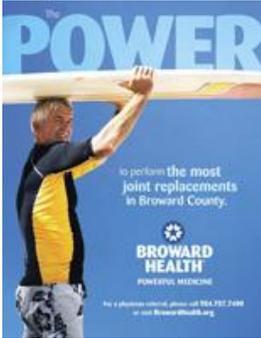


2020 ANNUAL
EVALUATION OF
THE ENVIRONMENT
OF CARE FOR
BROWARD HEALTH
IMPERIAL POINT

*Respectfully
Submitted By:
Alicia L. Beceña,
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 2021.

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 utilities program and utilities management plan.
- Report of progress on calendar year 2020 performance goals and plan objectives
- Priorities and goals for calendar year 2021

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 |
|--|-----------------------------|--|
| Randy Gross | Administration | Member |
| Netonua (Toni) Reyes, COO | Administration | Member |
| Michael Huempfer | Administration | Member |
| Alicia L. Beceña, Corporate Safety Officer | Corporate Safety & Security | Regional Safety Officer & EOC Chair |
| Garnett Coke, Corporate Director | Corporate Safety & Security | Corporate Security & Community Health |
| Anthony Frederick | Corporate Security | Member |
| Marcos Mantel, Director | Bio Medical Engineering | Medical Equipment Management, Chapter Leader |
| Cindy Salvo | Cardiology | Member |
| Barbara Donnelly | Nursing Critical Care | Member |
| Ira Lee | Nursing | Member |
| Patricia Conklin, Epidemiologist | Epidemiology | Member |
| Rafael Casares, Regional Manager | Lab Manager | Member |
| Dawn Burke | Dietary | Member |
| Katherine Gonzales, Regional Director | Operating Room/Surgery | Member |



| | | |
|--|--|--|
| Donna Williamson, Regional Director | Quality & Patient Safety Officer | Member |
| Shevonne Evans, Regional Director | Emergency Room | Member |
| Marjie Altamirano, Regional Manager | Risk Management | Member |
| Peter Coughlin | Facility Services | Fire Safety Officer/Fire Life Safety Management Chapter leader |
| Suzanne Singh, Employee Health Nurse / Teralee Arciola, W/C | Employee Health & Workers' Compensation | Safety Management Plan and Member |
| Narda Priester / Jose Encarnacion / Frank Paglianite | Radiation Safety Officer/Nuclear Medicine | Member |
| Letitia Woods, Regional Director | Human Resource | Member |
| Steve Fredrickson, Regional Manager | Facility Services | Utility Systems Management Chapter leader |
| Miguel Torres | Environmental Services | Hazardous Materials & Waste Management |
| Shaneque West, Captain | Security | Security Management Plan |
| Kelly Keys, Manager / Erick Peña, Emergency Preparedness Coordinator | Emergency Preparedness and Emergency Management Chapter Lead | Member |

The following table includes the name of those individual who manages the Environment of care programs.

| Environment of Care Program | Evaluator and Chapter Leads |
|---------------------------------|-------------------------------------|
| • Safety Management | • Alicia Beceña & Steve Fredrickson |
| • Security Management | • Shaneque West |
| • Hazardous Materials and Waste | • Steve Fredrickson/Miguel Torres |
| • Fire Safety Management | • Peter Coughlin |
| • Medical Equipment Management | • Marcos Mantel |
| • Utility Systems Management | • Steve Fredrickson |



SAFETY MANAGEMENT PROGRAM

Reviewer: Steve Fredrickson and Alicia Beceña

Title: Safety Management Program

Region: Broward Health Imperial Point

Review Date: February 12, 2021

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 |
| Quality Management | Laboratory |
| Material Distribution | Administration |
| Biomedical 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.
- 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.

| Objective | Met | Not Met | Met w/ Conditions | Adjusted Objective |
|---|-----|---------|---------------------|---------------------------------|
| REDUCE STAFF NEEDLE STICKS (Target of 1.65 per Adjusted Patient Days) | | | ✓ | |
| REDUCE NUMBER OF OCCUPATIONAL INJURIES | ✓ | | 50% of the year | Reduce by 10% of previous years |
| REDUCE VISITOR FALLS | ✓ | | | |
| REDUCE PATIENT FALLS below target rate of 2.10 | | | Met 50% of the year | |
| REDUCE PATIENT FALLS with Injuries > previous year | | ✓ | | |

Review of Performance:

Performance Monitors #1

Monitor: CONTAMINATED NEEDLE STICKS

Target: REDUCE STAFF NEEDLE STICKS

Performance: Met

Performance Monitor Analysis:

| INDICATORS | Q4 2020 | Q3 2020 | Q2 2020 | Q1 2020 | CY 2020 | Q4 2019 | Q3 2019 | Q2 2019 | Q1 2019 | CY2019 |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| A. Needle sticks | | | | | | | | | | |
| (1) Contaminated | 1 | 4 | 6 | 2 | 13 | 4 | 0 | 5 | 2 | 11 |
| (2) Non-Contaminated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Program's Effectiveness:

We saw a slight increase in number of contaminated needle sticks in CY 2020 to 13 vs. 2019 = 11, and 15 for CY 2018 (formula for measuring needle stick injuries = per 10,000 Adjusted Patient Days (APD) the incident rate 2020 was met 50% of the time. Three of the 13 incidents reported were due to a New Butterfly needle device whose use was started in February 2020, Nursing



staff initial training on the use of the IV needle was conducted. Unfortunately, Phase 2 of training was suddenly stopped due to COVID-19 Outbreak. 3 to 4 months passed before the training was re-instated and Q3 & 4 shows a decrease in injuries.

Performance Monitors for 2021: Broward Health Imperial Point will continue to monitor Needle Sticks injuries and seek a downward trend equaling a ten (10) percent reduction from the average amount of incidents from the last three years to less than 12 for 2021. Education on new devices will be conducted using social distancing and masking to avoid the spread of any infectious diseases.

Performance Monitors #2

Monitor: OCCUPATIONAL INJURIES

Target: Reduce OSHA Recordable Injuries

Performance: Met Rate only 50% of the year

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

| Occupational Injuries for Year | Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | Q1 2020 | Q2 2020 | Q3 2020 | Q4 2020 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Hours Worked | 380,566 | 385,263 | 392,588 | 400,017 | 374,696 | 369,600 | 351,821 | 373,666 |
| #of OSHA Recordables Injuries | 9 | 12 | 11 | 15 | 9 | 22 | 34 | 9 |
| Performance | 4.73 | 6.23 | 5.60 | 7.50 | 4.80 | 11.90 | 19.33 | 4.82 |
| Acceptable Performance | | | | | 6.01 | 6.01 | 6.01 | 6.01 |
| (Target < or = 6.01 Adjusted Patient Days (APD) | 6.01 | 6.01 | 6.01 | 6.01 | | | | |

Program's Effectiveness:

During 2020, we recorded 74 OSHA recordable incidents vs, 2019 with 47 and CY18 = 52. This is an increase in number of Occupational injuries when comparing the last 3 years. The acceptable performance was met 50% of the time during Quarters 1 and 4 of 2020. CY2020 rate was 9.88 above the < 6.01 target

Performance Monitors for 2021: Broward Health Imperial Point will continue to monitor occupational injuries and seek a downward trend equaling a ten (10) percent reduction from the average (74 incidents) noted in 2020 to less than 52.

Performance Monitors #3

Monitor: REDUCE STAFF SLIPS/TRIPS/FALLS (STF)

Target: Reduce Staff Slips, Trips and Falls to 14 or less

Performance: Met

Performance Monitor Analysis:

Program's Effectiveness:

We saw Slips, Trips and Falls stay the same CY 2020 = 13 vs. CY 2019 = 13, a slight increase from 12 in CY 2018. Therefore, the goal of 14 was met (average of last 3 years which included 2017 = 17).

BHIP will continue to monitor for trends to address performance improvement opportunities to decrease Slips, Trips and Falls and other occupational injuries.



Other Occupational injuries/incidents:

- No PPD Converters in all of 2020
- Eight (8) Blood/Bodily Fluid Exposures
- Three (3) Splashes
- Seven (7) Communicable Disease Exposures
- Two (2) Sharp Object injury
- Slips, Trips and Falls = 13 CY2020 vs. 13 CY 19
- Back injuries dropped to 4 vs. 13 incident CY 19
- The OSHA recordable rate increased with 74 CY20 vs. 47 cases (2019) and 52 cases in CY2018
- The total number days injuries with LOST TIME for CY20 was 307 a decrease from CY19 was 406 and 2018 being the best with 110.
- The number of body assaults increased to 16 vs. 9 (2019) and 12 in CY18 most were combative patients

Environmental Tours/Staff knowledge of EOC:

- A multidisciplinary team conducted environmental tours of all patient care areas semi-annually which equaled to 28 and 6 in non-Patient care areas. Because of the COVID-19 on March 11, 2020 the World Health Organization declared a worldwide pandemic and some EOC Rounds were delayed avoiding the spread of the disease.
- Once EOC Rounds were reinstated with Social Distancing and wearing of mask the results of the rounds were sent to the department managers and they completed corrective actions on the findings.
- The AMP Tracer eTool software's use was kicked off in the last quarter of 2020. Observations are now maintained electronically and on paper until and full transition is completed. In conjunction to the AMP, Facilities uses Megamation to track Work Order and the completion of task.
- Staff knowledge and awareness of Safety Management assessed during environmental tours was above the 90% performance standard with a score of 98%.

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. All results were within the OSHA/NIOSH permissible exposure limits (PELs).
- 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) times during the 12 months period.
- Product recalls were checked and of those that required action were addressed 100% of the time in CY 2020.



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 CY2021 goals. Additional accomplishments complementing the Safety Management Program and enhancing effectiveness are included:

- Implemented the use of The Joint Commission Resources AMP Tracers during Q4 of 2020.
- Conducted Life Safety / Environmental of Care rounds weekly by a multidisciplinary group.
- Improved attendance during EOC Rounds implementing Social Distancing, hand hygiene and wear of masks
- Continue the daily monitoring of the Temp Trak system by Facilities and work with Nursing on any deficiencies
- Employee Health and Safety teamed up to initiate staff education for different occupational injuries – process was delayed due to COVID-19 in clinical areas.
- Continue to monitor and remove surplus equipment and products from the facility

|  | | Negative Var >5% | Neg Var <5% | Meeting Target | | |
|--|---------|------------------|-------------|----------------|-------|--------|
| Calendar Year 2020 | | | | | | |
| ENVIRONMENT OF CARE | Q1 | Q2 | Q3 | Q4 | YTD | CY19 |
| Safety Management | | | | | | |
| Productive Manhours | 380,566 | 369,600 | 379,793 | 373,666 | | |
| Total Injuries (#*200,000)/manhours 373,666 | 9 | 22 | 34 | 9 | 74 | |
| per 25 employees. Target <or =6.01 | 4.73 | 11.90 | 17.90 | 4.82 | 9.88 | |
| APD | 20,423 | 15,308 | 16,461 | 16,966 | | |
| Contaminated Needle Sticks | 2 | 6 | 4 | 2 | 14 | |
| per 10,000 APD. Target < or =1.4 *Formula APD's -16,966 | 0.98 | 3.92 | 2.43 | 1.18 | 2.13 | |
| Staff knowledge. Target >90% | 99% | 100% | 96% | 98% | 98% | 98% |
| Hazard Materials and Waste Mngt | | | | | | |
| Lbs of Red Bag Waste | 3,239 | 10,322 | 9,510 | 17,160 | 9,700 | 45,694 |
| Per APD target < or = 1.80 APD-16,966 | 0.16 | 0.67 | 0.58 | 1.01 | 0.60 | |
| Staff knowledge. Target >90% | 90% | 99% | 90% | 98% | 94% | 92% |
| Fire Safety | | | | | | |
| False Alarms # per quarter target <or= 11 per year | 0 | 0 | 1 | 3 | 4 | |
| Staff knowledge.Target > or = to 95% | 94% | 99% | 96% | 98% | 97% | 95% |
| Security Management | | | | | | |
| Staff Bodily Assaults. Target < or = 24 | 1 | 5 | 1 | | | |
| Staff knowledge. Target >90% | 99% | 100% | 99% | 100% | 100% | 98% |
| Utilities Management | | | | | | |
| Energy Efficiency Rate is kilowatt hours per sq ft of occupied space. Target < or= 11.11 (kwh/304,000) 3,060,240 | 9.31 | 10.51 | 12.22 | 10.07 | 10.68 | |
| Unscheduled outages >4 hrs. Target < or= 2 | 0 | 0 | 2 | 0 | 2 | 0 |
| Staff knowledge. Target >90% | 94% | 97% | 97% | 100% | 97% | 97% |
| Medical Equipment | | | | | | |
| Failed Performance. Target < or = 10% | 4% | 1% | 0% | 1% | 6% | |
| Improper Care % of equip. Target < or= 2% | 1% | 1% | 1% | 0% | 3% | |
| Staff knowledge. Target >90% | 93% | 97% | 94% | 100% | 96% | 97% |



Safety Management Performance Monitors for 2021:

- Reduce OSHA Recordable Cases (occupational injuries) to less than **52** (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)
- Continue to work with Employee Health, Clinical Education and vendors to educate staff on needle sticks prevention.
- Reduce Staff Slip, Trip and Fall's to no more **11** (10% less than the average of the last 3 years)
- Initiate Accident Prevention training during New Employee and Medical Staff Orientation
- Decrease turnaround time of EOC observations. Follow up on safety issues within 3 days.



SECURITY MANAGEMENT PROGRAM

Reviewer: Shaneque West

Title: Security Lieutenant

Region: BHIP

Review Date: February 9, 2021

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 2020. 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 considered to be effective. Goals have been established to direct the Security Management Plan in CY 2021.

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.

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

- The number of Assault/Battery incidents decreased drastically this year due to the proper staffing of sitters
- Threat of Violence incidents were extremely minimal in 2020. The first two quarters there were zero (0) incidents reported. By the end of quarter three and four, there were only two (2).
- Security presence increased drastically this year which resulted in fewer Code Assists and assaults on staff.
- The number of Thefts decreased in 2020 to zero (0) due to COVID
- Contraband searches decreased significantly in 2020 compared to 2019
- Staff knowledge and awareness of Security Management assessed during environmental tours was above the 90% performance standard with a score of 96% for 396 questions Answered in staff questionnaires.

Effectiveness

Broward Health transitioned to an in house security team in February of 2020. The goals that were set by HSS in the prior year remained ongoing and new goals were added for the Public Safety Department. Security endured a huge increase in responsibility when COVID-19 was detected in the community. This happened during the 1st quarter of 2020 just at the



beginning of this program, onboarding over 100 new staff and leaders. Public Safety staff was trained and had to acclimated to different sites, manning tents and drive thru testing sites, in addition to their regular responsibilities and normal security procedures. 2020 was a year that the Public Safety department will always remember because it showed Broward Health our resilience and willingness to adapt at all cost.

The increase in codes has set goals for around the clock rounds to help decrease the amount of code assist and to increase in patient assist/medication assist. Security has worked closely with staff to help identify aggressive behaviors in patients prior to them escalating. Security has also worked closely with the staffing admin to increase the change in sitters that are properly trained to be able to identify those aggressive behaviors before a code has to be called. Safety sitters are now more aware of where they are seating inside the room just in case they have to run for safety or blow their whistle.

In addition to the annual survey, the department also participates in a series of EOC rounds to improve the quality of service and ensure that the overall goals of EOC are met. The department also has ongoing projects and surveys designed to improve the effectiveness of the plan. Security will be working closely with the charge nurses on the aggressive floors such as PCU to identify the combative/aggressive patients at every shift. This will help security to identify rooms that need to be closely monitored and plans that would be implemented once a patient became combative. The pixies cameras were implemented on each nursing department which helped to decrease in medication investigation. There were also upgrades to the ED cameras, dining room cameras, and the analog cameras were changed out to digital. This allowed for security to conduct investigation accurately and to see issues before they escalated.

| Objective | Met | Not Met | Met with Conditions | Adjusted Objective |
|---|-----|---------|---------------------|---|
| ASSAULT/BATTERY | | | ✓ | Acceptable performance was met for all quarters even though we had 15 incidents vs. 9 in 2019 |
| THREAT OF VIOLENCE | | | | Unable to measure |
| AGGRESSIVE BEHAVIOR (patients/visitors) | | | ✓ | |
| CODE ASSIST (Reduce to 50) | ✓ | | | Monthly in 2020 the code assist has decreased under 50 |
| MISSING/LOST PROPERTY (Patients) | ✓ | | | |
| THEFTS: PATIENT BELONGINGS | ✓ | | | |
| THEFTS: AUTO/VANDALISM/BH Property | ✓ | | | |

Additional Goals that help meet the above objectives of the program during CY 2020 are below:

- Improve data collection by breaking down Code Assists vs. Nurse Assists. This goal was MET, and information was shared at least quarterly during EOC Committee meetings. Additionally, Security conducted more rounds, which resulted in fewer code assist being requested. Code Assist drills were implemented during quarters 2 & 3 as a process improvement with 1st Code Assist (unannounced) drill on 6/16 in PCU. Drill involved Nursing, PCA, Sitters, Facilities, MHT, etc. (Code Assist went from 93 to 41 during this period).
- Actions were developed to address missing/damaged patient property including the “sweep the room” campaign. Missing property many times becomes discarded with linen and trash, so staff is educated to be more vigilant. During 2020, security added to their EOC Reporting the success rate of returns (patient property). In 2019 only 5 (recovered) of 67 Missing Patient Property.
- Continues rounds on floors to educate staff on combative patients.
- For New Hires Security now includes a PowerPoint presentation showing the effectiveness of certain security components.
- Continue to purchase equipment such as radios for a better communication between Security, Facilities and EVS staff – these efforts remain on-going.
- Upgraded cameras to show an enhanced view of the perimeters and adjusted camera angels to show a better view of the area.
- Decrease in lost and found items reported when handed over to Security, increase in accountability for belongings and valuables – these efforts are on-going.
- Successfully decreased Code Elopements by educating staff on new door policies.
- Security enhanced their rounds daily by checking in with staff and by monitoring BSO rooms.



- Security increased rounding in the ED to every 30 minutes instead of every 2 hours and is now able to respond to incident much faster.
- Decrease in code assist when an MHT tech is in the room as staff is well trained in mental issues. New sitter positions were also approved by administration.

Review of Performance:

Performance Monitors #1

Monitor: Code Assist / Aggressive Behaviors

Target: Reduce rate below one (1)

Performance: Met

Performance Monitor Analysis:

Program Effectiveness:

The measured security performance performed within threshold. The average performance of 0. # Incidents per 10,000 adjusted patient days exceeded the performance baseline.

Performance Monitors #2

Monitor: Security Presence

Target: Reduce below 90%

Performance: Met

Performance Monitor Analysis:

Program Effectiveness:

The program performed within threshold. The average performance of 97% exceeded the performance baseline.

Performance Monitors for 2021:

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 2021 Performance Monitors:

- Purchased 4 new radios to enhance additional communication between departments
- Implement a new form by April 2021 for the Lost and Found, Patient Belongings, and Valuables System by assigning a health stream module for all staff throughout the system. This has already been implemented at Broward General and will be rolling out to all districts by Spring 2021
- Increase security rounds (by at least 10%), which will help to monitor Baker Act patients, safety sitters and BSO patients on each floor



HAZARDOUS MATERIALS & WASTE MANAGEMENT PROGRAM

Reviewer: Steve Fredrickson and Miguel Torres

Title: Regional Manager Facility Services

Region: BHIP

Review Date: February 10, 2021

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).
- Insuring 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 to minimize 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.

- There were CY 20 = 1127 lbs. of Universal waste removed from the Medical Center for recycling by a licensed facility, this waste included fluorescent lamps, lead, and NiCad batteries
- Purchased a fluorescent bulb crusher and implemented a recycling program.
- There were = 10,200 lbs. of Pharmaceutical waste generated, manifested and removed per all USEPA requirements for Florida Universal Waste Pharmaceuticals.
- There were 3729 lbs. of P-listed waste generated, manifested, and removed.
- Generated and disposed of 830,660 lbs. solid waste in CY 20. This represented 76% of the total waste stream.
- Generated and disposed of 90,062 lbs. Regulated Medical waste in CY 20. This represents 6% of the total waste stream and is about 50% increase from CY 2019 when there was no outbreak.
- Generated and recycled 283,835 lbs. of Cardboard, paper plastic and other recyclable materials. This represents 18.0% of the total waste stream..
- Staff knowledge and awareness of Hazardous Materials and Waste Management assessed during environmental tours did meet the 90% performance standard. There were = 684 questions asked.
- Radioactive waste inventory was maintained on a daily basis.
- All radioactive waste was managed appropriately either by decaying on campus to background levels or by returning to the manufacturer in their leaded container.
- Hazardous gases and vapors were monitored and managed during the year. All results were within the OSHA/NIOSH permissible exposure limits (PELs).
- Reviewed and revised the Hazardous Materials and Waste Management Program to reflect changes made during the year, which was submitted for approval.
- This year we postponed Stericycle training after the COVID-19 outbreak in the community. However, in January we did provided training sessions and trained staff on DOT and signing of waste manifest. Regulated Medical waste, Pharmaceutical waste and recycling training will resume in 2021.
- 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 was one Code Spill and spill cart was deployed and later rebuilt and re-stocked.
- There were (0) spill cart training conducted this year due to COVID-19 but will resume in 2021

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 CY2020. 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. The average performance was 0.62 (per 10,000 adjusted patient days).



| HAZMAT MONITOR | Q1CY19 | Q2CY19 | Q3CY19 | Q4CY19 | Q1CY20 | Q2CY20 | Q3CY20 | Q4CY20 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Biohazard Waste | | | | | | | | |
| Medical Encounters APD | 20243 | 19471 | 19629 | 19962 | 15178 | 15308 | 16,461 | 16966 |
| Lbs of Regulated Medical Waste | 3239 | 9680 | 8932 | 9909 | 3239 | 10322 | 9510 | 17160 |
| Performance | 0.16 | 0.50 | 0.46 | 0.50 | 0.21 | 0.67 | 0.58 | 1.01 |
| Acceptable Performance | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 |

Review of Performance:

Performance Monitors #2

Monitor: Managing Biohazard

Target: 95% or better

Performance: Met

| |
|---|
| Program Effectiveness: The measured performance was above the established threshold of 95% for all quarters |
|---|

Performance Monitor Analysis:

| Managing Biohazard | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|------|
| Surveyed | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Managed Correctly | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Performance | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Acceptable Performance | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 95% |

Performance Monitors for 2020 (Goals) Met:

- Conducted DOT Training on 01/07/20 with 15 staff members approved to sign waste manifest
- EVS Staff trained on how to use Electrostatic Sprayer disinfectant on 04/30/20. Education was conducted by EVS Director according to Kimberly Clark's training data
- EVS Staff trained on ICU/Terminal Cleaning & Covid-19 compliance (Donning & Doffing). Education conducted by EPI and EVS Director on 04/20/20
- Staff received training on SDS and GHS labeling through Health Stream
- Spill cart training was postponed due to COVID-19 until 2021

Performance Monitors for 2021 (Goals):

- Identify and reduce overstocked of waste containers and/or excessive supplies to reduce combustible loads and create improved aisle space in and around the Hazardous and Biohazard Waste areas.
- Maintain Biohazardous Waste to below 1.6 lbs./APD
- Manage Bio-Hazardous Waste for a compliance rate of 95%
- Continue to schedule DOT Training as needed since some classes were delayed due to COVID-19 Outbreak. Schedule DOT refresher classes (every 3 years) including SDS Labeling and signing of waste manifest.
- Conduct a minimum of one spill cart training
- Conduct further training on the labeling requirements for the SDS program.



FIRE SAFETY MANAGEMENT PROGRAM

Reviewer: Peter Coughlin

Title: Master Service Mechanic/Life Safety Officer

Region: BHIP

Review Date: February 9, 2021

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 are able to respond appropriately to any fire emergency.

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. | | | ✓ | 1123 CMS Waiver taken during COVID-19 |
| 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 | ✓ | | | |
| Update all Nodes with new Firmware and hardware. | ✓ | | | |

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.

On June 16, 2020 a Fire Life Safety Plan review was found to be successful and no Fire Violations were cited by the Fort Lauderdale Fire Marshal's Office.

Performance Monitors #1

Monitor: Perform fire drills, 1 per quarter, per shift. If ILSM's are being 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. A Surgical Fire training and MRI Drill were both completed in CY20 – Education was provided using a video tool to prevent the spread of infectious diseases.

Performance: Target MET

Performance Monitor Analysis:



| INDICATOR | CY 2020 |
|-----------------------|------------------------------|
| FIRE DRILLS COMPLETED | 25 including the training |

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 2020. Once COVID-19 outbreak was determined to impact the community – CMS Waiver 1123 was implemented and education on Fire Safety provided to staff. This education is documented, and records are kept in the Facilities office.

Performance Monitors #2

Monitor: Impeded Egress Corridor

Target: MET

Performance: Target MET with conditions – Most areas monitored except for 2 areas known to have space constraints.

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

Program's Effectiveness: The program was effective

Performance Monitors #3

Monitor: False Fire Alarms

Target: MET

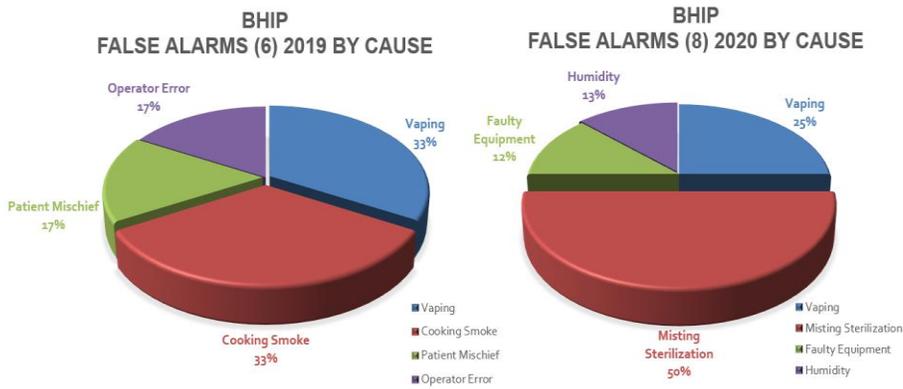
Performance: Target MET with only 8 alarms in CY 2020

Performance Monitor Analysis:

Commented [BA1]:

| FIRE SAFETY MONITOR | Q1CY20 | Q2CY20 | Q3CY20 | Q4CY20 |
|-------------------------------|-------------|-------------|-------------|-------------|
| False Fire Alarms | | | | |
| Square footage | 304000 | 304000 | 304000 | 304000 |
| # Per Quarter | 1 | 0 | 4 | 3 |
| Performance | 0.03 | 0.00 | 0.13 | 0.10 |
| Acceptable Performance | 0.5 | 0.5 | 0.5 | 0.5 |





Program's Effectiveness:

Broward Health Imperial Point was not able to reduce the number of False Fire Alarms therefore, we will continue to monitor. There were 8 unscheduled activation of the fire alarm system for the CY 20 vs. 6 CY 19. However, the benchmark established was 11 or less for the year based on previous year's average. The ongoing implementation of the hot work permit program and increased awareness and vigilance etc. has continued to result in fewer false alarms than previous calendar years.

The following information highlights other 2020 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 97%.
- 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 no violations 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 it was felt to be necessary.
- There were 0 fires in CY 20
- 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 CY2020 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 2020 below:



| Indicator | 1st | 2nd | 3rd | 4th | Year-to-date | Target | Data Source |
|--|--------------|-------------------------|----------|------------|--------------|---|---|
| CMS: Fire Drills: Due to the inavailability 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. | 6 | 1 drill 2 training * | 8 | 8 | 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 | 6 | NA | NA | NA | 7 | NA | |
| C. Number of Actual Fires | 0 | 0 | 0 | 0 | 0 | 0 | |
| D. Number of False Alarms | 1 | 0 | 4 | 3 | 8 | 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 | 1853 of 1853 | 85 of 85 | 85 of 85 | ≥1667 | 3690 | ≥2108 | |
| G. Medical Arts Pavilion Surgery Center Testing of Fire alarm and suppression systems per JCAHO, NFPA Standards # of tests performed / # of tests required | 347 of 347 | 20 of 20 | 20 of 20 | 347 of 347 | 734 | ≥407 | |
| H. Cited Code Violations: | 0 | 0 | 0 | 0 | 0 | 0 | |
| <p>1st Quarter: Fire Drills: 1st shift: 2nd fl. NE. Radiology, one in the OSC at the MAP and BHIP Lab plus an additional drill in the MRI. 2nd shift: 1st fl. W. center... 3rd shift: 1st fl. ED. 1st Quarter False Alarms: 1 Smoke Detector in room 310 caused by Vaping. Cited Code Violations: 0</p> <p>2nd Quarter: Fire Drills: 1st shift: 1st fl main kitchen *(2nd and 3rd shift provided training only in multiple locations per CMS Covid-19 guidelines) CMS: Fire Drills: Due to the inavailability 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. Refer to: 2012 LSC, sections 18.19.7.1.6. 2nd Quarter False Alarms: 0 Cited Code Violations: Zero: On June 9th the Fort Lauderdale Fire Department performed the annual fire inspection of BHIP and found no violations.</p> <p>3rd Quarter: Fire Response Training: Provided training in multiple locations on all shifts including surgical site fire training for OR staff. 3rd Quarter False Alarms: 4; Three were activation of smoke detectors caused by misting sterilization for covid 19 and one was smoke from faulty equipment in IVR. Cited Code Violations: 0</p> <p>4th Quarter: Fire Drills: Provided training in 8 departments (multiple locations) on all shifts per CMS guidelines 4th Quarter False Alarms: 3 One was a smoke detector in the 5th floor corridor caused by humidity after an exterior door was left open. One was a smoke detector in room 500 caused by vaping. One was a smoke detector in ICU room 6 possibly caused by misting sterilization Cited Code Violations: 0</p> <p>January 2021 Fire Safety PMR Prepared by Peter Coughlin</p> | | | | | | | |

Results on Goals MET for CY 2020 Fire Safety

- Obtained on June 9, 2020 – Fire Department approval to reset the Fire alarm after a False activation of the Fire alarm system.
- Completed getting all fire alarm systems and devices covered with Contracts.
- Updated the FA System (Nodes) with new Firmware and hardware.
- Continued to train staff on RACE and PASS used Health Stream, fire drills, EOC Rounds, and CMS prescribed training to meet this goal.
- Completed on 9/25/20 training for anesthesiologists and other surgery staff on preventing surgical fires in the OR.
- Continued to train security staff (current and new) on proper fire response.
- Completed on 2/12/20 fire drill in MRI.
- 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. False Alarm rate for CY20 = 0.27 (8 false alarms per 304,000 sq. ft.)
- Maintained no actual fires in the facility.
- Increase Staff Participation during Fire Drills including Clinical Staff – this was put on hold as we monitor the COVID-19 Pandemic in the hospital.
- Continue to remove surplus equipment from the facility – this is an on-going effort.

Performance Monitors for 2021:

- Provide hands on fire extinguisher training for in-house first responders (Security and Facilities) as well as kitchen staff.
- Replace aging UL 300 Fire suppression system in main kitchen.
- Replace duct smoke detectors on the 7th, 8th, and 9th floors.
- Replace aging diesel-powered fire pump with an electric fire pump.



MEDICAL EQUIPMENT MANAGEMENT PROGRAM

Reviewer: Marcos Mantel

Title: Medical Equipment Management Program

Region: Broward Health Imperial Point

Review Date: February 9, 2021

Unlike other EOC functions, the management of the Medical Equipment program for all the facilities of Broward Health is done by the Clinical/Biomedical Engineering Executive Director and his staff from one central location. In keeping in line with the centralized nature of the Biomedical Engineering organization, this section of the annual appraisal covers all the Broward Health facilities/regions. Performance is tracked by region with corresponding corrective action plans as deemed necessary.

Objectives

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

- To establish criteria for identifying, evaluating and inventorying equipment included in the program.
- To minimize the clinical and physical risks of equipment through inspections, testing and regular maintenance. An Alternate Equipment Management (AEM) Program (CMS) is implemented for all equipment with some exceptions.
- To provide education to personnel on the capabilities, limitations and special applications of equipment; operating, safety and emergency procedures of equipment; the procedures to follow when reporting management problems, failures and user errors; and the skills and/or information to perform maintenance activities.

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.

Scope

The Plan provides an overview of the processes that are implemented to ensure the effective and safe management of medical equipment in the environment of care. The scope of the Medical Equipment Management Plan encompasses all medical equipment used in the diagnosis, therapy, monitoring, and treatment of patients at Broward Health facilities. Radiological, Dialysis, Sterilizer, Lasers and some Laboratory Analyzer service is contracted to outside vendors. This service is overseen by user department and/or Clinical/Biomedical Engineering or the EOC Committees.

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 2020, performance standards for the Medical Equipment Management Plan were tracked in the following areas:

- Active Inventory
- Work Orders Opened
- Work Orders 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 2020.

Accomplishments-Special Projects CY 2020

BHIP

- Coordinate the NK Physiological Monitoring Refresh Project – Completed December 2020
- Replacement of all IV Pumps – Completed November 2020
- Replacement of all PCA/Epidural Pumps – Completed December 2020

BH (All)

- Deployment of new AEDs at all Physician Practices – Completed November 2020

Strength

Our Scheduled Maintenance (SM) program is unique because we do "environmental" SM's. This helps us achieve close to 100% annual completion of all SM's in all facilities.

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.

Evaluation of CY 2020 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 | ≤ 15% | MET |
| - Improper Care | ≤ 2% | MET |
| - Missing Accessories * new FY 18 | ≤ 2% | MET |
| - Staff Instruction | ≤ 2% | MET |



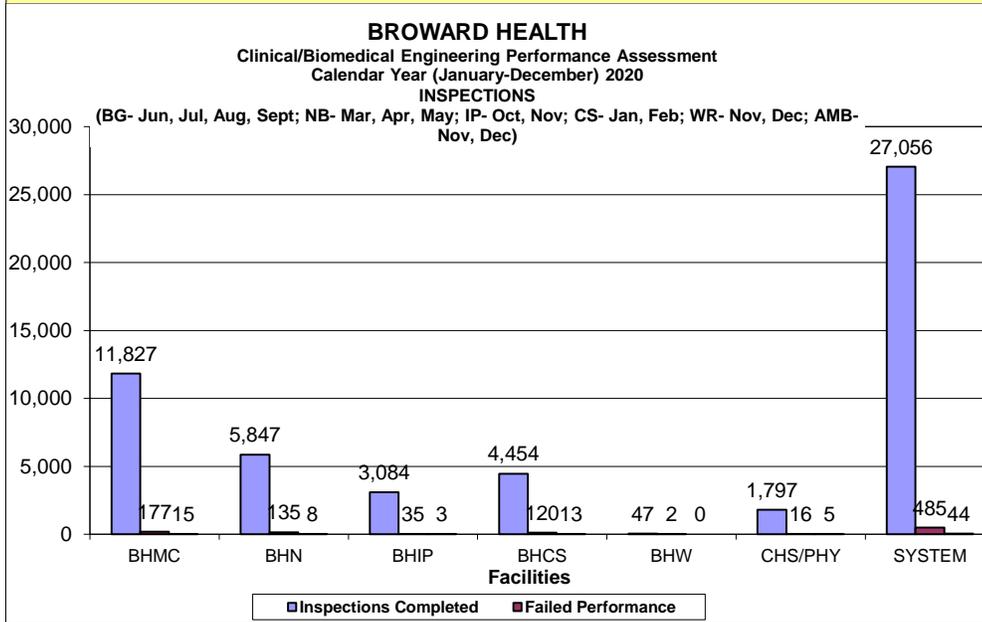


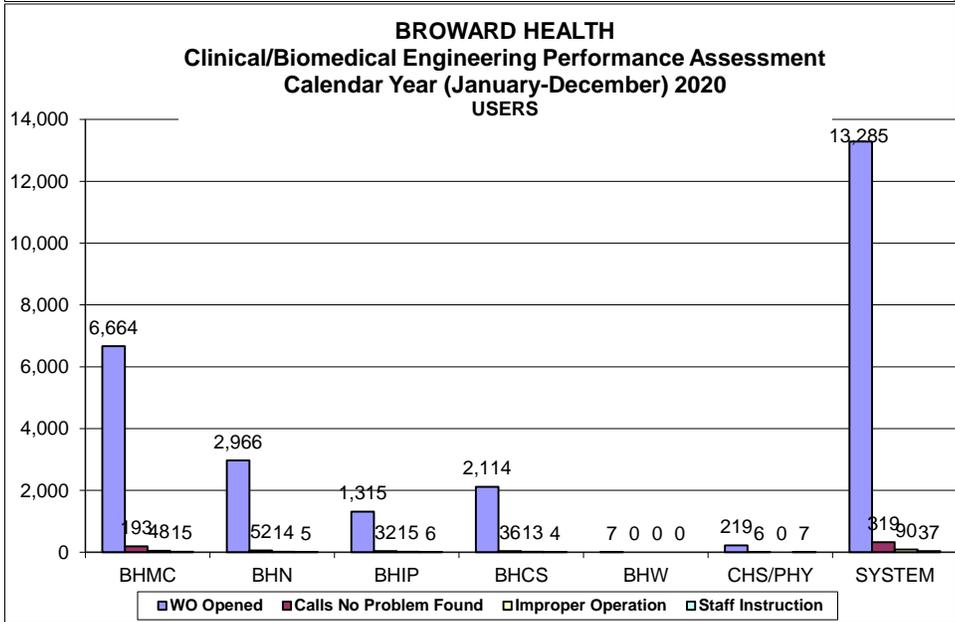
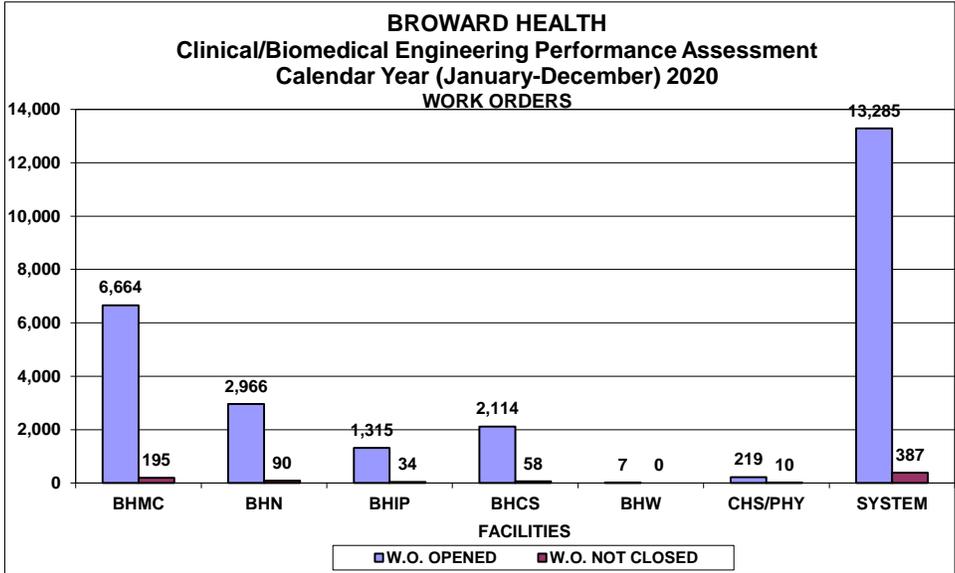
Clinical / Biomedical
Engineering

BROWARD HEALTH
Clinical/Biomedical Engineering Performance Assessment
Calendar Year (January-December) 2020

| | All Regions | | | | | | | SYSTEM |
|---|------------------|-------------|------------|-------------|-------------|------------|----------------|---------------|
| | BHMC | BHN | BHIP | BHCS | BHW | CHS/PHY | | |
| SAMPLE SIZE: | | | | | | | | |
| UNITS IN INVENTORY | 13,208 | 5,785 | 3,166 | 4,943 | 59 | 2,465 | 29,626 | |
| W.O. OPENED | 6,664 | 2,966 | 1,315 | 2,114 | 7 | 219 | 13,285 | |
| TOTAL W.O. COMPLETED | 6,665 | 2,934 | 1,333 | 2,059 | 7 | 217 | 13,215 | |
| INSPECTIONS COMPLETED | 11,827 | 5,847 | 3,084 | 4,454 | 47 | 1,797 | 27,056 | |
| W.O./INSPECTIONS COMPLETED | 18,492 | 8,781 | 4,417 | 6,513 | 54 | 2,014 | 40,271 | |
| LABOR HOURS | 8,146 | 4,154 | 1,941 | 2,984 | 30 | 1,051 | 18,306 | |
| PARTS/MATERIALS | \$204,126 | \$79,618 | \$30,880 | \$33,244 | \$147 | \$8,512 | \$356,527 | |
| QA ROUNDS | 2,992 | 2,336 | 1,985 | 2,020 | 0 | 0 | 9,333 | |
| PARAMETERS | 19,676 | 8,524 | 4,958 | 7,609 | 80 | 3,261 | 0 | |
| INDICATORS: | TARGET | BHMC | BHN | BHIP | BHCS | BHW | CHS/PHY | SYSTEM |
| W.O. NOT CLOSED <i>(W.O. OPENED)</i> | <= 10% | 3% | 3% | 0% | 3% | 0% | 5% | 3% |
| FAILED PERFORMANCE <i>(INSPECTIONS COMPLETED)</i> | <= 6% | 1% | 2% | 1% | 3% | 4% | 1% | 2% |
| FAILED ELECTRICAL SAFETY <i>(INSPECTIONS COMPLETED)</i> | <= 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| NEW TO INVENTORY <i>(W.O./INSPECTIONS COMPLETED)</i> | <= 5% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| CALLS WHERE NO PROBLEM WAS FOUND <i>(W.O. OPENED)</i> | <= 15% | 3% | 2% | 2% | 2% | 0% | 3% | 2% |
| IMPROPER CARE <i>(W.O./INSPECTIONS COMPLETED)</i> | <= 2% | 1% | 0% | 1% | 0% | 0% | 0% | 1% |
| MISSING ACCESSORIES <i>(W.O./INSPECTIONS COMPLETED)</i> | <= 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| STAFF INSTRUCTION <i>(W.O./INSPECTIONS COMPLETED)</i> | <= 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |

Comments:





Review of Performance:

Performance Monitors #1

Monitor: Failed Inspections
Target: > 6 % or lower
Performance: MET

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

| MEDICAL EQUIPMENT MONITOR | Q1CY19 | Q2CY19 | Q3CY19 | Q4CY19 | Q1CY20 | Q2CY20 | Q3CY20 | Q4CY20 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Failed Inspections | | | | | | | | |
| # of Inspection Completed | 147 | 524 | 99 | 1740 | 109 | 514 | 556 | 1905 |
| # Failed Performance | 0 | 4 | 0 | 62 | 4 | 7 | 1 | 23 |
| Performance | 0% | 1% | 0% | 4% | 1% | 1% | 0% | 1% |
| Acceptable Performance | 6% | 6% | 6% | 6% | 6% | 6% | 6% | 6% |

Performance Monitors #2

Monitor: Improper Care
Target: > 2% or less
Performance: MET

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

| Improper Care | Q1CY19 | Q2CY19 | Q3CY19 | Q4CY19 | Q1CY20 | Q2CY20 | Q3CY20 | Q4CY20 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| # of Work Orders and Inspection Completed | 491 | 2931 | 99 | 2209 | 399 | 685 | 1237 | 2096 |
| # Improperly Cared For | 12 | 31 | 12 | 15 | 5 | 6 | 13 | 10 |
| Performance | 2% | 1% | 12% | 1% | 1% | 1% | 1% | 0% |
| Acceptable Performance | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |

Recommended Goals for CY 2021

Medical Equipment Management Goals were submitted to the Environment of Care Committees at all facilities for approval. The Committees approved the following goals for CY 2021:

- Continuation of the NK Physiological Monitoring Refresh Project (Infrastructure) – June 2021
- Replace the NK Monitoring Network – June 2021
- Connect All NK Monitors to Cerner Care Aware EMR – June 2021
- New Cath Lab – March 2022

BH (ALL)

- Infusion Pumps EMR Connectivity – December 2021
- Assure all staff receives proper medical equipment training in order to perform their respective duties in a safe and proficient manner - Ongoing
- Ensure that all alerts, recalls and hazards that pertain to medical equipment are investigated - Ongoing
- Review and revise the Medical Equipment Management Program as necessary – Ongoing

Summary

The Medical Equipment Management Plan and its continuation was considered effective this year. We will continue to trend the current performance indicators for another year, reassess the targets and make appropriate changes based on the consensus of the EOC Committees.



UTILITIES MANAGEMENT PROGRAM

Reviewer: Steve Fredrickson

Title: Regional Manager Facility services

Region: BHIP

Review Date: February 10, 2021

Purpose: The Purpose of the Utilities 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

Scope: The BHIP Utilities 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.

| Objective | Met | Not Met | Met with Conditions | Adjusted Objective |
|------------------------------------|-----|---------|---------------------|---|
| Reduce Electric Consumption | ✓ | | | Performance was met in Q1, 2, and 4 (75%) |
| Complete Generator Testing at 100% | ✓ | | | |

Additional objectives of the BHIP Utilities Management Plan MET include:

- Assure the operational reliability of the utility systems.
- Reduce the potential for hospital-acquired illness.
- Assess of 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 – 75% of the Time

Performance: Broward Health Imperial Point every year plans to reduce electrical consumption and achieved this 75% of the time during CY 2020. In Q3, however the acceptable performance was below the established threshold for a 4th year in a row. The actual performance for Q3 fails to achieve the desired outcome. July, August and September continue to hot in the South Florida environment.

| Energy Efficiency 2020 | Q1 | Q2 | Q3 | Q4 |
|-------------------------------|--------------|--------------|--------------|--------------|
| Square Footage | 304000 | 304000 | 304000 | 304000 |
| KWh Used | 2,810,880 | 2,980,900 | 3,716,400 | 3,060,240 |
| Performance | 9.25 | 9.81 | 12.23 | 10.07 |
| Acceptable Performance | 11.26 | 11.45 | 10.22 | 11.11 |

Performance Effectiveness: An overall reduction was MET in 2020 when compared to the kWh used in 2019 for 3 of the 4 quarters.

Performance Monitor #2

Monitor: Generator Testing

Target: 100% MET

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 | 3 | 2 | 1 | 0 | | 0% | Facilities Services |
| B. Utility System Scheduled Shut Downs | 5 | 4 | 2 | 1 | | 0% | |
| C. Equipment Preventive Maintenance Work Order Completion Rate (BS4) | 187/187 100% | 80/80 100% | 81/81 100% | 87/87 100% | | 96% | |
| D. Infection Control Preventive Maintenance Work Order Completion Rate (BS4-IC) | 111/110 99.09% | 120/120 100% | 133/133 100% | 124/124 100% | | 100% | |
| E. Life Safety Preventive Maintenance Work Order Completion Rate (BS4-LS) | 77/75 97.4% | 145/145 100% | 147/147 100% | 130/130 100% | | 100% | |
| F. Generator Test Results (Hospital Main) (see attached graph) | 3 of 3 | 3 of 3 | 3 of 3 | 3 of 3 | 3 of 3 | 100% | |
| G. Generator Test Results (New Emergency) (see attached graph) | 3 of 3 | 3 of 3 | 3 of 3 | 3 of 3 | 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 | 1 | 1 | 2 | 0 | | 0% | |
| H. Generator Test Results (Surgery Center) (see attached graph) | 3 of 3 | 3 of 3 | 3 of 3 | 3 of 3 | 3 of 3 | 100% | |
| 1st Quarter: . 4 hour Load completed by Genset services in February on Generator number 5. Started preparations for the Covid 19 virus. Setting up triage tents, increasing the number of negative pressure isolation rooms. Continued to work on the ASCO switch, completed the Chiller project. Some PMs were carried over into April due to contracts and the Covid19. Utility failures. Repaired South core UPS system. Genset services conducted level 5 PM on Gen sets. | | | | | | | |
| 2nd Quarter: Chiller#1 water leak on drive. After some work restarted and is running fine. Got temp morgue set up. Worked on adding isolation rooms installed two 10,000 CFM fans on the 7th floor. Chiller#2 failure work scheduled. Completed ICU exhaust fans low exhaust fans. Boiler PM and annual chiller PM. Medical gas outlets PMed and repairs made. Completed the Annual Medical gas equipment PMs, both BHIP and ASC. Repaired chemical feed piping. Installed rooftop Generator #4. Completed the switch gear project Covid testing rooms. | | | | | | | |
| 3rd Quarter: Electrical safety check done on new incoming beds. Load bank all 4 generators. Completed quarterly on the chillers. Replaced manifold on generator #4. Replaced the drive on chiller#1. Had 2 steam system shut downs, pipe in doctors lounge repair. Built Sick room for incoming Covid patients. Replaced window in room 424 patient smashed with chair. Completed PM on critical and non critical air pressurizations and followed up with corrections in 5 areas. medical gas PM's on all the outlets in the ASC. Completed Medical air and vacuum PMs. | | | | | | | |
| 4th Quarter: FPL load shed completed. Completed a load bank test on Generators 1,2,3,4. Rebuilt pressure relief valve on the fire pump. Paralleled breakers for gen sets 1,2,3, adjusted for time. Completed 4th quarter vacuums and compressors. Completed 5 year storm water drain licence. Completed Clean room project reconciled trane chiller # 1 claim. Went into full hurricane mode. Continued all efforts on the Covid pressure rooms. Completed the room resurfacing. | | | | | | | |
| FACILITIES SERVICES SIGNATURE: Steve Fredrickson | | | | | | | 30-Dec-20 |

Overall Effectiveness of the Program

The Utilities management plan was acceptable and considered effective, stable and sustainable during CY2020 as evidenced by performance standards, goals and objectives that were met and the level of regulatory compliance maintained. No additional actions needed to achieve the expected outcome.

- All Life safety, Infection control, and building maintenance Preventive Maintenance (PM) activities were completed.
- 1419 equipment items had preventive maintenance conducted meeting target
- BS4 PM'S 100%, BS4-IC PM'S 100%, BS4-LS 100% for the 12-month period.
- 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 six (6) utility failures for CY 20
- 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.
- Ongoing Water Management program with a multi-disciplinary team approach.



Performance Monitors (Goals) completed in 2020:

- Completed Clean Room Project – December 2020
- Cath Lab project – delayed for 2021
- Completed - Recoating the Roof, approximately 70,000 sq. ft.
- Completed the implementation of a new work order (Megamation) to track utility work orders.
- Completed the Planning Stage of the electrical study to increase AHU on Emergency power.
- Reduce electric consumption by 1% by continuing to replace existing fluorescent indoor lighting with energy efficient LED lighting during construction and renovation projects – to be continued in 2021
- Completed the 600 Ton Chiller installation
- ASCO main power switch replacement - completed 100%

Performance Monitors for 2021 (Goals):

- Complete the Cath Lab project
- Reduce electric consumption by 1% by continuing to replace 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
- Work on implementing (HKS) master plan projects
- Complete Overhaul on Chiller #1
- Fine tune the Chiller plan to maximize efficiency



OVERALL PERFORMANCE SUMMARY FOR THE ENVIRONMENT OF CARE PROGRAM AND PLANNING OBJECTIVES

Overall Performance Summary: Based on a review of the current overall performance indicators, some goals were not able to be met in 2020. With the actions planned in the individual objectives, the following goals have been chosen for 2021:

Planning Objectives and Performance Monitors for CY 2021:

Safety Management

- Reduce OSHA Recordable Cases (occupational injuries) to less than **52** (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)
- Continue to work with Employee Health, Clinical Education and vendors to educate staff on needle sticks prevention.
- Reduce Staff Slip, Trip and Fall's to no more **11** (10% less than the average of the last 3 years)
- Initiate Accident Prevention training during New Employee and Medical Staff Orientation
- Decrease turnaround time of EOC observations. Follow up on safety issues within 3 days.

Action items for fall prevention and contaminated needle stick reductions to continue as follows:

- Conduct in-service during huddles regarding Contaminated Needle Sticks, Slips/Trips & Falls and other identified Workplace Injuries

Security Management

- Purchased four (4) new radios to enhance communication between departments
- Implement the use of a new form for Lost and Found, Patient Belongings, and Valuables System by assigning a health stream module for all staff throughout the system. This will start on or by April 2021. This has been implemented at Broward General and will be rolling out to all districts by Spring 2021
- Increase security rounding (by at least 10%), to help monitor Baker Act patients, safety sitters and BSO patients on each floor

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
- Increase Recycled Waste above the previous year of 18%
- Conduct DOT Training both initial and refresh (every 3 years)
- Conduct further training on the labeling requirements for the SDS program
- DOT training to emphasis signing/understanding and maintaining Manifests
- Conduct a minimum of one spill training class

Fire Safety Management

- Provide hands on fire extinguisher training for in-house first responders (Security and Facilities) as well as kitchen staff.
- Continue to train staff on RACE and PASS through Health Stream, fire drills and EOC Rounds
- Replace aging UL 300 Fire suppression system in main kitchen
- Replace duct smoke detectors on the 7th, 8th, and 9th floors.
- Replace aging diesel-powered fire pump with an electric fire pump.



Medical Equipment Management

- Continuation of the NK Physiological Monitoring Refresh Project (Infrastructure) – June 2021
- Replace the NK Monitoring Network – June 2021
- Connect All NK Monitors to Cerner Care Aware EMR – June 2021
- New Cath Lab – March 2022

BH (ALL Regions)

- Infusion Pumps EMR Connectivity – December 2021
- Assure all staff receives proper medical equipment training in order to perform their respective duties in a safe and proficient manner - Ongoing
- Ensure that all alerts, recalls and hazards that pertain to medical equipment are investigated - Ongoing
- Review and revise the Medical Equipment Management Program as necessary – Ongoing

Utilities Management

- Complete the Cath Lab project
- Reduce electric consumption by 1% by continuing to replace 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
- Work on implementing (HKS) master plan projects
- Complete Overhaul on Chiller #1
- Fine tune the Chiller plan to maximize efficiency

