	**Watch Metric.**
During Disaster Exercises and Actual Incidents, the Incident Management Team will Complete Critical Functions.	**95%**	**Watch Metric.** Continuing focus on standard work and documentation.
Follow Up on Issues Identified for Improvement During HICS Activations during prior year.	**95%**	**Watch Metric.** Ensuring accountability for Corrective Actions.
Assess Frontline Staff Knowledge of Critical Response Actions for our Most Likely and Highest Impact Emergencies.	**95%**	**Watch Metric.**
Maintain Everbridge Alert System Undeliverable Messages to ≤ 0.10%.	**≤ 0.10%**	**Watch Metric.** Ensuring safety for staff.

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), Federal, State & local authorities, and as required by various other regulatory bodies. The Life Safety Management plan is designed to ensure an effective response to emergencies that could endanger the safety of patients, staff & visitors, and affect the Zuckerberg San Francisco General environment of care (ZSFG).

SCOPE

The Life Safety Management Program applies to all 16 buildings on the ZSFG campus (approximately 1.8m sqft of floor space), including all bond funded 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 4th & 5th 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. As of this report, all FDs & FSDs are accessible.
- Completed annual test, inspection, and repairs to fire and smoke dampers on the Ground floor in Bldg 25 per NFPA standards: required every six years. The intent is to test and inspect one to 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, maintains a safe and reliable smoke control system.
- Assessed risks at and around various construction projects and assisted the project team in 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.
- Maintained Covid-19 social distancing requirements, testing sites, and vaccination sites.
- 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.

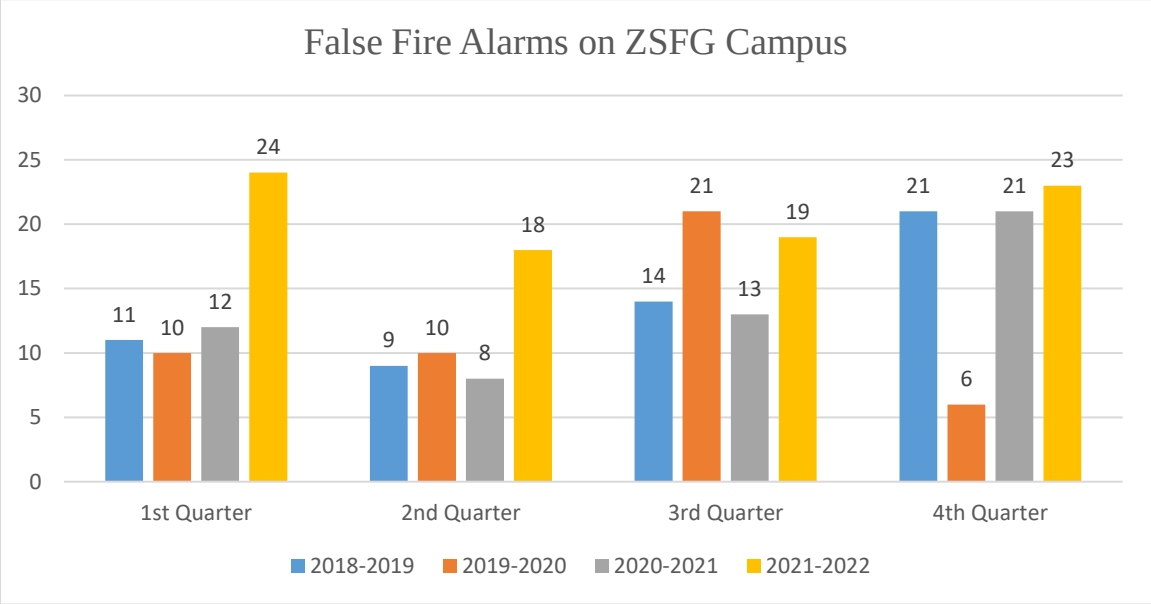
Summaries of identified problems with fire detection, NFPA code compliance, fire response plans, drills, and operations in aggregate, are reported to the EOC Committee quarterly.	Met	Any problems or deficiencies of the fire alarm system are repaired in a timely fashion or is reported in the quarterly 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	All 898 fire extinguishers on Campus 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.

PERFORMANCE METRICS

Life Safety Management Performance Metrics	2021 3rd Qtr.	2021 4th Qtr.	2022 1st Qtr.	2022 2nd Qtr.	Target	Comments and Action Plan
Quarterly Fire Drills: a minimum of 9 per quarter - one fire drill per shift, w/ completed department evaluation forms.	10	10	11	11	Minimum of 9 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	24	18	19	23	25 or less false	Target not met – False fire alarm goal at less than 25

					alarms per year	for the year. 49 of 84 FAs were smoking related.
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 2022-2023, false fire alarm goal on campus was adjusted to 50 per year or fewer.



Target of 25 or fewer false fire alarms for FY 2021-2022 has 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, the number of false fire alarms needs constant management.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2022-2023

- Manage false fire alarms for a quality and safe care experience in Bldg 25.

- Continue engagement with projects on the ZSFG Campus. Ensure that the appropriate Risk Assessments for a quality, and safe care experience are followed.

- 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 2022-23	Target	Comments and Action Plan
AIM: manage and reduce false fire alarms in Bldg 25 to a more acceptable level through staff training.	**50 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.

PROGRAM OBJECTIVES/PERFORMANCE METRICS FOR 2021-2022

Objectives	Met / Not Met	Comments and Action Plans
Conduct RFP for Pharmaceutical Waste Disposal	**Not Met**	This effort was delayed due to the pandemic.
Rebuild pandemic/disaster PPE stockpile	**Met**	Worked with Materials Management to identify and purchase needed PPE for our stockpile.
Attempt to reduce and/or eliminate exposure to a hazardous material on campus.	**Met**	Worked diligently with Pharmacy to identify a safer sporicidal disinfectant. While the effort to replace it was ultimately unsuccessful, we did develop policies and procedures to reduce employee exposures.

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 2022-2023

- Make the EH&S vacant positions more attractive to potential candidates and staff the EH&S Department.
- Conduct RFP for Pharmaceutical Waste Disposal

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:

- Created a Biomedical Equipment Planning Committee which lead to the purchase of key capital medical equipment
- Replaced all Med-Surg bladder scanners (8x) with new bladder scanner medical technology
- Hired a new Biomedical Technician with a dialysis background to prepare for Ward 17 Dialysis new location
- Additional feeding pumps and aspirators were purchased
- An additional 100 infusion pumps were ordered during the peak of the COVID-19 pandemic
- Working with department leaders to purchase medical equipment under $5K that are End of Life (EOL)

Developing People (Completed Training):

- Baxter Prismax V2 (LS/Hemodialysis Units, Renal, Continuous Replacement Therapy)
- Draeger Medical Inc. Apollo (LS/Anesthesia Units)
- Draeger Medical Inc. Evita Infinity V500 (LS/Ventilators, Intensive Care)
- Philips Healthcare MX 400-800 (Monitors, Physiologic, Multipurpose, Bedside, Modular)
- CareFusion Respiratory A BD Co LTV 1200 (LS/Ventilators, Intensive Care)

Safety:

- Philips Respironics DS760S (BIPAP): Two issues related to the polyester-based polyurethane (PE-PUR) sound abatement foam used in Philips Continuous and Non-Continuous Ventilators: 1) PE-PUR foam may degrade into particles which may enter the device's the air pathway and be ingested or inhaled by the user, and 2) the PE-PUR foam may off-gas certain chemicals.
    - Devices have been removed from service and will be sent back to Philips Healthcare
    - Philips Healthcare will be providing replacement units
- Philips Respironics DS560HS (BIPAP): Two issues related to the polyester-based polyurethane (PE-PUR) sound abatement foam used in Philips Continuous and Non-Continuous Ventilators: 1) PE-PUR foam may degrade into particles which may enter the device's the air pathway and be ingested or inhaled by the user, and 2) the PE-PUR foam may off-gas certain chemicals.
    - Devices have been removed from service and have been returned back to Philips Healthcare
    - Philips Healthcare have provided DSX520H11C DS2 Auto CPAP as replacement devices
- Philips Respironics V60 (Ventilator): Internal source ("35V Rail") that powers the ventilator – an anomaly affecting power management may lead to the ventilator shutting down and the patient no longer receiving respiratory assistance.
    - A technical solution (changing two resistors within the ventilator) that will cause the V60 ventilator to alarm in call cases should the ventilator experience an issue with the 35V Rail.
    - While awaiting deployment of the technical solution, Respiratory Therapy (RT) decided to implement one of the mitigations that Philips Respironics provided to mitigate the risk of the hazard caused by the 35V Rail issue.
    - RT connected the Philips Respironics V60 ventilators to a nurse call/remote alarm.

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.

PERFORMANCE METRICS

Preventative Maintenance:

Objectives	Met/Not Met	Comments and Action Plan
Key Performance Metrics • 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 FY21-22.
Realignment of medical device PM (Preventative Maintenance) workload per base month	Met	Continuous PM realignment in order for Biomedical Technicians to more efficient on a daily basis to manage both PMs and service calls. The goal is to have each Biomedical Technician have less than 125 PMs per month.
Reduce cost for maintenance and repair services	Met	Continuous training to increase the number of medical devices that can be serviced in-house in order to rely less manufacturers and third-party vendors
Biomedical technicians to complete 25% of monthly PMs each week	Met	Biomedical technicians continue completing 25% of their monthly PMs each week.

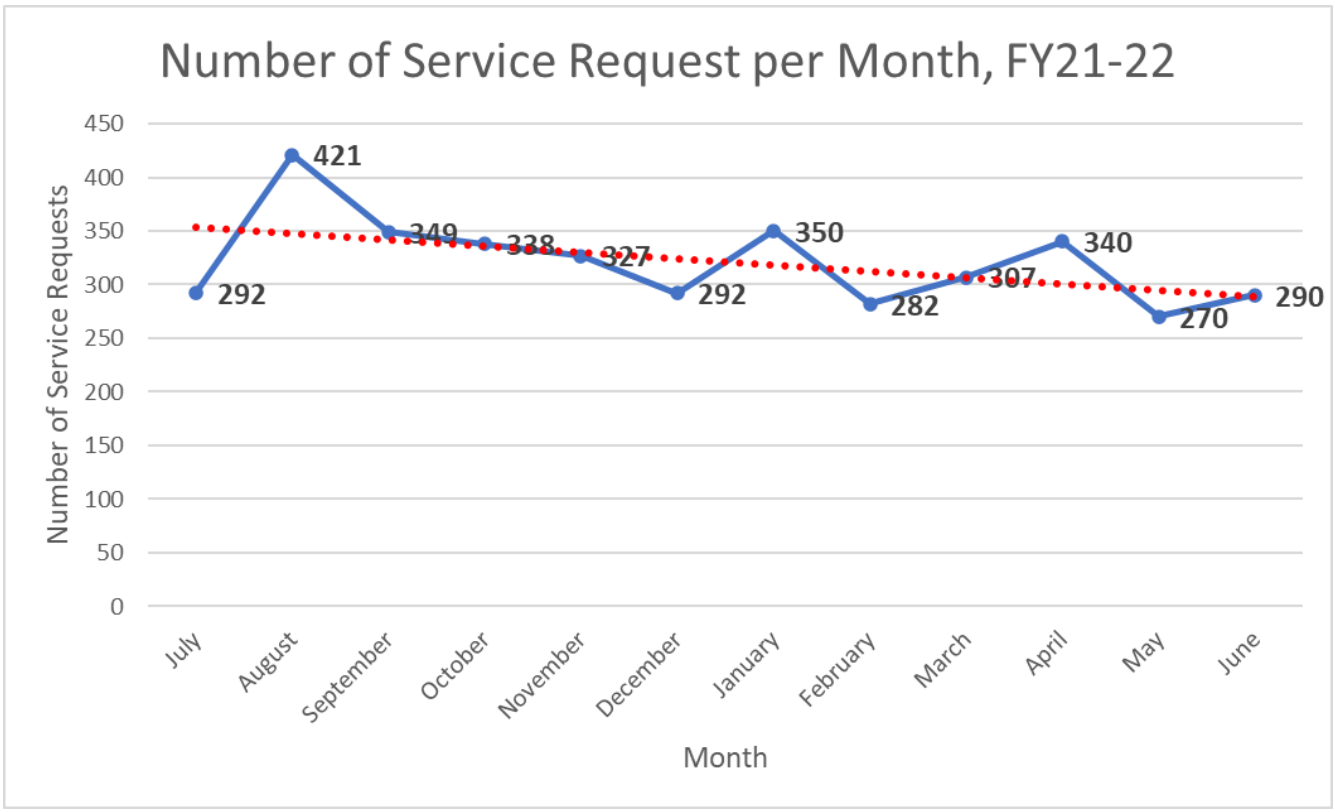
	July	August	September	October	November	December	January	February	March	April	May	June

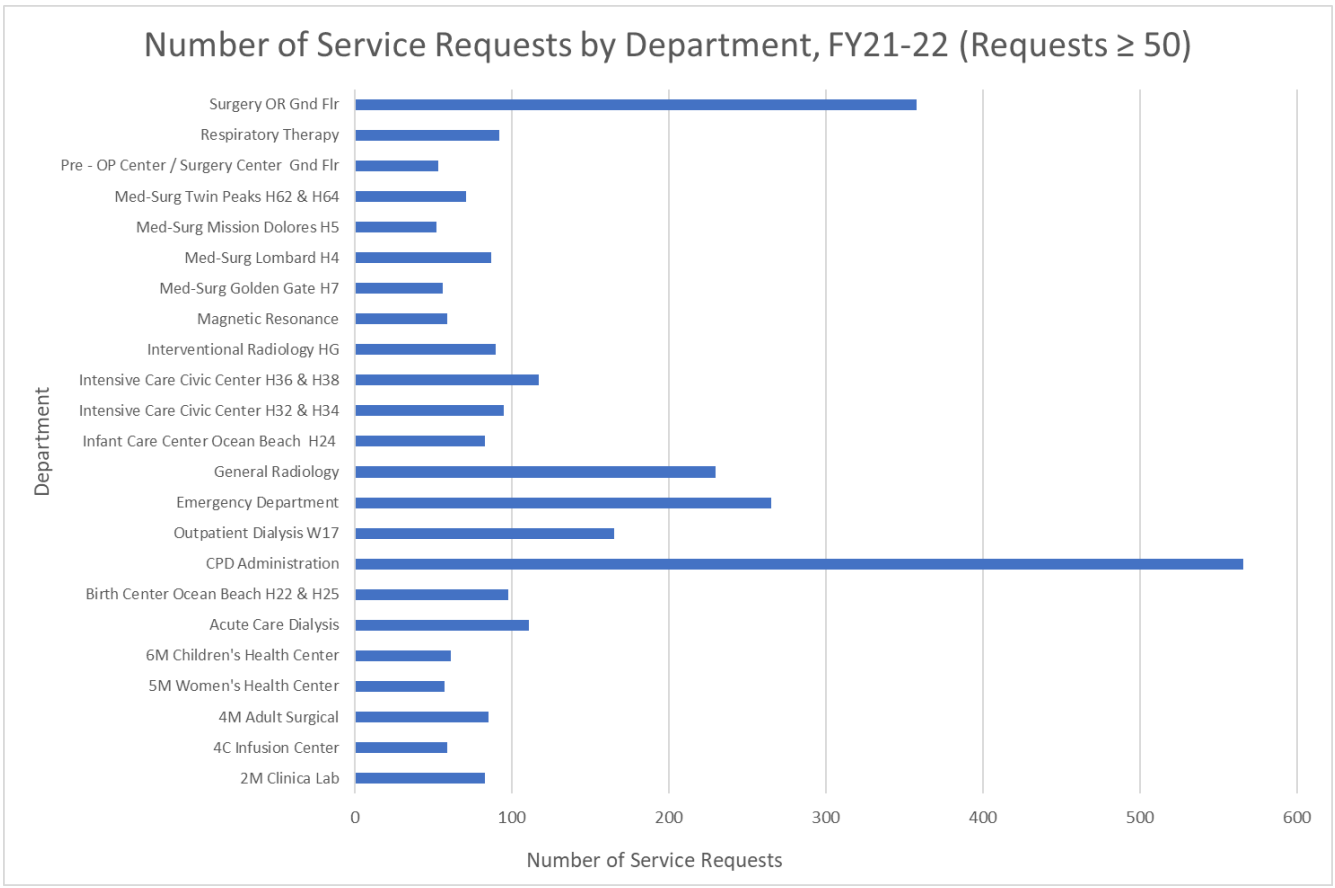
High Risk (Life Support)												
Number of PMs	138	41	33	34	88	132	119	37	23	17	36	50
Completion Percentage	100 %	100%	100%	100%	100%	100%	100%	100%	100%	100%	97.22 %	100%
Number of Devices Not Located	0	0	0	0	0	0	0	0	0	0	0	0
Number of Devices Pending Service	0	0	0	0	0	0	0	1	0	0	1	0
Number of Devices Unavailable	0	0	0	0	0	0	0	0	0	0	0	0
Percentage Managed (Goal: 100%)	100 %	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-High Risk												
Number of PMs	576	659	454	563	1133	739	602	566	1620	714	534	489
Completion Percentage	100 %	100%	99.78%	100%	98.41%	100%	100%	100%	99.01 %	99.86 %	97.57 %	95.09 %
Number of Devices Not Located	0	0	1	0	9	0	0	0	8	0	6	2
Number of Devices Pending Service	0	0	0	0	0	0	0	0	0	1	6	20
Number of Devices Unavailable	0	0	0	0	0	0	0	0	0	0	0	1
Percentage Managed	100 %	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95.09 %

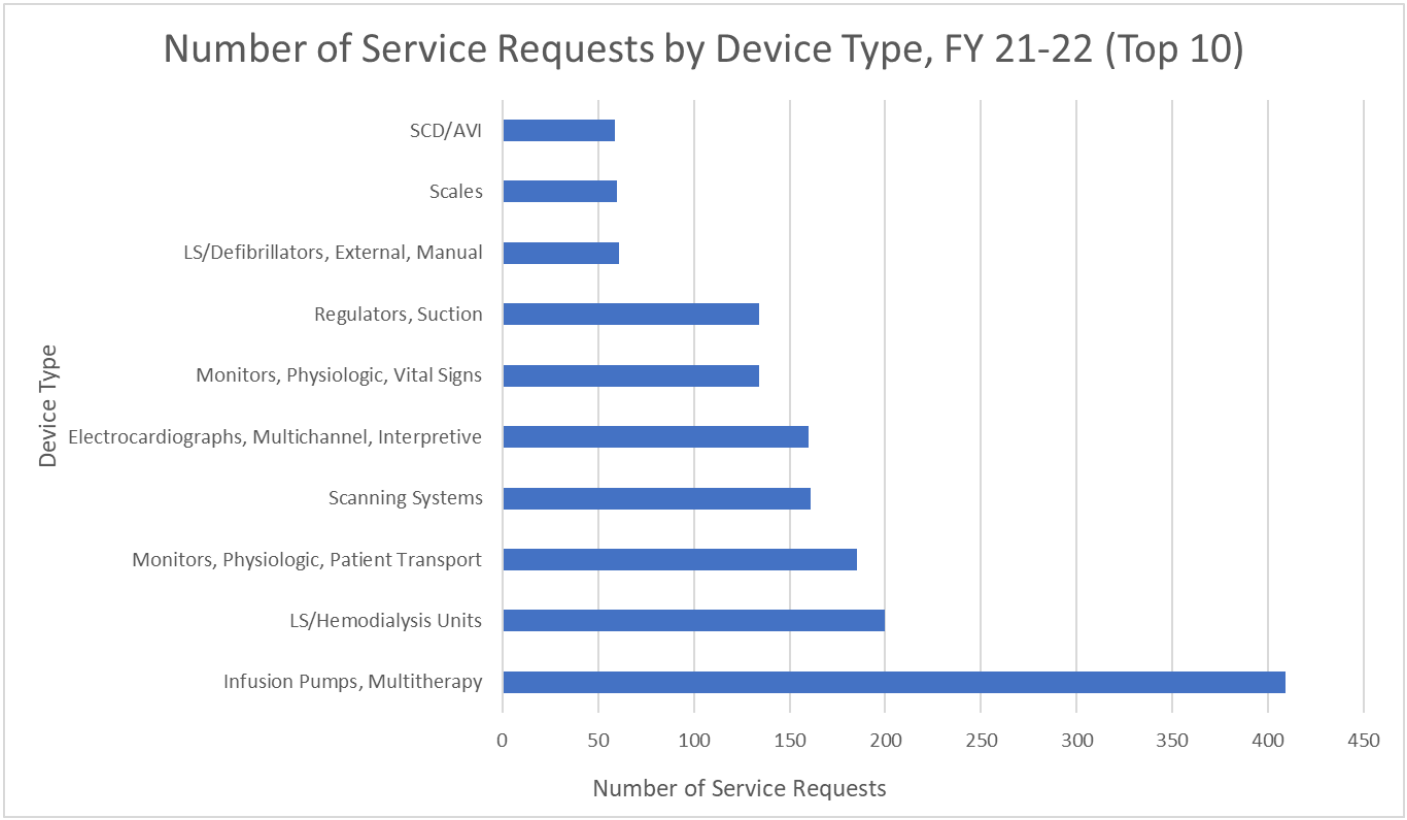
(Goal: 100%)												

Service Request Activities:

Categories	July	August	September	October	November	December	January	February	March	April	May	June
Number of Service Request	292	421	349	338	327	292	350	282	307	340	270	290
Number of devices retired	40	18	31	34	62	29	59	34	42	35	40	7
Number of initial inspections performed	22	37	82	12	27	34	59	30	35	52	46	21
Number of UO reports	1	3	3	2	6	4	5	5	6	4	2	4
EOC rounds survey	0	1	3	0	1	0	1	0	2	0	0	4


Number of Service Request per Month, FY21-22
Number of Service Requests
450
400
350
300
250
200
150
100
50
0
421
349
338
327
292
350
282
307
340
270
290
292
July
August
September
October
November
December
January
February
March
April
May
June
Month


Number of Service Requests by Department, FY21-22 (Requests ≥ 50)
Department
Surgery OR Gnd Flr
Respiratory Therapy
Pre - OP Center / Surgery Center Gnd Flr
Med-Surg Twin Peaks H62 & H64
Med-Surg Mission Dolores H5
Med-Surg Lombard H4
Med-Surg Golden Gate H7
Magnetic Resonance
Interventional Radiology HG
Intensive Care Civic Center H36 & H38
Intensive Care Civic Center H32 & H34
Infant Care Center Ocean Beach H24
General Radiology
Emergency Department
Outpatient Dialysis W17
CPD Administration
Birth Center Ocean Beach H22 & H25
Acute Care Dialysis
6M Children's Health Center
5M Women's Health Center
4M Adult Surgical
4C Infusion Center
2M Clinica Lab
0
100
200
300
400
500
600
Number of Service Requests



Medical Device Recalls/Hazard Alerts:

Manufacturer and Model	Device type, Issue, Solution
Maquet Medical Systems; CardioSave Hybrid; Circulatory Assist Units, Cardiac, Intra-Aortic Balloon	Helium Indicator Inaccuracy in Presence of EMC and Unexpected Shutdown Upon Battery Removal; Software update will begin in late Q2 2022 to correct these issues

Smiths Medical; H-1000 and H-1200; Warming Units, Blood/Intravenous Solution	Fluid Warming and Irrigation System Disposables contain aluminum heat exchangers, due to the potential for aluminum ion leaching into warmed fluids; Placards will be provided which will hang on the rack visible for users of the device
Medtronic Surgical Technologies Div Medtronic Inc; PH304; Irrigation/Distention Systems, Hysteroscopic	Inflow volume when it reaches 32,450 ml during long cases and it does not continue to indicate the actual inflow volume; Medtronic will be releasing software version PH304_030_A_0_11_0_2 that will address the issue
Philips Respironics Inc; V60; LS/Ventilators, Noninvasive Positive Pressure	Philips plans the removal of the Nav-Ring as a whole, only leaving an accept button in its place; Philips time frame for repair of all V60 units is two years - if unit does have any issues with the Navi-ring that unit will become a priority repair to Philips and will be repaired first
Philips Respironics Inc; DS560HS (BIPAP AUTO BI-FLEX) and DS760S (BIPAP AUTO BI-FLEX); LS/Positive Airway Pressure Units, Continuous	Two issues related to the polyester-based polyurethane (PE-PUR) sound abatement foam used in Philips Continuous and Non-Continuous Ventilators: 1) PE-PUR foam may degrade into particles which may enter the device's the air pathway and be ingested or inhaled by the user, and 2) the PE-PUR foam may off-gas certain chemicals; Units have been removed from service per Philips Respironics, Technical Support communicated that the RP Kit has not been approved by the FDA yet – there is no ETA on when these kits will be shipped

Baxter International Inc.; Prismax V2 US; LS/Hemodialysis Units, Renal, Continuous Replacement Therapy	Baxter Healthcare is issuing an Urgent Medical Device Correction to the user level for the PrisMax System. This correction is due to a software anomaly occurring during use. If the operator initiates therapy with a saved prescription profile and makes a change to the prescription after a disposable filter change using the Same Patient button, the PrisMax system may display values from the original prescription profile, rather than the current prescription.
Philips Healthcare; Affiniti 70G; Scanning Systems, Ultrasonic, Cardiac	Philips Healthcare has identified the following two issues with the Affiniti Ultrasound System: • Issue #1: Potential lock-up in x-plane • Issue #2: Potential Compromise of Pulse Wave Doppler Signal using Dual Mode The Affiniti 70G (CN:59538) has software version 5.0.1 which according to the Philips Medical Device Correction letter is associated with issue #2 (Potential Compromise of Pulse Wave Doppler Signal using Dual Mode). A Philips FSE will need to come on-site to update the software version of the system.
Baxter Healthcare Corp.; SIGMA Spectrum; Infusion Pumps, Multitherapy	Baxter Healthcare Corporation is issuing a Medical Device Correction to the user level for the Spectrum infusion pumps due to a software error which may occur following the completion of a secondary infusion, during the programming of a repeat of that secondary infusion. When the user attempts to repeat the programming of a secondary infusion with a concentration string longer than 19 characters (e.g., 2000 mUnits / 2000 mL), the pump will display a white screen with an audible alarm, reboot the operating software, and display "Improper Shutdown" and "System Error 101" messages. The user must then power cycle the device and reprogram both the primary and secondary infusions, as the previously set infusion parameters will have been cleared. Baxter will be working with customers to upgrade all Spectrum infusion pumps to correct
Abbott Laboratories Inc.; i1000; Analyzers, Laboratory, Clinical Chemistry, Automated, Discrete	Abbott has identified three potential performance issues for the ARCHITECT Software version 9.41 and earlier. Abbott will be releasing ARCHITECT Software versions 9.45 and 9.50 to correct these issues.

Fresenius Medical Care North America; 2008T; LS/Hemodialysis Units	Fresenius T model machines will be updated to software v.2.74.
Siemens Healthcare; ADVIA Chemistry XPT; Analyzers, Laboratory, Blood, Glycated Hemoglobin	Department declined Siemens to install software. Email notification has been sent to Dr. Zane Amenhotep
Medtronic Spinal and Biologics Div Medtronic Inc.; StealthStation S7; Stereotactic Systems, Image-Guided, Surgical, Intracranial	The current StealthStation S7 has Synergy Cranial, version 2.2.8 which is affected by the recall. There is a potential for inaccuracy during biopsy procedures. A Medtronic FSE will be coming on-site to provide a warning an placard to be applied to the impacted system to maintain visibility to the mitigations until a software fix is available. Medtronic Technical Supported confirmed on 11/18/21 that a software fix has been released and that a FSE should be coming on-site before the end of the month.
Siemens Healthcare; SOMATOM Definition AS and SOMATOM Definition Edge; Radiotherapy Simulation Systems, Computed Tomography-Based	Siemens Healthcare has informed customers about a possible degradation of image quality in head scans when using CT scanner with software sygno.CT VB20A_SP5 running on the Definition AS and Definition Edge. Siemens Healthcare is working on solution for the describe degradation which will be provided with software version VB20_SP6. Biomed to follow up with end users to confirm that the cupping correction setting is set to C =4.
Draeger Medical Inc; V500; LS/Ventilators, Intensive Care	Cybersecurity Improvement Action which consists of receiving a cybersecurity kits for each system. The kits will have tools to cover or close the data interfaces of the ventilators.
Philips Respironics Inc; V60; LS/Ventilators, Noninvasive Positive Pressure	All V60/V60 Plus and V680 units have been identified to have potential issue that could affect the main electrical circuit (“35V Rail”) powering the ventilator and alarm. In some cases, this issue may result in either one of the following scenarios: 1. The ventilator ceases to operate, activating both visual and audible alarms.

	2. The ventilator ceases to operate and does not activate either a visual or audible alarm causing a "silent shutdown".
ICU Medical (Smiths Medical) Medfusion 3500; Infusion Pumps, Multitherapy, Syringe	Smiths Medical has issued a letter to notify about the following five potential issues for the Medfusion 3500 Syringe Infusion Pump: Issue Description Affected Models Affected Versions Action 1 False Alarm for Primary Audible Alarm (PAA) System Failure 3500 and 4000 All versions Until the problem is addressed, take corrective action 4 Intermittent Volume Over Time (IVOT) Delivery Mode - Infusion Continues after System Failure 3500 and 4000 3500 v6.0.0 v6.0.1 4000 v1.0.0 v1.1.0 v1.1.1 v1.1.2 Do not use IVOT delivery mode 5 Clearing of Program Volume Delivered (PVD) 3500 and 4000 3500 v5.0.0 v6.0.0 v6.0.1 4000 v1.0.0 v1.1.0 v1.1.1 v1.1.2 Do not change syringe size or brand during infusion 6 False Alarm for Rate Below Recommended Minimum for Syringe Size 3500 and 4000 3500 V6.0.0 V6.0.1 4000 All versions through 1.6.1 Until the problem is addressed, take corrective action

Baxter Sigma Spectrum V8; Infusion Pumps, Multitherapy	7 Incorrect Bolus or Loading Dose Time Display 3500 and 4000 3500 v6.0.0 v6.0.1 4000 All versions through 1.6.1 Until the problem is addressed, take corrective action The Smiths Medical sales representative, Aubrey Largaespada, confirmed that software patch 1.6.5 will be available later this year in December or in January 2023. Baxter is communicating important safety information for Spectrum V8 and Spectrum IQ infusion pumps related to potential reduced or non-delivery of medication, in some cases without alerting the user via pump alarm. This may occur as a result of incorrect administration set setup and/or incomplete resolution of upstream occlusion alarms when using Spectrum V8 and Spectrum IQ infusion pumps. Baxter is proposing a software update that will provide user prompts to support correct troubleshooting of the upstream occlusion alarm.

Proposed Performance Improvements, FY21-22	**Met/ Not Met**	**Results**
The management of medical equipment End of Life (EOL) documentation to help the Biomedical Engineering Department to plan ahead of time and to work with department leaders to purchase replacement medical equipment. To ensure proper medical equipment operation and to allow a proper timeline for the Biomedical Engineering Department to		Biomedical Engineering has collected EOL documentation from Original Equipment Manufacturer (OEM) that state the EOL date and confirms that end of manufacturer support. Biomedical Engineering will continue to collect EOL documentation in order to plan ahead in replacing medical equipment.

communicate with the manufacturer as to what parts/services will be available in order to maintain the medical device/system in service. The overall goal is to avoid any delay in patient care and improve hospital operations.	Met	
Medical Equipment Lifecycle Planning: Continue planning 2-3 years in advance as to what medical equipment will need to be replaced and what the total cost will be.	Met	Medical equipment has been identified that is currently not supported by the manufacturer or has reached its End of Life (EOL) date. A 1:1 meeting will be held with department leaders in the Fall to discuss their capital equipment submissions in November.
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.	Met	A Biomedical Committee lifecycle group has been formed to discuss and write up a standard procedure.
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.	Met	A procedure has been created with DPH IT to ensure any medical device that needs to be connected to the network is connected in a timely manner.
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.	Met	Department leaders are informed about any medical equipment that is no longer supported by the manufacturer or has reached its EOL. This information is also communicated during the monthly Value Analysis Committee (VAC).

Proposed Performance Metrics for FY22-23	**Target**	**Comments and Action Plan**

Medical device repairs	90% completion within 30 days	The Biomedical Engineering Department receives an average of 300-plus medical device service requests per month, the majority of which are repair requests. As service requests are received via phone or online ticket submission, they are logged into a database, assigned to a biomedical technician, who then will provide a solution. Requests for life support (LS) devices are prioritized for repair. Meet with Biomedical team bi-weekly to troubleshoot and discuss unresolved device repairs and work with vendors to become compliant with DPH.
Revive risk assessment of medical equipment in Biomedical Engineering's CMMS database and update the Biomedical Engineering Medical Equipment Management Plan (MEMP)	100%	The plan is to follow TMS (Biomedical Engineering CMMS) database embedded clinical equipment risk classification formula which is E+A+[(P+F+U)/3]. Once all medical devices in the database have an assigned risk score then the MEMP will be updated and presented at an EOC committee meeting.

EFFECTIVENESS

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

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN FY22-23

- Provide further training for all Biomedical Technicians in order to continue insourcing PM and repair services.
    - Reduce the total cost of ownership for each medical device
    - Reduce the service turnaround time

- Hire a Biomedical Technician with dialysis background to provide support when Outpatient Dialysis (Ward 17) moves to building 5 and expands its patient stations from 13 to 30.
    - The new area is expected to open in 2024

- Work with department leaders to develop a medical equipment lifecycle plan to replace medical devices/systems every 2-3 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.
    - Met with department leaders in the Fall to prepare for their capital equipment submission in November.

- 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

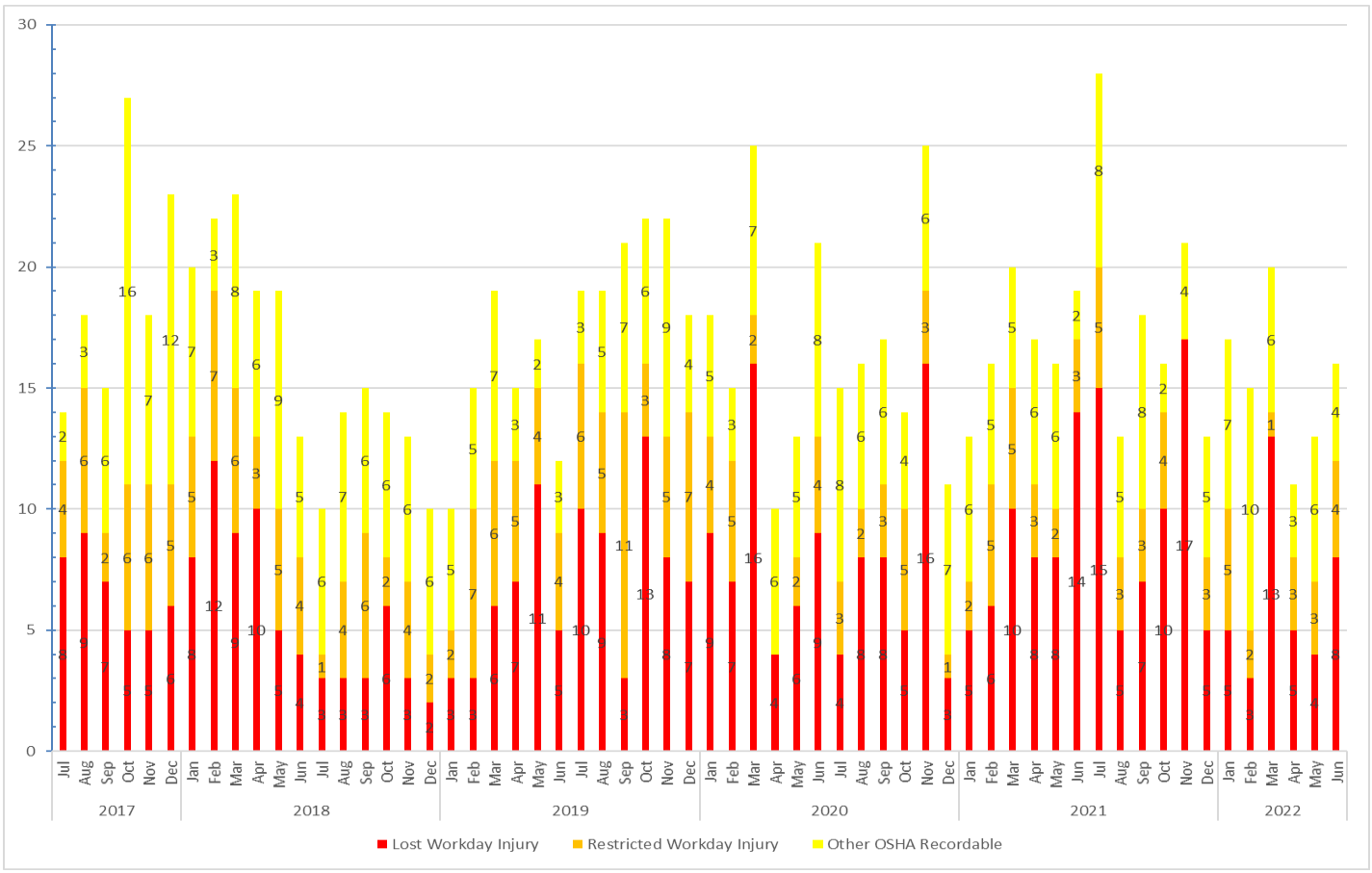
- Worked with Materials Management, Infection Control and DOC Logistics to identify alternate PPE to address COVD-related supply shortages.
- Maintained injury rate comparable to years that EH&S was fully staffed, despite operating at 33% staffing for the entirety of the pandemic

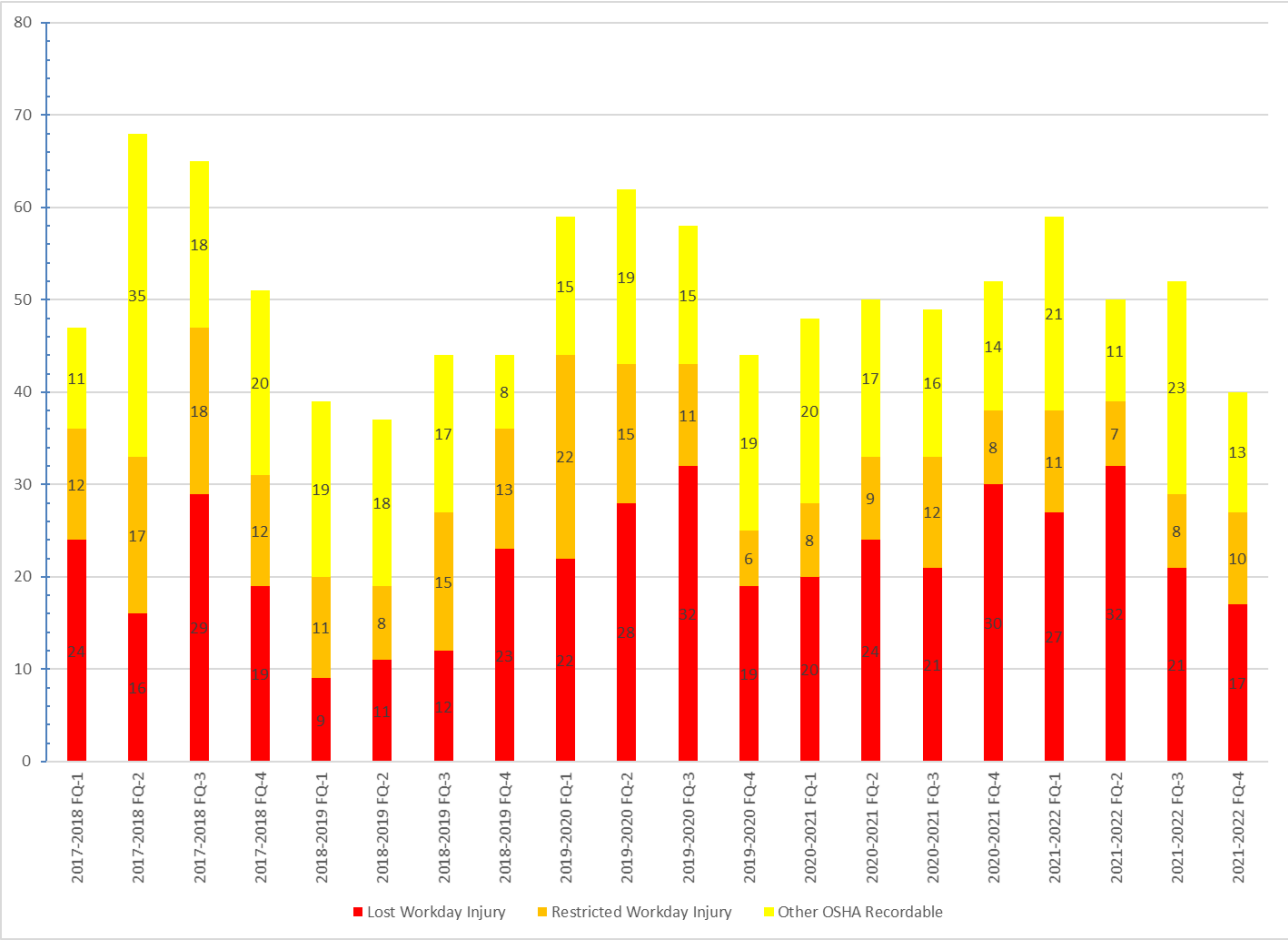
PROGRAM OBJECTIVES/PERFORMANCE METRICS

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:

Objectives & Performance Indicators	Results
AIM: Show continued progress in reducing staff injuries and injury rates, measured by no increase in Recordable Injury Counts or Injury Rates from FY2017-2022	**Met:** Injury counts and the standardized injury rate ("Incidence Rate") decreased from FY20/21- FY21/22.

OSHA Recordable Injuries July 2017 – June 2022





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 given the very 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.

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

- In response to 7,070 patient related service calls,
- 1% resulted in use-of-force.
- Confiscated 3,050 weapons and contraband through Emergency Department Security Weapons Screening.
- Investigated 26-moderate/high risk workplace violence threat incidents and developed security plans to address the threat and protect the individuals involved.
- Implementation of the Behavioral Emergency Response Team.
- Reduction of use-of-force incidents by 21%

PROGRAM OBJECTIVES

Objectives	Met / Not Met	Comments and Action Plans
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. A security management plan is developed, and monitored, quarterly to address security vulnerabilities, and minimize risk.	Met	2021-2022 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.
Ensure timely and effective response to security emergencies, and service request, including the enforcement of hospital rules and policies.	Met	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.
Report and investigate incidents of theft, vehicle accidents, threats, and property damage.	Met	SFSO quarterly call-for-service data, incident reports: Threat Management and SFSO Crime Report data supports that investigations are initiated for all crimes against persons and facility property.
Promote security awareness and education.	Met	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.
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.	Met	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.

PERFORMANCE

Performance Metrics #1	Performance Metrics #2	Performance Metrics #3	Significant Reporting Performance	Significant Reporting Performance
Code Green/At Risk (Patient Elopement)	**Customer Satisfaction**	**Electronic Security System Functionality**	**DPH and SFSO, MOU Performance**	**Employee Security Awareness**
Standard: The security provider will be measured on their performance during Patient Elopements, Patient "At Risk" and Missing Person incidents, including: • Initial Perimeter and Search • Notification of SFPD, BART, and MUNI • Documentation of Search Activity • Locate/Not Located Procedure	**Standard:** A monthly basis survey of 100 customers consisting of patients, visitors, employees, and physicians will be surveyed regarding their overall experience with Security Service/Sheriff's Office.	**Standard:** All electronic security equipment will be inspected monthly for functionality. Facilities, Security Services and the Sheriff's Operations Center will develop security plans to address vulnerabilities resulting from malfunctioning equipment.	**Standard:** A monthly security provider performance survey will be completed to assess the Sheriff's Office compliance with MOU obligations in the areas of operational performance, issue resolution, management responsibilities and finance provisions.	**Standard:** During Environment of Care Rounds, hospital staff be tested on 6 questions regarding security awareness (See Appendix B.) (Sample size: 300 employees per quarter)
Threshold – 80% **Target – 90%** **Stretch – 100%**	**Threshold - 80%** **Target - 90%** **Stretch – 98%**	**Target: 98%**	**Threshold – 3.0** **Target – 3.5** **Stretch – 4.5**	**Threshold - 80%** **Target - 90%** **Stretch – 98%**

Analysis of Performance Metrics Results and Corrective Action Plan

FY 2021-2022, Annual Performance Metrics

	Target	Overall Performance
Code Green Response (Patient Elopement)	90%	100%
Customer Satisfaction	90%	66%
Electronic Security Systems	98%	94%
San Francisco Sheriff Office MOU Compliance	3.5	3.6
Employee Security Awareness	90%	100%

EFFECTIVENESS

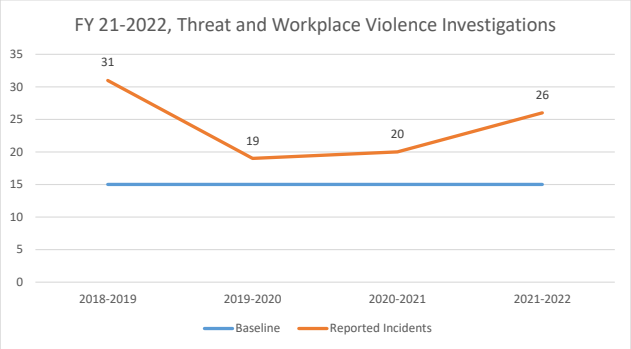
The 2021-2022 significant reporting metrics were developed to further demonstrate the security program's effectiveness. The metrics include Threat and Workplace Violence Investigations, Crimes against Persons and Property, Use-of-Force, and Campus Tunnel and Stairwell Patrols.

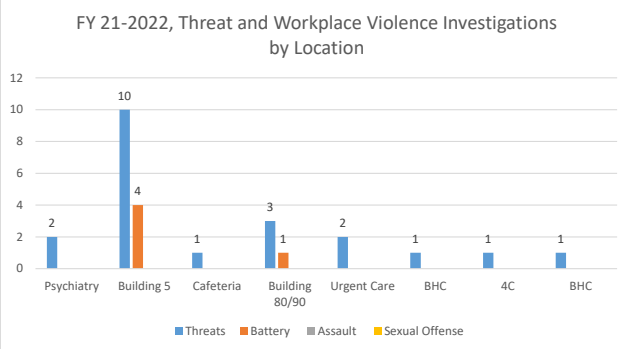
Threats Management and Workplace Violence Prevention Investigations

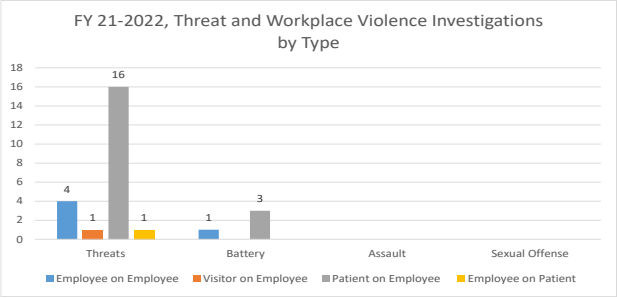
Standard:

Security will investigate reported moderate and high-risk threats where there is reasonable cause to believe that the personal safety of an individual or group of individuals may be at risk.

Moderate and High-Risk threats are incidents that required management and security intervention, where it is determined that without specific remedial action, the potential for escalating behavior or the imminent danger of injury or death to one or more individuals is highly probable.







- Over a 4-year period, moderate and high-risk investigations increased 13%. There was a 30% increase in investigations from FY 21-2022.

- Building 5 accounted for 55% of investigations, and 85% (10 of 26) involved reports of threats.

· Patient against employee reports accounted for 73% of moderate and high-risk investigations.

- Security-plans to address threats and acts of violence, included:

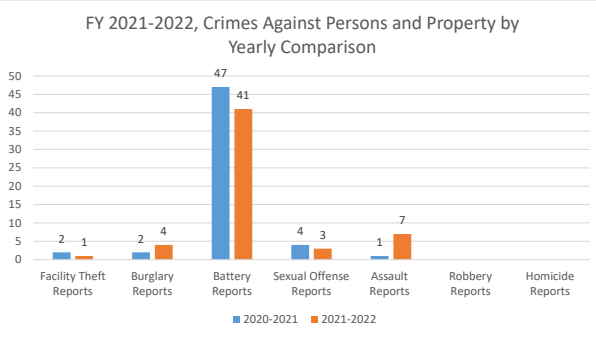
Remedial Action Taken	
Behavioral Plan	4
Restraining Order	1
Treatment Transferred	4
Arrest	1
Employee Disciplinary Action	4
Suspension of Care	1
SFSO Detention	1
SFSO Standby	5
HR Investigation	1

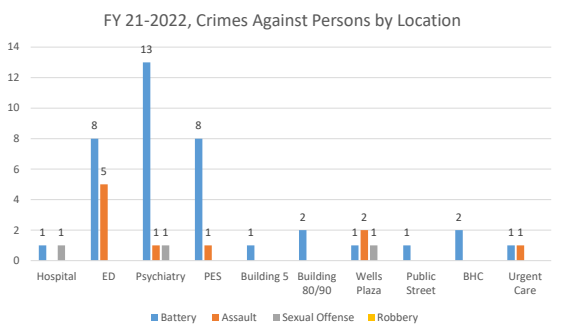
Crimes Against Persons and Property

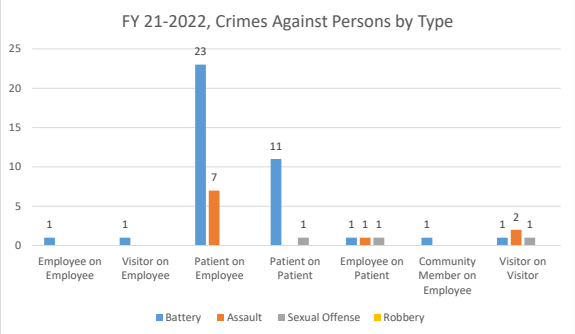
Yearly Comparison	2020-2021	2021-2022
SFSO - Facility Property Thefts Reports (>$900)	2	1

SFSO - Burglary Reports	2	4
SFSO - Battery Reports	47	41
SFSO - Sexual Offense Reports	4	3
SFSO - Assault Reports	1	7
SFSO - Robbery Reports	0	0
SFSO - Homicide Reports	0	0
Total	**56**	**56**

FY 21-2022, Crimes Against Persons and Property Action Taken	
Deputy Arrest	3
Private Person Arrest	18
Psych Evaluation	3
Detention	7





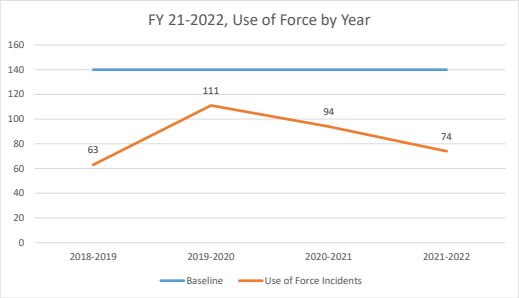


- Crimes against Persons and Property remained flat from FY 20-2021.
- Battery reports decreased 12% from FY 20-2021.
- Assault reports increased 600% (from 1 to 7 reports.)
- Battery reports accounted for 75% of crimes against persons (39 of 52 reports)
- Reports from the Psychiatry Department accounted for 34% of person-crimes (13 of 38 reports)
- Patient against Employee reports accounted for 58% of crimes against person incidents (23 of 39 reports.)
- 42% of victims of physical attack, pressed charges against their assailant (18 of 31.)

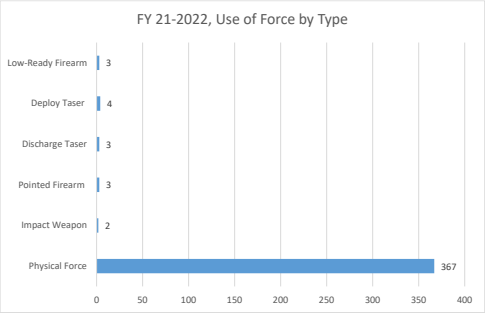
2021-2022 Crimes Against Property by Location		
	Theft	**Burglary**
Building 40	1	
Building 80		1
CHN	1	1
Building 5	1	
UCSF Construction Site		3

2021-2022 Use of Force Statistics

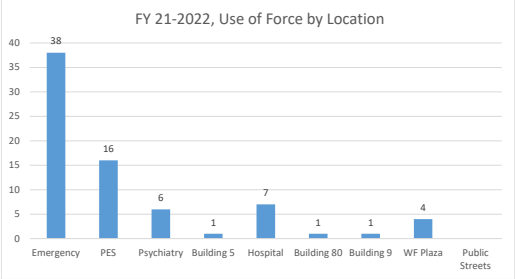
Use-of-force data is tracked of all SFSO incidents occurring on ZSFG campus. In 2021-2022, there were 74 incidents of use-of-force. The data was stratified by the types of force, type of incidents, location, demographics, diagnosis, and reported acts by demographics.



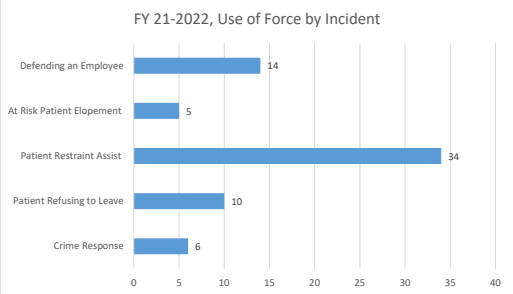
Use-of-force decreased 21% from FY 2020-2021.



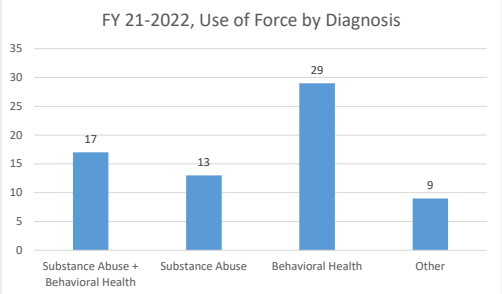
Of the 74 use-of-force incidents, there were 382 types of force used. Physical force accounted for 96% of the force used (367 of 382 types.)



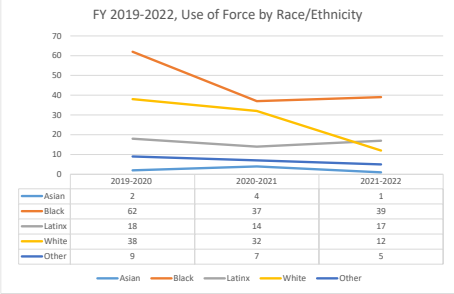
51% of use-of-force incidents occurred in the Emergency Department (38 of 74)



Deputies assisting with patient restraints accounted for 45% of use-of-force incidents (34 of 74 incidents.)



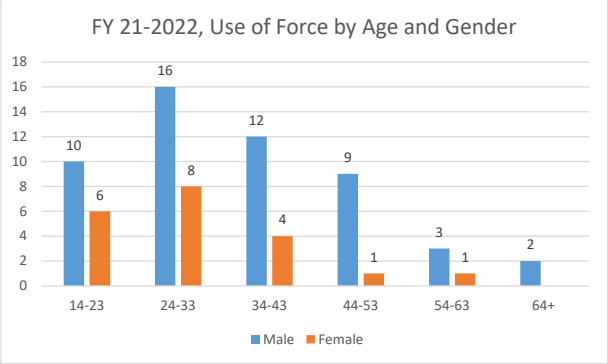
Sixty-seven percent of use-of-force was against patients that were diagnosis with behavioral health/substance abuse.



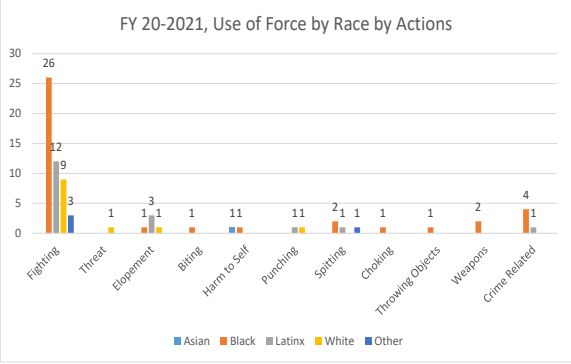
Use-of-force decreased in every race/ethnicity except Black/African Americans and Latinx. Of the 74 incidents of force, Black/African Americans were subjected in 39 of the incidents. race/ethnicities.

Use-of-Force by Patient Related Service calls and Clinical Data	
Per 1K Patient Related Service Calls	10
Per 1K ED Registrations	1
Per 1K PES Intakes	4
Per 100 Psychiatry Admissions	1

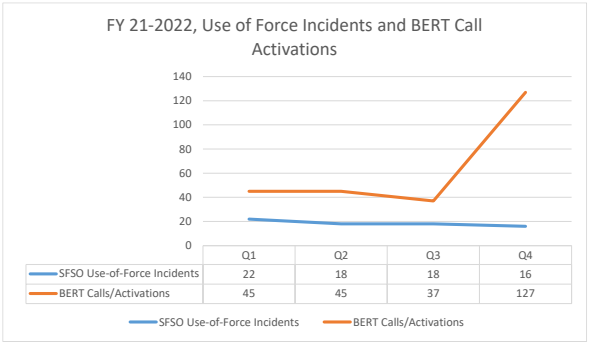
Use-of-Force (cont.)



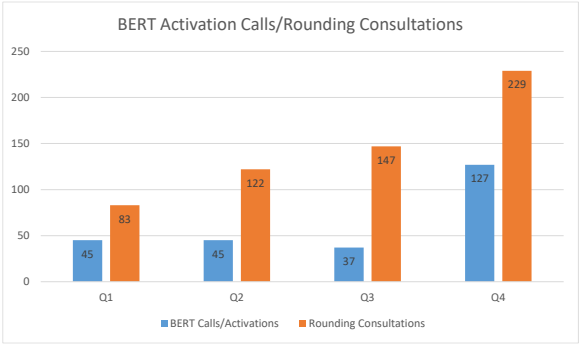
72% of use-of-force is against males and 33% against patients ages 24-33.



- Use-of-force, in response to reports of fighting, accounted for 67% of reported acts (50 of 74.)
- Acts committed by Black/African Americans accounted for 52% of the reports to the Sheriff's Office (39 of 74.)



- In January 2022, BERT was implemented, by year-end, BERT responded to 71% (254 BERT calls v 74 SFSO calls) more calls of patients demonstrating risk behavior; 81% of the calls were without law enforcement presence.

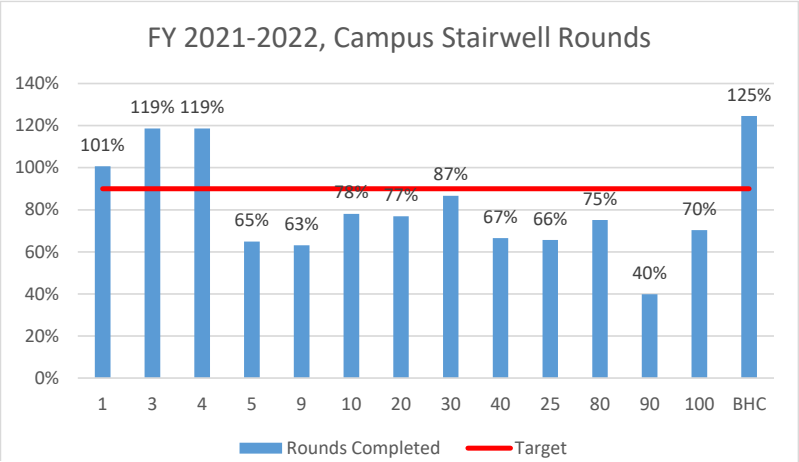


BERT conducted 581 rounding consultations that prevented escalating behavior through verbal de-escalation, staff support, patient assistance, patient safety escorts and safety planning.

Campus Tunnel and Stairwell Rounding

Standard:

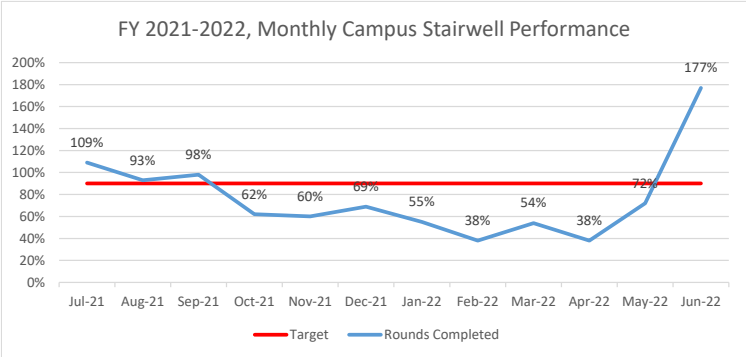
To demonstrate the effectiveness of the crime prevention through frequent patrols of campus tunnels and stairwells, there were 4,922 rounds conducted in 2021-2022



**Numbers are based on supporting documentation provided by SFSD.*

Stairwell Rounding Analysis

In 2021-2022, 78% of the campus stairwells patrols were completed. The Security Leadership Committee continues to monitor monthly rounding results. SFSO reported that staffing challenges were the primary driver for each building not meeting the 90% patrol target.



Other Campus and Tunnel Rounding Activity:

As a result of hardening access to the campus tunnels, there were no findings related to illegal lodging in the tunnels.

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 wastewater systems, vertical transportation, communication systems, HVAC, and medical gases.

ACCOMPLISHMENTS

- Installed a second temporary chiller to support the chiller replacement project in Bldg 2.
- Supported Bldg 5 projects including, Seismic upgrade, Dialysis center, Public Health Lab, Physical Therapy move to newly renovated space, Electrical distribution upgrade, and Fire Alarm system upgrade as part of ongoing projects work.
- Supported the many projects associated with the ongoing response to the Covid-19 pandemic.

PROGRAM OBJECTIVES FOR FY 2021-2022

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 (TMS).

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 latest edition of NFPA 110, Standard for Emergency & Standby Power Systems.	Met	Testing and inspection per NFPA 110.
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 2021-2022 Totals**						
Systems	**5**	**25**	**BHC**	**80**	**90**	**100**	**SB**
Emergency Power Failures	0	0	0	0	0	0	0
Commercial Power Failures	2	0	1	0	0	0	0
Water System Failures							
Domestic	0	0	0	0	0	0	0
Waste	1	1	0	0	0	1	0
Communication Failures	1	0	0	0	0	0	0
HVAC Failures	0	0	0	0	0	0	0
Med Gas Failures	0	0	0	0	0	0	0
Elevator Failures	8	10	1	0	0	3	0
High Voltage Electric Switchgear	1	1	0	0	0	0	0

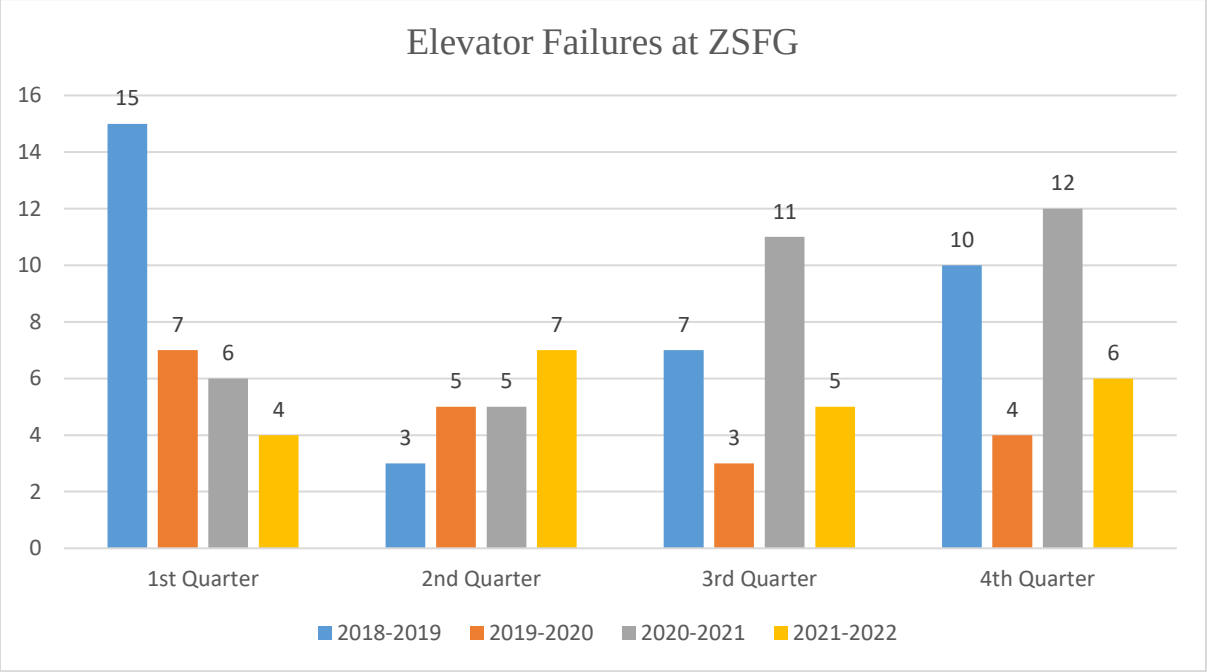
The Environment of Care Committee has evaluated the objectives and determined that they have been met. The Program continues to actively direct utilities management awareness.

PERFORMANCE METRICS

AIM: For FY 2021-2022, there was a downturn in elevator failures on Campus. Target met. 34 elevator outages in FY 2020-2021 vs 22 for 2021-2022.

Elevator Failures

Elevator Failures	1st	2nd	3rd	4th	Action
Elevator outages of 4-hours plus in duration, or passenger entrapment of any duration, (22 total cars)	4	7	5	6	Monitor for trends



AIM: For FY 2022-23 continue to manage and monitor outage trends with an overall goal to manage overall elevator outages. Note: the most common cause of elevator outage was damaged doors to the Bldg 5 cargo elevators (19 & 20). These elevator car doors are often hit by material moved in and out of the elevator (4 of 22 outages).

EFFECTIVENESS

The Utility Management Program is considered effective.

Proposed Performance Metrics for 2022-2023	Target	Comments and Action Plan
AIM: manage elevator failures at ZSFG to a minimum through contract unification	**Reduce outages from 2021-22 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 2022-23

- Support the chiller and cooling tower replacement projects in Bldg 2.
- Support the Security project in Bldg 2.
- Support the main switchgear, and electrical distribution replacement projects in Bldg 5.
- Support IT infrastructure project in Bldg 5.

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:

Materials Management

Major EOC Activities:

- Ensure continuity of medical supply coverage for the hospital
- Ensure standard work is maintained and proper inventory management for the storage areas managed by Materials Management
- Conduct regular walkthroughs of supply and medication rooms, inspect and monitor medical supply storage areas and identify/address non-conformances

Accomplishments:

- Redesigned and improved Weekly Supply Shortage Summary to include “at a glance” green, yellow, red, color code to assist staff with quickly identifying critical supply items
- In collaboration with Medline (Prime Vendor) and clinical staff, launched weekly Backorder Projection report and meeting, including clinical stakeholders, to identify and discuss in advance potential/real projected shortages and increase hospital awareness
- Relaunching of CPD inventory management/stocking of PPE in Clean Rooms, which was disabled for 2 years as a result to COVID and the global supply crisis

Challenges:

- Ongoing global supply crisis continues to cause challenges/gaps impacting our ability to maintain adequate supply coverage for the hospital

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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 us 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:

- Josie Huang, Regulatory Affairs
- Eunice Santiago, Biomedical Engineering
- Louis Moreno, Environmental Services
- Reyland Manatan, Environmental Services