



CREATING A CULTURE OF QUALITY

Reconcile Reporting Differences in HAI Data Submitted by Outpatient Hemodialysis Facilities

Network of New England developed a data validation protocol for HAI data submitted by dialysis facilities in NHSN.

Organization Name: Network of New England

Authors: Jaya Bhargava, Information Systems Manager; Priscilla Laliberty, HAI Project Coordinator; Martha Bean, Medical Quality Manager; and Cynthia Lambert, Medical Quality Manager

Project objective, purpose & goals: Develop a validation protocol for Healthcare Associated Infections data submitted to National Healthcare Safety Network (NHSN), a Centers for Disease Control and Prevention (CDC) database.

Setting: Selected dialysis facilities in New England

Sample/ Patients: Data from NHSN submitted by selected facilities is used for validation

Process studied: Data validation of data entered in NHSN

Interventions: Dialysis patients are immunocompromised which increases their susceptibility for infection. These patients are at high risk of infections for three major reasons: vascular access, frequency of dialysis treatment in an outpatient setting, and overall exposure to multiple healthcare environments. Medical appointments, emergency room visits, and hospitalizations are common events among dialysis patients. National Healthcare Safety Network (NHSN) is a secure internet-based surveillance system used by the Centers for Disease Control and Prevention (CDC). CDC provides guidelines for reporting Healthcare Associated Infections (HAI's) using NHSN. Infection rates can be calculated for each healthcare entity based on data entered in NHSN. Outpatient dialysis facilities are currently enrolling and entering data in NHSN due to the Centers for Medicare and Medicaid requirement under Quality Incentive Program. Over and under reporting of dialysis events in NHSN can happen because: NHSN is a new software system for dialysis facility staff, uncertainty in determining treatment setting infections origin (i.e. hospital, nursing home, and community or dialysis center), difficulty in understanding CDC definitions and concerns that surveillance data will be used for performance measurement. Based on the work conducted by Network of New England the following data management monitoring recommendations were provided: Establish a yearly validation process and a sign off process by facility on data submitted. Different levels of validation can be conducted by facility, ESRD Networks, State Health Departments, CMS and CDC. Network of New England developed a validation protocol for on site validation. This protocol has criteria regarding sample size for abstracting records when conducting site visits and methods to conduct validation for over and under reporting HAI dialysis events.



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Conducting Infection Prevention and Infection Control Interventions in Dialysis Facilities A New England Experience

Network of New England conducted HAI interventions for infection control and infection prevention to reduce bloodstream infections (BSI) in selected dialysis facilities. This project is based on the data entered National Healthcare Safety Network (NHSN). Early results indicate that the facilities that have conducted intervention reduce BSI rates.

Organization Name: Network of New England

Authors: Jaya Bhargava, Information Systems Manager; Priscilla Laliberty, HAI Project Coordinator; Martha Bean, Medical Quality Manager; and Cynthia Lambert, Medical Quality Manager.

Project objective, purpose & goals: Reduction in the Bloodstream Infections (BSI) or Dialysis Events (DE) as reported in National Healthcare Safety Network (NHSN).

Setting: Dialysis facilities in New England

Sample/ Patients: Data from NHSN, the Centers for Disease Control and Prevention (CDC) tool for surveillance of healthcare associated conditions and related processes for all healthcare settings were used to track progress of selected facilities conducting interventions. The sample size is approximately nine facilities representing about 450 patients.

Process studied: Infection control and infection prevention within the dialysis facility. Outcome measures are Bloodstream Infections (BSI) in dialysis facilities as entered in NHSN by facilities using CDC definitions for "Dialysis Event" (DE).

Interventions: Previous CDC Collaboration developed several interventions in ESRD settings to address bloodstream infections in dialysis facilities. The Network of New England designed this project on past HAI experience, by targeting the interventions to the facility's data entered in NHSN. In order to tailor the interventions to facility's need, Network of New England developed facility specific reports from data in NHSN and provided those reports to facilities. The Network of New England also obtained feedback from Advisory Committee for New England Dialysis Collaborative. Network Quality Managers developed QAPI templates for facilities to use. Major themes for interventions are Hand Hygiene, catheter management and removal, preventing infections associated with fistulas using buttonhole technique and change of facility culture with reference to infection control for staff and patients. The Network monitored data entry into NHSN and monitored facilities that are conducting interventions.

Evaluation: Early results indicate that the facilities conducting interventions reduce BSI.

Conclusion and Recommendations: Infection surveillance raises awareness of infection control and infection prevention in the dialysis unit. The HAI data feedback report sent to facilities generated provider focused interventions.

Barriers to conducting the intervention work: Facility staff were very confused about data entry into CROWNWeb and NHSN. Limited provider staff time to document intervention process and to measure intervention results.

References:

1. "12 Steps to Prevent Antimicrobial Resistance: Dialysis Patients" based on the presentation by Dr. Alex Kallen, MD, MPH of CDC on CDC dialysis collaborative call of Jan 2012.
2. Dialysis BSI Prevention Collaborative: <http://www.cdc.gov/dialysis/collaborative/>