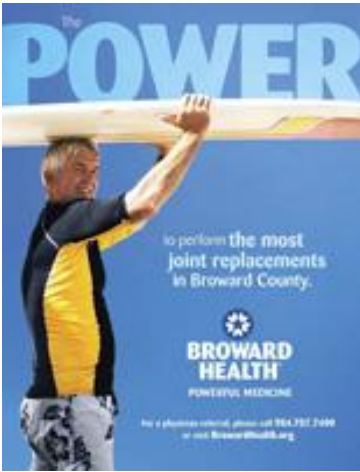


2022 ANNUAL
EVALUATION OF THE
ENVIRONMENT OF
CARE FOR BROWARD
HEALTH IMPERIAL
POINT

Respectfully
Submitted By:
Alicia L. Becena,
MBA, CHEC, CTM
Regional Safety
Officer

MISSION AND VISION



Mission: The mission of Broward Health is to provide quality health care to the people we serve and support the needs of all physicians and employees.

Vision: The vision of Broward Health is to provide world class health care to all we serve.

Broward Health is one of the largest hospital systems in the country, serving our community for 65 years.



Five Star Values:

- Exceptional service to our community
- Accountability for positive outcomes
- Valuing our employee family
- Fostering an innovative environment
- Collaborative organizational team

REGION'S COMPOSITION

Region:
Broward Health Imperial Point
Broward Health Outpatient Surgical Center



EXECUTIVE SUMMARY

The Environment of Care Committee Annual Report is designed to evaluate the objectives, scope, performance, and effectiveness of each of the six Environment of Care Programs and associated Plans.

The Annual Report is also an analysis of the methods and processes used to plan for a safe, accessible, effective, efficient, and comfortable environment, which supports the Medical Center mission.

The report highlights safety activities, Environment of Care Committee accomplishments, opportunities for improvement, and goals for 2023.

The Annual Report is approved by the Environment of Care Committee and is presented to the Broward Health Environment of Care Key Group and then reviewed by the QAOC (Quality Assurance and Oversight Committee).

This report will include a summarization of the following:

- Overall performance evaluation of the environmental safety program and safety management plan.
- Overall performance evaluation of the security program and security management plan.
- Overall performance evaluation of the hazardous materials and waste program and hazardous materials and waste management plan.
- Overall performance evaluation of the fire safety program and fire safety management plan.
- Overall performance evaluation of the medical equipment and the medical equipment management plan
- Overall performance evaluation of the utilities program and utilities management plan.
- Report of progress on calendar year 2022 performance goals and plan objectives.
- Priorities and goals for calendar year 2023.

Information Collection and Evaluation System (ICES), Performance Monitoring Metrics (PMR) are established for each Element of the Environment of care. Targets are developed based on past performance and regulatory requirements.

EVALUATION PROCESS AND COMPONENTS: The Scope, Objectives, Performance and Effectiveness of the Environment of Care Management (EOC) Plans were evaluated by the functional leaders with input from other interrelated functions such as Emergency Preparedness, Employee Health, Clinical Education, Risk Management, etc. The annual evaluation has determined the EOC plans to be effective in reference to their main scope and objectives.

Information is gathered for each quarter and data is summarized on the EOC Dashboard, and results on the Dashboard are reviewed and analyzed for any trends or Performance Indicators that are not meeting the goals.

Committee Members:

Title	Department	Function
Judy Frum, CEO	Administration	Member
Netonua (Toni) Reyes, COO	Administration	Member
TBD - Associate Admin	Administration	Member
Alicia L. Beceña, Corporate – Regional Safety Officer	Corporate Safety & Security	Regional Safety Officer & EOC Chair
Garnett Coke, Corporate Director	Corporate Safety & Security	Corporate Security & Community Health
Yvonne Gordon Russell, Lieutenant Anthony Frederick, Lieutenant	BHIP Security and Corporate Security	Member - Security Management Plan, Chapter Leader
Stephen Santos, Executive Director	Medical Equipment (BioMed)	Medical Equipment Management, Chapter Leader
Jamey Emerson, Nurse Manager	Cardiology	Member
Elizabeth Robinson (Lanie), Regional Manager	Nursing Administration and RN Support Services	Member
Janis Smith-Love	Nursing Critical Care (ICU/Respiratory)	Member
Dovid (Ira) Lee	Nursing	Member
Rachel Chavez	Progressive Care	Member
Jose Encarnacion	Radiology	Member
TBD, Epidemiologist	Epidemiology	Member
Rafael Casares, Regional Manager	Lab Manager	Member
Dawn Burke, Regional Director	Dietary & Nutritional Services	Member
Ramiro Cossio, Regional Manager	Materials Management	Member
Katherine Gonzales, Regional Director	Operating Room/Surgery	Member
Donna Williamson, Regional Director	Quality & Patient Safety Officer	Member
Chivone Hylton, Regional Manager	Emergency Services	Member
Irene Vargas, Regional Manager	Risk Management	Member

Peter Coughlin, Life Safety Officer	Facility Services	Life Safety Officer/Fire Life Safety Management Chapter leader
Kristina Castro, Employee Health Nurse / Alfredo Cruz, W/C	Employee Health & Workers' Compensation	Safety Management Plan and Members
Jose Encarnacion / Frank Paglianite	Radiation Safety Officer/Nuclear Medicine	Members
Deven Silverman, Executive Director Talent Acquisition	Human Resources	Member
Steve Fredrickson, Regional Manager	Facility Services	Member, Utility Systems Management, Chapter leader
Miguel Torres, EVS Director	Environmental Services	Member, Hazardous Materials & Waste Management
Natalie Trach, Regional Manager	Pharmacy	Member
Jacqueline Martinez-Ordaz, EM Coordinator and Erick Peña, Emergency Preparedness	Emergency Preparedness and Emergency Management Chapter	Members
Rosilene Ferraz, Clinical Specialist	Clinical Education	Member

The following table includes the name of those individuals who manage the Environment of care programs.

Environment of Care Program	Evaluator and Chapter Leads
• Safety Management	• Alicia Beceña
• Security Management	• Yvonne Gordon Russell, Anthony Frederick
• Hazardous Materials and Waste	• Steve Fredrickson / Miguel Torres
• Fire Safety Management	• Peter Coughlin
• Medical Equipment Management	• Stephen Santos
• Utility Systems Management	• Steve Fredrickson



SAFETY MANAGEMENT PROGRAM

Reviewer: Alicia Beceña

Title: Corporate – Regional Safety Officer

Region: Broward Health Imperial Point

Review Date: March 21, 2023

Purpose: The Safety Management Program establishes the parameters within which a safe Environment of Care is established, maintained, and improved for Broward Health facilities.

Scope: Broward Health (BH) is made up of many diverse medical facilities. This Program applies to patients, staff, Licensed Independent Practitioners (LIPs) and everyone else who enters a BH facility. The plan comprises those processes that define and measure an effective Safety program. These processes provide for a physical environment free of hazards and manage activities that reduce the risk of injury. The processes used for this plan are founded on organizational experience, applicable laws, and regulations, and generally accepted safety practices.

Any differences in activities at each site are noted or defined within the site-specific policies, as appropriate.

Evaluation of the Scope: The scope of the Safety Management Program was evaluated and encompasses the following:

- Broward Health Imperial Point buildings, grounds, equipment, and facilities on and off campus.
- Broward Health Imperial Point departments, services, and associated personnel on and off campus
- All Broward Health Imperial Point disciplines, with support and contribution from:

Safety	Infection Control
Risk Management	Employee Health Services
Facility Services	Protective Services - Security
Quality Management	Laboratory
Materials Management	Administration
Clinical Engineering	Radiation Safety
Environmental Services	Nursing
Workers' Compensation	IS/Communications
Surgical Services	

- All applicable regulations promulgated by Federal, State, and local authorities.
- All applicable standards of accrediting organizations.
- All applicable Medical Center and Broward Health policies and procedures

Review of Program Objectives: The Safety Management Program was effective towards the objectives listed below. Each of these have adjusted objectives listed individually and their Performance Monitors.

Providing an environment free from Hazards is our goal therefore the additional items are reviewed throughout the year:

- Assessing risk associated with buildings, ground, equipment, occupants, and physical systems.
- Using risks identified to select and implement procedures and controls to achieve the lowest potential for adverse impact on the safety and health of patients, staff and other people coming to the Medical Center's facilities.
- Evaluating environmental conditions, work practices and staff knowledge of the Environment of Care through a hazard surveillance process (environmental tours), conducted semi-annually in areas where patients are served and annually in non-patient areas.
- Reporting, investigating, and taking actions as necessary to address incidents involving patients, staff, and other people coming to the Medical Center's facilities as well as incidents involving equipment and buildings.
- Reviewing, distributing, practicing, and enforcing Safety/Environment of Care policy and procedures.
- Responding to product alerts and recalls in a timely manner.
- Providing Safety/Environment of Care orientation and on-going education through health stream.
- Managing staff activities to reduce the risks of injury.
- Conducting proactive risk assessments when planning demolition, construction, or renovation to address potential impact on air quality, infection control, utility requirements, noise, vibration, and emergency procedures.
- Providing a smoke free environment in all the Medical Center's facilities.
- Examining and addressing, as necessary, Safety/Environment of Care issues at quarterly meetings of a multidisciplinary Environment of Care Committee.
- Having a qualified individual to oversee and monitor Safety Management and intervene whenever conditions pose an immediate threat to life, health, equipment, or disruption of service.
- Carrying out an effective worker safety program which includes workplace violence prevention.
- Maintaining an environment that is sensitive to patient needs and conducive to comfort, social interaction, privacy and safety as well as minimizing environmental stress for patients, staff and other people coming to the Medical Center's facilities.

Performance associated with the Safety Management Program is determined by examining performance standards and indicators (measures), assessing compliance with regulatory/accreditation, and evaluating performance improvement projects, as well as opportunities for improvement identified. Reviews and revisions of the Safety Management Plan made during the year will be identified and submitted for EOC approval.

Based on a review of the current Safety Management Plan and performance indicators, these objectives are appropriate for the management of safety within Broward Health Imperial Point facilities. Therefore, no changes to the plan objectives will be recommended at this time.

Objectives	Met	Not Met	Met w/ Conditions	Comments / Adjusted Objective
REDUCE STAFF NEEDLE STICKS (Target of 1.65 per Adjusted Patient Days)			✓	CY2020 = 13 CY2021 = 13 CY2022 = 12
REDUCE NUMBER OF OCCUPATIONAL INJURIES	✓			CY2020 = 74 CY2021 = 50 CY2022 = 27
REDUCE VISITOR FALLS	✓			CY2022 = 4 falls and only 2 falls with injuries
REDUCE PATIENT FALLS below target rate of 2.10	✓			The fall rate in 2022 was met 42% of the time an increase from only 25% in 2021
REDUCE PATIENT FALLS with Injuries < previous year	✓			CY2020 = 20 CY2021 = 19 CY2022 = 09

Review of Performance:

Performance Monitors #1

Monitor: CONTAMINATED NEEDLE STICKS

Target: REDUCE STAFF NEEDLE STICKS

Performance: Met

Performance Monitor Analysis:

<i>Contaminated Needle Sticks</i>	<i>Q1CY22</i>	<i>Q2CY22</i>	<i>Q3CY22</i>	<i>Q4CY22</i>
Medical Encounters	16753	15813	15277	16274
# of Contaminated Needle Sticks	6	2	2	2
Needle Stick %age Change	500%	-67%	0%	0%
Performance	3.58	1.26	1.31	1.23
Acceptable Performance	1.65	1.65	1.65	1.65
Rate %age Change	479%	-65%	4%	-6%

Program’s Effectiveness:

We slightly reduced number of contaminated needle sticks in CY2022 to 12 vs. CY2021 with 13 injuries and 13 in CY2020 (formula for measuring needle stick injuries = per 10,000 Adjusted Patient Days (APD) the incident rate in 2022 was met 75% of the time vs. only 50% in 2021. Some of the needle stick injuries were still due to the butterfly needle which remains a challenge for nursing staff to engage the safety devise. Nursing staff continues to receive the initial training and refresher training throughout the year on the use of different needles within the hospital.

Performance Monitors for 2023: Broward Health Imperial Point will continue to monitor Needle Sticks injuries and seek a downward trend. For 2023 a reduction of ten (10) percent from the average number of incidents over the last three years will equal twelve (12). Education on the different devices, especially the butterfly IV needle will continue to be conducted.



Performance Monitors #2

Monitor: OCCUPATIONAL INJURIES
Target: Reduce OSHA Recordable Injuries
Performance: Met

Performance Monitor Analysis: (#*200,000)/man hours worked per 25 employees)

<i>Occupational Injuries</i>	<i>Q1CY22</i>	<i>Q2CY22</i>	<i>Q3CY22</i>	<i>Q4CY22</i>
Hours Worked	361326	277737	321298	325543
# of OSHA Recordable Injuries	9	8	6	4
Injury Percentage Change	29%	-11%	-25%	-33%
Acceptable Performance	6.01	6.01	6.01	6.01
Performance Rate	4.98	5.76	3.73	2.46
Rate % Change	1%	16%	-35%	-34%

Program's Effectiveness:

During 2022, we recorded twenty-seven (27) OSHA Recordable incidents vs. fifty (50) incidents CY2021 and seventy-four (74) in 2020 (2019 = 47 and CY18 = 52). This is significant decrease in number of Occupational Injuries when comparing to the previous years. The average Acceptable Performance rate for CY2022 was 4.23 vs. CY2021 was 7.7 vs. 10 for CY2020. The rate was below the acceptable performance target of 6.01 every quarter for 2022 and continues to trend downward from the previous years.

Performance Monitors for 2023: Broward Health Imperial Point will continue to monitor occupational injuries and continue to seek a downward trend. A goal of ten (10) percent reduction from the average fifty (50) incidents noted over the last three years equals less than 45 incidents as a downward trend for CY2023.

Performance Monitors #3

Monitor: REDUCE STAFF SLIPS/TRIPS/FALLS (STF)
Target: Reduce Staff Slips, Trips and Falls
Performance: Met
Performance Monitor Analysis:

Program's Effectiveness:

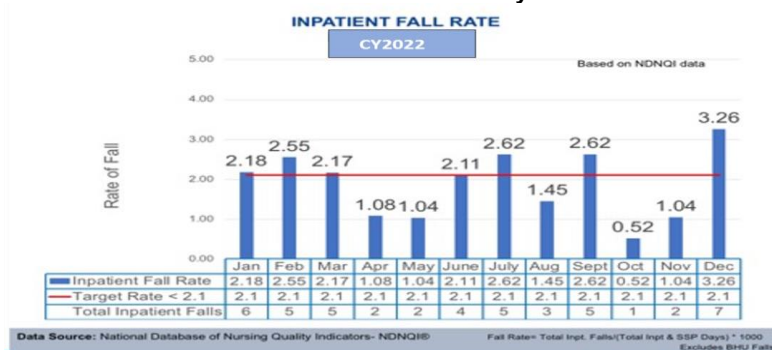
We saw Slips, Trips and Falls decrease again for CY2022 to five (5) vs. eight (8) incidents CY2021 and CY 2020 = 13, CY 2019 = 13 and 12 in CY 2018. Therefore, the goal to reduce these types of injuries was met.

BHIP will continue to monitor for trends to address any improvement opportunities which will decrease Slips, Trips and Falls and other occupational injuries. For 2023 our goal will be not to exceed the eight (8) incidents which is the average number of incidents less 10% recorded in the last 3 years.

Performance Monitors #4

Monitor: Inpatient FALLS
Target: Reduce or maintain Falls > 2.1 target rate
Performance: Met about 42% of the time

Performance Monitor Analysis:



Program’s Effectiveness: Inpatient falls continue to be a challenge however, in 2022 we met the target rate 42% of the time vs. 25% compliance in 2021. During Quarter 2 the Risk Management team re-instated a falls committee as an initiative with the goals of reducing the risk of fall and patient injuries due to falls. Discussion of fall in details and the identification of any trends will be discussed during these monthly meetings.

Other Occupational injuries/incidents:

- Abrasions/Contusion/Laceration 2022 = 2 vs. 2021 = 5 and 11 in CY2020
- One (1) Blood/Bodily Fluid Exposures in 2022 vs. Four (4) in 2021
- One (1) TB Exposures in 2022 vs. 3 in 2021
- Four (4) Back/Neck/Shoulder (Overexertion) injuries in 2022 vs. CY2021 to 9 and 4 in CY2020 and 13 in CY2019
- The total number days injuries workers were out with LOST TIME for CY22 124 vs. 2021 was 429 and 307 in 2020 a substantial decrease when compared to the previous three years (CY19 = 406)
- The number of body assaults decreased to seven (7) CY 2022 vs. 2021=19 incidents and 16 (2020), 9 (2019) and 12 in CY18.

Environmental Tours/Staff Knowledge of EOC:

- A multidisciplinary team conducted environmental tours of all patient and non-patient care areas during the year equaled to fifty-six (56) rounds.
- The AMP Tracer from The Joint Commission Resources continues to be our preferred method to track observations and tasks of EOC problems and process improvements. These reports are maintained electronically in combination with the use of the Megamation Work Order tracking system. Facilities continues to close work order upon completion of task.
- Staff knowledge and awareness of Safety Management assessed during environmental tours was above the 90% performance standard with an average score of 94.25%.

SAFETY	1ST QTR	2ND QTR	3RD QTR	4TH QTR
Who is your Safety Officer?	23	35	65	39
How do you report safety concerns?	35	38	91	45
How do you access the Environment of care policies?	35	38	88	44
What is an example of personal protective equipment?	35	38	90	45
SCORE	128/140	149/152	334/364	173/180
	91%	98%	92%	96%

Construction Safety:

- Weekly construction site hazard surveillances were performed. Projects passed inspection and Infection Control Risk Assessments (ICRA) were performed to proactively address infection control and the safety impact associated with construction projects and facility renovations.
- Projects that required Interim Life Safety Measures were addressed accordingly.

Industrial Hygiene:

- Hazardous gases and vapors were monitored and managed during the year. Any results not within the OSHA/NIOSH permissible exposure limits (PELs) were immediately addressed.
- All Preventive Maintenance (PMs) for air relationships in all clean and soiled areas maintained. Increased surveillance in all the soiled and clean areas in the Operating rooms and support areas by doing daily pressure checks.
- Air exchange rates, temperature, and humidity were checked in all the 13 operating rooms. Any readings that were not within the FGI guidelines were adjusted or brought to the department’s attention. Readings are recorded daily first thing in the morning.
- Increased temperature and Humidity sensors to Med rooms and other support areas.
- Temp Trak on all Clinical refrigerators to improve proper temperature is ongoing.
- Temp Trak training conducted bi-weekly for all areas using the system.
- Promoted Patient Safety through awareness programs, ongoing nursing unit and departmental assessments, and addressing sentinel event alerts and National Patient Safety Goals.

Other:

- The multidisciplinary Environment of Care Committee met four (4) (January, April, July, and October) times during the 12 months period via Microsoft Teams.
- Product recalls and notices were checked and those requiring action were addressed 100% of the time in CY 2022 and reported to the respective users.
- Conducted a Safety Education and Vendor Fair to increase awareness of different EOC, Fire Life Safety, Infection Control, and other standards. The event was the first fair at BHIP and was very well attended in July.



Effectiveness

The Safety Management Program was determined effective during the year, as evidenced by performance standards, goals, and objectives that were routinely met and regulatory/accreditation compliance regularly maintained. However, opportunities for improvement were identified and are included in CY2022 goals. Additional accomplishments complementing the Safety Management Program and enhancing effectiveness are mentioned below:

- Continued to use The Joint Commission Resources AMP Tracers.
- Conducted Life Safety / Environmental of Care rounds weekly by a multidisciplinary group.
- Improved attendance during EOC Rounds.
- Regional Safety Officer continued to provide staff education for different observations and occupational injuries using email flyers and by frequently communicating with managers/leaders.
- Continue to monitor and remove surplus equipment and products from the facility.

Safety Management Performance Monitors for 2023:

- Reduce OSHA Recordable Cases (occupational injuries) to less than **45** (10% less than the average of the last 3 years)
- Reduce Needle Sticks injuries to less than **12** (10% less than the average of the last 3 years)
- Reduce Staff Slip, Trip and Fall's to no more **8** (10% less than the average of the last 3 years)
- Conduct Quality Assurance rounding for EOC observations with follow up of findings/issues and closure of tasks by sending monthly reports to different leaders.
- Continue to work with Employee Health, Clinical Education, and vendors to educate staff on accident and injury prevention including needle sticks injuries.



SECURITY MANAGEMENT PROGRAM

Reviewer: Yvonne Gordon Russell

Title: Regional Security Lieutenant

Region: BHIP

Review Date: March 27, 2023

Purpose: The Broward Health Security Management Plan is designed to establish and maintain a security program that protects patients, visitors, and employees from danger. It also helps to guard the physical and intellectual property of the organization.

The Environment of Care Committee reviewed the Security Management Plan for effectiveness. The Objectives for the Security Management Plan were found to be appropriate in CY 2022. The Scope of the Security Management Plan was reviewed, and it was determined to be adequate for supporting a safe and effective Environment of Care. Performance is discussed and analyzed below. The Security Management Plan is effective, and Goals have been established to direct the Security Management Plan in CY 2023.

Objectives

The objectives of the Security Management Program are:

- Implement accepted practices for the prevention, proper documentation, and timely investigation of security incidents.
- Provide timely response to emergencies and requests for assistance.
- Educate Broward Health staff as to their roles in the Security Management Plan.
- Identify opportunities to improve performance.

Based on a review of our current plan and the performance indicators, the Security Management Plan objectives are appropriate. Therefore, no changes to the Plan objectives will be recommended at this time except for the inclusion of the new Workplace Violence Program which started January 1, 2022.

Scope

The Security Management Program applies to all employees, visitors, students, patients, and all those who enter Broward Health Imperial Point. Services include emergency room coverage, patient valuables control, consultative site reviews, access control assistance, investigative assistance, lost and found, patrol services of the facility and grounds, escort services, parking enforcement, assistance to Threat of Violence (TOV) victims, and other services. Local, county, state, and federal law enforcement agencies support the Protective Services Department through close working relationships with site security personnel.

Performance

- Security presence was at 422 incidents in CY2022 which resulted in fewer Code Assists 138.
- The number of Assault/Battery incidents slightly increased in Behavioral Health for CY2022 yet decreased slightly for Non-Behavioral Health areas (see graph below).
- The number of Thefts remained low with 1 for CY2022 vs. 4 for 2021
- Code Elopements decreased for CY 2022 = 7 vs. CY2021 with 16.
- Threat of Violence incidents decreased to 2 in CY2022 vs. 2021 with 4.
- Only one Weapon was seized for CY2022 and remained the same as in CY2021.
- Contraband searches dropped to 21 CY2022 vs. 73 for CY2021.
- Police Assistance was requested four (4) times in CY 2022 a drop from seven (7) times in CY2021.
- Trespass Warnings / Arrest remained low with zero for CY2022 vs. one CY2021.
- Staff knowledge and awareness of Security Management assessed during environmental tours remained above 90% performance. 99.5% for 508 questions answered in staff questionnaires.

Effectiveness

Broward Health transitioned to an in-house security team a few years ago with new goals added for the Public Safety Department to improve performance. 2022 was a new post COVID 19 phase for Public Safety and currently the department has increased outdoor rounds with two new golf carts purchase the previous year. This has helped increase outside surveillance around the hospital campus.

The Public Safety department continues to work closely with staff to help identify aggressive behaviors in patients prior to them escalating. Security staff has completed 100% of staff training in crisis prevention techniques.

The department continues to participate in weekly EOC rounds to improve the quality of service and ensure that the overall goals of EOC compliance matrix are met. The department also has ongoing projects and surveys designed to improve the effectiveness of the plan.

Objective	Met	Not Met	Met with Conditions	Adjusted Objective/Comments
ASSAULT/BATTERY (BH and NBH) / Aggressive Behaviors	✓			BH CY2022 = 11 vs. CY2021 = 8 NBH CY2022 = 7 vs. CY2021 = 8
Security Procedures – EOC Rounds	✓			
Workplace Violence Assessment	✓			Acceptable performance for assaults against employees slightly dropped in CY2022 with 18 vs. 19 incidents (2021), 16 (2020), 9 (2019) and 12 (2018). when measures are applied using the adjusted patient days (APD) data (per 10,000 APD the rate falls below the acceptable performance for all quarters).
MISSING/LOST PROPERTY	✓			
THEFTS: PATIENT BELONGINGS (Patients)			✓	8 incidents and 1 recovered – New Form Rollout as Pilot being monitored
THEFTS: AUTO/VANDALISM/BH Property	✓			Only 1 incident

Additional Goals that help meet the above objectives of the program during CY 2022 are below:

- Increased security rounds including the monitoring of Baker Act patients. Supported safety sitters by increased rounding including BSO patients.
- A Workplace Violence (WP) Assessment was completed in January 2022 as part of an annual physical worksite analysis. A review of the current WVP training was conducted for effectiveness by Security and the Dept. of Learning. We will continue education through HealthStream to prevent and mitigate workplace violence throughout the regions.

Review of Performance:

Performance Monitors #1

Monitor: Bodily Assaults / Aggressive Behaviors Non-Behavioral and Behavioral Patients

Target: Reduce rate below one (1)

Performance: Met

Performance Monitor Analysis:

Program Effectiveness:
The measured security performances performed within threshold. The average performance for CY2022 was 0.13 slightly better than CY2021 of 0.14 (non-behavioral health) and CY2022 = 1.04 vs. CY2021 = 0.72 was slightly higher / (behavioral health) # Incidents per 10,000 adjusted patient days with both below the performance baselines.

SECURITY MONITOR				
	Q1CY22	Q2CY22	Q3CY22	Q4CY22
Bodily Assaults NBH				
Medical Encounters	14233	13182	12756	13592
Number Per Quarter	3	2	1	1
NBH Assault %age Change	0%	-33%	-50%	0%
Performance	0.21	0.15	0.08	0.07
Acceptable Performance	1	1	1	1
Rate %age Change	-5%	-28%	-48%	-6%
Bodily Assaults BH				
Medical Encounters	2520	2631	2521	2682
Number Per Quarter	2	6	2	1
BH Assault % Change	100%	200%	-67%	-50%
Performance	0.79	2.28	0.79	0.37
Acceptable Performance	2.5	2.5	2.5	2.5
Rate %age Change	106%	187%	-65%	-53%

Performance Monitors #2

Monitor: Security Presence / Procedures – EOC Rounds

Target: 90% or higher

Performance: Met

Performance Monitor Analysis:

Program Effectiveness:

The program performed within threshold. The average performance exceeded the performance baseline for all quarters.

<i>Security Procedures</i>	<i>Q1CY22</i>	<i>Q2CY22</i>	<i>Q3CY22</i>	<i>Q4CY22</i>
<i>Number of Dept/Area Surveyed</i>	14	13	13	16
<i># of areas where no security procedures were violated</i>	13	13	12	16
<i>Security Pro % Change</i>	0%	0%	-8%	33%
<i>Performance</i>	93%	100%	92%	100%
<i>Acceptable Performance</i>	90%	90%	90%	90%
<i>Rate %age Change</i>	-7%	8%	-8%	8%

Performance Monitors for 2023:

Security Management will continue to monitor the program using the established performance indicators including violent acts (assaults, security presence, aggressive behavior, and threats of violence) in coordination with the safety officer, clinical leaders, and others to establish a program that emphasizes “early intervention” to help deescalate aggressive behaviors. The goal of the program is to decrease violent acts overall and to improve the Environment of Care. The following are the 2023 Performance Monitors:

- Continue to Work with the Security Task Force
- Reduce Assaults on staff through training and education by conducting brief in-services during monthly huddles.
- Address the results and implement performance improvements from the 2022 Safety and Security Comprehensive Vulnerability Risk Assessment including the addition of cameras indoors/outdoors and enhance camera coverage.
- Looking at using Megamation to record security rounds using iPads.
- Implement a platform communication device that will enable walkie/talkie/“push to talk” communication among the different Security departments’ regions.
- Continue quarterly security drills to help decrease Code assist and Code elopement as part of staff education.
- Continue to work with Telecommunication to identify and implement panic buttons throughout the facility.
- Address performance improvements to help reduce Workplace Violence and assaults overall.
- Continue to Monitor security procedures’ performance during EOC Rounds using the AMP Tracer Tool



Reviewer: Steve Fredrickson and Miguel Torres

Title: Regional Manager Facility Services

Region: BHIP

Review Date: February 4, 2023

Purpose: The Hazardous Materials and Waste Management Program and associated plans are based upon the following objectives:

- Providing a process for the selecting, handling, storing, transporting, using, and disposing of hazardous materials from receipt through final disposal (cradle to the grave).
- Ensuring minimal risk to employees, patients, other people coming to the Medical Center's facilities, the community, and the environment by complying with all Federal, State, and local regulations governing hazardous materials and wastes.
- Maintaining a current chemical inventory of hazardous materials both regulated and non-regulated and associated Safety Data Sheets (SDS) accessible to all staff through a contract with 3E for "SDS on Demand."
- Managing chemical waste, chemotherapeutic and radioactive waste, universal waste, and regulated medical/ infectious waste, including sharps and waste gases in a manner to protect staff, patients, visitors, and the environment.
- Ensure appropriate space is maintained for safe handling and storage of hazardous materials and waste.
- Ensure appropriate labeling of containers of hazardous materials and waste and posting warning notices in areas where hazardous materials or wastes are used /stored.
- Providing an orientation and on-going education/training program for staff, volunteers, and contractors, through Health Stream.
- Conduct on-going monitoring of air quality in areas where hazardous materials are stored or used, including but not limited to formaldehyde, nitrous oxide, halogenated anesthetics, and xylene.
- Providing a trained spill team for the remediation of hazardous chemical spills.
- Maintaining appropriate equipment for the Spill Team to safely mitigate spills.
- Reviewing, distributing, practicing, and enforcing the Hazardous Materials and Waste Management Plan policies and procedures.
- Maintaining current permits, licenses, and other documentation to validate adherence to regulatory requirements.
- Maintaining manifests for handling hazardous materials and wastes.
- Managing disposal/recycling activities for hazardous waste.
- Carrying out an effective radiation safety program that protects patients, personnel, visitors, and the environment.
- Ensure processes are designed, in place, and practiced minimizing the risk of harm from regulated medical waste. This includes but is not limited to education, procedures for safe handling, collection, storage, disposal and management of spill or exposures to regulated medical waste.

Scope: The scope of the Hazardous Materials and Waste Management Program encompasses the following:

- Compliance with regulations promulgated by the Occupational Safety and Health Administration, the US Environmental Protection Agency, NRC, Florida Department of Health, Agency for Health Care Administration (AHCA), the Florida Department of Environmental Protection and the City of Fort Lauderdale Public Works Department. Broward County.
- All applicable standards of accrediting organizations.
- Scope is effective for Hazardous materials.

Evaluation of the Scope: This past year we have seen increased surveillance and adherence to existing standards. Also new requirements From Broward County Environmental protection agency on diesel storage tanks.

Review of Performance: Performance associated with the Hazardous Materials and Waste Management Program is determined by examining performance standards and indicators, reviewing regulatory/accreditation compliance, and evaluating improvement projects or opportunities for improvement.

- Continue to recycle fluorescent bulbs using a bulb crusher as part of our Universal waste recycling program including lead, and NiCad batteries.
- Generated and disposed of 825,114 lbs. in CY 2022 vs. 843,964 lbs. of solid waste in CY2021 and 830,660 lbs. solid waste in CY 20. This represents the hospitals largest waste stream.
- Generated and disposed of 37,762 lbs. in CY2022 vs. 66,427 lbs. of Regulated Medical Waste in CY2021 and 90,062 lbs. Regulated Medical waste in CY 20. This represents a substantial drop as COVID+ patient admissions decreased.
- Generated and recycled 104,860 lbs. in 2022 vs. 377,624 lbs. in 2021 and 283,835 lbs. of cardboard, paper plastic and other recyclable materials.
- Staff knowledge and awareness of Hazardous Materials and Waste Management assessed during environmental tours meet the 90% performance standard with an average of 98.5% of questions answered correctly.
- Radioactive waste inventory was maintained daily.



- All radioactive waste was managed appropriately either by decaying on campus to background levels or by returning to the manufacturer in their lead container.
- Hazardous gases and vapors were monitored and managed during the year. All results were within the OSHA/NIOSH permissible exposure limits (PELs).
- No changes were made to the Hazardous Materials and Waste Management Program.
- Stericycle training resumed in 2022 and was held during the first safety fair for staff.
- Grease trap cleaning every three months.
- Biomedical waste was below target of 1.60 LBS per Adjusted Patient Days (APD)
- Radioactive waste flow was monitored around the clock, 24/7.
- Semi-annual Oil/Grease and PH testing with the City of Fort Lauderdale determined all was within the acceptable limits.
- There were no Exposures or Spill in the Lab.

Effectiveness: Based on a review of the current Hazardous Materials and Waste Management Plan and performance indicators, these objectives and scope were appropriate and effective for the management of hazardous materials and waste within the Broward Health Imperial Point facilities for CY2021. All hazardous waste was removed by a licensed waste hauler and manifest for disposal at licensed disposal facilities.

**Review of Performance:
Performance Monitors #1**

Monitor: Biohazard Waste

Target: 1.60 or Below

Performance: Met

Performance Monitor Analysis:

Program Effectiveness:

The measured performance was below the established threshold meeting the target for all quarters and performing better than the average performance in the previous year (CY2022 = 0.59 vs. 0.62 CY2021 (per 10,000 adjusted patient days)).

<i>Biohazard Waste</i>	<i>Q1CY22</i>	<i>Q2CY22</i>	<i>Q3CY22</i>	<i>Q4CY22</i>
<i>Medical Encounters</i>	16753	15813	15277	16274
<i>Lbs. of Regulated Medical Waste</i>	13557	9460	8011	6734
<i>Waste lbs. % Change</i>	76%	-30%	-15%	-16%
<i>Performance</i>	0.81	0.60	0.52	0.41
<i>Acceptable Performance</i>	1.60	1.60	1.60	1.60
<i>Rate %age Change</i>	70%	-26%	-12%	-21%

Review of Performance:

Performance Monitors #2

Monitor: Managing Biohazard

Target: 95% or better

Performance: Met

Performance Monitor Analysis:

Program Effectiveness:

The measured performance was above the established threshold of 95% for all quarters.

<i>Managing Biohazard</i>	<i>Q1CY22</i>	<i>Q2CY22</i>	<i>Q3CY22</i>	<i>Q4CY22</i>
<i>Surveyed</i>	14	13	13	16
<i>Managed Correctly</i>	14	11	13	15
<i>Waste Mgt % Change</i>	27%	-21%	18%	15%
<i>Performance</i>	100%	85%	100%	94%
<i>Acceptable Performance</i>	95%	95%	95%	95%
<i>Rate %age Change</i>	18%	-15%	18%	-6%



Performance Monitors for 2022 (Goals) Met:

- Maintain Biohazardous Waste to below 1.6 lbs./APD = MET
- Identified and reduced overstocked of waste containers and/or excessive supplies to reduce combustible loads and created improved aisle space in and around the Hazardous and Biohazard Waste areas.
- Scheduled DOT Training refresher classes (every 3 years) including SDS labeling and signing of waste manifest.

Performance Monitors for 2023 (Goals):

- Continue to maintain Biohazardous Waste to below 1.6 lbs./APD.
- Continue to manage Bio-Hazardous Waste for a compliance rate of 95%
- Conduct a minimum of one Chemical spill response team training.



Reviewer: Peter Coughlin

Title: Master Service Mechanic/Life Safety Officer

Region: BHIP

Review Date: March 8, 2023

Purpose:

The Purpose of the Fire Safety Management Program is to minimize the possibility and risks of a fire and protect all occupants and property from fire, heat, and products of combustion. To ensure that staff and Licensed Independent Practitioners (LIPs) are trained and tested in fire prevention and fire safety so that they can respond appropriately to any fire emergency.

Objective:

The Fire Safety Program and associated plans are designed to maintain a fire-safe environment for the protection of patients, staff and others coming into the hospital as well as property by meeting the following objectives:

- Inspecting, testing, and maintaining fire protection systems, equipment, and components in accordance with applicable standards.
- Ensuring the fire-resistive and smoke-tight integrity of building elements and features.
- Reporting, investigating, and taking actions as necessary to address fire safety incidents.
- Providing an effective fire safety orientation and on-going education/training program for staff through Health Stream.
- Conducting quarterly fire drills on each shift and increasing frequency when interim life safety measures are in place.
- Monitoring, maintaining, and updating the Life Safety conditions.
- Reviewing proposed acquisitions of furnishings, curtains, drapes, interior finishes, equipment, etc. for fire safety features/fire spread ratings.
- Implement interim life safety measures (ILSM) that compensate whenever the features of fire or life safety are compromised.
- Reviewing, distributing, practicing, and enforcing fire prevention and fire response policies and procedures.
- Maintaining a cooperative working relationship with the Ft. Lauderdale Fire Department.
- Complying with all applicable Federal, State, and local Fire Safety regulations.
- Carrying out an effective Life Safety Building Maintenance Program.

Based on a review of the current Fire Safety Plan and performance indicators, these objectives are appropriate for the management of fire safety within Broward Health Imperial Point facilities. Therefore, no changes to the plan objectives will be recommended at this time.

Scope:

The Fire Safety Management Program is designed to assure appropriate, effective response to fire emergency situations that could affect the safety of patients, staff, LIPs and visitors, or the environment of Broward Health. The program is also designed to assure compliance with applicable codes and regulations.

The Fire Safety Management Program applies to every patient and anyone who enters any Broward Health location. The Fire Safety Management Plan applies to Broward Health Medical Center, Broward Health Coral Springs, Broward Health Imperial Point, Broward Health North, Broward Health-Weston, Broward Health Community Health Services, and Broward Health Physician Group, and other business occupancies. Any differences in activities at each site are noted or defined within the specific site policies, as appropriate.

The scope of the Fire Safety Management Program encompasses the following:

- All Broward Health Imperial Point buildings, grounds, equipment, and facilities on and off campus.
- All Broward Health Imperial Point departments, services, and associated personnel on and off campus.
- The following Life Safety processes are in place to maintain these buildings safe:
 1. Fire alarm testing, maintenance, and certification
 2. Fire sprinkler system testing, maintenance, and certification
 3. Contractor knowledge, training, and certification
 4. Fire extinguisher and other fire suppression system testing, maintenance, and certification.
 5. Annual Fire door inspections and corrections.
 6. Interim Life Safety Management
 7. Completed Fire/damper inspections.
 8. Building rounds to assess life safety conditions.
 9. Mechanical systems assessment
 10. Fire drill planning, conducting drills, assessment, and follow-up.



- All applicable regulations promulgated by Federal, State, and local authorities.
- All applicable standards of accrediting organizations.

Evaluation of the Scope: Based on a review of the current Fire Safety Management Program and performance indicators, the scope is appropriate for the management of safety within Broward Health Imperial Point.

Review of Program Objectives: Based on a review of the current Fire Safety Management Program and performance indicators, these objectives are appropriate for the management of safety within Broward Health Imperial Point. Therefore, no changes to the plan objectives will be recommended at this time.

Objectives	Met	Not Met	Met with Conditions	Adjusted Objective
Perform fire drills, 1 per quarter, per shift. If Interim Life Safety Measures (ILSM's) are being used, perform 2 per quarter, per shift.	✓			
Impeded Egress Corridor(s)			✓	Two corridors were noted as challenging due to space constraints. These areas are monitored for improvements.
Reduce False Alarm Activations of Fire Alarm System			✓	
Replace smoke detector in Processing Services with heat detector.	✓			

Review of Performance: Performance associated with the Fire Safety Program is determined by examining performance standards and indicators (measures), assessing regulatory, and accreditation compliance, and evaluating performance improvement projects as well as opportunities for improvement. Additionally, performance is evaluated on timeliness and completion of preventive maintenance and/or repairs of fire/life safety systems, equipment, and components.

In 2022 – Quarter 3, The Ft. Lauderdale Fire Department did not identify any violations during their annual visit.

Performance Monitors #1

Monitor: Perform fire drills, 1 per quarter, per shift. If ILSM's are used, perform 2 per quarter, per shift when needed.

Target: MET (CMS Waiver during COVID19 Outbreak was put in play and staff education conducted and documented. Surgical Fire training / Laser Safety Education and Fire Drill completed in Q2 of CY2022.

Performance: Target MET

Performance Monitor Analysis:

INDICATOR	CY 2022
FIRE DRILLS COMPLETED	25

Program's Effectiveness:

Fire drills were held on all shifts at a rate of at least 1 drill per shift per quarter for Quarter 1 of 2022. During moments of high COVID outbreaks the CMS Waiver 1123 was implemented and education on Fire Safety was provided to staff. This education is documented, and records are kept in the Facilities office.

Performance Monitors #2

Monitor: Impeded Egress Corridor **Target:** NOT MET

Performance: During Q1, Q2 and Q4 performance was missed and egress was observed blocked. Some areas monitored expressed issues with storage space constraints.

Performance Monitor Analysis: Conducted during EOC Rounds and reported on the Corporate Dashboard.

Impeded Egress Corridor	Q1CY22	Q2CY22	Q3CY22	Q4CY22
Number of Dept/Area Surveyed	14	13	13	16
# Observed without Obstructions	13	11	13	13
Impeded Egress % Change	0%	-15%	18%	0%
Performance Rate	93%	85%	100%	81%
Acceptable Performance	100%	100%	100%	100%
Rate %age Change	-7%	-9%	18%	-19%



Program’s Effectiveness: The program was effective in monitoring and educating staff to move items on wheels if an emergency occurred. However, Q3 was the only quarter where egress was 100% clear during rounds.

Performance Monitors #3

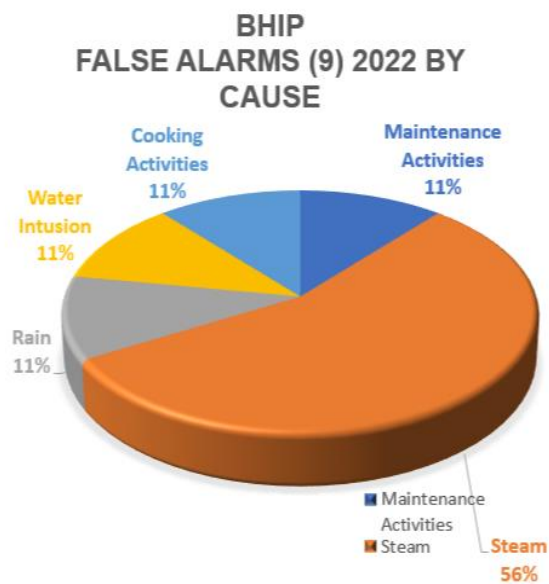
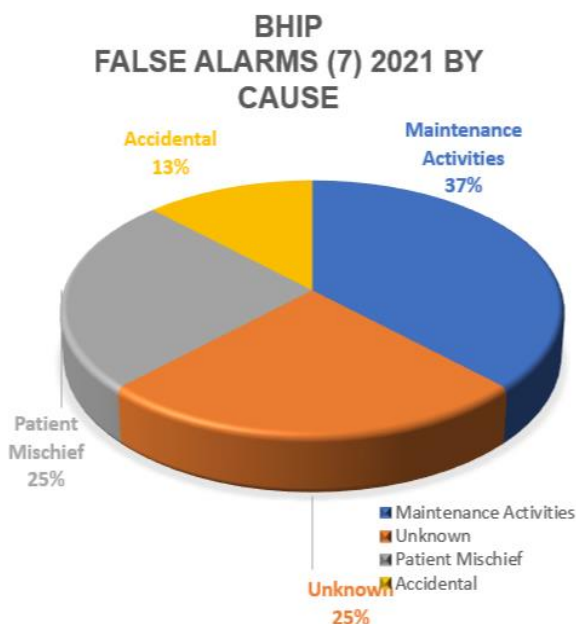
Monitor: False Fire Alarms

Target: 0.5 per quarter

Performance: Target MET

Performance Monitor Analysis:

False Fire Alarms	Q1CY22	Q2CY22	Q3CY22	Q4CY22
Square footage	304000	304000	304000	304000
# Per Quarter	2	3	0	4
Fire Alarm % Change	0%	50%	-100%	#DIV/0!
Performance	0.07	0.10	0.00	0.13
Acceptable Performance	0.5	0.5	0.5	0.5
Rate %age Change	0%	50%	-100%	#DIV/0!



Program’s Effectiveness:

Broward Health Imperial Point was not able to reduce the number of False Fire Alarms therefore we will continue to monitor performance. There were nine (9) unscheduled activations of the fire alarms for the CY2022 vs. seven (7) for 2021 and eight (8) in CY 20. The benchmark established at the beginning of the year was 11 or less for the year based on previous year’s average this benchmark was met. The ongoing implementation of the hot work permit program and increased awareness and vigilance continues to result in fewer false alarms. However, steam from the sterilization process continues to be one of our challenges.

The following information highlights other 2022 performances:

- Staff knowledge of fire safety assessed during fire drills and EOC rounds exceeded the performance standard of 95% and was met with a score of 98%.
- All inspection, testing, and maintenance of fire alarm detection systems, and all automatic fire extinguishing systems were completed within prescribed time frames, with identified deficiencies corrected in timely manner.
- There was a Ft. Lauderdale fire inspection with Zero violation found.

- All fire extinguishers were inspected monthly and received their annual maintenance and certification. The distribution and location of fire extinguishers was evaluated, and additional fire extinguishers were installed where necessary.
- The building maintenance program was 100% compliant with respect to the functional status of fire safety features, exceeding the target of 95%.

The Fire Safety Program was considered effective overall during CY2022 as evidenced by performance standards, goals and objectives that were met and the level of regulatory compliance maintained.

Effectiveness

- An ICES report is submitted on a quarterly basis to the EOC Committee. See the metrics for CY 2022 below:

Indicators	1st	2nd	3rd	4th	Year-to-date	Annual Target	Data Source
CMS: Fire Drills: Due to the inadvisability of quarterly fire drills that move and mass staff together, we will instead permit a documented orientation training program related to the current fireplan, which considers current facility conditions. The training will instruct employees, including existing, new or temporary employees, on their current duties, life safety procedures and the fire protection devices in their assigned area	10	5	6	4	25	1 per quarter per shift including one drill per quarter in the Lab and the ASC.	Facilities, Protective Services, Safety
B. All Drills critiqued: 100% of drills have score of 80 or higher	NA	100%	100%	100%	NA	NA	
C. Number of Actual Fires	0	0	0	0	0	0	
D. Number of False Alarms	2	3	0	4	9	11 or </yr.	
E. Alarm System Failures in hospital	0	0	0	0	0	0	
F. Testing of Fire alarm and suppression systems per TJC, NFPA Standards #of tests performed / #of tests required	3364	88 of 88	88 of 88	88 of 88	3188	3,690	
G. Medical Arts Pavilion Surgery Center Testing of Fire alarm and suppression systems per JCAHO, NFPA Standards #of tests performed / #of tests required	20 of 20	20 of 20	20 of 20	347	407	≥407	
H. Cited Code Violations	0	0	0	0	0	0	
1st Quarter: Fire Response Training and Drills: Provided training in 10 departments (multiple locations) including 3 actual drills, one in the new Cardiac Cath Lab, one on 6th floor, and one on the 4th floor on all shifts per CMS guidelines. 1st Quarter False Alarms: 2, One in Processing Services cause by steam, and one in the CEP caused by maintenance activities.							
2nd Quarter: Fire Response Training and Drills: 1st shift, Provided training in the Surgery Department and performed fire drill in 3rd floor HBO/Woundcare. 2nd shift: 3rd floor East fire drill. 3rd shift: 1st floor E. center. Also provided training in the Lab and the OSC. 2nd Quarter false alarms: 3, 2 were caused by steam activating a smoke detector outside the dishwasher room on the 1st floor and 1 was caused by rain intrusion activating a smoke detector on the 2nd floor. 2nd Quarter inspections by AELI. The Fort lauderdale Fire department performed a one day inspection and found no violations.							
3rd Quarter: Fire Response Training and Drills: 1st shift, 2nd floor X-Ray, Surgery, ASC & 6th floor training, 2nd shift, 2nd floor Lab 3rd shift 2nd floor ICU. 3rd Quarter False Alarms: 0							
4th Quarter Fire Response Training and Drills: 1st shift, 5th floor and 3rd floor wound care center; 2nd shift, 1st floor west center (Kitchen); 3rd shift, 5th floor. 4th Quarter false alarms: 4, Two in the CEP caused by steam activating a smoke detector, one in the kitchen caused by cooking activities, and one in the Pharmacy caused by water intrusion.							
January, 2023 Fire Safety PMR Prepared by Peter Coughlin							

Results on Goals MET for CY 2022 Fire Safety

- Continued to work towards decreasing the number of False/Unscheduled fire alarms to acceptable performance of 0.5 or less as established by Corporate team.
- Maintained no actual fires in the facility.
- Replaced the smoke detector in Central Energy Plant heat exchanger room with heat detector.
- Performed Fire Drill in new Cardiac Cath Lab.
- Provided hands-on fire extinguisher training for in-house first responders (Security and Facilities) including kitchen staff.

Performance Monitors for 2023:

- Maintain no actual fires in the facility.
- Replace aging diesel-powered pump. Obtaining price quotes.
- Continue to provide hands-on fire extinguisher training for in-house first responders (Security and Facilities) including kitchen staff.
- Replace approximately 80 Non-Addressable smoke detectors with Addressable detectors and replace two fire alarm system nodes.
- Continue to monitor unscheduled fire alarms and maintain acceptable performance of no more than 0.5 as calculated per square feet and/or to 10 (compared to the average of false alarms over the previous 3 years)

MEDICAL EQUIPMENT MANAGEMENT PROGRAM

Reviewer: Stephen Santos

Title: Executive Director, Corporate Biomedical Engineering

Region: Broward Health Imperial Point

Review Date: February 8, 2023

Purpose: The purpose of the Medical Equipment Management Plan (MEMP) is to establish criteria to minimize clinical and physical risks of medical equipment and ensure patient safety. This is accomplished by maintaining a facility-specific equipment inventory and performing scheduled maintenance in the required frequencies. To focus energies on meaningful preventive maintenance, an Alternate Equipment Management (AEM) Program is implemented for all eligible medical equipment. The Biomedical Engineering department also provides oversight of equipment serviced by contracted vendors to ensure compliance. The MEMP includes the capabilities and limitations of equipment, operations, safety, emergency procedures, and a process to remove equipment from service and report problems as soon as detected.

Scope

The scope of the Medical Equipment Management Plan provides an overview of the processes that are implemented to ensure the effective and safe management of medical equipment. The scope encompasses all medical equipment used in the diagnosis, therapy, monitoring, and treatment of patients at Broward Health Medical Center. Medical equipment used in Diagnostic Imaging and Dialysis, used for Sterilization, Lasers in Surgery as well as some Laboratory analyzer services are contracted to outside vendors. This service is overseen by user department and/or Clinical/Biomedical Engineering or the EOC Committees.

Evaluation of the Scope:

Based on a review of our current Plan and the Environment of Care performance indicators, these objectives are appropriate for the management of medical equipment within the Broward Health facilities. Therefore, no changes to the Plan objectives will be recommended at this time.

Review of Program Objectives:

The Medical Equipment Management Plan is designed to meet the following objectives:

Objectives	Met	Not Met	Met with Conditions	Adjusted Objective
Establish criteria for identifying, evaluating, and inventorying equipment included in the program.	✓			
Minimize the clinical and physical risks of equipment through inspections, testing and regular maintenance.	✓			
Educate end users on the operation, safety features and emergency procedures to reduce risk of equipment issues due to user errors	✓			

Based on a review of our current Plan and the Environment of Care performance indicators, these objectives are appropriate for the management of medical equipment within the Broward Health facilities. Therefore, no changes to the Plan objectives will be recommended at this time.

Performance

The Medical Equipment Management Plan is designed to support the delivery of quality patient care in the safest possible manner through the active management of medical equipment. During the CY 2022, performance standards for the Medical Equipment Management Plan were tracked in the following areas:

- Active Inventory
- Work Orders Opened / Closed
- Inspection Completed
- Labor Hours / Parts Cost
- QA Rounds / Parameter
- Work orders Not Closed for the Quarter*
- Failed Performance*
- Failed Electrical safety*
- New to Inventory (unreported)*
- Calls Where no Problem was Found*
- Improper Care*
- Missing Accessories*
- Staff Instruction*

Effectiveness

A review of performance indicators* in eight separate areas, as well as a review of the stated goals is used as the basis for determining **effectiveness** of the Plan on an annual basis. Evaluation and review of these criteria indicates an effective medical equipment management program. All performance indicators and goals were met in all facilities CY 2022.

Performance Monitors (Goals) and Accomplishments Completed for CY 2022 including Special Projects

- Monitored failed inspections and Improper Care of equipment using the target / acceptable performance.
- Continued to compile a medical equipment inventory that included all departments / modalities regardless of ownership.
- Continued to examine medical equipment that resides on the hospital network for cyber security risks and develop mitigation strategies.
- Completed the replacement of all defibrillators to meet AHA requirements.
- Completed the replacement of enteral feeding pumps.
- Completed the integration of vital signs monitors to Cerner allowing for vitals to be electronically transferred to patients EMR.
- Replacement of all Infusion Pumps EMR Connectivity (connectivity pushed by IT to 2022) with new EPIC implementation, the connectivity portion of this project is slated to start in September of 2024.

Strengths

- The ability to move Biomed staff as needed to the different facilities helps maintain optimum efficiencies and decrease down time of equipment.
- Strong participation in the EOC Committees in all facilities provides a venue for implementing best practices throughout Broward Health.
- Project lead for capital equipment replacement across Broward Health

Evaluation of CY 2022 Performance Indicators

Quarterly reports to the Environment of Care Committees.

Table I	Goal	BHIP
- Work Orders Not Closed	< 10%	MET
- Failed Performance*	< 6%	MET
- Failed Electrical Safety	< 1%	MET
- New to Inventory (Unreported)	< 5%	MET
- No Problem Was Found	< 6%	MET
- Improper Care	< 2%	MET
- Missing Accessories *	< 2%	MET
- Staff Instruction	< 2%	MET

BROWARD HEALTH Clinical/Biomedical Engineering ICES (Information, Collection, Evaluation, System)

		BHIP - CY 2022				DATA SOURCE	
		1 st QTR	2 nd QTR	3 rd QTR	4 th QTR		
SAMPLE SIZE:							
UNITS IN INVENTORY		2,670	2,789	2,706	2,600	Clinical/ Biomedical Engineering	
W.O. OPENED		234	223	416	574		
TOTAL W.O. COMPLETED		214	246	434	583		
INSPECTIONS COMPLETED		76	485	96	1,731		
W.O./INSPECTIONS COMPLETED		290	731	530	2,314		
LABOR HOURS		155	404	206	803		
PARTS/MATERIALS		\$2,738	\$14,500	\$9,469	\$5,237		
QA ROUNDS		675	660	658	630		
PARAMETERS		4,359	4,403	4,043	3,957		
INDICATORS:		TARGET	1 st QTR	2 nd QTR	3 rd QTR		4 th QTR
W.O. NOT CLOSED <i>(W.O. OPENED)</i>		<= 10%	9%	20	9%		21
FAILED PERFORMANCE <i>(INSPECTIONS COMPLETED)</i>		<= 6%	1%	1	7		2
FAILED ELECTRICAL SAFETY <i>(INSPECTIONS COMPLETED)</i>		<= 1%	0%	0	0		0
NEW TO INVENTORY <i>(W.O./INSPECTIONS COMPLETED)</i>		<= 5%	0%	1	0		0
CALLS WHERE NO PROBLEM WAS FOUND <i>(W.O. OPENED)</i>		<= 6%	2%	4	11		19
IMPROPER CARE <i>(W.O./INSPECTIONS COMPLETED)</i>		<= 2%	1%	4	4	6	
MISSING ACCESSORIES <i>(W.O./INSPECTIONS COMPLETED)</i>		<= 2%	0%	1	1	0	
STAFF INSTRUCTION <i>(W.O./INSPECTIONS COMPLETED)</i>		<= 2%	0%	0	0	2	

Review of Performance:

Performance Monitors #1

Monitor: Failed Inspections

Target: ≤ 6 % or lower

Performance: MET for all 4 Quarters

Program's Effectiveness: The program was effective in achieving our overall goal.

<i>Failed Inspection</i>	Q1CY22	Q2CY22	Q3CY22	Q4CY22
# of Inspection Completed	76	485	96	1731
# of Failed Performance	1	7	2	50
Failed Equipment % Change	-98%	600%	-71%	2400%
Performance Rate	1%	1%	2%	3%
Acceptable Performance	6%	6%	6%	6%
Rate %age Change	-46%	10%	44%	39%

Performance Monitors #2

Monitor: Improper Care

Target: ≤ 2% or less

Performance: MET for all 4 Quarters

Program's Effectiveness: The program was effective in achieving our overall goal.

<i>Improper Care</i>	Q1CY22	Q2CY22	Q3CY22	Q4CY22
# of Perf. Inspection Comp.	290	731	530	2314
# Improperly Cared For	4	4	6	19
Improper % Change	-71%	0%	50%	217%
Performance Rate	1%	1%	1%	1%
Acceptable Performance	2%	2%	2%	2%
Rate %age Change	231%	-60%	107%	-27%

Summary:

The Medical Equipment Management Plan and its continuation was considered effective this year. We will trend the following performance indicators for 2023:

- Scheduled maintenance completion (critical/ high risk and non-critical non-high risk)
- Unscheduled work orders:
 - Unable to duplicate failure.
 - Use Errors
 - Damage to equipment

These indicators were discussed and deemed appropriate based on the consensus of the EOC Committee.

Performance Monitors for CY 2023:

Medical Equipment Management goals were submitted to the Environment of Care Committees at all facilities for approval.

The EOC Committees approved the following goals:

- Continue to monitor failed inspections with a target/acceptable performance of 6% or lower.
- Continue to monitor Improper Care with a target/acceptable performance of 2% or less.
- Implement an intranet portal to allow clinical users of medical equipment to submit routine medical equipment repairs. This will allow for tracking turn-around repair times, and improved updating capabilities to end users as to the progress of their repairs.
- Continue to examine all medical equipment that resides on the hospital network for cyber security risks and develop mitigation strategies.



UTILITY SYSTEMS MANAGEMENT PROGRAM

Reviewer: Steve Fredrickson

Title: Regional Manager Facility services

Region: BHIP

Review Date: March 6, 2023

Purpose: The Purpose of the Utility Systems Management Plan is to describe how BHIP establishes and maintains utility systems to control risks and promote a safe, controlled, and comfortable environment of care; reduce the potential for organizational-acquired illness; assess and minimize risks of utility failures; and ensure operational reliability of utility systems. Criteria for identifying, evaluating, and taking inventory of critical operating components of systems are included.

The Plan addresses eight designated Essential Utility Systems:

- Electrical Distribution Systems
- Heating, Ventilation, and Air Conditioning Systems (HVAC)
- Domestic Water Systems and Sewage Removal Systems
- Medical Gas Systems, and vacuum Systems
- Vertical Transport Systems
- Communications Systems
- Steam Distribution Systems
- Fire Alarm Systems
- Water Management Program

Scope: The BHIP Utility Systems Management Plan applies to the direct responsibility of Facilities management personnel, clinical staff members regarding critical utilities use and contingency responses, the hospital, hospital property, utilities building, Medical Office Building, Medical Arts Pavilion, as appropriate.

Review of Program Objectives: All critical elements of the utility systems used for life support, infection control, environmental support, equipment support, and communications are included in the program. The BHIP Utilities Management Program addresses the safe operation, maintenance, and emergency response procedures for these critical operating systems, as well as evaluation, assessment, and improvement in operational costs without compromise to service or quality.

Objectives	Met	Not Met	Met with Conditions	Adjusted Objective
Reduce Electric Consumption	✓			
Complete Generator Testing at 100%	✓			This objective will continue to be monitored but not reported unless there is a failure
Complete Overhaul on Chiller #1	✓			
Fine tune the Chiller plan to maximize efficiency	✓			
Work on implementing (HKS) master plan projects, installation of new boiler. Boiler received and installed.	✓			

Additional objectives of the BHIP Utility Systems Management Plan MET include:

- Assure the operational reliability of the utility systems.
- Reduce the potential for hospital-acquired illness.
- Assess the special risks of the utility systems.
- Respond to utility systems failures.
- Provide a safe, controlled, and comfortable environment for patients, staff members, and other individuals in the facilities.
- Establish and maintain program policies and procedures consistent with the organization's mission, vision, and values.
- Enhance the maintenance of the utility systems to reduce and minimize system failures and/or interruption.

Review of Performance: Indicators have been developed to measure the Effectiveness of the Utility Systems Management Program. They are demonstrated in an ICES/ PMR, Information Collection and Evaluation System and presented quarterly:



Performance Monitor #1

Monitor: Increase Energy Efficiency and Reduce Electric Consumption

Target: Met 100% of the Time

Performance: Broward Health Imperial Point every year plans to reduce electrical consumption. For CY2022 BHIP achieved the goal 100% of the time with acceptable performance improved in Q3 over last year's rate.

UTILITIES MONITOR								
Energy Efficiency	Q1CY21	Q2CY21	Q3CY21	Q4CY21	Q1CY22	Q2CY22	Q3CY22	Q4CY22
Square Footage	304000	304000	304000	304000	304000	304000	304000	304000
KWh Used	2862480	3346900	3676604	3201005	3097362	3091976	3633694	3246929
KWh Usage % Change	-6%	17%	10%	-13%	-3%	0%	18%	-11%
Performance Rate	9.42	11.01	12.09	10.53	10.19	10.17	11.95	10.68
Acceptable Performance	11.26	11.45	12.01	11.11	11.26	11.45	12.01	11.11
Rate %age Change	-6%	17%	10%	-13%	-3%	0%	18%	-11%

Performance Effectiveness: An overall reduction was MET in Q2 and Q3 when compared 2 both quarters of CY2021 and Q1 and Q4 were higher but still performed below the acceptable target.

Performance Monitor #2

Monitor: Generator Testing

Target: 100% MET for all 4 Quarters of 2022

Performance: All generator testing completed at the target rate of 100%.

Performance Monitor Analysis:

See Graph/Chart lines F, G, and H for Generator Testing and Other Performance Monitors

Indicators	1st	2nd	3rd	4th	Sample Size	TARGET	Data Source
A. Utility Failures	0	0	0	0		0%	Facilities Services
B. Utility System Scheduled Shut Downs	2	2	1	0		0%	
C. Equipment Preventive Maintenance Work Order Completion Rate (BS4)	75/75 100%	80/80 100%	81/81 100%	91/91 100%		95%	
D. Infection Control Preventive Maintenance Work Order Completion Rate (BS4-IC)	111/111 100%	120/120 100%	135/135 100%	124/124 100%		100%	
E. Life Safety Preventive Maintenance Work Order Completion Rate (BS4-LS)	213/213/ 100%	197-197 100%	224/224 100%	222/222 100%		100%	
F. Generator Test Results (Hospital Main) (see attached graph)	3 of 3 100%	3 of 3 100%	3 of 3 100%	3 of 3 100%	3 of 3	100%	
G. Generator Test Results New Emergency (see attached graph)	3 of 3 100%	3 of 3 100%	3 of 3 100%	3 of 3 100%	3 of 3	100%	
Elevator PM completion	4 of 4	4 of 4	4 of 4	4 of 4	4 of 4	100%	
Elevator entrapments	0	0	0	0	0%	0%	
H. Generator Test Results (Surgery Center) (see attached graph)	3 of 3 100%	3 of 3 100%	3 of 3 100%	3 of 3 100%	3 of 3	100%	
<p>1st Quarter- MTA rebuilt Med air hog room, Trane replaced control arm on chiller#1 vane acuator, . Completed annual PM on the cooling towers, 360 did annual fuel polishing and tested all tanks, Completed annual PM on chiller 123, Installed new jockey pump and controler, MTA doing annual PM on pumps and compressors. BS4-LS PM completion Infrared scan, Chill#2 leak checked and repaired several times. Rebuilt 3000 amp breaker for main swith. Steam shut down for steam leak. Ordered new reheat for the 7th floor. Generator 3 developed leak during main run, shut down for repair. Ordered new air compressor for the 7th floor. Annual on all cooling towers</p> <p>2nd Quarter-MTA Completed Medical Air and O/2. repairs completed. Evergreen Medical completed the environmental testing in all areas.Chiller # 1 opened for the annual inspection. New purge unit installed on chiller #2. Chiller #3 opened for inspection- all good. Boiler #1opened for inspection- all good. Started the chiller rebuild project. repaired gas leak in the kitchen. Installed new equipment in the kitchen. Ran all toilets and sinks, showers on the 3rd floor Installed new batteries for the fire pump rm and on the Generator #1,2,3,4. New raycon fuel filters on generator #4.</p> <p>3rd Quarter- Equipment Preventive Maintenance Work Order Completion Rate (BS4) Boiler shut down. Completed Boiler project. Installed all Stop the bleed kits. Established safety rooms and identified them in the building. Began Plan of corrections for the 10 year City of fort Lauderdale safety inspection. Ran all toilets , sinks and showers on the 3rd floor. All electrical deficiency's have ben corrected and cleared by the city. All Roofing deficiencies have been corrected. Received letter on the roofing corrections and the Hurricane shutter screws have been reviewed when the company "Red Oak Shutters repaired all shutters on the building. An RFQ has been started and work should be done in February. Working o renovating the Surgeons lounge.</p> <p>4th Quarter- Reinsulated chilled water piping, Xray hallways, diet store room, Lab, Cath lab 2 water intrusion, repaired, Cath lab 1, breaker repair, Cath lab holding . Repair kitchen steam tables, updated building up lights, Replaced push bar on Mezz door. Completed electrical work needed in the processing department, Replaced 7th floor reheat, repaired 17 zones on sprinkler system, replaced domestic water pump motor, Condensate return, water pump replacement Covid room wall removal, replaced two steam traps, painted 1st floor complete. Completed all safety inspection roof repairs, Installed cooling tower supports, removed exhaust fans and duct work on the 6th floor / Replaced EF 8 and duct work. Ran all toilets and sinks, showers on the 3rd floor. Installed ballasts and bulbs on north end of the 1st floor, Replaced exhaust fan on the dish room . Replaced reheat pump in CEP. Completed Quarterly PM on generators.</p>							
Facility Services signature- Steve Fredrickson 1/14/23							

Overall Effectiveness of the Program

The Utility Systems Management plan was acceptable and considered effective, stable, and sustainable during CY2022 as evidenced by performance standards, goals and objectives that were met and the level of regulatory compliance maintained. No additional actions are needed to achieve the expected outcome.

- All Life safety, Infection control, and building maintenance including Preventive Maintenance (PM) activities were completed.
- 327 equipment items had preventive maintenance conducted meeting target during all 4 quarters of CY2022.
- BS4 PM'S 100%, BS4-IC PM'S 100%, and BS4-LS 100% were all at 100%.
- Air exchange rates, temperature, and humidity were checked in all the operating rooms. All were at or above the FGI guidelines at the time of reading.
- There was Zero utility failures during all 4 Quarters and 5 scheduled shutdowns for all Quarter 4 of CY2022
- Annual Insurance inspection completed.
- Annual Boiler and Chillers inspections completed.
- Fuel tank systems inspection by Broward County Environmental Protection agency.
- Ongoing Testing and treatment of water systems for the boiler and the chillers.
- Water treatment and testing on the cooling towers were both negative.
- City Fort Lauderdale treated the domestic water system twice this year.
- The Water Management program continued to be monitored by a multi-disciplinary team (below is the Quarter 4 dashboard of the Water Report:

Water Management		Utility System – Facilities		
Water Testing and Preventive Maintenance	Type of Testing/PM	Frequency	Completed	Next Test/Change
Tower cleaning	PM	Annually	February 2023	February 2024
Cooling tower treatment	PM	Monthly	October, November, December	Monthly
Legionella testing of towers	PM	Twice a year	July 21, 2022	January 2023
Boiler TEST – Monthly Boiler #2 down for one month. Reactivated and flushed.	PM	Monthly	October, November December. 2022	Monthly On Line
Water temperature checks (Wednesday checklist) Showers and faucets run on the 3 rd floor.	Temperature Checks (2 locations) Manual activation 20 min	Wednesday checklist Monthly	October, November, December 2022	Weekly Monthly
Risk Assessment		Annually	February 22/21	February 2023
South Florida Spectrum Test	Oil & PH within limits	Semi Annually	July 11 22	January 2023
Dialysis water		Monthly Testing /Reports Quarterly	See EPI Report	
Fountain and ice machine filters changed		Fountains will be removed and bottled dispensers reactivated.	2/23	
City Of Fort Lauderdale - Domestic Water	Chlorination	2 x year	September- October 2022	March 2023

Performance Monitors (Goals) completed in 2022:

- Removal of COVID Wall in OR
- Completed the Cath Lab project.
- Completed the Bi-directional Amplification System (BDA) project.
- Reduced electric consumption by replacing existing fluorescent indoor lighting with energy efficient LED lighting during construction and renovation projects. Completed lighting improvements on the first floor and retrofitted Room 5 in OR.
- Work on implementing (HKS) master plan projects, installation of new boiler completed in October.
- Completed Overhaul on Chiller #1 and fine-tuned the Chiller plan to maximize efficiency completed in July.

Performance Monitors for 2023 (Goals):

- Continue to report Water Testing Results at least quarterly during EOC Committee
- Initiate weather stripping of doors leading to exterior of the building.
- Continue to reduce electric consumption by 1% by replacing existing fluorescent indoor lighting with energy efficient LED lighting during construction and renovation projects.
- Continue the electrical study to increase AHU on Emergency power (in Planning stage) and work with (Johnson Controls or other vendor) on energy related projects consumption.

Overall Performance Summary: Based on a review of the current overall performance indicators, some goals were not met in 2022. With the actions plans in each individual objectives, the following goals have been chosen for 2023:

Planning Objectives and Performance Monitors for CY 2023:

Safety Management

- Reduce OSHA Recordable Cases (occupational injuries) to less than **45** (10% less than the average of the last 3 years)
- Reduce Needle Sticks injuries to less than **12** (10% less than the average of the last 3 years)
- Reduce Staff Slip, Trip and Fall's to no more **8** (10% less than the average of the last 3 years)
- Conduct to work and in-service regarding Contaminated Needle Sticks, Slips/Trips & Falls and other identified Workplace Injuries and Accidents.
- Conduct Quality Assurance rounding for EOC observations with follow up of findings/issues and closure of tasks by sending monthly reports to different leaders.

Security Management

- Continue to Work with the Security Task Force
- Reduce Assaults on staff through training and education by conducting brief in-services during monthly huddles.
- Address the results and implement performance improvements from the 2022 Safety and Security Comprehensive Vulnerability Risk Assessment including the addition of cameras indoors/outdoors and enhance camera coverage.
- Looking at using Megamation to record security rounds using iPads.
- Implement a platform communication device that will enable walkie/talkie/"push to talk" communication among the different Security departments' regions.
- Continue quarterly security drills to help decrease Code assist and Code elopement as part of staff education.
- Continue to work with Telecommunication to identify and implement panic buttons throughout the facility.
- Address performance improvements to help reduce Workplace Violence and assaults overall.
- Continue to Monitor security procedures' performance during EOC Rounds using the AMP Tracer Tool

Hazardous Materials & Waste Management

- Maintain Biohazardous Waste to below 1.6 lbs./APD.
- Manage Bio-Hazardous Waste for a compliance rate of 95% or better.
- Continue to conduct Biohazardous and Pharmaceutical and other waste segregation training.
- Revamp the Chemical Response Team and training for initial and refresh.
- Maintain Hazardous Waste Accumulation areas clean and have a written log available for inspection.
- Ensure all departments update the 2023 Chemical Inventory List so all products can be added to SDS (3E) for on-line access.

Fire Safety Management

- Maintain no actual fires in the facility.
- Continue to monitor unscheduled fire alarms and maintain acceptable performance of no more than 0.5 as calculated per square feet and/or to 10 (compared to the average of false alarms over the previous 3 years)
- Replace smoke detectors in Processing Services with heat detectors.
- Replace smoke detector in Central Energy Plant heat exchanger room with heat detector.
- Replace aging diesel-powered pump. Obtaining price quotes.
- Continue to provide hands-on fire extinguisher training for in-house first responders (Security and Facilities) including kitchen staff.

Medical Equipment Management

BH (ALL Regions)

- Continue to monitor failed inspections with a target/acceptable performance of 6% or lower.
- Continue to monitor Improper Care with a target/acceptable performance of 2% or less.
- Implement an intranet portal to allow clinical users of medical equipment to submit routine medical equipment repairs. This will allow for tracking turn-around repair times, and improved updating capabilities to end users as to the progress of their repairs.
- Continue to examine all medical equipment that resides on the hospital network for cyber security risks and develop mitigation strategies.



Utility Systems Management

- Continue to report Water Testing Results at least quarterly during EOC Committee
- Initiate weather stripping of doors leading to exterior of the building.
- Continue to reduce electric consumption by 1% by replacing existing fluorescent indoor lighting with energy efficient LED lighting during construction and renovation projects.
- Continue the electrical study to increase AHU on Emergency power (in Planning stage) and work with (Johnson Controls or other vendor) on energy related projects consumption.

