

**INFECTION CONTROL PLAN
 POLICIES AND PROCEDURE MANUAL-
 BHCS ADDENDUM TO SYSTEM IC PLAN**

POLICY #:	
SUBJECT: Broward Health Coral Springs Infection Control Program (BHCS) Addendum	Addendum updated: 3/2021, 8/2020, 3/2020 Addendum Effective: 3/2019 BHCS IC PLAN: 3/1987
PURPOSE: Broward Health Coral Springs (BHCS) has developed and implemented an effective Infection Control Program for the surveillance, prevention and control of infection.	BHCS IC PLAN DATE REVIEWED: 3/97, 3/98, 3/99, 3/00, 12/01, 3/02, 3/03, 3/04
SPONSOR: Epidemiology	BHCS IC PLAN REVISED: 3/19, 9/18, 3/18, 3/17, 3/16, 3/15, 3/14, 3/13, 3/12, 3/11, 3/10, 3/09, 3/08, 3/07, 3/06, 3/05, 3/03, 3/02, 12/00, 3/97, 8/95, 7/93, 7/91, 10/90
APPROVED BY: <div style="text-align: center;"> <hr/> Medical Director of Infection Prevention and Control and the Antimicrobial Stewardship Program <hr/> Chief Executive Officer, BHCS <hr/> Chief Nursing Officer, BHCS </div>	ADDENDUM APPROVED FOR USE AT BHCS

Purpose: Broward Health has developed and implemented an effective system-wide Infection Prevention and Control Program for the surveillance, prevention and control of infection. This is the BHCS specific addendum to the plan.

I. Description of Population

Broward Health Coral Springs is a 250 bed community hospital located in Coral Springs, in Northwest Broward County. BHCS provides comprehensive care across the continuum of care for all age groups. Patient populations include: medical-surgical specialties, including but not limited to intensive care, general surgery and medicine, gastroenterology, women and children, neonatology Level II, pediatrics, orthopedics and other services which are delineated in the *Scope of Program* section. In addition, the adult and pediatric emergency departments are very busy and treated over 46,538 patients in CY2020.

Per Fiscal Year 2020 statistics, our payer mix was Medicare 15.1%, Medicaid 5.3%, Commercial (includes HMO/PPO, Managed Care Medicaid, Managed Cared Medicare) 69.0%, Charity & Self pay 10.6%.

According to the Broward County Health Department, there are high numbers of infectious diseases reported. These primarily include HIV/AIDS, Hepatitis C, STD's, and Tuberculosis. In addition, Broward Health Coral Springs as all healthcare systems have been burdened with issues related to the pandemic, including increasing number of admissions, use of personal protective equipment, and mortalities.

The **Top 10 adult principle surgical procedures performed in CY2020** include: resection of gallbladder, percutaneous endoscopic approach, excision of stomach, percutaneous endoscopic approach, laparoscopic cholecystectomy with cholangiography, dilation of right ureter with intraluminal device, endoscopic, laparoscopic inguinal hernia repair, dilation of left ureter with intraluminal device, endoscopic, resection of uterus, open approach, cystoscopy, ureteroscopy with lithotripsy and indwelling stent insertion, resection of appendix, percutaneous endoscopic approach, repair of first reducible inguinal hernia repair.

The **Top 10 adult inpatient principle diagnosis for CY2020** include: acute respiratory disease, sepsis, pneumonia, chronic obstructive pulmonary disease, with acute exacerbation, severe morbid obesity due to excess calories, sickle cell disease with crisis, hypertension and heart and chronic kidney disease with heart failure and stage 1-4 chronic kidney disease, hypertensive heart disease with heart failure, full-term uncomplicated delivery and anemia complicating childbirth.

The **Top 10 adult emergency department diagnosis for CY2020** include: other chest pain, nCoV acute respiratory disease, urinary tract infection, abdominal pain, essential hypertension, threatened abortion, chest pain, viral infection, headache, acute upper respiratory infection.

The **Top 10 pediatric principle surgical procedures for CY2020** include: unlisted procedure dentaoalveolar structures, resection of appendix, percutaneous endoscopic approach, skeletal fixture of humeral fracture repair, umbilical hernia repair, circumcision age more than 28 days, laparoscopic appendectomy, division of stomach, pylorus, open approach, excision of pilonidal cyst, sinus complicated, skeletal fixation of distal radial fracture, tonsillectomy and adenoidectomy.

The **Top 10 pediatric inpatient principle diagnosis for CY2020** include: single live born, delivered by cesarean, single live born infant, delivered vaginally, twin liveborn infant delivered by cesarean, pneumonia, acute pyelonephritis, nCoV acute respiratory disease, urinary tract infection, neonatal jaundice, viral infection, and type 1 diabetes mellitus with ketoacidosis.

The **Top 10 pediatric emergency department diagnosis for CY2020** include: acute upper respiratory infection, viral infection, constipation, fever, vomiting, laceration without foreign body of other part of head, flu due to other identified influenza virus with other respiratory manifestations, injury to head, unspecified, non-infective gastroenteritis and colitis and urinary tract infection.

Conditions such as cancer, HIV/AIDS, indwelling medical devices, disorders that affect the immune system, alcoholism, drug abuse, diabetes and renal failure can also increase an individual's risk for acquiring infections as well as the new emergence of COVID-19.

II. Scope of Program

- a. BHCS is a 250 bed facility that provides care across the continuum of care for all age groups and includes a variety of inpatient, outpatient, rehabilitative, and emergency services for both adult and pediatric populations.
- b. The patient population at Broward Health Coral Springs consists of a majority of obstetric/pediatric patients, adult medical/surgical patients and a large number of geriatric cardiac patients. The needs of the geriatric patient population are influenced by an increased potential for complications due to pre-existing conditions and therapy; i.e., long term steroid use, financial constraints in a retirement community, increasing anxiety with potential impact on the timeliness of seeking medical care and compliance with instructions and medications pre and post hospitalization; compromised nutritional status; limited mobility; diminished sensory perception and a greater complexity of discharge planning needs due to length of stay and reimbursement constraints placed upon the hospital by Medicare, Managed Care and other healthcare insurers. Pediatric patients with the potential of acquiring and spreading communicable diseases (i.e., varicella, measles, mumps, pertussis, meningococcal disease, etc.) must be monitored to terminate spread of disease. Immunization status of all hospitalized children is evaluated upon admission. Low-income families run the potential risk of not having up-to-date immunizations. Neonates and newborns having compromised immune systems place them at risk for developing infections.
- c. Patient care units include:
 1. A thirty-four (34) bed Adult Emergency Department and a ten (10) bed Pediatric Emergency Department that includes four (4) observation beds which treats both adult and pediatric patients and also includes one (1) critical care/trauma for adults and one (1) critical care/trauma bed for pediatrics. Approximately 3,000 adult patient and approximately 800 pediatric patients are seen on a monthly basis presenting with cardio-respiratory, surgical, and neurovascular disorders. Minimal trauma cases are received. There are five (5) AII (Airborne Infection Isolation) rooms are available on the adult side 13, 14, 20, 34, 35. If needed, room 13 would be used for a pediatric patient.
 2. A sixteen (16) bed Adult Critical Care Unit (ICU/CCU) (separated into two units). The patient population is generally adult, geriatric and both antepartum and postpartum patients with cardiopulmonary, surgical, neurovascular disorders, hypertensive crisis and septic patients. Two rooms, in the Intensive Care Unit and Cardiac Care Unit, are AII rooms (ICU 1 and 8, CCU 1 and 8). This unit is located on the 2nd floor in the Legacy Building. Conversion of 2 additional AII rooms (ICU 2 and 7 and CCU 2 and 7) was completed due to the COVID pandemic.
 3. **A eight (8) bed Adult Critical Care Unit (ICUO) was opened in April secondary to increased census. The patient population is generally adult, geriatric patients with cardiopulmonary, respiratory, hypertensive disorders and septic patients. This is located on the second floor in the previous L&D unit.**
 4. A thirty-five (35) bed Progressive Care Unit (PCU) with primarily adult and geriatric patients with cardiopulmonary conditions. Dialysis patients are also treated. Two AII rooms are available (Room 438 and 452). Telemetry monitoring available. This unit is located on the 4th floor in the Legacy Building
 5. A thirty-three (33) bed Medical Unit (4 WEST) with primarily adult and geriatric patients with respiratory conditions, including suspected and active tuberculosis patients. There is one (1) permanent AII room (Room 401). There are currently 11 rooms which can be converted into AII rooms (409, 410, 411, 412, 415, 416, 417, 418, 423, 424, 425). **As of 4/13/20, BHCS converted the following additional rooms into AII rooms: 402, 403, 404, 405, 406, 407, 408, 413, 414, 419, 402, 421, 422, and 426.** All types of medical conditions are serviced and some surgical patients may be admitted

here. There is remote telemetry monitoring available. This unit is located on the 4th floor in the Legacy Building. All patient rooms on 4 West are now AII rooms. This was completed due to the COVID pandemic.

6. A thirty-three (33) bed Medical-Surgical Unit (3 EAST) with primarily adult and geriatric patients. There is one AII room available (Room 352). There is remote telemetry monitoring available. This unit is located on the 3rd floor in the Legacy Building.
7. A twenty-eight (28) Surgical Unit (3 SOUTH) dedicated to bariatric, urological, orthopedic, colorectal, gynecological and general surgical patients with two AII rooms (381 and 395). There is remote telemetry monitoring available. This unit is located on the 3rd floor in the South Tower.
8. **An eighteen (18) Medical-Surgical Unit (4 NORTH) with primarily adult and geriatric patients. There are two (2) permanent AII rooms (459 and 462). As of 4/13/20, BHCS converted the following additional rooms into AII rooms: 453, 454, 455, 456, 457, 458, 460, 461, 463, 464, 465, 466, 467 and 468. There is remote telemetry monitoring available. This unit is located on the 4th floor in the Legacy Building.** All patient rooms on 4 North are now AII rooms. This was completed due to the COVID pandemic.
9. A ten-(10) bed Level II Neonatal/Intensive Care Unit (NICU) is available. The majority of the neonates are premature, hypoglycemic, or rule-out sepsis cases. There is one AII room available (NICU10). This unit is located on the 2nd floor in the South Tower.
10. A twenty (20) bed Pediatric Unit (PEDS), with patients aged newborn to eighteen (18) years old with all medical and surgical conditions serviced. There is one AII room in the unit. (301). There is remote telemetry available for 7 beds. This unit is located on the 3rd floor in the Legacy Building.
11. There is a 5 bed PICU with one AII room (PICU #5). This is located inside the Pediatric Unit. The majority of the patients are treated for respiratory related conditions with some surgical patients. This unit is located on the 3rd floor in the Legacy Building.
12. The Surgical Services Unit (OR) has eight (8) surgical suites including one cystoscopy room with a population of primarily adult, geriatric, and pediatric patients. Surgical Services include general orthopedics, cardiovascular, urology, ENT, gynecology, neurovascular and general surgery. Approximately 4,200 surgical procedures are performed annually. This department is located on the 2nd floor in the Legacy Building. Two additional ORs are available (in the prior L&D surgery suite). One of the OR rooms have been set up with additional HEPA filtering specifically for COVID positive patients. The hallway outside of the two ORs is negative pressure.
13. An eleven (11) bed Post Anesthesia Care Unit (PACU) provides care for the post-operative patient recovering from general or regional anesthesia or receiving monitored anesthesia care for epidural pain control. This department is located on the 2nd floor in the Legacy Building, adjacent to the Surgical Services unit.
14. A twenty-eight (28) bed Mother-Baby Unit (MB) with 28 bassinet newborn nurseries and a five (5) bay virtual nursery area. The unit provides total mother-baby couplet care. Broward Health Coral Springs delivered approximately seventeen (1,700) live births in CY2020. There are two AII rooms available (212 and 228). This unit is located on the 2nd floor in the South Tower.
15. A twelve-(12) bed Labor Delivery Unit is available with three (3) Caesarian Section operative suites and five (5) recovery rooms. **As of 8/4/20, LD OR#3 has a negative pressure anteroom and OR#3 remains positive.** A five (5) bed exam room area is available there is one AII room available (5 room). This unit is located on the 1st floor in the South Tower. Approximately 700 Caesarian procedures were performed in CY2020.

13. A six (6) bed Antepartum Unit provides care for high-risk pregnancies, located in the Mother-Baby Unit. This unit is on the 2nd floor in the South Tower.
 14. A twenty-four (24) bed Same Day Surgery Unit provides care to pediatric, adult and geriatric patients. Services include care of the surgical patient before surgery and following recovery in the PACU, care of patients receiving other interventional/diagnostic procedures in Radiology and Cardiopulmonary, and the administration of intravenous medications, blood and blood products to outpatients. Two (2) reclining chairs are reserved for administration of intravenous medication, blood and blood products to outpatients. This unit is located on the 2nd floor in the Legacy Building.
 15. A four (4) room Endoscopy Unit is available with one AII room used for bronchoscopies. This unit is located on the 2nd floor in the Legacy Building adjacent to the Same Day Surgery Unit.
 16. A three (3) bed dialysis unit is available for dialysis treatments to be completed for inpatients. This unit is located on the 2nd floor in the Legacy Building adjacent to the ICU/CCU unit. This area is only opened while patients are receiving dialysis.
- d. Services provided at BHCS include but are not limited to:
- Adult & Pediatric Care**
- a. Emergency Department
 - b. Pediatric Emergency Department
 - c. Labor and Delivery Unit
 - d. Maternity Unit
 - e. Nursery
 - f. Level II Neonatal Intensive Care Unit
 - g. Pediatric Unit
 - h. Pediatric Acute Care Unit
 - i. Pediatric Intensive Care Unit
 - j. Pediatric Sedation
 - k. Surgical Services Department
 - l. Minimally Invasive Colorectal Services
 - m. Endoscopy Unit
 - n. Interventional Radiology
 - o. Primary Stroke Center
 - p. Inpatient Dialysis
 - q. Cardiopulmonary Services
 - r. Center for Wound Care
 - s. Sleep Disorders Center
 - t. Orthopedic Services
 - u. Women's Center
 - v. Rehabilitation Center
 - w. Community Health Services

III. At Risk Patient Populations

The Infection Control Committee at Broward Health Coral Springs has identified the following patient populations as being at higher risk for healthcare associated or transmissible community acquired infections:

- a. Patients undergoing mechanical ventilation
- b. Postpartum patients
- c. Patients undergoing surgical & invasive procedures

- d. Patients with indwelling medical devices (urinary catheters and peripheral and central venous catheters)
- e. Employees at risk for occupational exposure to tuberculosis, blood borne pathogens, and other communicable diseases
- f. Patients with immunosuppression due to chronic illness (diabetes, ESRD, HIV disease, COPD, sickle cell disease and drug and alcohol abuse)
- g. Patients with significant pathogens (i.e., multidrug resistant organisms, including *C. difficile*)
- h. Patients with limited mobility, compromised nutritional status, and diminished sensory perception
- i. Patients with chronic conditions with recurrent hospitalizations (i.e., CHF, COPD)
- j. NICU patients
- k. Pediatric patients with potential of acquiring and spreading communicable diseases (i.e. varicella, measles, mumps, pertussis, meningococcal disease, etc.)

IV. Roles and Responsibilities of the Infection Control Committee (ICC)

- a. The ICC is a multidisciplinary committee with representation from but not limited to Medical Staff, Executive Leadership, Nursing, Pharmacy, Laboratory, Surgical Services, Environmental Services, Facilities Management, Employee Health, Ancillary staff, and other departments of the hospital. The role of the ICC is to oversee the BHCS Infection Prevention and Control Program.
- b. Responsibilities of the Infection Control Committee include but are not limited to the following:
 - i. Recommends the minimum amount of time allocated to the Infection Prevention and Control Program based on the needs of the population served.
 - ii. Requests changes to the allocation of time as needs change or program goals cannot be met.
 - iii. Facilitates the allocation of resources needed to access information, supplies, equipment and laboratory services.
 - iv. Approves the Infection Control Plan, Annual Appraisal, Risk Assessments, BHCS IC Program revisions, and Infection Control new policies/revised policies and the BHCS Hand Hygiene Plan.
 - v. Initiates recommendations based on mandatory reporting data, surveillance findings, epidemiological investigations and performance indicator trends.
- c. The multidisciplinary Infection Control Committee meets quarterly. The Chairman of the ICC, who is also the Medical Director of the Infection Prevention and Control Program and the Antimicrobial Stewardship Program has the authority of the Chief of Staff and Chief Executive Officer of Broward Health Coral Springs to oversee the Infection Prevention and Control Program. The Clinical Specialist of Epidemiology serves as the facilitator. All hospital departments are encouraged to participate in the ICC and contribute to the infection prevention and control objectives of the program.
- d. Employee Health functions relating to Infection Control are conducted by the Employee Health Practitioner. Employee Health trends are reviewed and analyzed by the Infection Control Committee, to include the following:
- e. Employee blood and body fluid exposures and follow up with each occurrence reviewed to identify high-risk procedures and/or products. Based on the evaluations, corrective actions can be developed and implemented. Summary evaluations are presented to the Infection Control Committee and Environment of Care Committee.
- f. Employees are screened for TB at least annually. Employees with skin test conversions are referred for evaluation and follow-up. TB screenings and

conversions are tracked monthly by department and for the facility as a whole. An annual summary is presented to the Infection Control Committee.

- g. Infections of epidemiologic significance among employees are reported along with any control measures instituted, follow-up required, or cases of secondary spread.
 1. Pre-employment screening is completed by the Employee Health Practitioner to evaluate immunity to certain infectious diseases. Vaccines are offered when indicated.
 2. The Employee Health Practitioner or designee coordinates and performs initial fit test and annual fit-checks for N-95 Respirators as indicated.
 3. The Employee Health Practitioner will perform surveillance of employee illnesses and monitor and report any significant communicable disease. This will also be reported at the Infection Control Committee.

****Information generated by Infection Control activities is confidential and all individuals having knowledge of this information will maintain confidentiality of privileged health information. Results of infection control findings will be presented only to committees and/or personnel responsible for conducting or monitoring the quality of patient care, or to appropriate public health personnel.**

V. Objectives

Objectives for the Epidemiology department are as follows:

Please see Appendix A: Goals and Objectives CY2021

Organizations referenced:

1. Centers for Disease Control and Prevention (CDC)
2. The Association for Professionals in Infection Control and Epidemiology, Inc. (APIC)
3. Association of Perioperative Registered Nurses (AORN)
4. Association for the Advancement of Medical Instrumentation (AAMI)
5. The Society for Healthcare Epidemiology of America (SHEA).

REFERENCES:

1. CDC, Template for State Healthcare Associated Infections Plans 2010
<http://www.cdc.gov/HAI/pdfs/stateplans/fl.pdf>
2. Dudeck, M., Edwards, J., Allen-Bridson, K., Gross, C., Malpiedi, P., Peterson, K., Pollock, D., Weiner, L., & Sievert, D. (2015). National Healthcare Safety Network report, data summary for 2013, Device Associated module. *American Journal of Infection Control* 43 (3). 206-221.
3. Centers for Disease Control and Prevention (2002). Guideline for Hand Hygiene in Health-Care Settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA. *MMWR* 51(RR-16).1-45.
4. Hand Hygiene in Healthcare settings. (2015). Centers for Disease Control. Retrieved from <http://www.cdc.gov/handhygiene/>
5. Hospital Accreditation Standards (2015).The Joint Commission. Retrieved from <http://www.jointcommission.org/accreditation/hospitals.aspx>
6. The Joint Commission Infection Prevention and Control Standards

7. The Joint Commission National Patient Safety Goals 2021.
https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2021/hap_npsg_jan2021.pdf

Related Policies: Broward Health Infection Control Plan (System), Broward Health Epidemiology and Department Specific Infection Control Policies.

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Reviewed/Approved: BHCS Infection Control Committee, BHCS CEO, BHCS CNO, Medical Director of Infection Prevention and Control and the Antimicrobial Stewardship Program

Date: 3/12/2020

A risk assessment guides prioritization of infection prevention and control goals and objectives and is completed by the Infection Control Committee. BHCS identifies the risks for acquiring and transmitting infections based on its geographical location, community findings, care, treatment and services provided, healthcare worker risks, and environmental risks.

The Risk Assessment is conducted annually and/or whenever risks change significantly. Scoring of the Risk Assessment is approved by the Infection Control Committee (ICC) to ensure a multidisciplinary approach to assess the needs of the population served at Broward Health Coral Springs.

Appendix A Goals and Objectives CY 2021

**Based on Risk Assessment of Events*

**Will review monthly*

**Target goals based on 10% reduction in harm events from LCY and VBP achievement threshold using NHSN SIR data.*

Hospital Acquired Infection (HAI)/Admission Related Risks

Goal # 1: Overall reduction of hospital acquired infections.

*Pareto Analysis reveals surgical site infections (SSI) constituted the highest risk and multi drug resistant organisms (MDRO) as the second highest risk in the HAI/Admission risk portion of the risk assessment. The top 5 risks identified in the Pareto analysis were SSI, MDRO, central line blood stream infection (CLABSI), catheter associated urinary tract infection (CAUTI), and C-Difficile infections. All HAI are of concern and we strive in chasing zero.

Indicator	Population	Plan	Benchmark	Team	Methodology
SSI	Patients who had surgery	<ol style="list-style-type: none"> 1. Determine risk factors for HAI 2. Decrease HAI 3. Decrease sepsis 4. Continue participating in FHA HIIN 5. Re-establishment of SSI Prevention Committee with creation of gap analysis. 6. Medical Director of Infection 	BHCS target rates: Colon: 3.11 Hyst: 0.00 Threshold Colon: 0.781 Hyst: 0.722 Current rate: Colon: 3.82 Hyst: 4.02 SIR: Colon: 1.52	IP Surgical Services Nurses Physicians Anesthesiologists Pharmacists Surgeons Medical Director of Infection Control	<ol style="list-style-type: none"> 1. Monitor infection rates for all class I and II surgeries and report to appropriate stakeholders. 2. Monitor all total hip and total knee surgeries and report to appropriate stakeholders. 3. Monitor all C-section infection and report to OB/GYN meetings. 4. Monitor colon, abdominal hysterectomy infections and report to NHSN and stakeholders. 5. Daily surveillance of ED log, micro reports, OR schedule. 6. Review for weight based dosing for antibiotics, re-dosing as necessary. 7. Review to ensure glycemic monitoring is performed in all surgical cases. 8. Discuss each SSI during Patient Safety Quality Council meeting

		Prevention and Control and Dept of Surgery Chair for all SSIs.	Hyst: 5.46		<p>9. Discuss in depth SSI at monthly SSI Prevention meeting to determine lessons learned.</p> <p>10. Intense analysis meetings for all SSIs to include drill down checklist for Surgical Services department and drill down checklist for inpatient nursing units to review for SSI opportunities preoperatively, intraoperatively and postoperatively with NMs from Surgical Services, Women’s Services and Inpatient Surgical Nurse Units.</p> <p>11. Review to ensure FIO2 increases upon extubation and during transport to PACU</p> <p>12. Review patient temperatures to ensure normothermia during surgery and upon admission to PACU.</p> <p>13. Review to monitor for appropriate administration of antibiotic prophylaxis prior to surgery.</p> <p>14. Education provided for DaVinci instrumentation on routine basis.</p> <p>15. All infections reviewed by Medical Director of Infection Prevention and Control.</p> <p>16. Infections are reviewed by RMO if indicated.</p> <p>17. Create action plans based on results of audits.</p>
MDRO (including MRSA bacteremia) and C. diff	All patients	<ol style="list-style-type: none"> Determine risk factor for HAI Decrease HAI Decrease sepsis Continue participating in FHA HIIN Decrease 	BHCS; Target Rates: MRSA: 0.00 VRE: 0.02 CRE: 0.00 ESBL : 0.0	IP Nurses Physicians Pharmacists	<ol style="list-style-type: none"> Daily review of surveillance including ED visit log, review of all microbiology results/monitor labs, identify and verify infections, analyze data. Utilize MedMined data mining program to assist with identifying potential clusters. Review Antibigram and discuss at ICC and Antimicrobial Stewardship committee

		readmissions	<p>MRSA: 0.00 VRE: 0.02 CRE: 0.00 ESBL : 0.0</p> <p>Target Rate: MRSA bac: 0.02 C. Diff: 1.91</p> <p><u>SIR</u> MRSA bac: 0.47 CDIFF: 0.34</p>		<ol style="list-style-type: none"> 4. Continue contact precautions for active infection and 6 month history of infection. 5. Utilize Respiratory Viral Panel (Biofire) to prevent antibiotics for viruses. 6. C. diff: Place patient on enhanced contact precautions per policy and monitor compliance with bleach based disinfection. 7. Cohort if necessary on case by case basis. 8. Intense analysis of all C. diff and MRSA bacteremia cases including antibiotic indications and all room changes. 9. IP rounds facility wide. 10. IP rounds for isolation, PPE use, equipment disinfection compliance. 11. Nurse driven action plans. 12. All infections reviewed by Chief of Infection Prevention and Epidemiology until 11/19 and then Medical Director of Infection Prevention and Control and the Antimicrobial Stewardship Program. 13. Infections are reviewed by RMO if indicated.
CLABSI	Inpatients with central lines	<ol style="list-style-type: none"> 1. Determine risk factor for HAI 2. Decrease HAI 3. Decrease sepsis 4. Continue to follow CLABSI bundles. 5. Decrease line days 	<p>BHCS target rate: 0.27 Threshold: .0687 SIR: 0.67</p>	<p>IP Nurses Physicians Pharmacists Clinical Education</p>	<ol style="list-style-type: none"> 1. IP rounds facility wide. 2. Daily surveillance to monitor labs, identify and verify infections, analyze data. 3. Collect patient demographic data, line days 4. Identify risks, assess daily need/removal 5. Monitor bundle compliance during prevalence rounds: dressing, Biopatch, Curocap. 6. Education with bundles 7. Nurse driven action plans, include use of CHG bathing in the ICU

					8. CHG bathing at PM for all nursing unit. 9. Peripheral draws for blood specimens. 10. Intense analysis each CLABSI with nurse manager to determine opportunities/lessons learned. 11. Discuss each CLABSI infection in Patient Safety Quality Council meeting. 12. All infections reviewed by Medical Director of Infection Prevention and Control. 13. Infections are reviewed by the RMO if indicated. 14. Audits completed with medical device company and report findings back to stakeholders. 15. Create action plans based on results of audits. 16. Updated educational flyers
CAUTI	Inpatients with Foley catheters	1. Determine risk factor for HAI 2. Decrease HAI 3. Decrease sepsis 4. Continue participating in FHA HIIN 5. Decrease foley days	BHCS target rate: 0.27 SIR: 0.43	IP Nurses Physicians Pharmacists Clinical Education	1. IP rounds facility wide. 2. Daily surveillance to monitor labs, identify and verify infections, analyze data. 3. Collect patient demographic data, line days 4. Identify risks, assess daily need/removal 5. Nurse driven catheter removal protocol. 6. Monitor bundle compliance including foley below level of bladder, not on floor, foley bag not more than ½ full, secured to thigh, etc. 7. Educate on best practices in nursing orientation and rounding. 8. Nurse driven action plans. 9. Education through Webinar and the HIIN. 10. Discuss each CAUTI with nurse manager to determine opportunities/lessons learned. 11. Discuss each CAUTI infection in Patient

					<p>Safety Quality Council meeting.</p> <p>12. Perform RCA on all infections</p> <p>13. All infections reviewed by Chief of Infection Prevention and Epidemiology until 11/19 and then Medical Director of Infection Prevention and Control and the Antimicrobial Stewardship Program.</p> <p>14. Infections are reviewed by the RMO if indicated.</p> <p>15. Participate in AHRQ Safety Program for ICUs: Prevention CLABSI and CAUTI.</p> <p>16. Audits completed with medical device company and report findings back to stakeholders.</p> <p>17. Create action plans based on results of audits.</p> <p>18. Updated educational flyers</p>
C. diff	Inpatients	<ol style="list-style-type: none"> 1. Determine risk factor for HAI 2. Decrease HAI 3. Decrease sepsis 4. Antimicrobial stewardship 	<p>BHCS target rate: C. diff: 1.91</p>	<p>IP Respiratory Nurses Physicians Pharmacists</p>	<ol style="list-style-type: none"> 1. Daily surveillance to monitor labs, identify and verify infections, analyze data. 2. Utilize NHSN definition and report to appropriate stakeholders. 3. Educate staff on best practices. 4. Infections are reviewed by the RMO if indicated.

Other Identified Events:

Active TB, unknown at time of admission

1. All patients with signs and symptoms or questionable TB disease may be placed on airborne isolation by nursing without a physician’s order per airborne isolation policy.
2. Reeducation of nursing and physicians mandatory ED assessment for potential TB.
3. Review of Transmission based precautions, included difference between droplet and airborne isolation during New Hire Orientation and as needed.

Notification of Community Acquired Infections

1. Continue to utilize admit alert system and communicate with nursing and outside facilities as needed when patient admitted with a community acquired infection.

Outbreak

1. Monitor daily surveillance for any unusual organisms or clusters of organisms.
2. Initiate infection control measures based on CDC guidelines or other evidence based recommendations.
2. Consult with Florida Department of Health as necessary.
3. Educate healthcare staff on organism identified in outbreak and measures to prevent spread of further infections.
4. Utilize Outbreak procedure policy during any outbreak identified.
5. Report clusters/outbreaks to necessary stakeholders and committees.

Notification of Internal HAIs

1. Continue to utilize admit alert system and communicate with internal departments and bed control as needed when patient is admitted or transferred in the hospital with an MDRO.
2. Review of isolation log and review patient diagnosis to ensure accurate transmission based precautions are in use and education staff as needed.
3. Utilize HAS report system to track and trend occurrences and follow up with managers and conduct education as needed.

Community Risks

Goal # 2: Reduction of community risk.

*Pareto analysis reveals epidemic/pandemic to the highest risk with bioterrorism and seasonal flu as the next two highest risk for community related risks. The rest of the top 2 risks identified in the Pareto Analysis were Community Acquired MDRO, and Hemorrhagic Fever Disease. All risks from the community are evaluated and Epidemiology works closely with the Health Department.

<i>Indicator</i>	<i>Population</i>	<i>Plan</i>	<i>Benchmark</i>	<i>Team</i>	<i>Methodology</i>
Epidemic/Pandemic	All patients	BHCS will offer influenza and other vaccinations to	BHCS target: 90%	IP Nursing Quality Physicians	<ol style="list-style-type: none"> 1. If pandemic, work with Florida Department of Health and Emergency Preparedness. 2. Follow outbreak management plan 3. Development of task forces at Corporate level

		all qualified patients.		Pharmacists	
Bioterrorism (Emerging Infectious Disease)	All patients	BHCS will be prepared for Bioterrorism and emerging infectious disease or influx of infectious patients.	EM Drills 100%	IP ED EP Nursing Physicians	<ol style="list-style-type: none"> 1. Continue utilizing infectious disease screening tool for all patients during triage to screen for all potentially infectious patients. 2. Work with Emergency Preparedness in drills and PPE training for bioterrorism / emerging infectious diseases and bioterrorism. 3. Communicate with the Florida Department of Health as necessary. 4. Continue with established drills and EM updates and education. 5. Consult with Medical Director of Infection Prevention and Control as needed.
Seasonal flu	All patients	BHCS will offer influenza vaccination to all qualified patients.	BHCS target: 90%	IP Nursing Quality Physicians Pharmacists	<ol style="list-style-type: none"> 1. Inpatients vaccinated during flu season per Centers for Medicaid and Medicare Services (CMS) protocol unless contraindicated. 2. Patients with influenza placed on Droplet isolation precautions per policy.
Community acquired MDRO	All patients	Identify community onset infections for prompt isolation. Placing patients on transmission based precautions.	BHCS target: 90%	IP Nursing Physicians Case management	<ol style="list-style-type: none"> 1. Identification of patients through daily surveillance admitted with MDROs and alert tab. 2. Assess staff need for education. 3. Communication with SNF and LTC admitters. 4. Education for staff and physicians about HO and CO C. diff and MRSA bacteremia to identify community onset MDRO as early as possible and within the first 3 days of admission based on the NHSN definition. 5. Education at New Hire Orientation. 6. Review of daily isolation log and review of patient diagnosis to ensure that patient is placed on correct transmission based precautions.

					7. Hand hygiene to prevent transmission.
Hemorrhagic Fever Diseases	All patients	BHCS has international airport within 30 minutes	Diverse population	IP Nursing Physicians Emergency Management	<ol style="list-style-type: none"> 1. Active surveillance for incoming patients 2. Work with Emergency Preparedness with drills and PPE training. 3. Communicate with Florida Department of Health as necessary 4. Continue with established drills and EM updates and education.

Other Identified Events

Displaced person

1. Work with case management and social services to assist in timely discharge of patients with hospital acquired infections or multi drug resistant organisms as needed.

Active TB admissions

1. Continue to follow IC TB Plan.

HIV/AIDS

1. Continue to work with Florida Department of Health as necessary.

Flood

1. Work with Emergency Preparedness.
2. Yearly hurricane drills.

Waterborne Outbreak

1. Continue to monitor for waterborne organisms through Medmined and daily surveillance.
2. Work with facilities and consultant to identify risks in water management system.
3. Utilize CDC Legionella risk assessment.
4. Report to Florida Department of Health as necessary.

Food Associated Outbreaks

1. Adhere to established outbreak policy and procedure for outbreak management.
2. Continue to report positive cultures to Florida Department of Health.

Communicable Disease/Reportable to Florida Department of Health.

4. Continue to review and monitor ED and Medmined for positive cultures
5. Continue to report positive cultures to the Florida Department of Health

Healthcare Worker Risks

Goal #3: Reduction of healthcare worker risk of infection secondary to injury and/or exposure.

*Pareto Analysis reveals non-compliance with hand hygiene for independent HCWs as the highest risk. The remaining 4 risks identified in the Pareto analysis were non-compliance with hand hygiene for staff, blood and body fluid exposure, delay in proper isolation precautions and failure to follow protocols and use of safety devices or PPE. All risks to healthcare workers are followed by both Employee Health and Epidemiology and presented at Environment of Care Committee.

<i>Indicator</i>	<i>Population</i>	<i>Plan</i>	<i>Benchmark</i>	<i>Team</i>	<i>Methodology</i>
Non-compliance with hand hygiene for independent HCWs	All LIPs	Strive for 100% of hand hygiene compliance.	BHCS target: 90%	IP Administration RMO Chief of Staff	<ol style="list-style-type: none"> 1. Monitor compliance in all areas of hospital. 2. Updated poster campaign by corporate marketing. 3. Compliance reported at Patient Safety Quality Council monthly meetings. 4. Compliance reported at the quarterly ICC meeting. 5. Updated BHCS Hand Hygiene plan. 6. Continue to use recognition program to identify HCWs who perform hand hygiene by providing a business card with a lifesaver candy and a “thank you for being a life saver” note. 7. Just in time education and reinforcement. 8. Hand hygiene education at every New Hire Orientation.

					9. Meetings with RMO to engage medical staff.
Non-compliance with hand hygiene for staff HCWs	All employees, physicians, students, volunteers	Strive for 100% of hand hygiene compliance.	BHCS target: 90%	IP Administration	<ol style="list-style-type: none"> 1. Monitor compliance in all areas of hospital. 2. Updated poster campaign by corporate marketing. 3. Compliance reported at Patient Safety Quality Council monthly meetings. 4. Compliance reported at the quarterly ICC meeting. 5. Updated BHCS Hand Hygiene plan. 6. Continue to use recognition program to identify HCWs who perform hand hygiene by providing a business card with a lifesaver candy and a “thank you for being a life saver” note. 7. Just in time education and reinforcement. 8. Hand hygiene education at every New Hire Orientation.
Blood and body fluid exposure	All employees, physicians, students, volunteers	Decrease needle sticks, splashes, other preventable exposures.	BHCS target: 90%	IP EH Administration	<ol style="list-style-type: none"> 1. Monitored by Employee Health. 2. EH to continue to monitor and report to ICC and EOC. 3. IP rounding. 4. Just in time education and remediation as needed.
Employee Knowledge Deficit of Disease Transmission	All employees, physicians	Increase awareness of pandemic and knowledge of coronaviruses, and COVID 19	BHCS target: 90%	IP Administration Clinical Education Nurse Managers Regional Managers of all departments	<ol style="list-style-type: none"> 1. Need2Know flyers 2. In-person education to every department at the beginning of the pandemic to ensure education. 3. Education also performed on off site and on the weekend. 4. Continue to present relevant education on disease transmission in nursing orientation 5. Infection control and Clinical Education

					<p>to educate all nursing on the need to place order for isolation in computer system.</p> <ol style="list-style-type: none"> 6. Daily review of isolation log. 7. Will educate nursing on a case by case basis on the requirements for isolation. 8. Monitor disease alert and evaluate timeliness of implementation of transmission based precautions. 9. Monitor isolation log, chart for sticker, sign and PPE on door. 10. Continue to education and update HCW as needed as updates from CDC were made.
Failure to recognize employee outbreak	All employees, physicians, students, volunteers	Decrease needle sticks, splashes, other preventable exposures.	BHCS target: 90%	IP EH Administration	<ol style="list-style-type: none"> 1. IP rounds to reinforce infection control measures. 2. Reeducation of PPE requirements for all staff. 3. Hand hygiene. 4. Education with flyers as needed. 5. Follow outbreak policy 6. Ensure staff maintain infection control measures when on break and not on duty

Other Identified Events:

Non- compliance with standard precautions

1. Continue to educate nursing at orientation and periodically on standard precautions according to policy.
2. IP rounding.
3. Just in time education and remediation as needed.

Failure to follow protocols and use safety devices or PPE

Utilize HAS reports with risk management, Patient and Medication Safety meeting, and Nurse Practice Council to address any staff infection control issues.

1. IP rounds to engage and education staff.
7. Daily surveillance and MedMined analysis.
8. IP rounds to reinforce protocols, use of safety devices, proper PPE.
9. Revised isolation signs to standardize with rest of Broward Health. Signs to include new recommendations for transport of patients on isolation as well as PPE requirements in 3 different languages.
10. Reeducation of PPE requirements for visitors of patients on Airborne Isolation and provided sign to put on door specifically for visitors.

Environmental Risks

Goal #4: Reduction of environmental risk.

*Pareto analysis reveals improper sterilization of equipment /medical device as the highest risk priority. The remaining top 4 risks identified in the Pareto Analysis were: improper environmental cleaning, improper handling of biohazardous waste, inadequate high level disinfection of medical devices and inadequate supplies of personal protective equipment.

<i>Indicator</i>	<i>Population</i>	<i>Plan</i>	<i>Benchmark</i>	<i>Team</i>	<i>Methodology</i>
Inadequate supplies of PPE	All staff	Maintain adequate supplies of all PPE in all departments.	BHCS target: 90%	Materials	<ol style="list-style-type: none"> 1. Materials management responsible for maintaining par levels of PPE on each nursing unit in the facility. 2. Utilize new PPE calculator from the CDC to assess PPE based on Ebola admission or PUI (Persons under investigation) per Emergency Management 3. IP partnership with Material Management
Improper environmental cleaning	EVS staff	Compliance with proper cleaning protocols and products.	BHCS target: 90%	EVS	<ol style="list-style-type: none"> 1. Partnership with epidemiology and EVS. 2. EVS maintains pivotal role in Infection Prevention and Control Committee. 3. IP Rounding 4. IP Education to EVS staff

					5. Black light validation
Improper handling of biohazardous waste	All staff	Reduce misuse of red bag biohazard waste.	BHCS target: 90%	All employees	<ol style="list-style-type: none"> 1. EOC rounds to check biohazard waste. 2. DOH inspections. 3. Education of Staff
Improper high level disinfection of medical devices	All staff	Compliance with proper disinfection protocols and products.	BHCS target: 100%	All employees	<ol style="list-style-type: none"> 1. GI and Radiology department to monitor all high level disinfection process 2. Follow and adhere to all policies regarding high level disinfection 3. Follow all manufactures instruction for use with all AERs. 4. Infection Control to investigate any cases reported of improper high level disinfection.
Improper sharps handling	All staff	Follow all manufacturer's instruction for use. Education with new products	BHCS target: 90%	Materials	<ol style="list-style-type: none"> 4. Clinical education responsible for training all staff on proper use of medical devices/sharps. 5. IP partnership with Clinical Education

Other Identified Events

Failure of Negative Pressure Ventilation

1. Adhere to existing process for failure of negative pressure ventilation. Refer to Infection Control Policy # 21 *Isolation Room Checks*.
2. Facilities to ensure compliance with monthly temp and humidity measures in surgical environment per standards.

Inadequate Preconstruction IC Planning and & Risk Assessment

1. Partnership with facilities regarding early notification of future construction projects.

Surgical Services Environmental controls (air exchange, temp, humidity monitoring fallout)

1. Facilities to monitor and any alarms to sound in PBX and notify surgical services and Women's Services Manager.
2. Notification of alarms to managers of department on off hours.