

University of Michigan Hospitals and Health Centers
Infection Control & Epidemiology

SURVEILLANCE (DATA MANAGEMENT) PLAN

Infection Control & Epidemiology staff performs continuous, priority-directed, targeted surveillance. This method of surveillance was chosen to enable IC&E staff to focus on high-risk areas. Each staff specialist has identified areas to target based on the population at risk (e.g., those areas where frequent infectious complications are found - TBICU, other ICUs; those areas or services with a potential for prevention - HemOnc/BMT, 6AR, NICU, 7M; those areas/patients with a high potential for adverse patient outcomes - Cardiac Surgery, VRE; and high-volume areas - certain clinics). Patient populations are primarily intensive care and/or immunocompromised patients. Areas to monitor are reevaluated semi-annually.

Data are collected using microbiology laboratory reports to identify positive cultures that might indicate infected patients. In addition, a reporting system is used to identify patients in ambulatory care areas with potential post-surgical infections. Post-discharge surveillance is performed on the indicators followed through staff contacts in clinics, review through Care Web; and special post-discharge reports.

Nosocomial infections are identified through ongoing concurrent medical record review. The UMHHC definitions for nosocomial infections are followed. These definitions set criteria for defining infections and for differentiating nosocomial and community-acquired infections – they are based on the CDC's National Nosocomial Infections Surveillance System definitions. Staff Specialists and the Clinical Information Analyst are responsible for data collection, evaluation, and follow-up.

Data are used in studies for improving patient care. IC&E staff works with the quality assurance committees for all ICUs and other high-risk areas on improvement projects. Studies are performed as needed to evaluate accuracy and completeness of case finding. The UMHHC is a member of the National Nosocomial Infections Surveillance System of the CDC.

Data are presented routinely to the Infection Control Committee in the form of rates. Any problem areas are also brought to the attention of the nurse manager and medical director. At completion of follow-up an epidemiologic formal report is written. Recommendations are made related to the problem in order to decrease infectious complications and improve patient care.

If a cluster of infections or an outbreak is identified an investigation will be performed to identify root causes. A case-control or cohort study may be performed. One area of review is adequate staffing. Control measures are recommended at various stages prior to, during, and after the study. Surveillance is continued to ensure control of the problem. In general, epidemiologic methods are used to evaluate results, investigate problems, and determine measures for improvements. Sustained improvement is evaluated routinely through surveillance and review of microbiology laboratory culture results.

Specific surveillance areas are identified yearly as part of the ICC's quality management plan. Information on the selected indicators is presented on a routine basis to the Continuous Quality Improvement Program. In addition, data are provided for the CQIP report that is distributed to medical staff. Staff Specialists also provide nosocomial infection data to ICUs' QA committees.

IC&E staff members report identified reportable diseases to the Washtenaw County Health Department and other health departments as outlined in UMHHC policy.

Employee infections are monitored through Employee Health Service. A summary report is presented routinely to the ICC documenting body substance exposure trends and evaluating them for areas of improvement. IC&E staff performs exposure investigations with follow-up through EHS.

Microbiologic sampling of personnel, patients or the environment is performed only when epidemiological evidence suggests a personnel or environmental source of a problem.

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