Introduction

Description of UTMB Healthcare system:
The University of Texas Medical Branch (UTMB) healthcare system provides healthcare for persons living in the City of Galveston, Galveston County and the surrounding counties. The main campus is an academic medical center. There are 3 hospital pavilions on the main campus, for a total of 600 beds: Jennie Sealy, John Sealy, and Hospital Galveston for inmates of the Texas Department of Criminal Justice (TDCJ). There are 7 ICUs, including 3 in Jennie Sealy Hospital (medicine, surgery, neurosurgery), 1 in TDCJ (medical-surgical), and 3 in John Sealy Hospital (neonatal, pediatric, and burn). The emergency department is designated as a level 1 trauma center. Other services include labor and delivery, post-partum care, gynecology, medical-surgical services, nurseries, transplant, oncology, cardiology, neurology, neurosurgery, orthopedics, and pediatrics.

UTMB was designated as a regional Ebola treatment center for 5 states: Texas, Arkansas, Louisiana, Oklahoma and New Mexico. A biocontainment critical care unit (BCCU) was constructed in an area of the Emergency Department typically used for minor emergency cases (META). The area has been renovated and will accommodate 6 patients.

The UTMB Angleton Danbury Campus (ADC) is a 64-bed community hospital located in Brazoria County. Services include emergency services, outpatient surgery, endoscopy, labor and delivery, post-partum care, a medical-surgical ICU, and a medical-surgical acute care unit.

The UTMB League City Campus (LCC) is a 45-bed community hospital located in Galveston County. Services include an emergency room, an LDRP unit with 2 C-section rooms, Level I and Level II nurseries, a medical-surgical unit. In February, the obstetric services will transfer to the Clearlake Campus. An adult medical-surgical ICU will be added. There will be growth and additional services in CY2020.

The UTMB Clear Lake Campus (CLC) is a community hospital located in Harris County scheduled to open 89 beds in February 2019. Services initially include an emergency room, level III trauma service, medical-surgical ICU, a level II nursery, labor and delivery, postpartum care, cardiology, neurology, neurosurgery, and medical-surgical services for adults. Later in the year, a level III nursery and medical-surgical services for pediatric patients will be added.

In addition to inpatient care, the system includes a large network of community clinics and regional maternal child healthcare clinics. This includes a collaborative cancer treatment center on LCC, with one clinic operated by M.D. Anderson Cancer Center and the surgical specialties clinic on the second floor operated by UTMB. Where feasible, processing of semi-critical and critical equipment is performed by one of the sterile processing departments (SPD) on the hospital campuses, but high-level disinfection is also performed in clinics, endoscopy departments, ORs, and some ancillary departments. Sterilization is performed in an SPD and four approved clinic sites.
The main campus is located off the southeast Texas coast on Galveston Island, a barrier island between the Gulf of Mexico and Galveston Bay. Galveston has both a commercial and a cruise port. This poses a potential route for introduction of a novel pathogen. In addition, The Galveston National Laboratory, a biosafety level 4 research facility, is located on the main campus. The League City, Angleton Danbury, and Clear Lake campuses are on the mainland, but also at risk of the same adverse weather conditions. The climate is humid subtropical and the greatest weather risks are tropical storms and hurricanes. These events, while rare, may damage the physical plant from high winds and flooding, may cause utilities outages, and require mitigation to provide a safe patient care environment. Summer may bring extreme heat.

I. Program Organizational Structure

The Department of Infection Control and Healthcare Epidemiology (ICHE) is managed by the Director and the Director of Operations, who report to the Chief Medical Officer. The department receives laboratory support from the Clinical Microbiology Department for clinical microbiology data and epidemiologic studies, including surveillance cultures from patients (e.g. MRSA and MSSA screening), strain typing for suspected clusters/outbreaks, and environmental cultures. In addition to management, the current department staffing complement for the main campus and LCC includes the following: five Infection Preventionists, one Project Manager, one Administrative Associate, and one Coordinator for hand hygiene and active surveillance sampling. The Project Manager is responsible for infection prevention for the clinics and for high-level disinfection and sterilization practices for the system. The Angleton-Danbury campus has a part-time Infection Preventionist who reports to the ADC Associate Administrator of Patient Care Services and to the Director of Operations for Infection Control for infection control activities. ICHE employees are offered continuing education through on-campus, state, and national programs. The IC program utilizes an electronic surveillance tool (Sentri7), which includes ADT and laboratory data from all campuses.

The Infection Control Committee provides oversight for the program for all campuses by reviewing and approving the annual plan and annual program evaluation, approving policies and procedures related to infection prevention, reviewing surveillance data, reviewing employee health data, and providing a forum for discussing infection prevention issues. The Infection Control Committee reports to the Quality Council, which in turn reports to the Hospital Board.

II. Infection Control Program Goals (see Prioritized Goals for Infection Control and Prevention for 2019)

The overarching goal of the infection prevention and control program at UTMB is to prevent transmission of infections to all persons present at any of the UTMB Healthcare facilities, including patients, employees, students, visitors, and others.

The plan is developed as follows:
A. Perform a risk assessment with input from the ICHE staff, nursing, physicians, and leadership.

1. The risk assessment is based upon the following factors: geographic location; the community; services; characteristics of the patient population; care, treatment and services provided; and available data from surveillance and other activities.
2. All healthcare facilities in the system are included.
3. Each potential risk is evaluated based upon probability of occurrence, severity, current organizational preparedness to control the risk, and impact on the organization.
4. Risks are reassessed and re-prioritized as necessary based upon findings from surveillance and other activities, a facility event with infection control implications, emerging infectious diseases or other public health emergencies, and new regulatory mandates.
5. The risk assessment guides the development of prioritized goals for the infection prevention program.

B. Develop and prioritize goals based on the risk assessment

1. Prioritized goals guide allocation of resources for the infection prevention program.
2. Prioritized goals include methods of surveillance, metrics, targets, and activities to achieve the targets.
3. Reassessing and updating risks and goals as necessary based upon surveillance data, emerging issues, or changes in services provided.
   a. Highest priority goals for UTMB for 2019 include the following:
      - Prevent central line-associated bloodstream infections (CLABSI)
      - Reduce rates of surgical site infection (SSI) for higher risk procedures;
      - Prevent infections associated with LVADs and non-surgical invasive procedures.
   b. Moderate-priority goals, which may escalate in priority as appropriate to events, include the following:
      - Prevent catheter-associated urinary tract infections (CAUTI)
      - Prevent ventilator-associated pneumonia
      - Prevent hospital-onset *C. difficile* infections and transmission of drug-resistant organisms
      - Collaborate with Antimicrobial Stewardship program
      - Process, transport and store medical equipment and supplies according to nationally accepted standards and guidelines as well as the manufacturer’s instructions for use
      - Comply with CDC guidelines for hand hygiene
      - Comply with standard and isolation precautions
      - Prevent/manage blood and body fluid exposures
      - Collaborate with management of the biocontainment critical care unit in preparation for management of high-consequence infections
      - Collaborate with Pharmacy to ensure compliance with USP 797.
• Collaborate with BOF division to assure the healthcare environment supports infection prevention processes. This includes the following:
  o Participate in design review for new/renovated clinical spaces
  o Conduct infection control risk assessments (ICRAs) prior to construction
  o Participate in development/maintenance of the Water Quality Management Plan
  o Monitor fungal contaminants in the air as needed
  o Respond to facility events that impact infection control (e.g. water intrusion, sewage back-up, fires, HVAC issues, water supply issues); and maintain environmental cleanliness.

c. Because there are good control systems in place and these activities rarely require significant resources from the ICHE department, the following are lower priority:
  • Prevent occupationally acquired infections from exposures to infectious patients or colleagues.
  • Follow safe injection practices
  • Recognize and respond to an influenza pandemic or influx of other infectious patients not requiring the activation of the biocontainment unit.

C. Develop and implement a plan based on the prioritized goals, which is revised as needed to reflect changes in the healthcare system including services provided.

III. Surveillance and prevention activities

A. Surveillance for and prevention of healthcare-associated infections (HAIs)

The surveillance program is based upon CDC and other nationally-recognized guidelines and meets state and federal mandates. An epidemiological approach is utilized for surveillance, data collection, investigations, and trend analysis. UTMB is a participant in the National Healthcare Safety Network (NHSN) and uses NHSN definitions and methodology for identifying healthcare-associated infections. The surveillance program is designed to meet the public reporting requirements established by the Texas Department of State Health Services (DSHS) and the Centers for Medicare and Medicaid Services (CMS).

1. Surveillance for and prevention of device-associated infections
   a. Surveillance for central line associated bloodstream infections (CLABSI) is performed on all acute-care inpatient units on all campuses, using NHSN definitions. Reporting CLABSI in ICUs and medical-surgical units is mandated by the Centers for Medicare and Medicaid Services (CMS) and in all ICUs by the Texas Department of State Health Services (DSHS). CLABSI prevention strategies include the following processes:
      1) Insertion using ultrasound
      2) Optimal site selection.
      3) Adherence to the insertion bundle
         a) Placement of central lines monitored by an observer with a checklist. The observer assures that the protocol for insertion of central venous catheters is
followed precisely.
b) Maximal sterile barriers: gown, gloves, mask, and full-body fenestrated drape
c) Hand hygiene performed prior to donning sterile gloves
d) The site is prepared with CHG in 70% alcohol. A CHG impregnated sponge
 is used at the catheter site unless contraindicated.
e) The same precautions are followed for pulmonary artery catheters and arterial lines.

4) Adherence to the maintenance bundle
a) Dressings, tubing, and administration sets are changed per nursing policy.
b) Catheters are accessed aseptically (clean hands, hub/port disinfected with alcohol or CHG).

5) Screening for staphylococcal carriage and nasal and skin decolonization in the adult ICUs and defined high-risk patient populations on other nursing units.

6) Education about CLABSI prevention
a) Licensed independent professionals and nurses who insert and care for lines
 are educated about infection prevention for central lines including pulmonary arterial catheters, as well as peripheral arterial lines. This includes both simulation laboratory and on-line training.
b) Patients and families are educated about preventing line infections

7) Daily assessment of necessity for the central line. Discontinue when no longer needed.

8) Response to a CLABSI identified by surveillance:
a) Data is shared with unit leadership and various quality committees.
b) All CLABSI cases are reviewed with unit leadership to identify contributing factors and possible root cause.
c) Infections are reported to NHSN

9) HCE Policy 01.18 Intravascular Devices and Infusion Systems provides additional detail.

b. Surveillance for catheter-associated urinary tract infections (CAUTI) is performed in ICUs and all medical-surgical units on all campuses using NHSN definitions. Reporting of CAUTIs in ICUs is mandated by CMS and in all adult and pediatric ICUs by the Texas DSHS. CAUTI prevention strategies include the following processes:
1) An order is required to insert a urinary catheter and should only be inserted if criteria for use are met.
2) Limit duration of urinary catheters. Catheter necessity is documented daily in the EPIC Nursing Assessment. Nurses may remove the catheter if criteria for use are not met unless the medical team determines the need to continue catheter use.
3) Consider alternatives to an indwelling foley such as a condom catheter or intermittent straight catheterization.
4) Aseptic insertion
5) Maintain a closed drainage system with bag below bladder level.
6) Aseptic technique to access or open and reconnect.
7) All CAUTI cases are reviewed with unit leadership to identify contributing factors and possible root cause.
8) HCE Policy 01.45 Prevention of Urinary Tract Infection provides additional detail

Surveillance for and prevention of ventilator-associated pneumonia in ICUs
1) Prevention strategies include adherence to the VAP prevention bundle that is adopted for each age group (neonatal, pediatric, and adult).
2) Assess necessity of ventilator daily and discontinue when no longer necessary.

2. Surveillance for surgical site infections (SSI)
   a. Main campus procedures: cardiovascular bypass graft, peripheral vascular bypass graft, carotid endarterectomy, abdominal aortic aneurysm repairs, colon surgery, hip and knee prosthesis, abdominal and vaginal hysterectomy, and C-sections.
   b. LCC: abdominal and vaginal hysterectomy, colon surgery, C-sections, knee and hip prosthesis.
   c. ADC: abdominal and vaginal hysterectomy, colon surgery, hip and knee prosthesis, and C-sections.
   d. Infections may be identified during the admission, upon readmission, during an outpatient visit, or reported by another facility.
   e. With the exception of C-sections, DSHS requires reporting of these procedures.
   f. Strategies to prevent SSI include:
      1) Provide antibiotic prophylaxis in accordance with national guidelines and as recommended by the ASP
      2) Follow OR policies for scrub attire, hand hygiene, patient skin prep, draping,
      3) Environmental controls for OR in accordance with FGI guidelines, including temperature, humidity, and air pressure differentials.
      4) Comply with guidelines for processing critical and semi-critical equipment:
         transport of contaminated and processed equipment, sterilization and/or high-level disinfection, and appropriate storage of clean and sterile supplies
      5) Nasal and skin decolonization for selected surgical procedures.
      6) Provide immediate feedback to the surgeon when an SSI is identified and provide regular updates to the service chairs.
      7) For additional detail, see HCE policy 01.46 Guideline for Prevention of Surgical Site Infection.

3. Surveillance for and prevention of infections associated with left ventricular assist devices (LVAD) and other invasive procedures
   a. ICHE will conduct surveillance for drive-line infections and bacteremia. ICHE will share data with the VAD program (Interventional Cardiology).
   b. Collaborate with the service to strengthen infection prevention strategies, including decolonization protocols pre-operatively and post-operatively.
   c. Prevention strategies in procedure areas will include adherence to nationally-accepted standards to maintain sterility

4. Prevention and control of epidemiologically-significant organisms.
   a. This includes the bacterial species Enterococcus (vancomycin-resistant, or VRE), Staphylococcus aureus (methicillin-resistant or MRSA), Klebsiella (extended beta-lactamase producers or carbapenem resistant strains), Acinetobacter
baumannii, (multi-drug resistant or carbapenem-resistant), Pseudomonas (multi-drug resistant), Enterobacter (ESBL or CRE), E. coli (ESBL, CRE). Other epidemiologically significant organisms include C. difficile and Candida auris.

b. Data that is reported to NHSN to meet CMS requirements includes C. difficile infections and MRSA bacteremia.

c. DSHS requires reporting of all CRE isolates and all Acinetobacter isolates that meet CDC criteria for multi-drug resistance to the local health department.

1) Microbiology laboratory reports are reviewed daily using an electronic surveillance system for epidemiologically-significant organisms.

a) When such an organism is identified in a clinical isolate, the patient from which it was recovered is placed on Contact Precautions. Colonization with some, but not all, significant organisms also requires isolation precautions.

b) The electronic medical record of patients who are infected with MDROs is flagged to assure isolation precautions are implemented upon readmission.

c) Surveillance for C. difficile is hospital-wide on all campuses. Precautions are implemented when the patient develops diarrhea and continued until C. difficile is ruled out if the test is negative or until discharge if the test is positive. Extended contact precautions include use of soap and water for hand hygiene and bleach solution for disinfection of environmental surfaces.

d) Other organisms may be designated as epidemiologically significant for a particular patient population for a designated time frame.

e) Epidemiologically-linked cases of healthcare facility-associated C. difficile or MDROs are discussed with unit leadership.

f) MDRO status is reported to other facilities from which patient was recently transferred or to which patients will be transferred.

2) Active surveillance culturing is performed in the NICU and all adult ICUs on the Galveston campus. The ICU at ADC is a short-stay unit and there have been no trends requiring screening.

a) Patients in adult ICUs are screened for MRSA on admission. Patients on higher-risk ICUs may be screened for other organisms, including VRE and resistant gram-negative organisms.

b) In the NICU, active surveillance culturing of patients is performed weekly for MRSA. Additional organisms will be added as indicated by trends in clinical cultures.

c) If CRE or other extremely drug resistant organisms are identified in a clinical specimen anywhere in the hospital, culturing of patients near the index case and the environment in the area is performed until the patient(s) who are colonized or infected are discharged.

d) Environments are routinely cultured in the adult ICUs on the Galveston campus to check for efficacy of cleaning and disinfection methods. Other units on any campus may be cultured as the need arises. Results are
reported back to Environmental Services and Nursing. No trends in the ICU at ADC have been detected that support environmental culturing.

5. Surveillance for infections reportable to public health
   a. Infections are identified through routine reports from clinical microbiology or from reports from clinicians
   b. Reportable infections are reported to the Galveston County Health Department on the main campus and LCC and to Brazoria County Health Department for ADC. HCE will report requested information to the county where the infectious patient resides as needed.

6. Monitoring and improving hand hygiene compliance
   a. The HCE policy 01.14 on hand hygiene, based on the CDC guideline, describes indications, techniques, and products for hand hygiene. This applies to personnel who have contact with patients or the patient’s environment and equipment, including employees, physicians and healthcare professionals not employed by UTMB, contractors, students, and volunteers.
   b. Surveillance of hand hygiene practices is a shared responsibility between Healthcare Epidemiology and clinical management. Healthcare Epidemiology conducts surveillance on inpatient units including the Emergency Department and Labor and Delivery. Clinics assign responsibility for monitoring to a trained observer and report compliance to Healthcare Epidemiology. Data collected on the Angleton-Danbury campus is collated by the Infection Preventionist.
   c. Data is shared with healthcare leadership. Compliance is one of the key performance statistics. The goal for compliance is \( >91 \% \).
   d. Improvement initiatives include education, feedback of audit data throughout the month, and reminders to noncompliant staff.

B. Prevent Infections Associated with Medical Equipment and Environment

1. Prevent infections associated with medical equipment and supplies.
   a. Follow policies for disinfection (low- and high-level) and sterilization of equipment that are based on CDC, AAMI, and other nationally-recognized guidelines. The scope of the policies includes cleaning, disinfection and sterilization methods, quality control, transportation of both dirty and clean equipment and supplies, storage of clean and sterile supplies, and training. HCE policy 01.05 covers cleaning, sterilization, disinfection, and storage of patient care equipment and supplies, including noncritical, semi-critical and critical equipment. Policy 01.07 covers management of disposable (single use) items.
   b. Sites where high-level disinfection and sterilization are practiced are identified and audited by Infection Preventionists to assess practices and assure compliance with UTMB policies and AAMI standards at a frequency determined by a site risk assessment. Corrective action is taken when noncompliance is identified. The emphasis will be on equipment associated with higher risk of infection (e.g. lumened scopes).
   c. Noncritical equipment: due to nonstandard storage facilities, each area/department will have a designated method of distinguishing clean, patient-ready equipment
from dirty equipment. This may include use of a dedicated storage area where only clean equipment is present, a bag or tag method to identify clean mobile equipment where no clean equipment storage room is available, and a method of distinguishing clean from dirty stretchers. Compliance is assessed during Environment of Care (EOC rounds), unit/clinic management, and IPs.

d. Standardization of processes across all campuses and centralization where feasible.

2. Prevent infections associated with sterile compounding
   a. Pharmacy adheres to requirements of USP 797. This includes the use of engineering controls, environmental cleaning and disinfection, appropriate attire, and sterile technique.
   b. Pharmacy utilizes contract service to culture for quality assurance purposes.

3. Prevent infections associated with the environment
   a. Responsibility is shared with the following departments and programs:
      Environmental Services, Environmental Health and Safety (EHS), and Business Operations and Facilities (BOF).
   b. Environmental cleanliness is assessed by culture periodically in adult ICUs and as needed to assure highly resistant organisms are contained or to investigate a cluster of infections. Results are reported to Environmental Services. Cleanliness is also assessed visually during weekly environment of care (EOC) rounds.
   c. Waste management: noninfectious waste is managed by Environmental Services and hazardous waste by Environmental Health and Safety in accordance with federal, state, and local regulations.
   d. Prevent transmission of airborne pathogens:
      1) HVAC systems are designed and maintained to assure adequate air exchanges, appropriate pressure differentials, and humidity levels in accordance with FGI standards and BOF policy. A risk assessment was used to designate standards where FGI and/or AAMI guidelines were not clear.
      2) Monitors for air exchanges and/or pressure differentials are in place in sensitive areas such as operating rooms and airborne infection isolation rooms. A risk assessment was used to determine monitoring type and frequency.
   e. Air cultures are performed as indicated in clinical areas during building demolition, post construction of patient care areas and in response to identification of invasive fungal infections. Results are reported to BOF and the Utilities Subcommittee of the EOC Committee.
   f. Prevent infections associated with potable water
      1) The microbial risks for potable water are mitigated in accordance with the UTMB Water Quality Management Plan adopted and approved by the EOC Committee. The plan follows ASHE and CDC guidelines.
      2) Water quality is monitored routinely for chlorine levels, coliforms, and some chemicals by EHS. Cultures for Legionella may be collected only if routine monitors are out of range, if there is an unexpected disruption in the water system. Cultures will be collected to investigate any case of legionellosis that appears to be healthcare-associated.
a) Point of use Filters are used on fixtures in areas that do not meet criteria and where high-risk patients are housed (no more than 2 sites of 10 testing positive);
b) Other methods to protect the potable water supply may include filters for the building water supply, removal of dead legs in plumbing, UV lights, chemical disinfection, and/or flushing lines in patient care areas.
c) Other control methods for water-borne pathogens include biocides in the cooling towers.
g. Facility events with infection control implications
   1) Events include but are not limited to water incursion, HVAC outages, sewage back-up, water supply issues, and fires.
   2) Response is coordinated by BOF and patient care managers in the area. This includes development of an action plan and communication until the event is resolved.
   3) HCE consults as needed to assure any infection risk to patients is addressed and resolved.
h. Construction
   1) Pre-planning for construction is coordinated by BOF and includes review by HCE and EHS.
   2) An infection control risk assessment (ICRA) is performed prior to construction. The signed ICRA is posted at the construction site.
   3) HCE will perform post-construction air cultures after major construction in clinical areas. The construction supervisor will assume responsibility for scheduling cultures with HCE.

C. Prevention of infections to and among staff
   1. Responsibility is shared with Employee Health and EHS.
   2. Protocols describe requirements for vaccine-preventable diseases, management of exposures to blood/body fluids, management of unprotected exposure to infectious diseases, work restrictions for infectious employees, and the TB control program.
   3. Influenza prevention:
      a. The goal for the 2018 influenza season (October, 2017--March 31, 2018) is to achieve an acceptance rate of 90% of staff defined by policy as Healthcare Workers. This includes physicians not employed by UTMB, contractors, students and volunteers whose work processes meet this definition. The denominator includes all HCW employed at UTMB during the 2018 influenza season.
      b. Methods to improve acceptance include:
         1) Providing access to influenza vaccinations on-site and marketing opportunities.
         2) Educating healthcare workers about influenza vaccination; non-vaccine infection control measures (such as the use of Droplet Precautions); and diagnosis, transmission, and potential impact of influenza.
         3) Evaluating declinations to identify opportunities to reduce the number.
         4) Disciplinary procedures for HCW who are noncompliant with the policy (e.g. failing to either take the vaccine or decline or failure to mask if not vaccinated).
c. Scope of annual vaccination program for employees
   1) Vaccine is offered to all UTMB employees (supply permitting) with emphasis on healthcare workers (see IHOP 3.7.7 for definition).
   2) In accordance with Texas statutes, healthcare workers (HCW) may decline the vaccine for medical contraindications or as a matter of conscience, including religious beliefs. The declination must be in writing.
   3) HCW who are vaccinated are given a badge which they must wear through influenza season so that their status is easily recognized.
   4) HCW who decline the vaccine for any reason must wear a mask while on duty throughout the influenza season.

4. TB control: as mentioned in preceding sections, the control of tuberculosis depends upon the following measures.
   a. Prompt identification of possible tuberculosis and implementation of Airborne Precautions, including placement in an airborne isolation room (AIIR) with negative pressure.
   b. A respiratory protection program including fit testing for N95 respirators.
   c. TB skin tests (TST) for healthcare workers upon hire to detect both latent and active disease and annually and post-exposure to screen for occupationally acquired infection. Blood tests (interferon-gamma release assay) may be used in place of a TST.
   d. Management of staff with newly identified positive TST or IGRA to evaluate the need for treatment of latent TB or the presence and subsequent treatment for active TB.
   e. Work restrictions for employees with active TB until rendered noninfectious by treatment. Contacts will be identified for post-exposure screening/prophylaxis.

5. ICHE identifies and investigates exposure to infectious diseases, notifies the appropriate clinical leaders, informs management of exposed staff of required follow-up, and informs Employee Health.

6. ICHE identifies exposures to patients and informs the patient’s care provider of the exposure and suggested follow-up.

IV. Prevention of infections associated with biological emergencies such as an influx of infectious patients or from emerging and/or high-consequence infectious diseases
   A. HCE collaborates with the following departments and agencies for preparation and response to biological emergencies: Emergency Management department, leadership for the Biocontainment Critical Care Unit (BCCU), Environmental Health and Safety (EHS), the Galveston National Laboratory, and local and state health departments.
   B. HCE communicates with public health agencies to share information regarding an influx of infectious patients or admission of patients with emerging infectious diseases or high-consequence pathogens.
   C. Clinical departments are notified when it is advisable to screen for travel and/or syndromes.
   D. The Biocontainment Critical Care Unit located in the Emergency Department activates to care for patients infected with high-consequence pathogens such as Ebola virus. Protocols are in place to cover screening for infection, admission, patient care practices, discharge of
patients, post-mortem care, deactivation of the BCCU, cleaning/disinfection protocols, use of PPE, BCCU staff monitoring protocols, and post-exposure management.

V. Collaborating with public health agencies
   A. Report infectious diseases as required to the county health authority where the hospital is located or to Galveston County for all reportable infections identified in a UTMB clinic. Reporting is done within the time frame required by DSHS.
   B. Report influenza and flu-like illness to Galveston County for all UTMB locations.
   C. Provide any detail needed for public health investigations.

VI. Collaborating with clinical services and the various safety and quality improvement programs in the Hospital and Clinic system.
   A. In addition to the collaborative efforts described above, the HCE department collaborates with the following departments and/or programs.
      1. Environment of Care (EOC) program: participate in EOC committees and multiple subcommittees; participate in weekly multidisciplinary EOC rounds both on the main campus and at remote sites.
      2. Quality and Healthcare Safety: to align infection prevention and quality goals and to collaborate with the risk management staff as needed. This includes any unit-based quality improvement initiatives.
      3. Value Analysis to assure products selected support infection prevention.
      4. Risk Management to identify and respond to events that increased risk of infection to employees, physicians or other healthcare professionals not employed by UTMB, students, contractors, volunteers, or patients.
   B. The department participates in service-specific quality committees

VII. Developing and implementing infection control policies.
   Infection control policies and protocols are developed by a collaborative effort with management of clinical, ancillary and support services. They are based on nationally-recognized guidelines and evidence-based practice. Where no clear guidelines or standards are available, a risk assessment including relevant services will determine protocols that will be followed. Policies are presented to the Infection Control Committee for approval. The policies can be viewed on the Healthcare Epidemiology Website:
   http://www.utmb.edu/Policies_And_Procedures/Departmental/Healthcare_Epidemiology_Policies/index.htm

VIII. Investigating and Controlling Outbreaks
   Each outbreak of infection is investigated and control measures are implemented and assessed for efficacy.

IX. Education Provided by Healthcare Epidemiology
   A. Education of employees, physicians or other healthcare professionals not employed by UTMB, students, contractors, volunteers on the prevention of hospital-acquired infections in patients and occupationally-acquired infections in healthcare workers is provided on a continuous basis. All new employees receive Standard Precautions education during new
employee orientation. Annual updates are provided to clinical employees on either on-line through electronic learning modules or by presentation. Unit-specific inservices are provided on topics relevant to the unit/service.

B. Infection Control concepts are communicated to the public in several ways:
   1. Patient isolation signs are placed on the patient’s door explaining the proper precautions that need to be taken prior to entering the room.
   2. The Nursing website has several educational tools that are used for patient education.
   3. When a patient is placed on isolation, the nurse gives the patient/family a flier explaining isolation precautions.

X. **Evaluating the Infection Prevention and Control Program**
   A. The program is evaluated for effectiveness at least annually for the following and whenever risks change significantly:
      1. Implementation of the annual plan and prioritized goals
      2. Achievement of desired targets for infection reduction or compliance with policies, standards, and regulations, based on findings and trends from surveillance data, environmental rounds, or assessment of various practices.
      3. Analysis of success/failure in meeting goals and/or targets to identify possible causes.
   B. The evaluation is a basis for improvements to the infection prevention program.
   C. The evaluation is presented to the Infection Control Committee and Quality of Care Committee.

**Approved by the UTMB Infection Control Committee December 10, 2018**