# End Stage Renal Disease Network of Texas InfectionWatch2014 Quality Improvement Activity

APIC Meeting
September 2014



- \* A leading cause of death among hemodialysis patients, second only to vascular disease, are bloodstream and other types of infections which poses a significant threat to patient safety.
- \* In 2008, CDC estimated that 37,000 bloodstream infections occurred among hemodialysis patients with central lines. One in four of these infected patients may have died as a result of the infection.
- \* Since 1993, hospitalization rates among hemodialysis patients have increased 47% for bloodstream infection and 87% for vascular access infection.



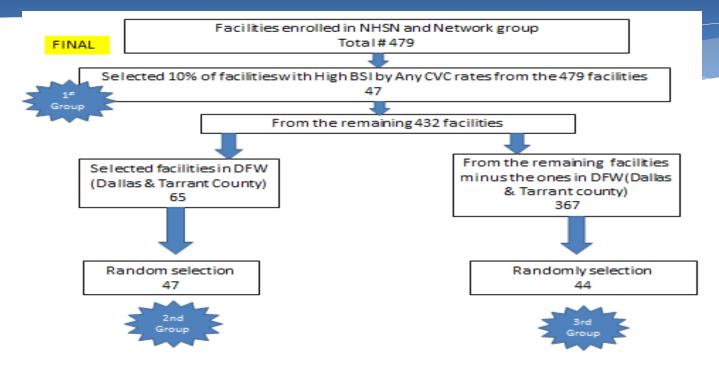
- \* A patient's risk of infection is related to their vascular access type (how a patient's veins are accessed so they can receive hemodialysis).
- \* Common types include: central lines, arteriovenous (AV) fistulas created from the patient's own blood vessels, and AV grafts constructed from synthetic materials.
- \* Whenever possible, AV fistulas are the preferred way to receive dialysis because they have the lowest risk of infection. Central lines have the highest infection risk.



# InfectionWatch2014 QIA HAI DE QIA

- \* As directed by CMS, Network 14 rolled out the HAI DE QIA impacting a minimum of twenty percent (N=96) of eligible ESRD facilities (N=479 as of December 2013). The QIA began 4/1 and ends 11/31/2014.
- \* The HAI DE QIA focus facility (FF) selection utilized an unbiased and widely stratified proportionate methodology to attain thirty percent of Network 14's eligible facilities (N=138) for the project.
- \* The selection process included stratifying facilities utilizing a three prong approach as exemplified in Chart 1 below

- \* The first one-third of FF were quantifiably low performers according to the National Healthcare Safety Network (NHSN) BSI rates by any central venous catheter type.
- \* The second one-third of FF were based on random geographical sampling and proximity to Network 14, permitting Network 14's staff to observe, mentor, and test if facilities are correctly implementing performing the CDC's established infection control observations as directed.
- \* The last one-third of FF were selected via random sampling of the remaining facilities in the Network 14 area.





- \* Interventions are limited to CDC developed tools and education resources located on CDC website under Bloodstream Infection (BSI) prevention materials found at <a href="http://www.cdc.gov/dialysis/">http://www.cdc.gov/dialysis/</a>.
- \* The 138 FF's will fully implement the HAI DE QIA beginning April 7, 2014, which includes, but is not limited to, correctly implementing and performing:
- \* ≥ 30 hand hygiene observations per month
- \* ≥ 10 catheter connection/disconnection observations per month
- \* ≥ 10 fistula/graft cannulation observations per month



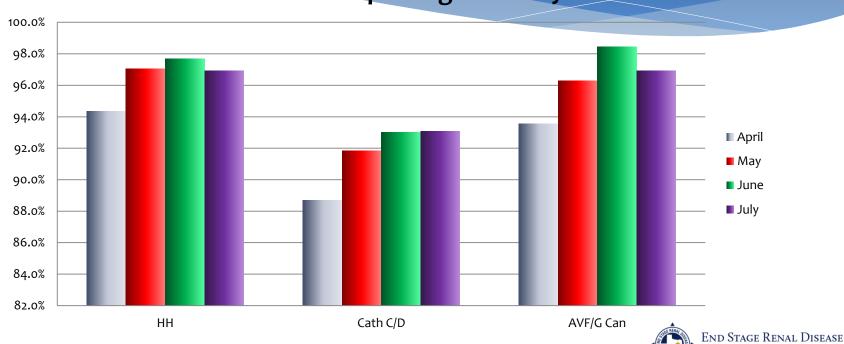
- \* FF's report the audit outcomes as numerators/denominators to Network 14 monthly.
- \* The CMS directed ESRD Network goal is to achieve >90% of the FF (N=134) correctly performing the CDC established audits and reporting tallies monthly to Network 14.
- \* Network 14 reports FF tallies monthly to CMS via the Dashboard the following month.



- \* Network staff continuously monitor the interventions through internal quality improvement metric(s), one-on-one telephone, and electronic communication with participating FF leadership and staff.
- \* Interventions are evaluated monthly based on their ability to achieve desired outcomes, the facility's use of specific tools for each intervention, and the intervention's potential use in future QIAs.



#### **Facilities Reporting Correctly**



#### **CDC BSI Resource Updates**

- \* The: Online availability of compatibility information for skin antiseptics and antimicrobial ointments with chronic hemodialysis catheters
- \* The: Spanish captioned version of the <u>Provider Training Video: Preventing Bloodstream</u> <u>Infections in Outpatient Hemodialysis Patients: Best Practices for Dialysis Staff</u>
- \* New: <u>Dialysis Infection Prevention Tools Web Button</u>
- \* NHSN web content syndication
  Instructions at: <a href="https://tools.cdc.gov/syndication/LearnMore.aspx">https://tools.cdc.gov/syndication/LearnMore.aspx</a>
- \* Available content at:
  <a href="http://www.cdc.gov/nhsn/dialysis/dialysis-event.html">http://www.cdc.gov/nhsn/dialysis/dialysis-event.html</a> (Protocol and Data)

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#### **CDC BSI Resource Updates Continued**

- Collection Forms and Instructions
- \* <a href="http://www.cdc.gov/nhsn/Training/dialysis/index.html">http://www.cdc.gov/nhsn/Training/dialysis/index.html</a> (entire page)
- \* New: computer-based, self-paced Protocol training
- \* http://nhsn.cdc.gov/nhsntraining/courses/C18/
- \* Receive continuing education credits for completing this training: http://www2a.cdc.gov/TCEOnline/registration/detailpage.asp?res\_id=40



#### **Questions?**

