Introduction

The University of Texas Medical Branch (UTMB) Health System provides health care for persons living in the City of Galveston, Galveston County and the surrounding counties.

There is a 436-bed hospital on the Galveston campus. The emergency department is designated as a level 1 trauma center. There are 6 ICUs in the John Sealy Hospital: a neonatal intensive care unit (ISCU), a surgical ICU (SICU), a medical ICU (MICU), neurosciences critical care unit (NCCU), a burn ICU for adults (BICU), and the pediatric ICU (PICU). Other services include labor and delivery, post-partum care, gynecology, medical-surgical services, nurseries, and pediatrics. Surgical procedures performed include organ transplant. UTMB was designated an Ebola treatment center for Texas and an emerging infectious disease unit was constructed in an area of the Emergency Department typically used for minor emergency cases. Construction is underway for the 310-bed Jennie Sealy hospital, slated to open in January 2016.

Hospital Galveston, also located on the main campus, is a 108-bed hospital for inmates in the Texas Department of Criminal Justice (TDCJ). There is an14-bed ICU, telemetry unit, 3 medicine-surgery units, and a transitional care unit.

UTMB’s Angleton Danbury Campus is a community hospital located in Brazoria County. There are 64 beds. Services include emergency services, outpatient surgery, endoscopy, labor and delivery, post-partum care, a medical-surgical ICU, and an acute care unit.

In addition to inpatient care, the system includes a network of community clinics and regional maternal child healthcare clinics. The Victory Lakes facility in League City includes an ambulatory surgical center and medical/surgical specialty clinics. This will expand this summer to include an emergency department and 39 inpatient beds for obstetrics and short-stay surgery. Other community clinics in the surroundings include adult and pediatric primary care, obstetric and specialty clinics. New clinic locations and clinic renovations are planned in 2014.

UTMB-Galveston 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 campus. Care for personnel who might become exposed or infected with these agents would be provided at UTMB. UTMB-Angleton Danbury is located inland, but is subject to much the same weather risks.

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 wind damage and flooding, may cause utilities outages, and require mitigation to provide a safe patient care environment.
Program Organizational Structure

The Department of Healthcare Epidemiology is managed by the Healthcare Epidemiologist and the Director of Healthcare Epidemiology, who report to the Chief Medical Officer. The department receives laboratory support from the Clinical Microbiology Department for epidemiologic studies, including surveillance cultures from patients (e.g. MRSA and VRE screening), strain typing for suspected clusters/outbreaks, and environmental cultures. In addition to management, the current staffing complement on the UTMB campus includes: 6 Infection Preventionists, 1 Epidemiology Technician, 1 Administrative Associate, 1 Coordinator for hand hygiene audits, and Student Research Assistants (hand hygiene and PPE audits). Employees are offered continuing education through on-campus and state and national programs. Student Research Assistants are trained by the Epidemiology Technician and Infection Preventionists. The Angleton-Danbury campus has an Infection Preventionist who reports to the ADC Associate Administrator of Patient Care Services. All hospitals utilize an electronic surveillance tool: Sentri7 is used at UTMB-Galveston/Hospital Galveston (TDCJ) and Midas at UTMB-Angleton Danbury.

The Infection Control Committee provides program oversight for the program at all campuses by review and approval of the annual plan and any subsequent revisions, approval of policies and procedures related to infection prevention, review of surveillance data, review of employee health data, and it provides a forum for discussing infection prevention issues. The Infection Control Committee reports to the Quality Council.

I. Infection Control Program Goals (see appended Prioritized Goals for Infection Control and Prevention for 2015)

The overarching goal of the infection prevention and control program at UTMB is to reduce the risk of acquisition of healthcare-associated infections in patients and occupationally-acquired infections in healthcare workers.

These goals are developed by the following process:

A. Performing a risk assessment with input from the HCE 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. Each potential risk is evaluated based upon probability of occurrence, severity, current organizational preparedness to control the risk, and regulatory requirements.
   3. 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.
4. The risk assessment guides the development of prioritized goals for the infection prevention program.

B. Developing and prioritizing goals based on the risk assessment
   1. Prioritized goals guide allocation of resources for the infection prevention program. Some goals are important institutionally, but resources come largely from other departments and programs, and they may therefore be lower priority for infection prevention.
   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 or emerging issues or changes in services provided.
   4. Highest priority for UTMB-Galveston for 2015 include: prevention of CAUTI and SSI, compliance with protocols for management of critical and semi-critical equipment, prevention of needlesticks, detection and care of possible and confirmed cases of Ebola, and commissioning new buildings including the hospital at League City (UTMB-League City Campus) and the Clinical Services Wing on the main campus.
      Highest priority for UTMB Angleton-Danbury include: prevention of CAUTI, compliance with protocols for management of critical and semi-critical equipment, and prevention of needlesticks.

C. Collaborating with clinical services and the various safety and quality improvement programs in the Hospital and Clinic system.
   1. The HCE department collaborates with the following departments/programs:
      a. Employee Health to develop protocols for prevention of occupationally acquired infections including screening and vaccination, management of exposures, and furlough of infectious employees.
      b. Environmental Health and Safety (EHS). There is joint responsibility with EHS and Employee Health to develop and implement the respiratory prevention program and the exposure control plan for bloodborne pathogens.
      c. Environment of Care program: in addition to participation in various EOC committees and subcommittees, the department participates in weekly multidisciplinary EOC rounds both on the main campus and at remote sites.
      d. Quality and Healthcare Safety: to align infection prevention and quality goals and to collaborate with the risk management staff as needed.
      e. Value Analysis to assure products selected support infection prevention.
      f. The Emergency Department to screen for certain infectious diseases, particularly for diarrheal illnesses, tuberculosis, and influenza-like illness. Appropriate precautions are implemented in the ED. If the patient is admitted, isolation status is re-evaluated based on laboratory, radiologic findings, and discussion with clinicians to determine if precautions should continue. The ED is also ready to respond to public health emergencies by screening and implementing preventive measures as necessary.
2. The HCE department participates in the following committees:
   a. The Healthcare Epidemiologist is a member of Pharmacy and Therapeutics Committee and chairs the Antimicrobial Subcommittee.
   c. Nursing and unit-based quality management meetings
   d. Various value analysis subcommittees

3. Data are shared with clinicians and clinical leadership. Cases are reviewed with clinical leadership to identify opportunities to reduce the risk of infection.

D. Developing and implementing infection control policies.

Infection control policies and protocols are developed by a collaborative effort including clinical and administrative management and the infection control staff. They are based on nationally-recognized guidelines and evidence-based practice. Policies are presented to the Infection Control Committee for approval. This includes the use of CDC guidelines for standard and transmission-based precautions. Infection control protocols have been developed and implemented for departments, services and procedures. The policies can be viewed on the Healthcare Epidemiology Website: http://www.utmb.edu/Policies_And_Procedures/Departmental/Healthcare_Epidemiology_Policies/index.htm

Policy Section I outlines policies general in nature (e.g. handwashing, IV therapy). Policy Section II outlines department-specific policies (e.g. Respiratory Therapy, Critical Care, Rehabilitation Services) Each service in the hospital such as dietary, laundry, pharmacy, central services, and housekeeping have infection control protocols which are the focal point of ongoing inservice education for infection control for their personnel. The policy on medical waste can be found in the Department of Environmental Health and Safety policies.

E. Planning for Biological Emergencies with Emergency Management department, the Galveston National Laboratory, and local and state health departments to manage an influx of potentially infectious patients as well as managing emerging and re-emerging infectious diseases.

F. Working with local public health authorities and clinical leadership to integrate the efforts for control of infections in the hospital and community.

1. UTMB @ Galveston: Reporting communicable diseases to the Galveston County Health District. This includes enrolling tuberculosis patients in the directly observed therapy (DOT) program.
2. UTMB @ Angleton Danbury: Reporting communicable diseases to and collaborating with the Brazoria County Health Department,
3. Responding to a large volume of patients that may need to be admitted due to infectious diseases.
4. Collaborating with bed control and the Emergency Department to screen and appropriately admit patients who may have infectious diseases.
5. Responding to public health alerts as appropriate, including sharing information with clinicians.

II. Healthcare Epidemiology Focus Areas

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 and Prevention of Device-Associated Infections

a. Surveillance for Central line associated bloodstream infections (CLABSI) is performed on all inpatient units, using NHSN definitions. Reporting of CLABSIs in ICUs is mandated by the Texas Department of State Health Services (DSHS) and CMS. 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 is 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, full-body fenestrated drape, and hand hygiene) are used/
      c) The site is prepared with CHG in 70% alcohol. A CHG impregnated sponge is used at the catheter site in adult units.
      d) The same policies for insertion are followed for pulmonary artery catheters and arterial lines.
   4) Observing the maintenance bundle
      a) Dressings, tubing, and administration sets are changed per nursing policy.
      b) Catheters are accessed aseptically ("scrub the hub")
   5) Education about CLABSI prevention
      a) Staff who insert and care for lines are educated about infection prevention for central lines including pulmonary arterial catheters, as well as peripheral arterial lines.
      b) Patients and families are educated about preventing line infections
   6) Catheters are assessed daily for necessity and are discontinued when no
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longer needed.
7) 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
7) 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 using NHSN definitions. Reporting of CAUTIs in ICUs is mandated by the Texas Department of State Health Services (DSHS) and CMS. CAUTI prevention strategies include the following processes:
   1) Limiting use and duration of urinary catheters. An indication for a catheter must be noted in the patient’s medical record upon insertion and daily thereafter if the catheter is not removed.
   2) Aseptic insertion
   3) Maintaining a closed drainage system.
   4) Aseptic technique to access or open and reconnect.
   5) All CAUTI cases are reviewed with unit leadership to identify contributing factors and possible root cause.
   6) HCE Policy 01.45 Prevention of Urinary Tract Infection provides additional detail
c. Surveillance for ventilator-associated pneumonia (VAP) is conducted in the ISCU and PICU and surveillance for ventilator-associated events is conducted (VAE) in adult ICUs. VAEs include ventilator-associated conditions (VAC), infection related ventilator associated condition (IVAC), and possible (PoVAP).

VAE/VAP prevention includes:
   1) Elevated head of the bed unless contraindicated, oral care with CHG rinse, and daily assessment for readiness to wean and to extubate.
   2) For additional detail, see HCE policy 01.40 Prevention of Nosocomial Pneumonia
2. Surveillance for surgical site infections (SSI) follows the NHSN protocol. The following inpatient procedures are followed: cardiovascular bypass graft, peripheral vascular bypass graft, abdominal and vaginal hysterectomy, carotid endarterectomy, abdominal aortic aneurysm repairs, colon surgery, and hip and knee prosthesis. Infections may be identified during the admission, upon readmission, during an outpatient visit, or reported by another facility. DSHS requires reporting of these procedures to NHSN.

The Ambulatory Surgery Center at Victory Lakes conducts post-op surveillance by surveying surgeons who performed procedures. In addition, at least one procedure performed in ambulatory surgery will be followed during 2\textsuperscript{nd}-4\textsuperscript{th} quarters to assess risk.
Prevention of SSI includes:
  a. Antibiotic prophylaxis as recommended by the Antibiotic Subcommittee of the Pharmacy and Therapeutics Committee.
  b. Follow SCIP measures
  c. Observe OR policies for scrub attire, hand hygiene, skin prep, draping, etc.
  d. Environmental controls.
  e. Comply with guidelines for sterilization and/or high-level disinfection and appropriate storage of equipment.
  f. For additional detail, see HCE policy 01.46 Guideline for Prevention of Surgical Site Infection.

3. Control of epidemiologically-significant organisms, including: vancomycin-resistant Enterococcus (VRE), methicillin-resistant, Staphylococcus aureus (MRSA), Clostridium difficile, Acinetobacter baumannii, carbapenemase-resistant Enterobacteriaceae (CRE), and extended spectrum beta-lactamase producing gram negative bacilli (ESBL). Data that is reported to NHSN to meet CMS requirements includes C. difficile infections and MRSA bacteremia. DSHS requires reporting of all CRE isolates and all Acinetobacter isolates that meet CDC criteria for multi-drug resistance to the local health department.
  a. Microbiology laboratory reports are reviewed daily using an electronic surveillance system for epidemiologically-significant organisms, including those that are resistant to multiple antibiotics. When such an organism is identified, the patient from which it was recovered is placed on Contact Precautions. Infection Preventionists investigate any trends that are identified.
  b. Microbiology pages the IP on call when certain of these organisms are identified, including VRE, VRSA, C. difficile, and CRE, so that isolation precautions may be implemented in a timely manner.
  c. Active surveillance is performed in the ISCU and all adult ICUs on the Galveston campus. Patients in adult ICUs are screened for MRSA on admission and weekly for MRSA, VRE, and certain gram-negative bacilli, which varies with the type of ICU. In the ISCU, active surveillance culturing of patients is performed weekly for MRSA, group B beta-hemolytic Streptococcus, and certain gram-negative bacilli. If Acinetobacter or CRE 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. Other units on any campus may be cultured as the need arises. Results are reported back to Environmental Services and Nursing. Patients have a flag placed in the electronic medical record to assure isolation upon readmission. The Department and Managed Care Services also work very closely with various nursing homes on placement of patients who require isolation precautions and other issues of infection control concern.
e. Surveillance for \textit{C. difficile} is also hospital-wide. Environmental culturing is performed as indicated based on data. Precautions are implemented when the patient develops diarrhea and continue until \textit{C. difficile} is ruled out. Extended contact precautions include use of soap and water for hand hygiene and bleach solution for disinfection of environmental surfaces.

f. Other organisms may be designated as epidemiologically significant for a particular patient population.

g. \textit{C. difficile} infections and MRSA bacteremia are reported to NHSN via the LAB ID Event module

4. Monitoring and improving hand hygiene compliance
   a. The HCE policy 01.14 on hand hygiene describes indications, techniques, and products for hand hygiene. Personnel are educated regarding hand hygiene requirements. It is based on the CDC guideline.

   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 90% by the 4th quarter of the fiscal year (June-Aug).

   d. Improvement initiatives include product review/selection, education, surveillance, collaboration on reduction of CAUTI, feedback of performance data, and enforcement of policies.

5. Complying with standard and isolation precautions.
   a. See policy 01.19.

   b. Availability of personal protective equipment (PPE): PPE is available in each patient care area for use by the staff at any time to comply with Standard Precautions. PPE for isolation is provided in carts ordered when the patient is placed in isolation. The onsite storeroom also stocks PPE and PPE is stored for use in the event of an emergency in an on-campus warehouse.

   c. Isolation precautions are implemented when isolatable infections are identified. As noted previously, this may be from review of laboratory results and/or suspected or confirmed diagnosis of specific infectious diseases. For some organisms, the emergency medical record is flagged so that the patient will be placed in appropriate precautions upon readmission.

   d. The medical technologists in the clinical microbiology laboratory call the Department of Healthcare Epidemiology or page the IP on call when certain “sentinel” organisms are identified (VRE, VRSA, \textit{N. meningitidis, Bordetella pertussis} and \textit{Clostridium difficile}, positive AFB smears/cultures, or positive
PCR tests for influenza and RSV). Patient isolation is initiated or confirmed and, if necessary, an exposure investigation is carried out. Staff exposures are reported to Employee Health for follow-up. Patient exposures are reported to the patient’s physician.

e. Compliance is checked when IPs round on patient care units and corrective action is taken for noncompliance.

B. Prevention of Infections Associated with Medical Equipment and Environment

1. Prevent infections associated with medical equipment and supplies.
   a. Policies for disinfection (low- and high-level) and sterilization of equipment are based on CDC and AAMI guidelines. The scope of the policies includes cleaning, disinfection and sterilization methods, quality control, transportation of both dirty and clean equipment and supplies, storage, 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 01.10 covers processing of scopes. Policy 01.07 covers management of disposable (single use) items.
   b. Sites where high-level disinfection and sterilization of are practiced are identified and visited by Infection Preventionists to assess practices and assure compliance with UTMB policies and AAMI standards. Corrective action is taken when noncompliance is identified.

2. Prevent infections associated with construction. HCE collaborates with the Office of Facilities Planning and Construction (OFPC) to complete infection control risk assessments and to assure agreed-upon precautions are followed.

3. Prevent infections associated with potable water
   a. Unfiltered water in clinical buildings is assessed periodically for the presence of *Legionella*. Criteria are established to determine if the water supply in the area must be filtered.
   b. Water is treated with copper (Cu+) and silver (Ag+) ionizers in accordance with licensure by the Texas Commission of Environmental Quality.
   c. Filters are used on fixtures in areas that do not meet criteria.

4. Prevent infections associated with ventilation (HVAC) system
   a. Criteria are established for presence of airborne pathogenic fungi.
   b. Air cultures are performed routinely in clinical areas, during building demolition, post construction of patient care areas, after events such as major water incursion, and in response to identification of invasive fungal infections.

5. Prevent infections associated with facility events such as storm damage or water incursion.
   a. Notified by BOF if an event has or may have infection control implications.
   b. Collaborate on plan to assure area is safe to re-open for patient care.

C. Prevention of Occupationally Acquired Infections and/or Transmission by Infectious Staff to Others.

1. Employee health policies pertaining to infection prevention are developed in
collaboration by the HCE department and Employee Health and Wellness Service.

2. Services provided by Employee Health include:
   a. Initial and annual health evaluations
   b. Initial and annual TB skin tests and management of conversions.
   c. Screening and immunizations for specified vaccine-preventable diseases.
   d. Influenza vaccination program.
   e. Evaluation of employees who are injured or who become ill on the job.
   f. Screening and evaluation of exposures to bloodborne pathogens.
   g. Post-exposure prophylaxis and follow up exams as indicated.
   h. Management of other occupational exposures to infections in conjunction with HCE department:
      i. Implement policies regarding furlough of employees who are identified as infectious or those who have reached the end of the incubation period for the infectious disease to which they were exposed.

3. Identification and management of exposures to infectious disease. The HCE department, in collaboration with Employee Health and management of the area where the exposure occurred, will investigate the exposure incident and make recommendations for follow-up as follows:
   a. Develop an exposure definition consistent with the known epidemiology of the disease.
   b. Develop a contact list of patients and staff who were exposed.
   c. Interview patients and staff to clarify type of exposure.
   d. Determine susceptibility of each exposed person by history and serologic testing. Refer exposed persons without immunity to the appropriate clinic (patients) or to Employee Health (staff) for testing.
   e. Refer exposed, susceptible employees to Employee Health for evaluation, prophylaxis, follow-up, and furlough of exposed susceptible personnel who may be incubating an infection.
   f. Provide recommendations to the health care provider when patients are exposed to an infectious person. Implement isolation precautions as necessary for exposed susceptible patients who need to remain in the hospital.

4. TB control: as mentioned in preceding sections, the control of tuberculosis depends upon the following measures.
   a. Prompt identification of possible tuberculosis.
   b. Prompt implementation of Airborne Precautions, including placement in an airborne isolation room (AIIR) with negative pressure.
   c. A respiratory protection program including fit testing for N95 respirators.
   d. TB skin tests (TST) 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 certain circumstances.
   e. 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.

f. Furlough of employees with active TB until rendered noninfectious by treatment.

5. Influenza prevention:
   a. Goal of annual vaccination program for employees
      1) It is the goal to improve vaccine acceptance each year. The goal for the 2014 influenza season (October 1, 2014 – March 31, 2015) is to achieve an acceptance rate of 91% of staff defined by policy as Healthcare Workers. The denominator includes all HCW employed at UTMB during the 2014 influenza season. The numerators are (a) all HCW who are vaccinated and (b) all HCW who decline vaccination).
      2) Methods to achieve the goal include:
         a) Providing access to influenza vaccinations on-site and marketing opportunities.
         b) Educating staff and licensed independent practitioners about influenza vaccination; non-vaccine infection control measures (such as the use of Droplet Precautions); and diagnosis, transmission, and potential impact of influenza.
         c) Evaluating declinations to identify opportunities to reduce the number.
         d) 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).
   b. 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) 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.
      5) Patient care areas are monitored through influenza season to assure unvaccinated staff are masked.
   c. Isolation of influenza like illness and confirmed influenza
      1) Patients with influenza-like illness are placed in Droplet Precautions until influenza is ruled out.
      2) The Clinical Microbiology laboratory offers PCR multiplex tests or viral culture during influenza season. Point of care rapid flu tests are used only in clinic settings.
      3) The Clinical Microbiology laboratory pages the IP on call if PCR tests are positive for inpatients or ED patients for influenza A, influenza B, or RSV. The IP on call will immediately notify the patient care area to implement precautions (droplet for influenza, contact for RSV).
d. Furlough of sick employees: employees with influenza must be fever-free for 24 hours without the use of antipyretic before returning to work.
e. Visitor control:
1) Kiosks with masks, tissues, and hand sanitizer are available at the entrance to the hospital. Signage encourages anyone entering with fever and a cough to use a mask.
2) Depending upon the incidence of cases and the severity of disease, there may be additional control measures implemented to prevent visitors with influenza-like illness from visiting.

D. Investigating and Controlling Outbreaks
Each outbreak of infection is investigated and control measures are implemented. Investigative techniques include development of case definitions, case finding, development and analysis of a line listing, point prevalence culture surveys of patients, cultures of personnel and the environment, development and analysis of the epidemic curve, observation of healthcare workers’ patient care techniques and performance of a case-control study. Interventions for control are developed and implemented as quickly as possible.

E. Identifying and Controlling Emerging Infectious Diseases (EID)
The Department of Healthcare Epidemiology has developed protocols that will prepare the institution in the event that a patient(s) present(s) with an EID. The protocols include information on Emergency Department triage, isolation, donning and removal of PPE, follow-up of employee exposures and public health communication. Protocols will be developed and refined as needed. These policies can be found in Policy Section III on the Department website.

III. Education Provided by Healthcare Epidemiology
A. Education of employees on the prevention of hospital-acquired infections in patients and occupationally-acquired infections in healthcare workers is provided on a continuous basis. Education is provided on Standard Precautions and topics in infection control specific for each group (service/department/unit). All employees receive Standard Precautions education during new employee orientation. Annual updates are given to clinical employees on Standard Precautions and other infection control topics either on-line through electronic learning modules or by presentation.

B. Infection Control concepts are communicated to the public in several ways:
1. Patient isolation signs are placed on the patient’s door, in both English and Spanish, explaining the proper precautions that need to be taken prior to entering the room.
2. Fliers are placed in the patient’s admission pack reminding the patient that it is “ok” for them to remind the healthcare provider to wash their hands, or use an alcohol hand rub.
3. The Nursing website has several educational fliers that are used for patient education.
4. When a patient is placed on isolation, the nurse gives the patient/family a flier explaining isolation precautions.

IV. 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.

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Healthcare Epidemiologist  Director, Healthcare Epidemiology

Date signed  Date signed  
Improved by Infection Control Committee 2/9/2015