National Opportunity to Improve Infection Control in ESRD (NOTICE)

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Purpose:  
Evidence suggests that infection control (IC) guidelines are not uniformly practiced in US dialysis facilities. Many of these infections are preventable through the use of standardized evidence-based IC practices. The goal of the NOTICE project is to determine if introduction of these practices, combined with the Comprehensive Unit-Based Safety Program will result in lowered vascular access infections.

Project Sample:  
Sixty hemodialysis (HD) facilities were selected for participation from 2 ESRD Networks. Selection was based on provider type and infection rate. Facilities with small patient census were excluded.

Project Design:  
To monitor and improve IC practices, educational resources were presented to project facilities via monthly coaching calls and 8 bimonthly content calls. Vascular access infection (VAI) data and bloodstream infection (BSI) data are collected through the National Healthcare Safety Network. Monthly process audit data are collected via the Comprehensive Data System developed by the Health Research & Educational Trust.

Preliminary Results:  
As of 10/2013, facilities have collected 9 mos. of outcome data and 6 mos. of process data. VAI and BSI (episodes/100 pt. mos.) decreased from baseline measurement. VAI rate decreased from 1.7 in the baseline month to 1.3 at 6 mos., although the baseline month may not be representative of basal rates. BSI rate decreased from 0.6 at baseline to 0.5 in 6 mos. Successful catheter care and fistula initiation observations increased approximately 11% and 10% respectively between April and August 2013. The NOTICE project continues through April 2014 during which changes in rates and safety culture will continue to be monitored.

Conclusion:  
Improving the culture of safety, communication, teamwork, and the use of standardized evidence-based practices have successfully reduced infection rates in other care settings. The preliminary NOTICE project results are encouraging, but longer trend analysis is needed to confirm success of this project.

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