



## EVALUATION OF THE SURVEILLANCE, PREVENTION AND CONTROL OF INFECTION PROGRAM PLAN CALENDAR YEAR 2020

This Program Evaluation is based in part on outcomes achieved during calendar year 2020. Outcomes are identified through review of performance measurement data, information resulting from Broward Health North (BHN) committees, team meetings and multidisciplinary rounds as well as interviews and discussions conducted with staff and leaders throughout Broward Health North and in collaboration with other Broward Health facilities.

The Infection Prevention and Control Program is an organization wide program that provides for surveillance, prevention and control of infections in patients, employees, students, Licensed Independent Practitioner (LIP), physicians, and all visitors to the organization. The Plan addresses epidemiologically important issues of infections, surgical site infections, and healthcare associated infections hospital wide, epidemiologically important and antibiotic resistant organisms, and reporting of communicable disease to the public health authorities. The Plan addresses all aspects of Infection Prevention and Control activities and education. This Plan is appropriate for the size and complexity of the medical center and includes assessment and prioritization of infection risks, recommendation for the implementation of strategies to reduce or eliminate the prioritized risks and is reviewed on a continual basis.

UNIT	Total infections for each unit CY 19	Total infections for each unit CY 20	CY20 CLABSI	CY20 SSI	CY20 CAUTI	CY20 MRSA bac	CY20 CDiff	CY20VAC**
MICU	9	18	2	0	1	0	7	8
SICU	15	8	1	0	1	0	0	6
3SE	4	3	0	0	0	0	3	0
3NE	1	2	0	0	1	0	1	0
REHAB	0	6	1	0	2	1	2	0
CSCU -5	11	10	2	0	1	1	6	0
NEUROTELE-6	12	5	2	0	1	1	1	0
NSD	5	4	3	0	0	0	1	0
SCU – 7E	3	4	1	0	0	1	2	0
MI OF – 7W	0	8	0	0	1	0	2	5
SMCU -8	2	4	1	0	1	0	2	0
SURGTELE -9	6	0	0	0	0	0	0	0
CICU	4	11	2	0	1	0	1	7
OR(Colon& Hys)	12	4	0	0	0	0	0	0
<b>Total CY 2020</b>		<b>87</b>	<b>15</b>	<b>22</b>	<b>10</b>	<b>4</b>	<b>28</b>	<b>26</b>
<b>Total YTD 2019</b>	<b>84</b>		<b>13</b>	<b>12</b>	<b>18</b>	<b>10</b>	<b>27</b>	<b>4</b>

\*\* Ventilator Associated Event includes VAC, IVAC, PVAP.

Medicare	14.4 %
Medicaid	3.3%
HMO/PPO Medicare	17.3%
HMO Medicaid	13.4 %
HMO Other/PPO	22.4 %
Commercial/WC/H	5.1 %
Self Pay	20.2%
Charity	3.8 %

Average age: 50

**Scope of Program**

BHN is a 409 bed Adult Level II Trauma Center located in Deerfield Beach, Broward County, Florida providing tertiary care across a continuum of services from inpatient, outpatient, emergency, rehabilitation, and select community health services. Patient populations include medical-surgical specialties and subspecialties including but not limited to trauma, intensive care, cancer, orthopedic, neurology, renal, pulmonary, diagnostics, endoscopy, and rehabilitation.

**Targets**

The following top organizational risk priority targets identified from the CY2020 Broward Health North Infection Control Risk Assessment, 2020 Annual Plan Evaluation and 2020 PMR data analysis (targets adopted to reduce harm by 3.5%, Value Based Purchasing performance achievement threshold, CDC, NHSN data and historical trends) were:

1. Provide a program for surveillance and reporting of a device related infection to include central line associated blood stream infection (CLABSI), catheter associated urinary tract infection (CAUTI), and ventilator associated events (VAE).	2020 BHN target	2020 Final	2021 Goal
<b>CLABSI</b> <u>Central Line Infections</u> Central Line Days X 1000 = Rate per 1000 Central Line Days  SIR = observed/predicted	0.90  0.784	1.11  0.478	1.00  0.43
<b>CAUTI</b> <u>Urinary Catheter Infections</u> Urinary Catheter Days X 1000 = Rate per 1000 Urinary Catheter Days  SIR = observed/predicted	0.46  0.828	0.91  0.381	0.82  0.34
<b>VAE</b> <u>Ventilator Associated Events (VAC, IVAC, PVAP)</u> Ventilator Days X 1000 = Rate per 1000 Ventilator Days	VAC - 3.40 IVAC - 0.00 PVAP - 0.28	0.6 0.1 0.3	VAC: 0.54 IVAC: 0.09 VAP: 0.27

**Analysis**

- Infections are identified from prospective surveillance by the Epidemiology nurses.
- Infection rates are monitored for trends above the benchmark which would require immediate investigation, identification of opportunities for improvement and implementation of corrective action items.
- Monthly reports are submitted to BHN Infection Prevention and Control Committee.
- Priority is given to device related infections based on risk assessment and analysis of collected data which is evaluated on an ongoing basis to provide immediate intervention when indicated to reduce or prevent infection.
- Communicated with nurse managers and administration during weekly management huddle on lessons learned to prevent infection.
- Epidemiology will continue to monitor and communicate findings with the appropriate stakeholders.
- No new units added for public reporting.
- Increase of infections related to dialysis lines. Meet with contracted dialysis manger and instituted an action plan. Manager to identify trends in employees. Competency on dressing changes. Dialysis Coordinator to proactively discuss discontinuing dialysis lines when applicable. (Patients who have not received dialysis in several days and lab values are

within normal limits)

**Effectiveness**

- **CLABSI**

- Increase in number of CLABSI from CY 2019 (13) to CY 2020 (15). However, SIR down from 0.877 in 2019 to 0.478.
- **CLABSI rates impacted by COVID-19 pandemic.**
- Compliance with evidence based best practices as well as continuing improvement solutions to reduce CLABSI. Epidemiology and nurse management daily rounding included ongoing interventions, line necessity, discontinuation or an alternative to the central line, line dressing surveillance, and hand hygiene.
- Daily Chlorhexidine bath for patients with CVC lines was implemented facility wide.
- Monitor for the identification of opportunities for improvement and implementation of corrective action items.

- **CAUTI**

- Decrease in CAUTI from CY 2019 (18) to CY 2020 (10)
- There was a no significant decrease in Foley days (11,685 CY 2019) and (10,954 CY 2020).
- Compliance with evidence based best practices as well as continuing improvement solutions to reduce CAUTI such as: facility wide nurse driven Urinary Catheter Removal Protocol using HOUDINI indications which included discontinuation and alternatives to the indwelling catheter, improved awareness and communication (patient hand- off), Epidemiology team follow up with physicians regarding indwelling catheter necessity, ICUs increased Foley and peri care to every 4 hours using an antimicrobial solution ,“WHAT and WHY” communications created for nursing staff, Epidemiology and nurse management daily rounding included ongoing interventions; Foley necessity, education and Foley care surveillance.

- **VAE**

VAP: 0.60-CY 2019 compared to 0.30 CY 2020  
 VAC: 2.0 -CY 2019 compared to 0.60 CY2020  
 IVAC: 0.4 CY 2019 compared to 0.10 CY 2020

- Prospective surveillance continued all ventilated patients in house is done on Mondays, Wednesdays, and Fridays so a change in oxygenation can be identified in real time.
- Analysis of the data reviewed at the Infection Prevention and Control Committee and subsequently by the Respiratory Coordinator and ad hoc meetings as necessary revealed a need to re-educate respiratory therapists regarding VAE criteria.
- Early recognition of VAEs prevents a decline in patient’s respiratory status by initiating additional modalities to improve the patient respiratory condition, i.e. increased inspiratory time on the ventilator, using the bed percussion to mobilize secretions, increased frequency with repositioning patient, and concentration on evidence based bundle to prevent pneumonia.
- The VAP bundle continues to be utilized.
- Epidemiology monitors for VAC, IVAC, and Possible Ventilator Pneumonia.
- Collaboration with respiratory therapy, the trauma service as well as Pulmonary and other appropriate stakeholders continues on an ongoing basis.

2. Carry out systemic program surveillance and reporting of all Class I and II surgical site infections.		2020 BHN target	2020 Final	2021 Goal
<b>Surgical Site Infections</b>	SSI Class I	0.28	0.45	0.40
<b>Surgical Procedures Completed X 100 = SSI Rate</b>	SSI Class II	1.23	0.9	0.8
<b>SIR: observed predicted</b>	Hysterectomy	0.722	NA	0.722
	Colon	0.781	0.363	0.325
<b>Analysis</b>				
<ul style="list-style-type: none"> <li>• Class II surgeries Target is 1.23 CY 2020 and our final number is 1.32 for CY 2020.</li> <li>• Colon surgery SIR (0.363) was below VBP threshold.</li> <li>• Class I surgeries was above benchmark.</li> <li>• Analysis of the all SSI data reviewed at the Infection Prevention and Control Committee.</li> <li>• Intense analysis of colon infections with Action Plan that includes all SSI prevention.</li> <li>• Drill down on all SSI infections with an opportunity to discuss lessons learned</li> </ul>				
<b>Improvement Solutions</b>				
<ul style="list-style-type: none"> <li>• New Performance Improvement team for 2021 to work on SSI Reduction</li> </ul>				

- Gap analysis and action plan regarding strategies supported by evidence-based medicine to reduce SSI which includes: preoperative bathing with Chlorhexidine, pre-surgical glucose monitoring, and surgical site scrub with Chlorhexidine, silver coated antimicrobial dressing (ACTICOAT), weight based antibiotic dosing, appropriate antibiotic selection for patients susceptible or likely to have MRSA, and antibiotic re-dose as needed.
- Re-education was provided to clinical staff regarding pre-op Chlorhexidine bathing; the antibiotic, time given, and re-dosing time are written on the individual OR rooms white board. Patient education “How to Prevent SSI” continues to be included in admission packet.

**Effectiveness**

- Surveillance of evidence based best practices as well as the improvement solutions remain on-going to maintain a downward trend with reducing colon surgery infections as well as class I and II SSI.
- Interventions are ongoing.

3. Management and reducing risk for acquiring and transmitting infectious agents like multi-drug resistant organisms (MDROs) and <i>Clostridium difficile</i> (CDIFF)		2020 BHN target	2020 Final	2021 Goal
CRE		0.01	0.01	0.01
VRE	<b># of patients with MDRO</b> <b># of patient days x 1000 =</b>  <b>MDRO rate</b>	0.01	0.07	0.06
RAS		0.01	0.01	0.01
ESBL K. Pneumo		0.01	0.05	0.09
ESBL E.coli		0.12	0.01	0.01
MRSA rate		0.30	0.17	0.15
CDIFF rate		2.85	3.46	3.10
MRSA bacteremia SIR		<b>SIR: <u>observed</u></b>	0.815	0.454
CDIFF SIR	<b><u>predicted</u></b>	0.852	0.543	0.489

**Analysis**

- Increase in CDIFF overall from CY 2019 to CY 2020. CY 2019: 3.17 compared to CY 2020: 3.46; however, the SIR 2020 (CMS) is 0.543 versus 0.852 in 2019.
- Overall MRSA bacteremia CY 2019: 0.12 compared to CY 2020: 0.05.
- Early identification of patients colonized or infected with resistant organisms or other infectious organisms and immediate transmission based isolation of these patients reduced and prevented further transmission.
- Epidemiology nurses performed daily surveillance of cultures from patients admitted with or developing infection.
- Individual patient positive MDRO results were entered into an ALERT data base system which is activated to display with subsequent patient visits. The ALERT screen enabled hospital staff to imitate transmission based precautions as indicated from the screen information.
- The Epidemiology nurses also monitored the daily ED visit log, admission log, disease alert log and isolation log. These measures assist with identifying previously colonized or infected patients with resistant organisms and allowed the Epidemiology nurse to limit unprotected exposure to pathogens by taking immediate action with appropriate transmission based precautions.
- The Epidemiology department provided large amounts of information on transmission based precautions to all staff via unit based in-services.
- The CDC isolation precautions are uploaded to the general Broward Health intranet website as a resource for all staff to have access to.
- An Action Plan for hospital onset MDRO transmission including CDIFF and MRSA bacteremia was created with a multidisciplinary focus and continued promotion of the Antimicrobial stewardship program; enforcing strict hand washing when exiting rooms with patients on Enhanced Contact Isolation; Adherence to high touch surface cleaning with hypochlorite based solution. New Ultraviolet light (UVC) disinfection implemented in 2020. Facility bought a THOR UVC robot.
- We continued to implement Transmissions-Based Precautions and Standard Precautions, Hand Hygiene education, MDRO admission alerts, and frequent communication between clinical and nursing departments and Epidemiology.
- Continued active surveillance for CRE and Candida auris for international patients who were admitted to an international hospital for >48 hours.

**Effectiveness**

- Surveillance rounds and lab monitoring are mechanisms in which information is gathered. Individual clusters were and will continue be analyzed and interventions will be determined at that time.
- The Epidemiology team continuously strives to increase staff and physician education.
- Added Resistant Pseudomonas surveillance in 2020.

<b>4. Assure all Health Care Workers receive proper education on disease modes of transmission Department of Clinical Education will have 100% compliance on all assigned modules relating to Infection Control.</b>	<b>2020 BHN target</b>	<b>2020 Final</b>	<b>2021 Goal</b>
Compliance of education	100%	100%	100%
<b>Analysis/Effectiveness</b> <ul style="list-style-type: none"> <li>Health Stream was used to educate staff on disease transmission and prevention.</li> <li>Broward Health and BHN specific orientations were targeted with a robust presentation on infection prevention.</li> <li>Unit level in-services continued to be presented; organization wide skills fair was completed; in-service coordination with Environmental Services, Transport, Nutrition and the Environment of Care team helped reach many healthcare workers.</li> <li>All hospital staff and LIPs are required to comply with mandatory in-service education about the prevention of health care associated infections, multi-drug resistant organisms, and prevention strategies, at hire and annually thereafter.</li> <li>All nursing staff is required to complete education about prevention of central line associated blood stream infections, catheter associated urinary tract infections, and ventilator associated pneumonia, surgical site infections, and transmission of multidrug-resistant organisms.</li> <li>Education is provided to all patients and families who are infected or colonized with a multidrug-resistant organism about health care associated infection prevention strategies.</li> <li>Educational materials are approved by the Infection Prevention and Control Committee, provided on the intranet or printed and used to educate staff, patients and families.</li> </ul>			

<b>5. Prevent unprotected exposure to pathogens (i.e. seasonal flu, pandemic flu, influx of infectious patients, active TB patients and patients with history of MDRO, unusual clusters of organisms or HAI). Monitor the inpatient and outpatient traffic for any potential cases of active TB or increase in influx of infectious patients.</b>	<b>2020 BHN target</b>	<b>2020 final</b>	<b>2021 Goal/ Expectation</b>
MDRO Trends/Identification	Zero. Ongoing monitoring and surveillance and will intervene as necessary.	Zero. Continued to monitor and intervene as necessary.	Zero. Ongoing monitoring and surveillance and will intervene as necessary.
TB Influx Trends			
Influx of Infectious Patients			
<b>Analysis</b> COVID-19 March 2020 <ul style="list-style-type: none"> <li>CDC guidelines for patient care were initiated and maintained</li> <li>Donning and Doffing competency</li> <li>Hand Hygiene Competency</li> <li>First positive patient admitted; DOH screening and testing.</li> <li>COVID-19 Nursing Unit established</li> <li>COVID-19 ICU established</li> <li>Quest laboratories started testing for COVID-19</li> </ul> April 2020 <ul style="list-style-type: none"> <li>Testing for COVID-19 via Sepheid/Gene Xpert initiated and Panther platform followed</li> <li>Mandatory masking</li> </ul> December 2020 <ul style="list-style-type: none"> <li>First dose of Pfizer vaccine given to staff</li> </ul> Exposures <ul style="list-style-type: none"> <li>There were 0 TB exposures, 0 meningitis exposures, 0 varicella exposure, 0 shingles exposures, and 0 mumps exposure for CY 2020. Each exposure was followed by Employee Health. There were no detected transmissions.</li> <li>No unusual clusters of organisms or HAI. If necessary, cohorting of patients and staff can be utilized to decrease spread of infection.</li> <li>The surveillance plan based on prioritized risk of transmission of diseases identified in our community and from the characteristics of the population served was developed and approved by the Infection Prevention and Control</li> </ul>			

Committee.

- The surveillance plan is carried out by the Epidemiology nurses on an ongoing basis resulting in prevention of disease transmission to patients, hospital staff, LIPs, students, volunteers and visitors.
- Epidemiology identifies risks for acquisition and transmission of infectious agents on an ongoing basis (MDROs, C. difficile, TB, Influenza) and annual risk assessments.
- There is a high incidence of TB in Broward County which requires constant surveillance to identify suspect cases. This is included in the risk analysis of reported data as intermediate risk and requires close monitoring to prevent transmission.
- There are also a large number of indigent patients admitted from the community with other types of communicable conditions including head and body lice and scabies. These patients are monitored closely for appropriate transmission based precautions and treatment to prevent transmission.

**Performance:**

- BHN will continue to actively track and trend the traffic of patients for any increase influx of patients and/or need to implement the Pandemic Plan.
- Epidemiology nurses performed daily ongoing surveillance through the monitoring of admissions logs, Emergency Dept. logs, admit alert reports, microbiology candidate reports and walking rounds helped identify influx of infectious patients. We met the goal of identifying trends and clusters.
- The ESSENCE reporting system that identifies syndromic trends through the ER was used to coordinate surveillance with the Broward County Department of Health.
- A database for TB reporting to the Health Dept. was utilized to maintain a record of communication.
- Laboratory screening for Inpatient Rehab Unit: Urine cultures were done upon admission for external patient admissions. This practice is being reviewed and revised by IRU medical leadership team.
- Early identification of patients colonized or infected with resistant organisms, TB, influenza or other infectious organisms and immediate transmission based isolation of these patients reduced and prevented further transmission.
- Individual patient positive MDRO results are entered into an ALERT data base system which is activated to display with subsequent patient visits. The ALERT screen enables hospital staff to initiate transmission based precautions as indicated from the screen information. The Epidemiology nurses also monitored the daily ED visit log, admission log, disease alert log and isolation log. These measures assist with identifying previously colonized or infected patients with resistant organisms and allowed the Epidemiology nurse to limit unprotected exposure to pathogens by taking immediate action with appropriate transmission based precautions.

**Effectiveness**

- All blood and body fluid exposures documented in CY 2020 were followed up by Employee Health and resulted in zero transmissions.
- No TB conversion from exposures.

6. Improve hand hygiene and equipment disinfection	2020 BHN Target	2020 Final	2021 Goal
Hand hygiene surveillance (Self Report and Observed)	90%	97%	97%
Equipment disinfection surveillance	90%	No data	90%

**Analysis/Effectiveness**

- Utilize staff on Infection Prevention and Control Committee and Patient and Medication Safety Committee to increase number of direct observers for extra hand hygiene surveillance data.
- Staff from various units completed hand hygiene and equipment disinfection surveillance forms each month.
- Epidemiology conducted observations while rounding on units.
- Teachable moments used to encourage hand hygiene if noncompliance was observed.
- Epidemiologists provide ongoing staff and student education and observation for compliance with Standard Precautions with emphasis on hand hygiene and equipment disinfection. Observers continue to use the revised hand hygiene and equipment disinfection observation form (2014). This monitoring tool allows for immediate feedback to the staff member for compliance or non-compliance with hand hygiene and equipment disinfection. Sustained improvement with hand hygiene and equipment disinfection continues.
- Infection prevention educational handout was provided to forensic staff assigned to inpatients.

7. Promote and improve seasonal flu immunization organization wide	2019-2020	2020-2021	2020-2021 goal
HCW Influenza immunization rate	90.5%	62.3%	68.5 %

**Analysis**

- There were 1,431 staff (including medical staff) vaccinated at BHN in 2020/2021 influenza season. This represents an 62.3 % vaccination compliance. This was down from the prior influenza season 90.5 %.

- CY 2021 data will include a robust increase in physician numbers due to sharing of information at each Broward Health hospital.
- Influenza vaccine program is initiated in September and continues through March for all staff, volunteers, medical staff, and LIPs. Nursing offers vaccination to inpatient patients meeting recommended guidelines during influenza vaccine season.
- Vaccination is administered in Employee Health during the entire flu season as well as times when mobile vaccination carts attend units and meetings.
- Mandatory influenza education is provided to all hospital staff via Health Stream, newsletters, and educational brochures are used to educate staff, physicians, and LIPs about the importance of influenza immunization..
- Declination forms are used to monitor the reasons given for declining the vaccine as well as the effect of educational interventions.

**Effectiveness**

- Vaccination was promoted and the Epidemiology team collaborated closely with Employee Health to vaccinate staff.
- Discussion of mandatory vaccination has been presented at the Infection Prevention and Control Committee multiple times.
- Employees who decline the flu vaccine required religious or medical exemption
- Epidemiology in collaboration with employee health will continue to explore methods to increase the rate of flu vaccination among health care workers. Our goal is to obtain 72 % vaccination rate compliance of employees by 2022 by improving vaccination rates by 10% annually.

8. PMR Review	2020 Target	2020 Final	2021 Goal
<b>Endotoxin</b>	100%	100%	100%
<b>Water Cultures</b>	100%	100%	100%
<b>Dialysate Culture</b>	100%	100%	100%
<b>Transmission based precautions initiated</b>	100%	100%	100%
<b>Reporting to state, federal, local public health authorities</b>	100%	100%	100%
<b>Sterilizer/Steris Monitoring</b>		100%	100%

**Analysis**

- Epidemiology has one-on-one discussion with nurse to remind them about the importance of placing transmission based precautions order in EMR to facilitate communication between departments.
- Tracking of cultures for water, dialysate and endotoxin continues. Cultures collected monthly. Results communicated to Epidemiology, DaVita (company contracted to provide dialysis services) as well as to the dialysis manager.
- Sterile Processing action plan in place to ensure compliance.
- Epidemiology monitors endotoxin and water cultures for the reverse osmosis water system cultures and dialysis machines cultures monthly.
- Epidemiology evaluates cleaning procedures and solutions used by Environmental Services.
- EOC/Infection Prevention rounding team observed for EOC compliance throughout the hospital and forwarded non-compliance issues requiring corrective actions to the responsible area when indicated.
- All disinfectants are approved by the Infection Prevention and Control Committee. Education regarding the product use is provided to the EVS staff by the EVS management team as well as the product vendors.
- The ICRA (Infection Control Risk Assessment) for all construction and renovation projects is carried out on a continuing basis with numerous projects reported throughout the year through the Infection Prevention and Control Committee. The Epidemiology nurse rounds in the construction areas to ensure appropriate ICRA measures are maintained during the construction period to reduce infection transmission.
- Educational brochures, posters and information sheets are used to educate patients, visitors, families and licensed independent practitioners regarding responsibilities for preventing infections and infection transmission within the hospital.
- Infections identified after patient discharge or transfer is reported to the receiving organization immediately following review of the data per Infection Control Policy. Patients received from another organization with an infection requiring action are also reported to the transferring organization.
- The hospital has a system for reporting infection surveillance, prevention and control information to appropriate staff within the hospital, federal, state, and local public health authorities, accrediting bodies and referring or receiving organizations when a patient was transferred or referred and the presence of an infection was not known at the time of transfer or referral.

**Effectiveness**

- In addition to the routine immediate fax reporting of reportable infections to the Health Department there were several telephone reports and faxing to other facilities required during CY 2020.
- Microbiology telephone notification for specific pathogens has been effective in early intervention by Epidemiology

with appropriate transmission based precautions and notification to the inpatient care area as well as Broward County Health Department when indicated.

- The Epidemiology nurse rounds, utilizing the isolation log to monitor transmission based precautions compliance. Appropriate use of PPE, hand hygiene and Environment of Care (EOC) compliance are monitored during these rounds as well, with reports submitted to appropriate managers for review and corrective action when indicated.
- Surveillance data is reported monthly to the Infection Control Committee and Quality Council.

<b>9. Infection Prevention and Control Program Plan, Evaluation of the Plan, Risk Assessment, Flu Plan, TB Plan, Policies and Procedures are reviewed and updated annually. Plans include policies and procedures for minimizing risk of transmitting infection associated with use of procedures, medical equipment, medical devices, and products.</b>	<b>2020 Target</b>	<b>2020 Final</b>	<b>2021 Goal</b>
Program policies and procedures completed	100%	100%	100%
Epidemiologist Coordinator, Certification in Infection Control	100%	100%	100%
Nurse Epidemiologist, APIC trained	100%	100%	100%
Medical Director, Board Certified Infectious Disease Physician	100%	100%	100%

**Analysis**

- The Comprehensive Infection Control Risk Assessment for CY2021 was presented to the Infection Prevention and Control Committee for review, recommendations and approval.
- The effectiveness of the Infection Control Plan as outlined in the Annual Evaluation of the Program was presented for approval to the Infection Prevention and Control Committee and Medical Council. The goals of the program are revised whenever risks significantly change or when assessment of the intervention failure is identified. The National Patient Safety Goals included in the Plan are also evaluated on an ongoing basis and effectiveness documented.
- The Infection Prevention and Control Committee shall meet at least monthly no less than nine (9) times per year. The Committee structure includes the Committee chair (Infectious Disease physician), staff physicians, administration, nursing, pharmacy, lab, nutritional services, environmental services, surgery, safety, facilities, employee health nurse and other departments as needed. Indicator compliance and action plans are forwarded monthly to Quality Council. Items for approval are forwarded to Pharmacy and Therapeutics Committee and then to Medical Council.
- Computer technology is utilized for analysis, trending and tracking of infection surveillance data.
- Continuing education opportunities are encouraged and financially supported by leadership on an ongoing basis.
- All areas surveyed for construction were found to be fully ICRA compliant during CY 2020

**Effectiveness**

- All of the prioritized risks were reviewed and evaluated. Goals of the IPC program will be revised for the coming calendar year based on the effectiveness of the interventions identified in the previous plan.
- Epidemiology monitored sterilization and high level disinfection processes within the medical center. Ongoing review of the monitoring reports submitted by all departments utilizing a sterilization/high level disinfection process is effective in identifying deficiencies or problems immediately and initiation of recall procedures when necessary. Data are reported to the Infection Prevention and Control Committee on the monthly PMR.
- Epidemiology and Endoscopy Departments remained vigilant and compliant with FDA Safety. Compliance with updates regarding the endo scopes is ongoing.
- The Epidemiologists are members of the national and local chapter of their professional organization and receive education related to Epidemiology/ Infection Prevention and Control on an ongoing basis.
- Significant improvement in analysis of surveillance data has been accomplished with increased utilization of Excel spreadsheets and MedMined surveillance over the calendar year. This has provided more accurate analysis to better prioritize our risks and set new goals for the coming calendar year.

**The Joint Commission Standards Evaluation**

<b>STANDARD</b>	<b>ELEMENTS OF PERFORMANCE</b>	<b>EFFECTIVENESS</b>
<b>IC.01.01.01</b> Does the organization identify the individual(s) responsible for the infection prevention and control program?	1. Does the organization identify an individual(s) with clinical authority over the infection prevention and control program?	1. Authority statement in the IC Annual Plan. 2. Dr. Indulekha Gopal, Medical Director of Epidemiology, Infectious Disease physician 3. Staff position descriptions, experience, licenses and certifications
	2. When the individual(s) with clinical	1. Medical Director of Epidemiology, Infectious

	<p>authority over the infection prevention and control program does not have expertise in infection prevention and control, he or she consults with someone who has such expertise in order to make knowledgeable decisions.</p>	<p>disease physician available 24/7, 365 days a year.</p> <p>2. Other district organizations provide collegial/ expert support (Epidemiologist on –call)</p>
	<p>3. The organization assigns responsibility for the daily management of infection prevention and control activities (see also HR .01.02.01, EP 1, LD .02.01.01, EP 3) Note: Number and skill mix of the individual (s) assigned should be determined by the goals and objectives of the infection prevention and control program.</p>	<p>1. Comprehensive surveillance and analysis of epidemiological data is completed by 2 full time epidemiologists on a daily basis.</p> <p>2. Epidemiologists identify and intervene to assist the facility and its various departments in preventing transmission of infection.</p> <p>3. The annual risk assessment and evaluation help to create the annual plan for the Epidemiology Dept. The plan may change to meet unforeseen priorities.</p>
	<p>4. "For hospitals that use Joint Commission accreditation for deemed status purposes: Is the individual with clinical authority over the infection prevention and control program responsible for the following:</p> <ul style="list-style-type: none"> <li>- Developing policies governing control of infections and communicable diseases?</li> <li>- Implementing policies governing control of infections and communicable diseases?</li> <li>- Developing a system for identifying, reporting, investigating, and controlling infections and communicable diseases?"</li> </ul>	<p>1. The Medical Director of Infectious Diseases, Epidemiology department Director, Coordinator and Epidemiologist work together to develop and implement policies that prevent the spread of infection. The team investigates, responds and intervenes to prevent and contain communicable diseases. These events are reported to the Infection Prevention and Control Committee and the Quality Council as well as other unit-based committees. Communicable diseases are reported to the Broward County Department of Health.</p>
<p><b>IC.01.02.01</b> Do the organization leaders allocate needed resources for the infection prevention and control program?</p>	<p>1. Does the organization provide access to information needed to support the infection prevention and control program? (See IC.01.01.01, EP 2; IC.01.03.01, EP 3; IC.01.05.01, EPs 1 and 2; IC.01.06.01, EP 2; IC.02.01.01, EP 8; IC.03.01.01, EP 1; IM.02.02.03, EP 2)</p>	<p>1. The Epidemiology Department uses technology for data gathering, analysis, trending and tracking of infection surveillance data.</p> <p>Medmined Cerner Powerchart Cerner Surginet Cerner Reports/Alerts Microsoft Office Discern Analytics</p>
	<p>2. Does the organization provide laboratory resources when needed to support the infection control program? (See IC.01.05.01, EP 2)</p> <p>3. Does the organization provide equipment and supplies to support the infection control program. (See IC.01.05.01, EP 2 and LD.03.03.01, EP 4)</p>	<p>2. The Epidemiology team receives daily Candidate reports from the Laboratory and Microbiology for surveillance and analysis.</p> <ul style="list-style-type: none"> <li>a. Surveillance Report</li> <li>b. Quest Diagnostic reporting</li> <li>c. Phone alerts</li> </ul> <p>3. Lab serves as a resource when microbiological information is necessary (outbreak investigation, NHSN LabID event information).</p> <p>4. Computers, offices with equipment, phones, faxes, printers, copier and supplies.</p>
<p><b>IC.01.03.01</b> Does the organization identify risks for acquiring and transmitting infections?</p>	<p>1. The organization identifies risks for acquiring and transmitting infection based on the following: Its geographic location, community and population served ( see also</p>	<p>1 &amp; 2. The Infection Control Plan is based upon the population it serves and location. A description of the population can be found in the BHN specific Infection Control Plan. Surveillance data, communicable disease data as well as the Risk Assessment drive the plan.</p>

	<p>NPSG.07.03.01, EP 1)</p> <ol style="list-style-type: none"> <li>2. The care, treatment and services it provides. (see also NPSG.07.03.01, EP 1)</li> <li>3. The analysis of surveillance activities and other infection control data. (see also NPSG.07.03.01, EP 1; TS.03.03.01, EP2 )</li> <li>4. Does the organization reviews and identifies its risks at least annually and whenever significant changes occur with input from, at a minimum, infection control personnel, medical staff, nursing and leadership. (see also NPSG.07.03.01, EP 1)</li> <li>5. Does the organization prioritize the identified risks for acquiring and transmitting infections? These prioritized risks are documented. (see also, NPSG.07.03.01, EP 1)</li> </ol>	<p>3&amp;4. An infection control risk assessment is conducted annually and as needed (Cluster/outbreak) and presented to the Infection Prevention and Control Committee for approval.</p> <p>5. Risks are prioritized according to probability and impact utilizing a Pareto Diagram and incorporated into the annual plan.</p>
<p><b>IC.01.04.01</b> Based on the identified risks, the organization sets goals to minimize the possibility of transmitting infections. Note: See NPSG.07.01.01 for hand hygiene guidelines.</p>	<p>Do the organization’s written infection prevention and control goals include the following:</p> <ol style="list-style-type: none"> <li>1. Addressing its prioritized risks.</li> <li>2. Limiting unprotected exposure to pathogens</li> <li>3. Limiting the transmission of infections associated with procedures.</li> <li>4. Limiting the transmission of infection associated with the use of medical equipment, devices, and supplies.</li> <li>5. Improving compliance with hand hygiene guidelines. (See also NPSG.07.01.01)</li> </ol>	<p>The Infection Control Plan and Risk Assessment guide the Epidemiology department.</p> <ol style="list-style-type: none"> <li>1. Risks are prioritized by the Risk Assessment.</li> <li>2. Standard/Transmissions based precautions are followed. An electronic alert system identifies patients previously admitted with select MDROs.</li> <li>3. Routine surveillance of surgical and other procedures is conducted through Microbiology lab results, reports and by assisting in multi-disciplinary rounds and committees. The PMR tracks surgical procedures and the infection rates associated with them.</li> <li>4. Infections associated with medical devices are prevented by the maintenance of hand sanitizers, PPE and hospital improved disinfection wipes throughout clinical areas.</li> <li>5. Hand Hygiene is encouraged and promoted by maintaining hand sanitizer products in clinical areas, hand hygiene observation tracking, orientation education and in-services and fairs.</li> </ol>
<p><b>IC.01.05.01</b> Does the organization have an infection prevention and control plan?</p>	<ol style="list-style-type: none"> <li>1. When developing infection prevention and control activities, the organization uses evidence based, national guidelines or, in the absence of such guidelines, expert consensus.</li> <li>2. The organization’s infection prevention and control plan include a written description of the activities, including surveillance, to minimize reduce or eliminate the risk of infection.</li> <li>3. The organization describes, in writing, the process for investigating outbreaks of infectious diseases. (see also IC.02.01.01, EP 5)</li> <li>4. Are all organization components and</li> </ol>	<ol style="list-style-type: none"> <li>1. The organization follows CDC hand hygiene guidelines and CDC/NHSN definitions of organization acquired infections and</li> <li>2. The Infection Control Plan includes a written description of the activities, including surveillance, to minimize reduce or eliminate the risk of infection.</li> <li>3. The Infection Control Plan is updated annually and reviewed and approved by the Infection Control Committee.</li> <li>4. The Organization has a policy for investigating outbreaks. (Outbreak Management Plan).</li> <li>5. The Epidemiology team participates in Nursing Orientation for all Broward Health facilities level and presents Infection Prevention module to all BHN new hires. It also conducts annual updates and participates in various competency projects.</li> </ol>

	<p>functions integrated into infection prevention and control activities? (see HR.01.04.01, EPs 2 and 4 )</p> <p>5. The organization identifies methods for reporting infection surveillance and control information to external organizations. (see also IC.02.01.01, EP 9)</p>	<p>The organization reports communicable diseases to the local, state and federal Departments of Health and to other organizations when necessary. Faxed copies are stored and a daily log of number of cases is reported out to on the Performance Measure Review (PMR).</p>
<p><b>IC.01.06.01</b> The organization prepares to respond to an influx of potentially infectious patients.</p> <p><b>IC.01.06.01 cont'd</b> The organization prepares to respond to an influx of potentially infectious patients.</p>	<p>1. Does the organization obtain current clinical and epidemiological information from its resources regarding new infections that could cause an influx of potentially infectious patients?</p> <p>2. Does the organization have a method for communicating critical information to licensed independent practitioners and staff about emerging infections that could cause an influx of potentially infectious patients?</p> <p>3. The organization describes, in writing, how it will respond to an influx of potentially infectious patients. (See also EM.01.01.01. EP 2). Note: One acceptable response is to decide not to accept patients.</p>	<p>1. The organization utilizes frequent updates from the local health department and the Centers of Disease Control as resources. The ESSENCE, a statewide system alert system based on common syndromic presentations is monitored by the local and state Departments of Health for common symptoms among patients.</p> <p>2. Communication of critical information is communicated through various methods that utilize email, fax, phone, website updates and other methods.</p> <p>3. The Broward Health Comprehensive Emergency Management Plan and Pandemic Preparedness Plan in addition to the BH Emergency Management Operations Plan are located in the Environment of Care Manual and address the actions to take in case of an influx of infectious patients.</p>
<p><b>IC.02.01.01</b> Does the organization implement its infection and control plan?</p>	<p>1. The organization implements its infection prevention and control activities, including surveillance, to minimize, reduce, or eliminate the risk of infection.</p> <p>2. Does the organization use standard precautions, including the use of personal protective equipment, to reduce the risk of infection? (See also EC.02.02.01, EP 4) Note 1: Standard precautions are infection prevention and control measures to protect against possible exposure to infectious agents. These precautions are general and applicable to all patients.</p> <p>3. Does the organization implements transmission-based precautions in response to the pathogens that are suspected or identified within the organization's service setting and community.</p> <p>5. Does the organization investigate outbreaks of infectious disease? (See IC.01.05.01, EP 5)</p> <p>6. The organization minimizes the risk of infection when storing and disposing of infectious waste. (See also EC.02.02.01, EP 1&amp;12)</p> <p>7. Does the hospital implement its methods to communicate responsibilities for preventing and controlling infection to licensed</p>	<p>1. The Infection Control Program is directed by a full time Infectious Disease physician and managed by a Regional Manager of Epidemiology, Safety &amp; Quality, 4 Staff Epidemiologists (2 FT and 2 per diem). The Infection Control Committee has been given the authority for the Program and includes community and staff physicians, administration, pharmacy, dialysis, critical care adult nursing, microbiology, environmental services, surgery, education, quality, safety, facilities, employee health nurse and other departments as needed.</p> <p>1. Computer technology will be utilized for analysis, trending and tracking of infection surveillance data (MEDMINED).</p> <p>1. Continuing education opportunities are encouraged and financially supported by leadership on an ongoing basis.</p> <p>1. The Epidemiologists are on call and available on a 24/7 basis. The Director or designees are members of or attend all major organization committees.</p> <p>2. The organization educates and uses standard precautions and personal protective equipment for employees.</p> <p>3. Transmission based precautions according to CDC guidelines is implemented across the facility. An electronic alert system and electronic medical records assist in identifying patients with MDRO's</p> <p>5. The organization investigates outbreaks whenever</p>

<p><b>IC.02.01.01 cont'd</b> Does the organization implement its infection and control plan?</p>	<p>independent practitioners, staff, visitors, patients, and families? Information for visitors, patients, and families includes hand and respiratory hygiene practices? (See also HR.01.04.01, EP 4)</p> <ol style="list-style-type: none"> <li>8. Does the organization reports infection surveillance, prevention and control information to the appropriate staff within the organization?</li> <li>9. Does the organization report infection surveillance, prevention, and control information to local, state, and federal public health authorities in accordance with law and regulation? (See also IC.03.01.01, EP 6)</li> <li>10. When the organization becomes aware that it transferred a patient who has an infection requiring monitoring, treatment, and/or isolation, does it inform the receiving organization?</li> <li>11. When the organization becomes aware that it received a patient from another organization who has an infection requiring action, and the infection was not communicated by the referring organization, does it inform the referring organization?</li> </ol>	<p>suspect clusters or reports are obtained through surveillance activities.</p> <ol style="list-style-type: none"> <li>6. The organization maintains a current list of inventory of hazardous materials and waste, sharps containers, red bags and other protective products are used to guard infectious waste.</li> <li>7. The Epidemiology team and EOC team educate the staff through Health stream, in-services and orientation on hand hygiene, PPE and blood and body fluids exposures. The public is educated through brochures and handouts on the importance of infection prevention and hand hygiene.</li> <li>8. The Infection Control Committee, Patient Safety Care Key Group, EoC Committee and various Medical/Quality committees are informed</li> <li>9. The organization reports infection surveillance, prevention and control information to local, state and federal public health authorities in accordance with law and regulation. ESSENCE and HIV directly and others via phone, HL7 and fax.</li> <li>10. The organization informs receiving organizations when we become aware that we transferred a patient who has an infection requiring monitoring, treatment, and/or isolation, or if we receive such a patient. A log is maintained.</li> <li>11. The organization, if not communicated prior to transfer, informs the facility the patient was sent and infection identified on admission requiring monitoring, treatment and/or isolation.</li> </ol>
<p><b>IC.02.02.01</b> Does the organization reduce the risk of infections associated with medical equipment, devices and supplies?</p>	<ol style="list-style-type: none"> <li>1. The organization implements infection prevention and control activities when doing the following: Cleaning and performing low-level disinfection of medical equipment devices, and supplies. Note: low level disinfection is used for items such as stethoscopes, and blood glucose meters. Additional cleaning and disinfecting is required for medical equipment, devices, and supplies used by patients who are isolated as part of implementing transmission based precautions.</li> <li>2. Does the organization implement infection prevention &amp; control activities when doing the following: Sterilizing Performing intermediate, high-level disinfection and sterilization of medical equipment, devices, &amp; supplies? (See also EC.02.04.03, EP 4) Note 1: Sterilization is used for items such as implants and surgical instruments. High-level disinfection may also be used if sterilization is not possible, as is the case with flexible endoscopes.</li> <li>3. Does the organization implement infection prevention &amp; control activities when doing the following:</li> </ol>	<ol style="list-style-type: none"> <li>1. A policy for disinfection of high touch surfaces has is utilized. This policy is "Cleaning Protocol for Touch Surfaces in the Nursing Station/Clinical Areas and Frequently Used Non-Critical Medical Equipment".</li> <li>2. The Epidemiology Department tracks biological indicator data on a routine basis. All areas that conduct critical disinfection activities report sterilization reports to the Epidemiology department.</li> </ol> <ol style="list-style-type: none"> <li>1. Opportunities identified, and actions implemented. New Endoscopy log created to include negative reagent testing and pre-cleaning of OR instruments prior to transport to decontamination area. Education provided through huddles. Log audits: Education provided</li> </ol>

	<p>Disposing of medical equipment, devices, and supplies?</p> <p>4. Does the organization implement infection prevention &amp; control activities when doing the following: Storing medical equipment, devices, and supplies? Note: Surveillance may be targeted rather than hospital wide.</p> <p>5. When reprocessing single-use devices, the organization implements infection prevention and control activities that are consistent with regulatory and professional standards.</p>	<p>3 &amp; 4. Surveillance rounds conducted by Epidemiology and EoC that routinely monitor the disposal and storing of medical equipment.</p>
<p><b>IC.02.03.01</b> Does the organization work to prevent the transmission of infectious diseases among patients, licensed independent practitioners and staff?</p>	<p>1. Does the organization make screening for exposure and/or immunity to infectious disease available to licensed independent practitioners and staff who may come in contact with infections at the workplace?</p> <p>2. When licensed independent practitioners or staff have, or are suspected of having, an infectious disease that puts others at risk, the organization provides them with or refers them for assessment and potential testing, prophylaxis/ treatment or counseling?</p> <p>3. When licensed independent practitioners or staff have, have been occupationally exposed to, and infectious disease, the organization provides them with or refers them for assessment and potential testing, prophylaxis/ treatment or counseling?</p> <p>4. When patients have been exposed to an infectious disease, the organization provides them with or refers them for assessment and potential testing, prophylaxis/ treatment or counseling?</p>	<p>1. 2 and 3. Several policies outline the protocols that address screening for infectious diseases for LIP, staff and others; it also addresses responses to exposures. The policies are Broward Health Tuberculosis Infection Control Plan, Chicken Pox Exposure, and Blood borne Pathogen Plan.</p> <p>4. The Outbreak management plan, as well as the Blood borne pathogen plan, outlines the organization's response to patient exposures and potential follow-up.</p>
<p><b>IC.02.04.01</b> Does the organization offer vaccination against influenza to licensed independent practitioners and staff?</p>	<p>1. Does the organization establish an annual influenza vaccination program that is offered to licensed independent practitioners and staff?</p> <p>2. Does the organization educate licensed independent practitioners and staff about, at a minimum, the influenza vaccine; non-vaccine control and prevention measures; and the diagnosis, transmission, and impact of influenza. (See also HR.01.04.01, EP 4)</p> <p>3. The organization provides influenza vaccination at sites accessible to licensed independent practitioners</p>	<p>1. The Influenza Immunization Program is initiated October 1st and continues through March 31st for all staff, physicians, and LIPs as well as all patients meeting recommended guidelines.</p> <p>2. LIPs and staff are educated via health stream annually. Employee Health advertises availability of vaccination in the Health Office covering all shifts and also provides a mobile vaccination program to all the nursing units and departments at various times during the season. Declination forms are used to monitor the effect of intervention.</p> <p>3. Vaccination is offered on site, at an advertised schedule, and at other convenient times and locations.</p> <p>4. &amp;5. The goal of increasing vaccination rates by year</p>

<p><b>IC.02.04.01cont'd</b> Does the organization offer vaccination against influenza to licensed independent practitioners and staff?</p>	<p>and staff.</p> <ol style="list-style-type: none"> <li>4. Does the organization include in its infection control plan the goal of improving influenza vaccination rates? (For more information, refer to Standard IC.01.04.01)</li> <li>5. Does the organization set incremental influenza vaccination goals, consistent with achieving the 90% rate established in the national influenza initiatives for 2020?</li> </ol> <p>Note: The U.S. Department of Health and Human Services' Action Plan to Prevent Healthcare-Associated Infections is located at: <a href="http://www.hhs.gov/ash/initiatives/ha/hcpflu.html">http://www.hhs.gov/ash/initiatives/ha/hcpflu.html</a>.</p> <ol style="list-style-type: none"> <li>6. Does the organization have a written description of the methodology used to determine influenza vaccination rates? (See IC.02.04.01, EP 1)</li> <li>7. Does the organization provide influenza vaccination rate data to key stakeholders who may include leaders, licensed independent practitioners, nursing staff, and other staff at least annually?</li> <li>8. Does the organization improve its vaccination rates according to its established goals at least annually? (For more information, refer to Standards PI.02.01.01 and PI.03.01.01)</li> <li>9. Does the organization provide influenza vaccination rate data to key stakeholders who may include leaders, licensed independent practitioners, nursing staff, and other staff at least annually?</li> </ol>	<p>is located in the annual infection control plan.</p> <ol style="list-style-type: none"> <li>6. The hospital uses Joint Commission/NHSN recommendations to calculate influenza vaccination rates for LIP's, staff and contracted staff.</li> <li>7. Possible methods for increasing employee vaccination rates discussed at the Infection Control Committee. Employee health compiles a list of reasons employees declined vaccine. This information is reported after the flu season has ended. Some methods discussed include mandatory vaccination or donning of mask during flu season if not vaccinated.</li> <li>8. Yes. Annual rates have increased.</li> <li>9. Yes. Rates are sent out weekly during flu season by Employee Health through administration.</li> </ol>
<p><b>IC.03.01.01</b> Does the organization evaluate the effectiveness of its infection prevention and control plan?</p>	<ol style="list-style-type: none"> <li>1. Does the organization evaluate the effectiveness of its infection prevention and control plan annually and whenever risks significantly change?</li> <li>2. Does the evaluation include a review of the following: The infection prevention and control plan's prioritized risks?</li> <li>3. Findings from the evaluation are communicated at least annually to the individuals or interdisciplinary group that manages the patient safety program.</li> <li>4. The organization uses the findings of</li> </ol>	<ol style="list-style-type: none"> <li>1&amp;2. The Infection Control Plan is based upon the population it serves and location. Surveillance data, communicable disease data and the facility specific risk assessment drive this plan.</li> <li>1&amp;2. An annual Infection Control risk assessment is conducted and presented to the Infection Control Committee for approval. Risks are prioritized according to probability and impact.</li> <li>2. The Plan is implemented as planned.</li> <li>3. The Infection Prevention and Control Committee and Quality Council evaluate infection rates and the annual evaluation of program goals.</li> <li>4. The analysis of the annual activities and results are used to revise the new infection control program plan.</li> </ol>

	its evaluation of the infection prevention and control plan when revising the plan. (See also LD.01.02.01.EP 4)	
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### National Patient Safety Goals Standards Evaluation

STANDARD	ELEMENTS OF PERFORMANCE	EFFECTIVENESS
<p><b>NPSG.07.01.01</b> Comply with either the current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines or the current World Health Organization (WHO) hand hygiene guidelines.</p>	<ol style="list-style-type: none"> <li>1. Implement a program that follows categories IA, IB, and IC of either the current Centers for Disease Control and Prevention (CDC) or the current World Health Organization (WHO) hand hygiene guidelines. (See also IC.01.04.01, EP 2)</li> <li>2. Set goals for improving compliance with hand hygiene guidelines. (2. See also IC.03.01.01 EP3)</li> <li>3. Use compliance with hand hygiene guidelines based on established goals.</li> </ol>	<ol style="list-style-type: none"> <li>1. The organization follows CDC Hand Hygiene guidelines.</li> <li>2. Hand Hygiene is encouraged and promoted by maintaining hand sanitizer products in clinical areas, hand hygiene observation tracking, orientation education and in-services, .</li> <li>3. Hand hygiene tool is completed monthly by hand hygiene observers and turned into the Epidemiology department. Epidemiology also performs hand hygiene monitoring during surveillance rounds</li> <li>4. Target of 90% identified. Will accomplish through continuous education on the importance of hand hygiene.</li> </ol>
<p>Implement evidence based practices to prevent healthcare associated infections due to multi-drug resistant organisms in acute care hospitals. Note: This requirement applies to, but is not limited to, epidemiologically important organisms such as methicillin-resistant staphylococcus aureus (MRSA), clostridium difficile (CDI), vancomycin-resistant enterococci (VRE), and multi-drug resistant gram negative bacteria.</p>	<ol style="list-style-type: none"> <li>1. Conduct periodic risk assessments (in time frames defined by the organization) for multi-drug-resistant organism acquisition and transmission. (See also IC.01.03.01 EP 1-5)</li> <li>2. Based on the results of the risk assessment, educate staff and licensed independent practitioners about health care–associated infections, multi drug-resistant organisms, and prevention strategies at hire and annually thereafter. Note: The education provided recognizes the diverse roles of staff and licensed independent practitioners and is consistent with their roles within the hospital.</li> <li>3. Educate patients and their families as needed, who are infected or colonized with a multi-drug-resistant organism about health care–associated infection prevention strategies.</li> <li>4. Implement a surveillance program for multi-drug-resistant organisms based on the risk assessment.</li> <li>4. Measure and monitor multi drug-resistant organism prevention processes and outcomes, including the following: <ol style="list-style-type: none"> <li>a. Multi drug-resistant organism infection rates using evidence-based metrics</li> <li>b. Compliance with evidence-based guidelines or best practices</li> <li>c. Evaluation of the education program provided to staff and licensed independent practitioners. Note: Surveillance may be targeted</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. An annual risk assessment of MDRO transmission is conducted and data tracked during the year.</li> <li>2. On hire and annually staff is educated on the basics of infection prevention and MDROs.</li> <li>3. Patient education is carried out by nursing staff, FAQ sheets are available for use, and documented in the EMR is reflected of the education provided.</li> <li>4. Surveillance, isolation reports, and alert tab provides reports on MDRO transmission and influx of patients with an MDRO.</li> <li>5. A Performance Measurement Report (PMR) is tracked for MDROs of significance using NHSN LAB ID definition.</li> <li>6. PMR compliance also tracked for CDC isolation guidelines are followed which is conducted during surveillance.</li> <li>7. The Infection Prevention and Control Committee as well as other meetings provides information to key stakeholders.</li> <li>8. Policies: “Multi-Drug Resistant Organisms” provides guidance on reducing MDRO transmission. The International Hospital Transfer Patients CRE Screening Protocol also outlines a process for patients admitted for 48 hours or greater outside of the United States. Patients who meet these criteria have a rectal swab culture completed to rule out CRE. Patients are placed on contact isolation until CRE is ruled out. Rule out cdiff patients are also placed on Enhanced Contact isolation until ruled out.</li> <li>9. A Laboratory based alert system has been implemented that targets inpatients and readmitted patients. Critical results as outlined by the policy “Microbiology Critical &amp;</li> </ol>

	<p>rather than organization-wide.</p> <ol style="list-style-type: none"> <li>5. Provide multi drug-resistant organism process and outcome data to key stakeholders, including leaders, licensed independent practitioners, nursing staff, and other clinicians.</li> <li>6. Implement policies and practices aimed at reducing the risk of transmitting multi drug-resistant organisms. These policies and practices meet regulatory requirements and are aligned with evidence-based standards (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).</li> <li>7. When indicated by the risk assessment, implement a laboratory-based alert system that identifies new patients with multi drug resistant organisms. Note: The alert system may use telephones, faxes, pagers, automated and secure electronic alerts, or a combination of these methods.</li> <li>8. When indicated by the risk assessment, implement an alert system that identifies readmitted or transferred patients who are known to be positive for multi-drug-resistant organisms. Note 1: The alert system information may exist in a separate electronic database or may be integrated into the admission system. The alert system may be either manual or electronic or a combination of both. Note 2: Each organization may define its own parameters in terms of time and clinical manifestation to determine which re-admitted patients require isolation.</li> </ol>	<p>Reportable Cultures &amp; Test Results” are communicated to the Epidemiologist, or on-call Epidemiologist 24 hours/7 days a week.</p> <ol style="list-style-type: none"> <li>10. Patient’s positive for histories of MDRO are entered into the alert system by Epidemiology. On each subsequent visit to the organization, when the patients chart is opened, an admit alert pops up notifying the provider of the patients history of MDRO infection.</li> </ol>
<p>Implement evidence-based practices to prevent central line–associated bloodstream infections. Note: This requirement covers short- and long-term central venous catheters and peripherally inserted central catheter (PICC) lines.</p>	<ol style="list-style-type: none"> <li>1. Educate staff and licensed independent practitioners who are involved in managing central lines about central line associated bloodstream infections and the importance of prevention. Education occurs upon hire, annually thereafter, and when Involvement in these procedures is added to an individual’s job responsibilities.</li> <li>2. Prior to insertion of a central venous catheter, educate patients and, as needed, their families about central line–associated bloodstream infection prevention.</li> <li>3. Implement policies and practices aimed at reducing the risk of central line–associated bloodstream infections. These policies and practices meet regulatory requirements and are aligned with evidence-based standards (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).</li> <li>4. Conduct periodic risk assessments for central line associated blood stream infections, monitor compliance with</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff education requirements regarding CLABSIs, the importance of preventing CLABSIs and infection prevention strategies are included in new hire orientation and the mandatory annual education in Health stream.</li> <li>2. Patient/Family education is provided using patient FAQ sheets and is documented in the patient chart.</li> <li>3. CLABSI policies and practices meet applicable regulatory requirements and are aligned with evidence based standards, professional organization guidelines and best practices</li> <li>4. Epidemiology monitors CLABSI infection rates. The NHSN definition of CLABSI is used for surveillance purposes. Epidemiology monitors all central line infections and compliance with CLABSI prevention practices and the findings are reported in the annual assessment of the Infection Control program.</li> <li>5. Epidemiology provides infection rates monthly to the Infection Prevention and Control Committee, Quality Council and other committees as needed. CLABSI rates and</li> </ol>

	<p>evidence- based practices and evaluate the effectiveness of prevention efforts. Then risk assessments are conducted in time frames defined by the hospital, and this infection surveillance activity is hospital wide, not targeted.</p> <ol style="list-style-type: none"> <li>5. Provide central line–associated bloodstream infection rate data and prevention outcome measures to key stakeholders, including leaders, licensed independent practitioners, nursing staff, and other clinicians.</li> <li>6. Use a catheter checklist and a standardized protocol for central venous catheter insertion.</li> <li>7. Perform hand hygiene prior to catheter insertion or manipulation.</li> <li>8. For adult patients, do not insert catheters into the femoral vein unless other sites are unavailable.</li> <li>9. Use a standardized supply cart or kit that contains all necessary components for the insertion of central venous catheters.</li> <li>10. Use a standardized protocol for sterile barrier precautions during central venous catheter insertion.</li> <li>11. Use an antiseptic for skin preparation during central venous catheter insertion that is cited in scientific literature or endorsed by professional organizations. * Footnote *: A limited number of National Patient Safety Goals contain requirements for practices that reflect current science and medical knowledge. In these cases, the element of performance refers to a practice that is cited in scientific literature or endorsed by professional organizations. This means that the practice used by the hospital must be validated by an authoritative source. The authoritative source may be a study published in a peer-reviewed journal that clearly demonstrates the efficacy of that practice or endorsement of the practice by a professional organization(s) and/or a government agency (ies). It is not acceptable to follow a practice that is not supported by evidence or wide-spread consensus. During the on-site survey, surveyors will explore the source of the practices the hospital follows.</li> <li>12. Use a standardized protocol to disinfect catheter hubs and injection ports before accessing the ports.</li> <li>13. Evaluate all central venous catheters routinely and remove nonessential catheters.</li> </ol>	<p>compliance issues that may be identified are communicated on a monthly basis to the Infection Prevention and Control Committee. Any breach in compliance with infection prevention is addressed immediately with the health care provider and nurse manager. All CLABSI infections are discussed with management and administration on a weekly basis to identify lessons learned to prevent in the future.</p> <p>6-13. BHN utilizes a CLABSI bundle for CVC insertion that addresses all of the evidence based elements of infection prevention including but not limited to: hand hygiene, avoidance of the femoral site, utilization of a central line insertion kit, maximal sterile barrier precautions for inserter as well as assistant, Chlorhexidine based antiseptic, disinfection of catheter hubs and injection ports prior to accession, as well as removal of non-essential central venous catheters.</p>
<p>Implement evidence-based practices for preventing surgical site infections.</p>	<ol style="list-style-type: none"> <li>1. Educate staff and licensed independent practitioners involved in surgical procedures about surgical site infections and the importance of prevention. Education occurs upon hire, annually thereafter, and when involvement in surgical procedures is added</li> </ol>	<ol style="list-style-type: none"> <li>1. Education regarding SSIs, the importance of preventing SSIs and other infection prevention strategies are based on risk assessments and surveillance findings, and are provided on hire during the orientation process, annually through health stream and when involvement in surgical</li> </ol>

<p>Implement evidence-based practices for preventing surgical site infections.</p>	<p>to an individual's job responsibilities.</p> <ol style="list-style-type: none"> <li>2. Educate patients, and their families as needed, who are undergoing a surgical procedure about surgical site infection prevention</li> <li>3. Implement policies and practices aimed at reducing the risk of surgical site infections that meet regulatory requirements and are aligned with evidence-based guidelines (for example, the Centers for Disease Control and Prevention (CDC) and/or professional organization guidelines).</li> <li>4. As part of the effort to reduce surgical site infections: <ul style="list-style-type: none"> <li>- Conduct periodic risk assessments for surgical site infections in a time frame determined by the hospital.</li> <li>- Select surgical site infection measures using best practices or evidence-based guidelines.</li> <li>- Monitor compliance with best practices or evidence-based guidelines.</li> <li>- Evaluate the effectiveness of prevention efforts.</li> </ul> <p>Note: Surveillance may be targeted to certain procedures based on the hospital's risk assessment.</p> <li>5. Measure surgical site infection rates for the first 30 or 90 days following surgical procedures based on National Healthcare Safety Network (NHSN) procedural codes. The hospital's measurement strategies follow evidence-based guidelines.  Note 1: Surveillance may be targeted to certain procedures based on the hospital's risk assessment.  Note 2: The NHSN is the Centers for Disease Control and Prevention's health care-associated infection tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate health care-associated infections. For more information on NHSN procedural codes, see <a href="http://www.cdc.gov/nhsn/CPTcodes/ssi-cpt.html">http://www.cdc.gov/nhsn/CPTcodes/ssi-cpt.html</a>.</li> <li>6. Provide process and outcome (for example, surgical site infection rate) measure results to key stakeholders</li> <li>7. Administer antimicrobial agents for prophylaxis for a particular procedure or disease according to methods cited in scientific literature or endorsed by professional organizations. *  Footnote *: A limited number of National Patient Safety Goals contain requirements for practices that reflect current science and medical knowledge. In these cases, the element of performance refers to a practice that is cited in scientific literature or</li> </li></ol>	<p>procedures is added to an individual's job responsibilities.</p> <ol style="list-style-type: none"> <li>2. Educational materials are provided to all surgical patients utilizing approved fact sheets.</li> <li>3. Evidence based practices outlined in AORN, APIC, SHEA &amp; CDC standards for prevention of SSI's have been adopted and HAI's are monitored by the Epidemiology department.</li> <li>4 &amp; 5. The Epidemiology department closely monitors high volume and high risk procedures. These include but are not limited to colorectal surgeries, hip &amp; knee replacements, Hysterectomies, and all other surgeries. The Epidemiology department follows NHSN guidelines for time frame for surveillance monitoring. Colorectal surgeries and Hysterectomies are reported to NHSN on a monthly basis. Tracking and trending of all surgical site infections is completed by the Epidemiology department.</li> <li>6. Infection statistics are shared with stakeholders on a regular basis through the Infection Prevention and Control Committee, Quality Council, as well as directly to managers and staff by way of in-services, staff meetings and nursing and Medical staff committees. Epidemiology has worked closely with Surgery to target and reduce infections in those areas.</li> <li>7. Evidence based practice is followed regarding the type and dose of antimicrobial selected.</li> <li>8. The chosen method for hair removal if needed is clipping.</li> </ol>
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	<p>endorsed by professional organizations. This means that the practice used by the hospital must be validated by an authoritative source. The authoritative source may be a study published in a peer-reviewed journal that clearly demonstrates the efficacy of that practice or endorsement of the practice by a professional organization(s) and/or a government agency (ies). It is not acceptable to follow a practice that is not supported by evidence or widespread consensus. During the on-site survey, surveyors will explore the source of the practices the hospital follows.</p> <p>8. When hair removal is necessary, use a method that is cited in scientific literature or endorsed by professional organizations. * Footnote *: A limited number of National Patient Safety Goals contain requirements for practices that reflect current science and medical knowledge. In these cases, the element of performance refers to a practice that is cited in scientific literature or endorsed by professional organizations. This means that the practice used by the hospital must be validated by an authoritative source. The authoritative source may be a study published in a peer-reviewed journal that clearly demonstrates the efficacy of that practice or endorsement of the practice by a professional organization(s) and/or a government agency(ies). It is not acceptable to follow a practice that is not supported by evidence or wide-spread consensus. During the on-site survey, surveyors will explore the source of the practices the hospital follows.</p>	
<p>Implement evidence based practices to prevent catheter associated urinary tract infections (CAUTI)</p>	<ol style="list-style-type: none"> <li>1. Educate staff and licensed independent practitioners involved in the use of indwelling urinary catheters about CAUTI and the importance of infection prevention. Education occurs upon hire or granting of initial privileges and when involvement in indwelling catheter care is added to an individual's job responsibilities. Ongoing education and competence assessment occur at intervals established by the organization.</li> <li>2. Educate patients who will have an indwelling catheter, and their families as needed, on CAUTI prevention and the symptoms of a urinary tract infection. Note: See FAQs about "Catheter-associated Urinary Tract Infection" at <a href="http://www.shea-online.org/images/patients/NNL_CA-UTI.pdf3">http://www.shea-online.org/images/patients/NNL_CA-UTI.pdf3</a>.</li> <li>3. Develop written criteria, using established evidence-based guidelines, for placement of an indwelling urinary catheter. Written criteria are revised as scientific evidence changes.</li> </ol> <p>Note: Examples of criteria for placement of an</p>	<ol style="list-style-type: none"> <li>1. Staff is educated upon hire and annually or when job responsibilities are changed to include care of urinary catheters.</li> <li>2. Patient/Family education is provided using patient FAQ sheets and is documented in the patient chart.</li> <li>3. HOUDINI protocol is utilized.</li> </ol>

<p>Implement evidence based practices to prevent catheter associated urinary tract infections (CAUTI)</p>	<p>indwelling urinary catheter include the following:</p> <ul style="list-style-type: none"> <li>- Critically ill patients who need accurate urinary output measurements</li> <li>- Patients with acute urinary retention or bladder outlet obstruction</li> <li>- Patients who require prolonged immobilization (for example, a potentially unstable thoracic or lumbar spine or multiple traumatic injuries such as pelvic fractures)</li> <li>- Incontinent patients with an open sacral wound or perineal wound</li> <li>- Perioperative use for selected surgical procedures, such as patients undergoing urologic surgery or other surgery on contiguous structures of the genitourinary tract; patients who will have a prolonged duration of surgery (catheters inserted for this reason should be removed in a post-anesthesia care unit); patients anticipated to receive large-volume infusions or diuretics during surgery; patients needing intraoperative monitoring of urinary output</li> <li>- End-of-life care</li> <li>- Neurogenic bladder</li> </ul> <p>4. Follow written procedures based on established evidence-based guidelines for inserting and maintaining an indwelling urinary catheter. The procedures address the following:</p> <ul style="list-style-type: none"> <li>- Limiting use and duration</li> <li>- Performing hand hygiene prior to catheter insertion or maintenance care</li> <li>- Using aseptic techniques for site preparation, equipment, and supplies</li> <li>- Securing catheters for unobstructed urine flow and drainage</li> <li>- Maintaining the sterility of the urine collection system</li> <li>- Replacing the urine collection system when required</li> <li>- Collecting urine samples</li> </ul> <p>Note: There are medical conditions that require a prolonged use of an indwelling urinary catheter in order to avoid adverse events and promote patient safety. Examples can include, but are not limited to, patients with a spinal cord injury, multiple sclerosis, Parkinson’s disease, and spina bifida. (See also PC.02.01.01, EP 1)</p> <p>5. Measure and monitor catheter-associated urinary tract infection prevention processes and outcomes in high-volume areas by doing the following:</p> <ul style="list-style-type: none"> <li>- Selecting measures using evidence-based guidelines or best practices</li> <li>- Having a consistent method for medical record documentation of indwelling urinary catheter use, insertion, and maintenance (See also RC.01.01.01, EP 7)</li> </ul>	<p>4. Procedures are adopted using best practices as outlined by IHI, APIC, SHEA, CDC, ect.</p> <p>5. Nurses document in the EMR on insertion, maintenance and need for urinary catheters. Epidemiology utilizes the NHSN definition for CAUTI. Epidemiology monitors for compliance to best practices and evidence based guidelines and evaluates the effectiveness of prevention efforts.</p>
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	<ul style="list-style-type: none"> <li>- Monitoring compliance with evidence-based guidelines or best practices</li> <li>- Evaluating the effectiveness of prevention efforts</li> </ul> <p>Note: Surveillance may be targeted to areas with a high volume of patients using indwelling catheters. High-volume areas are identified through the hospital's risk assessment as required in IC.01.03.01, EP 2.</p>	
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## **CY 2020 Epidemiology Accomplishments**

### **Hand Hygiene and Isolation Precautions**

1. Nursing management educate, encourage and supervise monthly hand hygiene monitor/compliance.
2. Epidemiology disseminates hand hygiene compliance in multiple committee/meetings.
3. Increased number of hand sanitizer stations.

### **CAUTI-**

1. We have implemented an HAI spreadsheet within real-time information of detailed infection events.
2. Education on NHSN and surveillance definitions.
3. Epi rounding on maintenance and care related to Foley catheters as well as reminder for removal.
4. Daily rounding by managers (morning huddle) discussing the need for the Foley catheter and alternatives as appropriate.
5. Weekly discussion of CAUTI infections in management huddles with recommendations by Epidemiology for prevention in the future.
6. House wide collection of line days.
7. Peri-care/foley care and CAUTI prevention provided to all staff.

### **CLABSI-**

1. Education on NHSN and surveillance definitions
2. Identified maintenance of central lines to be a contributing factor in CLABSI infection rate at BHN.
3. Communicated with nurse managers and administration during weekly management huddle on lessons learned to prevent CLABSI.
4. Chlorhexidine bathing to all patients with central lines.
5. Manager rounding on the unit questioning the necessity of lines Education through centurion Angel program offered to all nursing. This education provided a competency on central line maintenance including dressing changes.
6. Discussion of CLABSI in multidisciplinary meetings.
7. Chlorohexidine impregnated caps (curos) utilized for all central lines. Influenced by the latest guidelines from SHEA regarding the prevention of central line infections.

8. House wide collection of line days.
9. Daily prevalence rounding by Epidemiology.

#### **SSI-**

1. Education on NHSN and surveillance definitions.
2. Daily surveillance of cultures to identify any surgical site infections.
3. Multidisciplinary RCA completed for each infection
4. Weekly discussion in huddles of surgical site infections and lessons learned.
5. Participation in investigations.
6. Continued weight based dosing for pre op antibiotics as per evidence based practice.
7. Chlorhexidine bathing for all inpatient procedures the night before and morning of.
8. Tracking and trending of all surgical site infections.
9. Glucose monitoring.
10. Participation in the join replacement committee meeting.

#### **VAE-**

1. Education in NHSN and surveillance definitions.
2. Unit based in-services completed.
3. Surveillance through rounding (both Epi and managers) observing for compliance to VAP bundles.
4. Multidisciplinary meetings when upward trend identified.

#### **Education**

1. CDC education on NHSN definitions by Epidemiology staff.
2. Ongoing education for CAUTI, CLABSI, MRSA bacteremia, C. diff, SSI prevention through HEN.

#### **Clostridium Difficile & MDROs**

1. EVS in-services.
2. Use of Medmined data mining system to capture any trends related to MDRO's and CDI.
3. Recognizing the importance of antimicrobial stewardship in decreasing the rates of MDROs, the Epidemiology Department continues to work with Pharmacy.
4. Continued to implement Transmissions-Based Precautions and Standard Precautions, Hand Hygiene education, MDRO admission alerts, and frequent communication between clinical and nursing departments and Epidemiology.
5. Continued use of Respiratory Viral Panel/Biofire technology to decrease antibiotic use when viruses are identified.

#### **Policies and committees**

1. Annual Review and update of Infection Control Policies.

## Surgical Services Report

(run from Discern Analytics)

CY 2020

Location of Patient	Number
ER	76
Outpatient	1454
Inpatient	2971
SSP	891
Unclassified	3
Total	5393

Types of Surgery	Class
Clean (Class I)	3654
Clean-Contaminated (Class II)	985
Contaminated (Class III)	352
Infected (Class IV)	399
Unclassified	3
Total Surgeries	5393

Top 12 Surgical Procedure 2020						
	Replacement Total Hip Anterior		Creation AV Fistula		Insertion Catheter Hemodialysis	
	Vitrectomy		Smpl repair scalp/neck/ax/genit/trunk		Laporscopic Cholectectomy Cholangio	
	Incision & Drainage		Exploratory Laparotomy		Debridement muscle/fascia	
	Replacement Total Knee		Laparoscopic appendectomy		Balloon Angioplasty	