NATIONAL QUALITY FORUM

Measure Evaluation 4.1
December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized)**:** Complete all yellow highlighted areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) **NQF Review #:** 1477 **NQF Project:** End Stage Renal Disease
MEASURE DESCRIPTIVE INFORMATION
De.1 **Measure Title:** National Healthcare Safety Network (NHSN) Intravenous (IV) Antibiotic Start Measure
De.2 **Brief description of measure**: Monthly rate of outpatient intravenous antibiotic starts (initiation of a new antibiotic not in use in previous 21 days)per 100 patient months within outpatient dialysis unit. The 21 day rule is used to exclude counting antibiotics that are given for the same infection.
1.1-2 **Type of Measure:** Other This measure is both process and outcome De.3 **If included in a composite or paired with another measure, please identify composite or paired measure**
De.4 **National Priority Partners Priority Area:** Safety De.5 **IOM Quality Domain**: Safety De.6 **Consumer Care Need:** Staying healthy

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	**NQF Staff**
A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. *Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.* A.1 **Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)?** Yes A.2 **Indicate if Proprietary Measure** (*as defined in measure steward agreement*)**:** A.3 **Measure Steward Agreement:** Government entity and in the public domain - no agreement necessary A.4 **Measure Steward Agreement attached:**	**A** **Y☐** **N☐**
B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least	**B** **Y☐**

every 3 years. Yes, information provided in contact section	N☐
C. The intended use of the measure includes both public reporting and quality improvement. ►**Purpose:** Public reporting, Internal quality improvement	C Y☐ N☐
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1**Testing:** Yes, fully developed and tested D.2 **Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?** Yes	D Y☐ N☐
(for NQF staff use) **Have all conditions for consideration been met?** **Staff Notes to Steward** (*if submission returned*)**:**	Met Y☐ N☐
Staff Notes to Reviewers (*issues or questions regarding any criteria*)**:**	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
1. IMPORTANCE TO MEASURE AND REPORT	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. *Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.* (evaluation criteria) **1a. High Impact**	**Eval Rating**
(for NQF staff use) **Specific NPP goal**:	
1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Leading cause of morbidity/mortality, Patient/societal consequences of poor quality **1a.2** **1a.3 Summary of Evidence of High Impact:** Approximately 350,000 patients undergo hemodialysis in the United States each year. In light of the immune-compromised state of these patients and their frequent exposure to medical care/ medical devices, hemodialysis patients are at high risk for healthcare-associated infections. Although recently decreases in healthcare-associated infections in other populations have been realized, infections among dialysis patients continue to result in increasing morbidity and mortality. This includes hospitalizations related to infections which have increased among dialysis patients over the last 10 years. In addition, these patients are at high risk for infections with multidrug-resistant organism. Patients undergoing dialysis are at a more than 100 times higher risk of infections with methicillin-resistant Staphylococcus aureus. Better categorizing antimicrobial usage is an important part of understanding and measuring the impact of serious and drug-resistant infections in this group of patients. In addition, IV antibiotic starts can serve as a proxy for infections in hemodialysis patients and can be used to assess the effect of interventions aimed at decreasing antibiotic use—an important factor in the induction of further antibiotic resistance. **1a.4 Citations for Evidence of High Impact:** US Renal Data System. USRDS 2008 Annual Data report: Atlas of end-stage renal disease in the United States. NIH, National Institute of Diabetes and Digestive and Kidney Diseases. Bethesda, MD (2008). CDC. Invasive methicillin-resistant Staphylococcus aureus infections among dialysis patients--United States,	**1a** C☐ P☐ M☐ N☐

Comment [KP1]: 1a. The measure focus addresses:
•a specific national health goal/priority identified by NQF's National Priorities Partners; OR
•a demonstrated high impact aspect of healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

2005. MMWR 2007; 56:197-9
Kallen AJ, et al. Health care associated invasive MRSA infections, 2005-2008. JAMA 2010; 304:641-647

1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: Use of a measure that quantifies IV antibiotic starts in dialysis setting can lead to a better understanding of the use of these agents in this setting. It can allow for measurement of efforts targeting antibiotic stewardship. In addition, as this measure can be used as a proxy for infections in dialysis settings, this measure can be used to evaluate quality improvement efforts aimed at decreasing dialysis-related infections.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:
Rates of bloodstream infections (for which IV antibiotic starts may serve as a proxy) vary greatly between facilities and access types. Subsequently antibiotic use varies greatly in these settings.

1b.3 Citations for data on performance gap:
Klevens RM, et al. Dialysis surveillance report: National Healthcare safety Network (NHSN) – data summary for 2006. Semin Dialysis 2008; 21:24-8

1b.4 Summary of Data on disparities by population group:
Hemodialysis is disproportionately common among non-whites and lower social economic categories. Among dialysis patients rates of infections varies greatly by access type.

1b.5 Citations for data on Disparities:
Klevens RM, et al. Dialysis surveillance report: National Healthcare safety Network (NHSN) – data summary for 2006. Semin Dialysis 2008; 21:24-8

1b
C☐ P☐ M☐ N☐

1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*)**:** The IV antibiotic starts measure is both a process measure and an outcome measure depending on how it is used. If antimicrobial resistance is the outcome minimizing the use of unnecessary antibiotics is an important prevention practice and measuring antibiotic starts would be the process measure used to evaluate this risk factor. Decreasing antibiotic selective pressure can lead to changes in antimicrobial resistance patterns among organisms isolated from clinical cultures. IV antibiotic starts can also be used as a proxy measure for infections in outpatient dialysis centers where cultures may not always be done to completely document infections. When used in this way it is an outcome measure. As antibiotics can be started empirically for presumed infections, even when a culture has not been done, antibiotic starts may be a more sensitive mechanism for determining infections than positive clinical cultures alone.

1c.2-3. Type of Evidence: Observational study, Evidence-based guideline, Expert opinion

1c.4 Summary of Evidence (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*)**:**
For use as a process measure:
Antimicrobials can contribute to the dissemination of resistance in several ways. First, use of antimicrobials can eliminate normal human flora and thereby reduce competition that might aid in the transmission of more resistant bacterial strains that are not included in the antimicrobials spectrum of activity. Second, use of certain antimicrobials can select for or induce resistance among patients already colonized with these organisms. Modifications in antimicrobial use have resulted in changes (decreases in resistance) among certain pathogens.
Evidence to support this includes:
Shales DM, et al. Society for Healthcare Epidemiology of America (SHEA) and Infectious Disease Society of America (IDSA) Joint Committee on the Prevention of Antimicrobial Resistance: Guidelines for the Prevention of Antimicrobial resistance in Hospitals. Clin Infect Dis 1997; 25:584-99
Gerding DN, Larson TA. Aminoglycoside resistance in gram-negative bacilli during increased amikacin use. Comparison of experience in 14 United States hospitals with experience in the Minneapolis Veterans

1c
C☐ P☐ M☐ N☐

Comment [KP2]: 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

Comment [k3]: 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

Comment [k4]: 1c. The measure focus is:
•an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;
OR
•if an intermediate outcome, process, structure, etc., there is **evidence** that supports the specific measure focus as follows:
oIntermediate outcome – evidence that the measured intermediate outcome (e.g., blood pressure, Hba1c) leads to improved health/avoidance of harm or cost/benefit.
oProcess – evidence that the measured clinical or administrative process leads to improved health/avoidance of harm and
if the measure focus is on one step in a multi-step care process, it measures the step that has the greatest effect on improving the specified desired outcome(s).
oStructure – evidence that the measured structure supports the consistent delivery of effective processes or access that lead to improved health/avoidance of harm or cost/benefit.
oPatient experience – evidence that an association exists between the measure of patient experience of health care and the outcomes, values and preferences of individuals/ the public.
oAccess – evidence that an association exists between access to a health service and the outcomes of, or experience with, care.
oEfficiency – demonstration of an association between the measured resource use and level of performance with respect to one or more of the other five IOM aims of quality.

Comment [k5]: 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status – patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., ... [1]

Administration Medical Center. Am J Med 1985; 79:1-7
Kallen AJ, et al. Complete restriction of fluoroquinolone use to control an outbreak of Clostridium difficile infection at a community hospital. Infect Control Hosp Epidemiol 2009; 30:264-72.

For the outcome measure:
Dialysis patients are at high risk for infections particularly bacteremia and sepsis as a result of the requirement for regular access to their vasculature. Identifying and measuring bacteremia requires the collection of blood cultures which is more difficult to perform in outpatient dialysis centers than it is in inpatient settings. In light of this some facilities may choose to treat patients with antimicrobials empirically rather than draw blood cultures. Therefore, identifying and measuring antimicrobial starts is a potentially more sensitive measure for documenting infections among dialysis patients than positive cultures. Infections in dialysis centers are clearly preventable and recent guidelines have described interventions that can reduce these infections.
Reviews/guidelines describing infection prevention practices that can reduce dialysis-related infections:
CDC. Recommendations for Preventing Transmission of Infections among Chronic Hemodialysis Patients. MMWR 2001; 50(RR05):1-43.
CDC. Guidelines for the Prevention of Intravenous Catheter-Related Infections. MMWR 2002; 51(RR10):1-26.
Kallen AJ, Arduino MJ, Patel PR. Preventing infections in patients undergoing hemodialysis. Expert rev Anti Infect Ther 2010; 8:643-55.

1c.5 Rating of strength/quality of evidence (*also provide narrative description of the rating and by whom***):**
The Infectious Disease Society of America has recommended the use of process measures in addition to outcome measures when measuring the impact of antimicrobial stewardship activities (Dellit TH, et al. IDSA and SHEA guidelines for developing an institutional program to enhance antimicrobial stewardship. Clin Infect Dis 2007; 44:159-77). The evidence for this is rated a B-III (see below for description)

1c.6 Method for rating evidence: CDC/HICPAC recommendations are based on reviews of the evidence by an expert writing group. This information is then compiled and voted on by HICPAC. The evidence is rated as follows:
Category IA. Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.
Category IB. Strongly recommended for implementation and supported by some experimental, clinical, or epidemiologic studies, and a strong theoretical rationale.
Category IC. Required by state or federal regulations, rules, or standards.
Category II. Suggested for implementation and supported by suggestive clinical or epidemiologic studies or a theoretical rationale.
Unresolved issue. Represents an unresolved issue for which evidence is insufficient or no consensus regarding efficacy exists.

In the IDSA guidelines recommendations are rated as follows:
Table 1. Infectious Diseases Society of America–United States Public Health Service grading system for ranking recommendations in clinical guidelines.

Strength of recommendation
A Good evidence to support a recommendation for use
B Moderate evidence to support a recommendation for use
C Poor evidence to support a recommendation for use

Quality of evidence
I Evidence from 1 properly randomized, controlled trial
II Evidence from 1 well-designed clinical trial, without randomization; from cohort or case-controlled analytic studies; from multiple time-series; or from dramatic results from uncontrolled experiments
III Evidence from opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

1c.7 Summary of Controversy/Contradictory Evidence: It is unlikely that measurement of either of these items or the importance of preventing these infections would be considered controversial

Comment [k6]: 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question being studied (e.g., randomized controlled trials appropriate for studying drug efficacy are not well suited for complex system changes). When qualitative studies are used, appropriate qualitative research criteria are used to judge the strength of the evidence.

1c.8 Citations for Evidence (*other than guidelines***):** Summary of evidence surrounding prevention of infections in hemodialysis:
Kallen AJ, Arduino MJ, Patel PR. Preventing infections in patients undergoing hemodialysis. Expert Rev Anti Infect Ther 2010; 8:643-55.
Patel P, Kallen A, Arduino M. Epidemiology, surveillance, and prevention of bloodstream infections in hemodialysis patients. Am J Kidney Dis 2010; 56:566-77.

1c.9 Quote the Specific guideline recommendation (*including guideline number and/or page number***):**
For outcome measure (From Dellit TH, et al. IDSA and SHEA guidelines for developing an institutional program to enhance antimicrobial stewardship. Clin Infect Dis 2007; 44:159-77):
"Both process measures (did the intervention result in the desired change in antimicrobial use?) and outcome measures (did the process implemented reduce or prevent resistance or other unintended consequences of antimicrobial use?) are useful in determining the impact of antimicrobial stewardship on antimicrobial use and resistance patterns (B-III)."

For the preventability of infections in dialysis settings there are a large number of recommendations from two main sources:
CDC. Recommendations for Preventing Transmission of Infections among Chronic Hemodialysis Patients. MMWR 2001; 50(RR05):1-43.
CDC. Guidelines for the Prevention of Intravenous Catheter-Related Infections. MMWR 2002; 51(RR10):1-26.

1c.10 Clinical Practice Guideline Citation: Dellit TH, et al. IDSA and SHEA guidelines for developing an institutional program to enhance antimicrobial stewardship. Clin Infect Dis 2007; 44:159-77

Shales DM, et al. Society for Healthcare Epidemiology of America (SHEA) and Infectious Disease Society of America (IDSA) Joint Committee on the Prevention of Antimicrobial Resistance: Guidelines for the Prevention of Antimicrobial resistance in Hospitals. Clin Infect Dis 1997; 25:584-99

CDC. Recommendations for Preventing Transmission of Infections among Chronic Hemodialysis Patients. MMWR 2001; 50(RR05):1-43.
CDC. Guideliens for the Prevention of Intravenous Catheter-Related Infections. MMWR 2002; 51(RR10):1-26.
1c.11 National Guideline Clearinghouse or other URL:
http://www.journals.uchicago.edu/doi/pdf/10.1086/513766 and
http://www.journals.uchicago.edu/doi/pdf/10.1086/510393 and
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5110a1.htm and
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm

1c.12 Rating of strength of recommendation (*also provide narrative description of the rating and by whom***):**
Rating for process measure outcome is B-III. There are multiple recommendations for preventing infections in dialysis settings.

1c.13 Method for rating strength of recommendation (*If different from USPSTF system, also describe rating and how it relates to USPSTF)***:**
CDC/HICPAC recommendations are based on reviews of the evidence by an expert writing group. This information is then compiled and voted on by HICPAC. The evidence is rated as follows:
Category IA. Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.
Category IB. Strongly recommended for implementation and supported by some experimental, clinical, or epidemiologic studies, and a strong theoretical rationale.
Category IC. Required by state or federal regulations, rules, or standards.
Category II. Suggested for implementation and supported by suggestive clinical or epidemiologic studies or a theoretical rationale.
Unresolved issue. Represents an unresolved issue for which evidence is insufficient or no consensus regarding efficacy exists.

In the IDSA guidelines recommendations are rated as follows:

Comment [k7]: USPSTF grading system **http://www.ahrq.gov/clinic/uspstf/grades.htm**: **A -** The USPSTF recommends the service. There is high certainty that the net benefit is substantial. **B -** The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. **C -** The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. **D -** The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. **I -** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

Table 1. Infectious Diseases Society of America–United States Public Health Service grading system for ranking recommendations in clinical guidelines. Strength of recommendation A Good evidence to support a recommendation for use B Moderate evidence to support a recommendation for use C Poor evidence to support a recommendation for use Quality of evidence I Evidence from 1 properly randomized, controlled trial II Evidence from 1 well-designed clinical trial, without randomization; from cohort or case-controlled analytic studies; from multiple time-series; or from dramatic results from uncontrolled experiments 1c.14 **Rationale for using this guideline over others:** These are the two most widely used guidelines for this area and are from the groups with the greatest expertise in these areas	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Importance to Measure and Report?*	**1**
Steering Committee: Was the threshold criterion, *Importance to Measure and Report*, **met?** **Rationale:**	**1** **Y☐** **N☐**
2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES	
Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)	**Eval Rating**
2a. MEASURE SPECIFICATIONS	
S.1 **Do you have a web page where current detailed measure specifications can be obtained?** S.2 **If yes, provide web page URL:** **2a. Precisely Specified**	
2a.1 **Numerator Statement (***Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome***):** Total number of intravenous antibiotics started (not in use in previous 21 days) in the outpatient unit. 2a.2 **Numerator Time Window (***The time period in which cases are eligible for inclusion in the numerator***):** Cases are included if the IV antibiotic is started during a month that the outpatient unit is selected for surveillance (antibiotic cannot have been used in last 21 days). 2a.3 **Numerator Details (***All information required to collect/calculate the numerator, including all codes, logic, and definitions***):** The antibiotic must be given via the intravenous route (i.e., oral and intramuscular antibiotics are not included) in the outpatient hemodialysis unit during the month being evaluated. Antibiotics given for any indication are included, provided they have not been used in the prior 21 days. An antibiotic is defined as any of a number of FDA-approved medications for the treatment of bacterial infections. Data specifications: Events are included if the field labeled, "In-unit IV antimicrobial start" on Form 57.109 under ´Event Details´ is checked as being present.	
2a.4 **Denominator Statement (***Brief, text description of the denominator - target population being measured***):** The denominator is the number of patients receiving hemodialysis at the facility on the first two hemodialysis days of the month (i.e., patient-months). 2a.5 **Target population gender:** Female, Male	**2a-specs** **C☐** **P☐** **M☐** **N☐**

Comment [KP8]: 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP) .

2a.6 Target population age range: Patients of all ages receiving hemodialysis in the unit

2a.7 Denominator Time Window (*The time period in which cases are eligible for inclusion in the denominator***):**
Includes patients receiving hemodialysis at the facility on the first two hemodialysis days of the month. For simplicity of capture, the assumption is made that those receiving hemodialysis on the first two days of the month receive therapy for the entire month and that no new patients are admitted to the unit until the beginning of the next month.

2a.8 Denominator Details (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions***):**
The denominator includes all hemodialysis outpatients who receive hemodialysis at the outpatient dialysis unit on the first two working days of the month during which surveillance is being conducted. If the first day of the month is a Sunday and dialysis is not conducted on that day, the next two days in which dialysis is conducted are used.
Data specification: The numeric value entered into the field labeled "Total patients" (on Form 57.119) is used as the denominator.

2a.9 Denominator Exclusions (*Brief text description of exclusions from the target population***):** Patients receiving outpatient hemodialysis during the month during which surveillance is being conducted but not present in the facility during the first two calendar days of the month are not included in the denominator

2a.10 Denominator Exclusion Details (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions***):**
See above

2a.11 Stratification Details/Variables (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions***):**
Both the numerator and denominator are stratified by patient vascular access type, where permanent central lines are defined as tunneled central lines (or tunneled central venous catheters) and temporary central lines are defined as nontunneled central lines (or nontunneled central venous catheters)
Details of stratified measures:
1. IV antibiotic start rate in CVC (central venous catheter) patients = the numerator below divided by denominator below times 100
1a. NUMERATOR. Events are included in the numerator if the "In-unit IV antimicrobial start" field on Form 57.109 is checked AND any of the following fields on Form 57.109 under ´Vascular accesses´ are checked as being present: "Permanent central line", "Temporary central line", or "Port access device".
1b. DENOMINATOR. The denominator equals the sum of the numeric values entered for the following fields on Form 57.119: "Permanent central line", "Temporary central line", and "Port access device".
2. IV antibiotic start rate in AVG (arteriovenous graft) patients = the numerator below divided by denominator below times 100
2a. NUMERATOR. Events are included in the numerator if the "In-unit IV antimicrobial start" field on Form 57.109 is checked AND if the field labeled "Graft" on Form 57.109 under ´Vascular accesses´ is checked as being present AND none of the following fields on the same form are checked as being present: "Permanent central line", "Temporary central line", or "Port access device".
2b. DENOMINATOR. The denominator equals the numeric value entered for the field labeled, "Graft" on Form 57.119.
3. IV antibiotic start rate in AVF (arteriovenous fistula) patients = the numerator below divided by denominator below times 100
3a. NUMERATOR. Events are included in the numerator if the "In-unit IV antimicrobial start" field on Form 57.109 is checked AND if the field labeled "Fistula" on Form 57.109 under ´Vascular accesses´ is checked as being present AND none of the following fields on the same form are checked as being present: "Graft", "Permanent central line", "Temporary central line", or "Port access device".
3b. DENOMINATOR. The denominator equals the numeric value entered for the field labeled, "Fistula" on Form 57.119.

2a.12-13 Risk Adjustment Type: Analysis by subgroup

2a.14 Risk Adjustment Methodology/Variables (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method***):**

Comment [k9]: 11 Risk factors that influence outcomes should not be specified as exclusions.
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Rates are stratified by single greatest risk factor for infection – type of vascular access. The vascular access variables that are included in this analysis are arteriovenous (AV) fistula, AV graft, permanent central line, temporary central line. If more than one access type is present the antibiotic start is attributed to the access with the greatest risk (i.e., arteriovenous (AV) fistula< AV graft<permanent central line<temporary central line).

2a.15-17 Detailed risk model available Web page URL or attachment:

2a.18-19 Type of Score: Rate/proportion
2a.20 Interpretation of Score: Better quality = Lower score
2a.21 Calculation Algorithm (*Describe the calculation of the measure as a flowchart or series of steps***):**
1.Determine the number of outpatient intravenous antibiotic starts in the unit for the month under surveillance (X)
2.Determine the outpatient hemodialysis facility patient month denominator for the month under surveillance (Y)
3.Divide X by Y and multiply this by 100 to determine the rate of antibiotic starts per 100 patient months.

2a.22 Describe the method for discriminating performance *(e.g., significance testing)***:**
Rates can be compared using standard significance tests for rates (e.g., mid p exact test). In addition, rates can be tested to evaluate changes over time.

2a.23 Sampling (Survey) Methodology *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate)*:
Not a sample. Entire population of reporting units is included

2a.24 Data Source (*Check the source(s) for which the measure is specified and tested)*
Paper medical record/flow-sheet, Pharmacy data, Electronic clinical data, Electronic Health/Medical Record

2a.25 Data source/data collection instrument (*Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.***):**
National Healthcare Safety Network (NHSN) Dialysis Event form (numerator)-collected with each event
NHSN ouptaient dialysis denominator form (denominator) - collected monthly

2a.26-28 Data source/data collection instrument reference web page URL or attachment: URL
http://www.cdc.gov/nhsn/forms/57.119_DenomOutpatDialysis_BLANK.pdf and
http://www.cdc.gov/nhsn/forms/57.109_DIA_BLANK.pdf

2a.29-31 Data dictionary/code table web page URL or attachment: URL
http://www.cdc.gov/nhsn/PDFs/variable_labels.pdf

2a.32-35 Level of Measurement/Analysis (*Check the level(s) for which the measure is specified and tested)*
Facility/Agency, Population: national

2a.36-37 Care Settings (*Check the setting(s) for which the measure is specified and tested)*
Dialysis Facility

2a.38-41 Clinical Services (*Healthcare services being measured, check all that apply*)
Dialysis

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample *(description of data/sample and size)***:** This data consists of reports of IV antibiotics starts in about 130 facilities. It is a descriptive data set for those facilities. IV antibiotic starts have been reported to NHSN since 1999.

2b.2 Analytic Method *(type of reliability & rationale, method for testing)***:**
IV antibiotic starts are calculated monthly using rates of starts per 100 patient months. The numerator is

2b
C☐
P☐
M☐
N☐

Comment [KP10]: 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

Comment [k11]: 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

the number of inpatient starts and the denominator is the total patient months in that unit for the month under surveillance. Results are stratified by vascular access type. Rates such as this are an important and reliable measure – they are easily interpreted and accounting for the exposure time helps make analysis over time possible. Results are usually captured using billing or pharmacy records making them more reliable.

2b.3 Testing Results *(reliability statistics, assessment of adequacy in the context of norms for the test conducted)*:
NA

2c. Validity testing

2c.1 Data/sample *(description of data/sample and size)*: A validation study was conducted of CDC´s dialysis surveillance system in 2002. At the time, this measure was collected as part of the Dialysis Surveillance Network (predecessor to the current dialysis event module in NHSN). A validation study of IV antibiotic starts and several other measures was conducted at 13 facilities. Twenty facilities were selected for the validation project. Participation in the study was voluntary. Thirteen of the 20 facilities opted to participate.

2c.2 Analytic Method *(type of validity & rationale, method for testing)*:
The 2002 validation study had 2 components. (1) For each facility, a sample of events reported to the dialysis surveillance system were pulled and medical record review was conducted at the facility to verify the information submitted. (2) A list of most recent positive blood culture events and other events of interest were independently obtained from the facility and were compared with data submitted to the surveillance system to determine the completeness of event capture.
The validity of this measure will be further tested in 2010-2011 in a study designed to evaluate the validity of the measures compared to health record data available electronically and in paper records within the facility and to compare to a definition of BSI that will attempt to be more specific than the current definition. The study has been funded and is expected to begin in late 2010. It will involve data abstraction in at least 20 facilities in each of 4 geographically distinct sites in CDC's Emerging infections Program. The Colorado health department is also planning a validation study to compare the BSI measure in NHSN to facility medical record data.

2c.3 Testing Results *(statistical results, assessment of adequacy in the context of norms for the test conducted)*:
(1) Of 70 IV antibiotic starts that were reported to the surveillance system and were reviewed, 78.7% of these were determined to have been correctly characterized and reported.
(2) Of 78 IV vancomycin starts that were reported to the surveillance system and were reviewed, 87.6% of these were determined to have been correctly characterized and reported.
(3) Of 85 recent IV antibiotic starts that were identified by the facilities in the study, 59 (69.4%) had an appropriate surveillance form completed for the event.
Thus, the accuracy for this measure was determined to be high and completeness of reporting for also appeared to be very good

2c
C ☐
P ☐
M ☐
N ☐

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s):
For simplicity, this data collection is restricted to outpatient IV antimicrobial starts and does not include oral antibiotics. Oral antibiotics are not included to better capture treatment for serious infections (primarily bloodstream infections) which are treated primarily with IV antibiotics. Additionally, oral antibiotics are often prescribed by nondialysis providers and are not administered during the hemodialysis session. As a result, they are less likely to be reliably captured in the patient´s dialysis medical record and less able to be impacted by dialysis facility-specific quality improvement efforts.

2d.2 Citations for Evidence:
None

2d.3 Data/sample *(description of data/sample and size)*: N/A

2d
C ☐
P ☐
M ☐
N ☐
NA ☐

Comment [KP12]: 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

Comment [k13]: 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid indicator of quality for the specific topic; ability of measure scores to predict scores on some other related valid measure; content validity for multi-item scales/tests. Face validity is a subjective assessment by experts of whether the measure reflects the quality of care (e.g., whether the proportion of patients with BP < 140/90 is a marker of quality). If face validity is the only validity addressed, it is systematically assessed (e.g., ratings by relevant stakeholders) and the measure is judged to represent quality care for the specific topic and that the measure focus is the most important aspect of quality for the specific topic.

Comment [KP14]: 2d. Clinically necessary measure exclusions are identified and must be:
•supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;
AND
•a clinically appropriate exception (e.g., contraindication) to eligibility for the measure focus;
AND
•precisely defined and specified:
–if there is substantial variability in exclusions across providers, the measure is specified so that exclusions are computable and the effect on the measure is transparent (i.e., impact clearly delineated, such as number of cases excluded, exclusion rates by type of exclusion);
if patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that it strongly impacts performance on the measure and the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

Comment [k15]: 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

2d.4 Analytic Method *(type analysis & rationale)*:
N/A

2d.5 Testing Results *(e.g., frequency, variability, sensitivity analyses)*:
N/A

2e. Risk Adjustment for Outcomes/ Resource Use Measures

2e.1 Data/sample *(description of data/sample and size)*: This is not a sample but represents all the data reported (i.e., total population reported is used).
The total population to date represents dialysis events including antibiotic starts from about 130 outpatient dialysis centers.

2e.2 Analytic Method *(type of risk adjustment, analysis, & rationale)*:
Risk adjustment is accomplished by stratifying analysis and results by vascular access type. This is the single most prominent risk factor for infection among patients undergoing hemodialysis.

2e.3 Testing Results *(risk model performance metrics)*:
N/A

2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: N/A

2e
C ☐
P ☐
M ☐
N ☐
NA ☐

2f. Identification of Meaningful Differences in Performance

2f.1 Data/sample from Testing or Current Use *(description of data/sample and size)*: This is not a sample but represents all the data reported (i.e., total population reported is used).
The total population to date represents dialysis events including antibiotic starts from about 130 outpatient dialysis centers.

2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance *(type of analysis & rationale)*:
This measure represents a simple rate calculation and rates over time or between two time periods or two units can be compared using standard significance tests for rates (e.g., mid p exact test). Significance testing is usually between the facility´s stratified rate and the NHSN pooled mean rate. In addition, the distribution of facility specific rates are calculated and individual facility percentiles are reported to allow for additional facility comparisons.

2f.3 Provide Measure Scores from Testing or Current Use *(description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance)*:
N/A

2f
C ☐
P ☐
M ☐
N ☐

2g. Comparability of Multiple Data Sources/Methods

2g.1 Data/sample *(description of data/sample and size)*: N/A

2g.2 Analytic Method *(type of analysis & rationale)*:
N/A

2g.3 Testing Results *(e.g., correlation statistics, comparison of rankings)*:
N/A

2g
C ☐
P ☐
M ☐
N ☐
NA ☐

2h. Disparities in Care

2h.1 If measure is stratified, provide stratified results *(scores by stratified categories/cohorts)*: Measure is stratified by vascular access type but this is not related to a disparity but related to a differential risk for infection related to the use of different access types.

2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:

2h
C ☐
P ☐
M ☐
N ☐
NA ☐

Comment [KP16]: 2e. For outcome measures and other measures (e.g., resource use) when indicated:
•an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that influence the measured outcome (but not disparities in care) and are present at start of care;[Error! Bookmark not defined.] OR rationale/data support no risk adjustment.

Comment [k17]: 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate cancer, inequalities in treatment for CVD risk factors between men and women). It is preferable to stratify measures by race and socioeconomic status rather than adjusting out differences.

Comment [KP18]: 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

Comment [k19]: 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of $25 in cost for an episode of care (e.g., $5,000 v. $5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

Comment [KP20]: 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

Comment [KP21]: 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender);OR rationale/data justifies why stratification is not necessary or not feasible.

N/A

TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Scientific Acceptability of Measure Properties?*

2

Steering Committee: Overall, to what extent was the criterion, *Scientific Acceptability of Measure Properties*, **met?**
Rationale:

2
C☐ P☐ M☐ N☐

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

Eval Rating

3a. Meaningful, Understandable, and Useful Information

3a.1 **Current Use:** In use

3a.2 **Use in a public reporting initiative (disclosure of performance results to the public at large)** (*If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years*)**:**
Public reporting through the National Healthcare Safety Network (NHSN) is currently mandated in one state – Colorado. The state of Colorado has mandated that all dialysis facilities report to the state department of health all of the currently captured dialysis metrics including antimicrobial starts.
http://www.cdphe.state.co.us/hf/PatientSafety/HospitalReportCardInitiative/HB061045.pdf

3a.3 **If used in other programs/initiatives (***If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years***):**
Dialysis facilities are required by the US Centers for Medicare and Medicaid Services to have active quality improvement plans that address infection prevention. Tracking of antimicrobial starts is one of several measures commonly used by facilities for quality improvement.

Testing of Interpretability (*Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement*)
3a.4 **Data/sample** *(description of data/sample and size)***:** Interpretability has not been formally tested but this measure has been used for Quality Improvment Efforts since its inception in 1999. An example of its use for quality improvement efforts is included in the study by George et al.
(George A, et al. Reducing dialysis associated bacteraemia, and recommendations for surveillance in the United kingdom: a prospective study. BMJ 2006; 332:1435-9).

3a.5 **Methods** *(e.g., focus group, survey, QI project)***:**
N/A

3a.6 **Results** *(qualitative and/or quantitative results and conclusions)***:**
N/A

3a
C☐ P☐ M☐ N☐

3b/3c. Relation to other NQF-endorsed measures

3b.1 **NQF # and Title of similar or related measures:**
none

(for NQF staff use) **Notes on similar/related endorsed or submitted measures:**

3b. Harmonization

3b
C☐ P☐ M☐ N☐ NA☐

If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population):
3b.2 **Are the measure specifications harmonized? If not, why?**
N/A

3c. Distinctive or Additive Value

3c

Comment [KP22]: 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

Comment [KP23]: 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

Comment [k24]: 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., *influenza immunization* of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for *patients with diabetes*), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

Comment [KP25]: 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).

3c.1 **Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:** N/A 5.1 **If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:** N/A	C☐ P☐ M☐ N☐ NA☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Usability*?	**3**
Steering Committee: Overall, to what extent was the criterion, *Usability*, **met?** **Rationale:**	**3** C☐ P☐ M☐ N☐
4. FEASIBILITY	
Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)	Eval Rating
4a. Data Generated as a Byproduct of Care Processes 4a.1-2 **How are the data elements that are needed to compute measure scores generated?** Other Data are collected and inputted by dialysis unit staff based on observations of events that occue within the unit.	**4a** C☐ P☐ M☐ N☐
4b. Electronic Sources 4b.1 **Are all the data elements available electronically?** (*elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims*) No 4b.2 **If not, specify the near-term path to achieve electronic capture by most providers.** Currently studies are underway to determine the feasibility and validity of electronically captured data to identify a number of dialysis related measures including antibiotic starts. The pilot portion of this project is scheduled to begin in late 2010.	**4b** C☐ P☐ M☐ N☐
4c. Exclusions 4c.1 **Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications?** No 4c.2 **If yes, provide justification.**	**4c** C☐ P☐ M☐ N☐ NA☐
4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences 4d.1 **Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results.** One important aspect of the NHSN dialysis reporting is the fact that, unlike much of this surveillance system, does not require reporters to posses knowledge of extensive case definitions to allow for accurate reporting. As this reporting takes place in outpatient dialysis centers this module is specifically designed to be easy to use for dialysis providers without extensive training in infection control. All calculations and data manipulation ids performed at CDC using simple, easily understood data elements that are collected at the dialysis center. For this reason data entry errors related to misinterpretation are minimal. Public reporting of this information using NHSN is only required in one state, Colorado and this state will conduct a validation study to ensure that purposeful underreporting does not occur. In the future the goal will be to collect these data electronically thereby decreasing data entry errors. A validation study of this proposed mechanism is also set to begin in late 2010.	**4d** C☐ P☐ M☐ N☐

Comment [KP26]: 4a. For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

Comment [KP27]: 4b. The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

Comment [KP28]: 4c. Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

Comment [KP29]: 4d. Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

4e. Data Collection Strategy/Implementation **4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues:** This measure has been in use in NHSN since 1999. Since that time it has remained largely unchanged and has been an important part of quality improvement efforts in dislysis centers. In one study from the United Kingdom, George et al (George A, et al. Reducing dialysis associated bacteraemia, and recommendations for surveillance in the United kingdom: a prospective study. BMJ 2006; 332:1435-9) the authours found NHSN and the antibiotic start measure to be easy to use and an important part of their efforts to reduce infections in their unit. **4e.2 Costs to implement the measure** (*costs of data collection, fees associated with proprietary measures*)**:** In the study from George et al (George A, et al. Reducing dialysis associated bacteraemia, and recommendations for surveillance in the United kingdom: a prospective study. BMJ 2006; 332:1435-9) found that using the dialysis event module of NHSN(Including recording antibiotic starts) required about 2 hours of staff time per month. There is also no specific cost to participants to use NHSN. **4e.3 Evidence for costs:** see above **4e.4 Business case documentation:** see 4e.2.	**4e** C☐ P☐ M☐ N☐
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for *Feasibility*?	**4**
Steering Committee: Overall, to what extent was the criterion, *Feasibility*, met? **Rationale:**	**4** C☐ P☐ M☐ N☐
RECOMMENDATION	
(for NQF staff use) **Check if measure is untested and only eligible for time-limited endorsement.**	**Time-limited** ☐
Steering Committee: Do you recommend for endorsement? **Comments:**	Y☐ N☐ A☐

Comment [KP30]: 4e. Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

CONTACT INFORMATION
Co.1 Measure Steward (Intellectual Property Owner) **Co.1 Organization** Centers for Disease Control and Prevention, 1600 Clifton Road NE, Mailstop A-31, Atlanta, Georgia, 30333 **Co.2 Point of Contact** Priti, Patel, MD, MPH, ppatel@cdc.gov, 404-639-4273-
Measure Developer If different from Measure Steward **Co.3 Organization** Centers for Disease Control and Prevention, 1600 Clifton Road NE, Mailstop A-31, Atlanta, Georgia, 30333 **Co.4 Point of Contact** Priti, Patel, MD, MPH, ppatel@cdc.gov, 404-639-4273-
Co.5 Submitter If different from Measure Steward POC Priti, Patel, MD, MPH, ppatel@cdc.gov, 404-639-4273-, Centers for Disease Control and Prevention

Co.6 Additional organizations that sponsored/participated in measure development
ADDITIONAL INFORMATION
Workgroup/Expert Panel involved in measure development **Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**
Ad.2 If adapted, provide name of original measure: **Ad.3-5 If adapted, provide original specifications URL or attachment**
Measure Developer/Steward Updates and Ongoing Maintenance **Ad.6 Year the measure was first released:** 1999 **Ad.7 Month and Year of most recent revision:** 06, 2005 **Ad.8 What is your frequency for review/update of this measure?** yearly **Ad.9 When is the next scheduled review/update for this measure?** 01, 2011
Ad.10 Copyright statement/disclaimers:
Ad.11 -13 Additional Information web page URL or attachment:
Date of Submission (*MM/DD/YY*)**:** 12/09/2010

Page 3: [1] Comment [k5] **Karen Pace** **10/5/2009 8:59:00 AM**

4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending immunization are necessary steps, they are not sufficient to achieve the desired impact on health status – patients must be vaccinated to achieve immunity. This does not preclude consideration of measures of preventive screening interventions where there is a strong link with desired outcomes (e.g., mammography) or measures for multiple care processes that affect a single outcome.

Variable Name	Label
ABOconfirm	ABO Routinely Confirmed
ABOconfirmSep	ABO Confirmation on Separately Collected Specimen
ABOconfirmWhen	When ABO confirmed
ABOconfirmWhenDesc	When ABO confirmed Description
abx_mean	NHSN ABX Pooled Mean
ABX_pctl10	NHSN ABX 10th Percentile
ABX_pctl25	NHSN ABX 25th Percentile
ABX_pctl50	NHSN ABX 50th Percentile
ABX_pctl75	NHSN ABX 75th Percentile
ABX_pctl90	NHSN ABX 90th Percentile
ABXCount	ABX Incident Count
ABXFistulaCount	ABX Count Fistula
ABXGraftCount	ABX Count Graft
ABXPCLCount	ABX Count Perm Central Line
ABXPortCount	ABX Count Port
ABXRate	ABX Rate
abxStandards	Use ABX Susc Stds?
abxStart	In-unit IV Antimicrobial Start
ABXTCLCount	ABX Count Temp Central Line
abxTest	Peform Susc Testing?
abxTestPerf	Where Susc Testing Performed
abxTestPerfDesc	Where Susc Testing Performed
accessType	Access Type
acComment	ACS Test Method Comment
accredByAABB	AABB Accred
accredByCAP	CAP Accred
accRelBact	Access Related Bacteremia
ACINE	Organism MDR-Acinetobacter
ACINE_admPrevBldCount	ACINE Blood Admission Prevalence LabID Count
ACINE_admPrevCOCount	ACINE CO Admission Prevalence LabID Count
ACINE_admPrevCount	ACINE Admission Prevalence LabID Count
ACINE_admPrevHOCount	ACINE HO Admission Prevalence LabID Count
ACINE_admPrevRate	ACINE Admission Prevalence Rate
ACINE_bldIncCount	ACINE Blood Incident LabID Count
ACINE_BSIAdmPrevRate	ACINE BSI Admission Prevalence Rate
ACINE_BSIIncDensRate	ACINE BSI Incidence Density Rate
ACINE_BSIIncRate	ACINE BSI Incidence Rate
acine_gg	Gown/Glove ACINE?
acine_hh	Hand Hygiene ACINE?
ACINE_incCount	ACINE Incident LabID Count
acine_infSurv	Inf Surv ACINE?
acine_labID	Lab ID ACINE?
ACINE_labidCount	ACINE LabiD Count
ACINE_MDROIncDensRate	Overall ACINE Infection/Colonization Incidence Density Rate
ACINE_MDROIncRate	Overall ACINE Infection/Colonization Incidence Rate
ACINE_pctAdmPrevCO	ACINE Percent Admission Prevalence/Community-Onset
ACINE_pctAdmPrevHO	ACINE Percent Admission Prevalence/Healthcare Facility-Onset
ACINE_prevRate	Overall ACINE Prevalence Rate
acineCount	ACINE HAI Count
ACINERate	ACINE HAI Rate
acPrimary	ACS 1st Test Method
acPrimaryDesc	ACS 1st Test Method
acSecondary	ACS 2nd Test Method
acSecondaryDesc	ACS 2nd Test Method
addiTest	Other Action: Additional Testing?
addr1	Address 1
addr2	Address 2
addr3	Address 3
adhRate_Admin	Adherence Rate Administered
adhRate_AdminME	Adherence Rate Administered/Med Elig HRI
adhRate_AdminMEW	Adherence Rate Administered/Med Elig Willing HRI
adhRate_Offer	Adherence Rate Offered
admASTEligible	Admission AST Eligible

Variable Name	Label
admASTPerformed	Admission AST Performed
admDateYH	Fac Admission Yr/Half
admDateYM	Fac Admission Yr/Mon
admDateYQ	Fac Admission Yr/Qtr
admDateYr	Fac Admission Year
adminDate	Date Unit Administered
adminDateTime	Date/Time Unit Administered
adminDateYH	Administered Yr/Half
adminDateYM	Administered Yr/Mon
adminDateYQ	Administered Yr/Qtr
adminDateYr	Administered Year
administered	Vaccine Administered
administeredDesc	Vaccine Administered Description
adminToAdvRxnDays	Days: Admin to Reaction
adminToAdvRxnHrs	Hours: Admin to Reaction
adminToDeathDays	Days: Admin to Death
admissions	Admissions
admitDate	Fac Admission Date
admittedToICU	Admitted to ICU for CDAD complications
admToDisDays	Days: Admit to Discharge
admToEvntDays	Days: Admit to Event
advReaction	Adverse Reactions?
advRxn	Adverse Reaction
advRxnDate	Adverse Reaction Date
advRxnDateTime	Adverse Reaction Date/Time
advRxnDateYH	Adverse Reaction Yr/Half
advRxnDateYM	Adverse Reaction Yr/Mon
advRxnDateYQ	Adverse Reaction Yr/Qtr
advRxnDateYr	Adverse Reaction Year
advRxnDesc	Adverse Reaction Description
advRxnOth	Other Adverse Reaction
advRxnOutcome	Outcome
advRxnOutcomeDesc	Outcome Description
advRxnPTDesc	Adverse Reaction Description
advRxnToDeathDays	Days: Reaction to Death
advrxnvaccdesc	Adverse Reaction Description
ageAtEvent	Age on Event Date
ageAtExp	HCW Age at Exposure
ageAtHVAdvRxn	Age At Reaction
ageAtProc	Age on Proc Date
ageAtProphy	HCW Age at Prophylaxis Date
ageAtSpec	Age at Specimen Collection
ageAtTreat	HCW Age at Treatment Date
ageAtVacc	HCW Age at Vacc Date
agrmntPersonID	Agreement Person ID
ahaID	AHA ID
alc_adhRate	ALC Adherence Rate
alcCount	ALC Skin Prep Count
alertType	Alert Type
all_incomplete	Record Incomplete All SSI Model
ambsurgsetting	AMB-SURG Setting
ambsurgsettingDesc	AMB-SURG Setting Description
AMK	Amikacin
AMP	Ampicillin
AMPSUL	Ampicillin/Sulbactam
AMXCLV	Amoxacillin/clavulanic acid
anesthesia	General Anesthesia?
approach	Type of Approach
approachDesc	Approach Description
AR_Mean	NHSN AR Pooled Mean
AR_Pctl10	NHSN AR 10th Percentile
AR_Pctl25	NHSN AR 25th Percentile
AR_Pctl50	NHSN AR 50th Percentile

Variable Name	Label
AR_Pctl75	NHSN AR 75th Percentile
AR_Pctl90	NHSN AR 90th Percentile
AR_Tested	NHSN No. Tested
AR_Units	No. of NHSN Units
ARB	Access Related Bacteremia
ARB_mean	NHSN ARB Pooled Mean
ARB_pctl10	NHSN ARB 10th Percentile
ARB_pctl25	NHSN ARB 25th Percentile
ARB_pctl50	NHSN ARB 50th Percentile
ARB_pctl75	NHSN ARB 75th Percentile
ARB_pctl90	NHSN ARB 90th Percentile
ARBCount	ARB Count
ARBFistulaCount	ARB Count Fistula
ARBGraftCount	ARB Count Graft
ARBPCLCount	ARB Count Perm Central Line
ARBPortCount	ARB Count Port
ARBRate	ARB Rate
ARBTCLCount	ARB Count Temp Central Line
ARRate	Antimicrobial Resistance Rate
arvDrug1	Anti-retroviral drug #1
arvDrug1Desc	Anti-retroviral drug #1 Description
arvDrug2	Anti-retroviral drug #2
arvDrug2Desc	Anti-retroviral drug #2 Description
arvDrug3	Anti-retroviral drug #3
arvDrug3Desc	Anti-retroviral drug #3 Description
arvDrug4	Anti-retroviral drug #4
arvDrug4Desc	Anti-retroviral drug #4 Description
arvDrug5	Anti-retroviral drug #5
arvDrug5Desc	Anti-retroviral drug #5 Description
arvDrug6	Anti-retroviral drug #6
arvDrug6Desc	Anti-retroviral drug #6 Description
arvDrugOffered	HCW Offered Anti-retroviral Prophylaxis?
arvDrugOth	Other Anti-retroviral Drug
arvDrugTaken	Anti-retroviral Prophylaxis Taken by HCW?
asa	ASA Class
asaDesc	ASA Class Description
AU_Mean	NHSN AU Pooled Mean
AU_Pctl10	NHSN AU 10th Percentile
AU_Pctl25	NHSN AU 25th Percentile
AU_Pctl50	NHSN AU 50th Percentile
AU_Pctl75	NHSN AU 75th Percentile
AU_Pctl90	NHSN AU 90th Percentile
AU_Units	No. of NHSN Units
AURate	Antimicrobial Usage Rate
aurMicro	AUR Micro Plan?
aurPharm	AUR Pharmacy Plan?
avgStay	Average Length of Stay
avgWPLATPool	Average Pool Size
AZITH	Azithromycin
AZT	Aztreonam
barrierCap	Barrier Used: Cap?
barrierDrape	Barrier Used: Drape?
barrierGloves	Barrier Used: Gloves?
barrierGoggles	Goggles Used by HCW?
barrierGown	Barrier Used: Gown?
barrierMask	Barrier Used: Mask?
barrierMaskResp	Mask/Respirator Used by HCW?
barrierOth	Other Barrier Used by HCW?
barrierOthSfy	Other Barrier Used by HCW
barrierShield	Shield Used by HCW?
baseTest	Baseline Testing Performed?
bbfExpFacility	Exposure Occurred in Reporting Facility?
bbfLocation	Location of Exposure

Variable Name	Label
bbfLocBeds	Exposure Location Beds
bbfLocCDC	CDC Exposure Location
bbfLocCDCDesc	CDC Exposure Location Description
bbfLocLabel	Exposure Location Label
bbfLocStatus	Exposure Location Status
bCultIncid	Positive Blood Culture
bedsize	Bedsize
birthWt	Birth Wt
birthWtCode	Birth Wt Code
birthWtCodeDesc	Birth Wt Code Description
biteActivity	Activity/Event When Bite Occurred
biteActivityDesc	Activity/Event When Bite Occurred Description
biteActivityOth	Other Activity/Event When Bite Occurred
biteExp	Bite Exposure?
BJ_BONEcount	BJ/BONE Count
BJ_DISCcount	BJ/DISC Count
BJ_JNTcount	BJ/JNT Count
BJcount	BJ Count
bldCultSource	Blood Culture Source
bldCultSourceDesc	Blood Culture Source Description
bldCulture	Blood Culture
bldCultureDesc	Blood Culture Description
bldEstimate	Estimated Amount of Blood/Body Fluid
bldEstimateDesc	Estimated Amount of Blood/Body Fluid Description
bldLoss	Estimated Blood Loss - ml
bldUtilComm	Blood Utilization Committee
bloodGroupUnit	Blood Group of Unit
bodySiteArm	Body Site of Exposure: Arm?
bodySiteEye	Body Site of Exposure: Eye?
bodySiteFoot	Body Site of Exposure: Foot?
bodySiteHand	Body Site of Exposure: Hand?
bodySiteLeg	Body Site of Exposure: Leg?
bodySiteMouth	Body Site of Exposure: Mouth?
bodySiteNose	Body Site of Exposure: Nose?
bodySiteOth	Body Site of Exposure: Other?
bodySiteOthSfy	Other Body Site of Exposure
bornInUS	HCW Born in US?
BSI_CSEPcount	BSI/CSEP Count
BSI_LCBIcount	BSI/LCBI Count
BSIcount	BSI Count
bsiplan	CLAB Plan?
bundle_adhrate	CLIP Bundle Adherence Rate
bundleCount	CLIP Bundle Count
cap_adhRate	Cap Adherence Rate
capCount	Cap Barrier Count
CathDU	Cath Util Ratio
CathDU_Mean	NHSN Cath DU Pooled Mean
CathDU_Pctl10	NHSN Cath DU 10th Percentile
CathDU_Pctl25	NHSN Cath DU 25th Percentile
CathDU_Pctl50	NHSN Cath DU 50th Percentile
CathDU_Pctl75	NHSN Cath DU 75th Percentile
CathDU_Pctl90	NHSN Cath DU 90th Percentile
CAU_ASBcount	CA UTI/ASB Count
CAU_Mean	NHSN CAU Pooled Mean
CAU_OUTIcount	CA UTI/OUTI Count
CAU_Pctl10	NHSN CAU 10th Percentile
CAU_Pctl25	NHSN CAU 25th Percentile
CAU_Pctl50	NHSN CAU 50th Percentile
CAU_Pctl75	NHSN CAU 75th Percentile
CAU_Pctl90	NHSN CAU 90th Percentile
CAU_SUTIcount	CA UTI/SUTI Count
CAU_UCDays	NHSN Urinary Catheter-Days
CAU_Units	No. of NHSN Units

Variable Name	Label
CAUcount	CA UTI Count
CAURate	CA UTI Rate
cause	Primary Underlying Cause for Transfusion
causeUnk	Cause Unknown
cd4Count	Most Recent CD4 Count
cd4Month	Month of Last CD4 Count
cd4Year	Year of Last CD4 Count
cdiAssay	CDI Assay
CDIF	Organism C. difficile
CDIF_admPrevCOCount	CDIF CO Admission Prevalence LabID Count
CDIF_admPrevCOHCFACount	CDIF CO-HCFA Admission Prevalence LabID Count
CDIF_admPrevCount	CDIF Admission Prevalence LabID Count
CDIF_admPrevHOCount	CDIF HO Admission Prevalence LabID Count
CDIF_admPrevRate	CDIF Admission Prevalence Rate
CDIF_facIncCount	CDIF Facility Combined Incident LabID Event Count
CDIF_facIncHOCount	CDIF Facility Incident HO LabID Event Count
CDIF_facIncRate	Facility CDIF Combined Incidence Rates
cdif_gg	Gown/Glove CDIF?
cdif_hh	Hand Hygiene CDIF?
CDIF_HOIncRate	Facility CDIF Healthcare Facility-Onset Incidence Rate
CDIF_incCount	CDIF Incident LabID Count
CDIF_incRate	CDIF Incidence Rate
cdif_infSurv	Inf Surv CDIF?
cdif_labID	Lab ID CDIF?
CDIF_labidCount	CDIF LabID Count
CDIF_pctAdmPrevCO	CDIF Percent Admission Prevalence/Community-Onset
CDIF_pctAdmPrevCOHCFA	CDIF Percent Admission Prevalence/Community-Onset Healthcare Facility-Associated
CDIF_pctAdmPrevHO	CDIF Percent Admission Prevalence/Healthcare Facility-Onset
CDIF_prevRate	Overall CDIF Prevalence Rate
cdifCount	CDIF HAI Count
CDIFRate	CDIF HAI Rate
CEFAZ	Cefazolin
CEFEP	Cefepime
CEFOT	Cefotaxime
CEFOX	Cefoxitin
CEFTAZ	Ceftazidime
CEFTRX	Ceftriaxone
CEFUR	Cefuroxime
cellulitis	Cellulitis?
centralLine	Central Line?
CEPH	Cephalothin
chg_adhRate	CHG Adherence Rate
chgCount	CHG Skin Prep Count
CIPRO	Ciprofloxacin
city	City
CLAB_CLDays	NHSN Central Line-Days
CLAB_CSEPcount	CLA BSI/CSEP Count
CLAB_LCBIcount	CLA BSI/LCBI Count
CLAB_Mean	NHSN CLAB Pooled Mean
CLAB_Pctl10	NHSN CLAB 10th Percentile
CLAB_Pctl25	NHSN CLAB 25th Percentile
CLAB_Pctl50	NHSN CLAB 50th Percentile
CLAB_Pctl75	NHSN CLAB 75th Percentile
CLAB_Pctl90	NHSN CLAB 90th Percentile
CLAB_Units	No. of NHSN Units
CLABcount	CLA BSI Count
CLABRate	CLA BSIRate
CLARTH	Clarithromycin
cleanNeedle	Exposure Involved Clean Sharp?
CLIND	Clindamycin
clinSpec	HCW Clinical Specialty
clinSpecDesc	HCW Clinical Specialty Description
CLIPcount	CLIP Count

Variable Name	Label
cmpx_incomplete	Record Incomplete Complex AR Model
cmsID	CMS HCFA ID
CNS_ICcount	CNS/IC Count
CNS_MENcount	CNS/MEN Count
CNS_SAcount	CNS/SA Count
cnsComment	CNS Test Method Comment
CNScount	CNS Count
cnsPrimary	CNS 1st Test Method
cnsPrimaryDesc	CNS 1st Test Method
cnsSecondary	CNS 2nd Test Method
cnsSecondaryDesc	CNS 2nd Test Method
coatedCath	Coated Cath Used?
collect	Collect Blood
collectTypeALLOG	Allogeneic Bld Collect
collectTypeAUTO	Autologous Bld Collect
collectTypeDIRECT	Direct Bld Collect
comment	Comment
comments	Comments
commSetting	Community Setting
commSettingDesc	Community Setting Description
compCDC	CDC Component Code
compCDCDesc	CDC Component Code Description
compCode	Component Code
compFollowed	Components Followed
completedDate	Survey Completion Date
completedFlag	Complete?
confirmVRS	Procedure to Confirm VRS?
contribDeath	Contrib To Death?
coreLab	Part of Core Laboratory
corrError	Staff Allowed Correct Patient ID
county	County
countyName	County Name
cr_diagEvent	Physician Diagnosis of this Event Type?
cr_diagTher	Physician Institutes Appropriate abx Therapy?
cr_lab15colIV	>15 Colonies Cultured from IV Cannula Tip?
cr_lab1cult1org	1 Pos. Culture w/ >=10^5 col/ml of Single Uropathogen?
cr_lab1cult2org	1 Pos. Culture w/ >= 10^5col/cc and <= 2 Org?
cr_lab2cult1org	>=2 Pos. Cultures w/ >=10^2 col/ml of Same Uropathogen?
cr_lab2cult2org	>=2 Pos. Urine Cultures w/ >=10^5 col/mL w/same Org and <= 2 Species?
cr_labBALcells	>=5% BAL Cells w/Bacteria?
cr_labGrmNoCult	Pos. Gram Stain when Culture is Neg./Not Done?
cr_labHisto	Histopathologic Exam?
cr_labLegPneu	Legionella pneumophila Serogroup 1?
cr_labLpneu	4-fold Rise in L. pneumophila Antibody Titer?
cr_labLRT	Fungi or Pneumocytis carinii from LRT Specimen?
cr_labNoCult	Not Cultured?
cr_labNoOrg	Bld Culture Not Done/No Org Detected?
cr_labOthPos	Oth Pos. Lab Tests?
cr_labPath	Recognized Pathogen from Bld Culture(s)?
cr_labPosAnti	Pos. Detection of Viral Antigen or Antibody?
cr_labPosBld	Pos. Bld Culture?
cr_labPosCandid	Matching Pos. Bld & Sputum Cultures w/ Candida spp?
cr_labPosDip	Pos. Dipstick / Leukocyte Esterase or Nitrate?
cr_labPosGramSt	Pos. Gram Stain?
cr_labPosIFCh	Pos. micro-IF test for Chlamydia?
cr_labPosIFLeg	Pos. culture or micro-IF of Legionella spp?
cr_labPositive	Pos. Culture?
cr_labPosPath	Pos. Culture of Pathogen?
cr_labPosPCR	Pos. PCR for Chlamydia or Mycoplasma?
cr_labPosPleur	Pos. Pleural Fluid Culture?
cr_labPosQuanLRT	Pos. Quantitative Culture/LRT specimen?
cr_labPosSkin	Pos. Culture of Skin Contaminant?
cr_labPosVirus	Pos. Culture of Virus or Chlamydia?

Variable Name	Label
cr_labPyuria	Pyuria?
cr_labRad	Radiographic Inf Evidence?
cr_labSera	4-fold Rise in Paired Sera for Pathogen?
cr_labSkinCon	CSC from >2 Bld Cultures?
cr_ssAbscess	Abscess?
cr_ssApnea	Apnea?
cr_ssAptach	Apnea/ Tachycardia?
cr_ssBradtach	Bradycardia/ Tachycardia?
cr_ssBradycard	Bradycardia?
cr_ssCDT	Cough, Dyspnea, Tachypnea?
cr_ssChills	Chills?
cr_ssCough	Cough?
cr_ssDiarrhea	Acute Onset of Diarrhea?
cr_ssDysuria	Dysuria?
cr_ssFever	Fever?
cr_ssFrequency	Frequency?
cr_ssGas	Gas Exchange?
cr_ssHeat	Heat?
cr_ssHemopt	Hemoptysis?
cr_ssHypoten	Hypotension?
cr_ssHypotherm	Hypothermia?
cr_ssIncision	Incision opened by surgeon?
cr_ssLethargy	Lethargy?
cr_ssLeuko	Leukopenia or Leukocytosis?
cr_ssLocSwell	Localized swelling?
cr_ssMental	Altered Mental Status?
cr_ssNausea	Nausea?
cr_ssOthInf	Other evidence of infection found?
cr_ssOthSS	Other signs & symptoms?
cr_ssPain	Pain or tenderness?
cr_ssPleuritic	Pleuritic Chest Pain?
cr_ssPurDrain	Purulent drainage/material?
cr_ssRales	Rales?
cr_ssRedness	Redness?
cr_ssSputum	Sputum?
cr_ssStoolBld	Blood in Stool?
cr_ssTemp	Temperature Instability?
cr_ssTender	Suprapubic tenderness?
cr_ssUrgency	Urgency?
cr_ssVomit	Vomiting?
cr_ssWheeze	Wheezing?
cr_ssWndDehisce	Wound spontaneously dehisces?
cr_xrayCavitat	Cavitation?
cr_xrayConsol	Consolidation?
cr_xrayInfilt	New/Progressive and Persistent Infiltrate?
cr_xrayPneumato	Pneumatoceles?
CTET	Cefotetan
ctResistant	Resistant
customAdvRxna01	Custom AdvRxn alpha01
customAdvRxna02	Custom AdvRxn alpha02
customAdvRxna03	Custom AdvRxn alpha03
customAdvRxna04	Custom AdvRxn alpha04
customAdvRxna05	Custom AdvRxn alpha05
customAdvRxna06	Custom AdvRxn alpha06
customAdvRxna07	Custom AdvRxn alpha07
customAdvRxna08	Custom AdvRxn alpha08
customAdvRxna09	Custom AdvRxn alpha09
customAdvRxna10	Custom AdvRxn alpha10
customAdvRxnD01	Custom AdvRxn date01
customAdvRxnD02	Custom AdvRxn date02
customAdvRxnN01	Custom AdvRxn num01
customAdvRxnN02	Custom AdvRxn num02
customDen1	Custom Denominator 1

Variable Name	Label
customDen2	Custom Denominator 2
customDen3	Custom Denominator 3
customDen4	Custom Denominator 4
customDen5	Custom Denominator 5
customEventType	Custom Event Type
customEvntA01	Custom Event alpha01
customEvntA02	Custom Event alpha02
customEvntA03	Custom Event alpha03
customEvntA04	Custom Event alpha04
customEvntA05	Custom Event alpha05
customEvntA06	Custom Event alpha06
customEvntA07	Custom Event alpha07
customEvntA08	Custom Event alpha08
customEvntA09	Custom Event alpha09
customEvntA10	Custom Event alpha10
customEvntD01	Custom Event date01
customEvntD02	Custom Event date02
customEvntN01	Custom Event num01
customEvntN02	Custom Event num02
customHCWA01	Custom HCW alpha01
customHCWA02	Custom HCW alpha02
customHCWA03	Custom HCW alpha03
customHCWA04	Custom HCW alpha04
customHCWA05	Custom HCW alpha05
customHCWA06	Custom HCW alpha06
customHCWA07	Custom HCW alpha07
customHCWA08	Custom HCW alpha08
customHCWA09	Custom HCW alpha09
customHCWA10	Custom HCW alpha10
customHCWD01	Custom HCW date01
customHCWD02	Custom HCW date02
customHCWN01	Custom HCW num01
customHCWN02	Custom HCW num02
customIncida01	Custom Incid alpha01
customIncida02	Custom Incid alpha02
customIncida03	Custom Incid alpha03
customIncida04	Custom Incid alpha04
customIncida05	Custom Incid alpha05
customIncida06	Custom Incid alpha06
customIncida07	Custom Incid alpha07
customIncida08	Custom Incid alpha08
customIncida09	Custom Incid alpha09
customIncida10	Custom Incid alpha10
customIncidd01	Custom Incid date01
customIncidd02	Custom Incid date02
customIncidn01	Custom Incid num01
customIncidn02	Custom Incid num02
custompatA01	Custom Patient alpha01
custompatA02	Custom Patient alpha02
custompatA03	Custom Patient alpha03
custompatA04	Custom Patient alpha04
custompatA05	Custom Patient alpha05
custompatA06	Custom Patient alpha06
custompatA07	Custom Patient alpha07
custompatA08	Custom Patient alpha08
custompatA09	Custom Patient alpha09
custompatA10	Custom Patient alpha10
custompatD01	Custom Patient date01
custompatD02	Custom Patient date02
custompatN01	Custom Patient num01
custompatN02	Custom Patient num02
customProcA01	Custom Proc alpha01
customProcA02	Custom Proc alpha02

Variable Name	Label
customProcA03	Custom Proc alpha03
customProcA04	Custom Proc alpha04
customProcA05	Custom Proc alpha05
customProcA06	Custom Proc alpha06
customProcA07	Custom Proc alpha07
customProcA08	Custom Proc alpha08
customProcA09	Custom Proc alpha09
customProcA10	Custom Proc alpha10
customProcD01	Custom Proc date01
customProcD02	Custom Proc date02
customProcN01	Custom Proc num01
customProcN02	Custom Proc num02
customVaccA01	Custom Vacc alpha01
customVaccA02	Custom Vacc alpha02
customVaccA03	Custom Vacc alpha03
customVaccA04	Custom Vacc alpha04
customVaccA05	Custom Vacc alpha05
customVaccA06	Custom Vacc alpha06
customVaccA07	Custom Vacc alpha07
customVaccA08	Custom Vacc alpha08
customVaccA09	Custom Vacc alpha09
customVaccA10	Custom Vacc alpha10
customVaccD01	Custom Vacc date01
customVaccD02	Custom Vacc date02
customVaccN01	Custom Vacc num01
customVaccN02	Custom Vacc num02
CVS_CARDcount	CVS/CARD Count
CVS_ENDOcount	CVS/ENDO Count
CVS_MEDcount	CVS/MED Count
CVS_VASCcount	CVS/VASC Count
CVScount	CVS Count
DAPTO	Daptomycin
deactDate	Deactivation Date
deactReason	Deactivation Reason
deathDate	Date of Death
deathDateYH	Death Yr/Half
deathDateYM	Death Yr/Mon
deathDateYQ	Death Yr/Qtr
deathDateYr	Death Year
declineDate	Decline Date
declineOth	Declined for Other Reason?
declineOthSfy	Other Reason for Declining
decMedAllergy	Medical Declination Allergy
decMedChemo	Medical Declination Chemotherapy
decMedFebrile	Medical Declination Febrile Illness
decMedGuillianBarre	Medical Declination Guillian-Barre Syndrome
decMedOth	Medical Declination Other
decMedOthSfy	Medical Declination Other Specify
decMedRespInf	Medical Declination Respiratory Inf
decMedTransplant	Medical Declination Transplant
decPerEffects	Personal Declination Fear Side Effects
decPerIneffect	Personal Declination Perceived Ineffective
decPerNeedle	Personal Declination Fear Needles
decPerOth	Personal Declination Other
decPerOthSfy	Personal Declination Other Specify
decPerReligious	Personal Declination Religious
decPerTransmit	Personal Declination Transmission Fear
decRate	Declination Rate Declining/HRI Offered
decRate_Med	Declination Rate Declining Medical/HRI Offered
decRate_Per	Declination Rate Declining Personal/HRI Offered
degree	HCW Degree
denialCmt	Denial Comment
department	HCW Department

Variable Name	Label
depthInjury	Depth of Injury
depthInjuryDesc	Depth of Injury Description
devCDC	CDC Device
devCDCDesc	CDC Device Description
devDiscQtr	Device Discontinuation Qtr
devDiscWhy	Reason for Device Discontinuation
devDiscWhyDesc	Reason for Device Discontinuation Description
devDiscYr	Device Discontinued Yr
device	Device
deviceBrand	Device Brand
deviceLabel	Device Label
deviceOth	Other Device
deviceVisContam	Sharp Visibly Contaminated?
devImpQtr	Device Implementation Qtr
devImpYr	Device Implementation Yr
devInsertDate	Date of Device Insertion
devInsertLoc	Location of Device Insertion
devstatus	Device Status
devTypeCDC	CDC Device Type
devTypeCDCDesc	CDC Device Type Description
diabetes	Diabetes Mellitus
dialCard	Cardiovascular Event
dialFever	Fever?
dialNonInf	Vasc Access Problem w/out Infection?
dialOth	Other Problem?
dialOthSfy	Other Problem Specifics
dialPneu	Pneumonia?
dialPRS	Pus, Redness, or Swelling?
dialResp	Respiratory Infection (not Pneu)?
dialUTI	Urinary Tract Infection?
dialVanc	IV Vancomycin Started?
dialWnd	Wound with Pus/Redness?
died	Died?
diplan	Dialysis Plan?
directcare	HCW Performs Direct Patient Care?
discDate	Date of Discovery
discDateTime	Date/time of Discovery
discDateYH	Discovery Yr/Half
discDateYM	Discovery Yr/Mon
discDateYQ	Discovery Yr/Qtr
discDateYr	Discovery Year
dischargeDate	Discharge Date
discLocation	Discovery Location
discLocCDC	Discovery CDC Location
discLocCDCDesc	Discovery CDC Location Description
discLocLabel	Discovery Location Label
discTimeApprox	Disc Time Approximate?
discTimeUnk	Disc Time Unknown?
disDateYH	Discharge Yr/Half
disDateYM	Discharge Yr/Mon
disDateYQ	Discharge Yr/Qtr
disDateYr	Discharge Year
dob	Date of Birth
donorPath1	Donor Pathogen 1
donorPath2	Donor Pathogen 2
donorPath3	Donor Pathogen 3
donorPathDesc1	Donor Pathogen 1 Description
donorPathDesc2	Donor Pathogen 2 Description
donorPathDesc3	Donor Pathogen 3 Description
donorTestPerform	Test Performed on Donor?
donorTestPositive	Donor Test Results Positive?
dose	Dose
doseUnit	Dose Unit

Variable Name	Label
drape_adhRate	Drape Adherence Rate
drapeCount	Drape Barrier Count
drug	Drug
drugDesc	Drug Description
dry_adhRate	Prep Dry Adherence Rate
dryCount	Prep Dry Count
dtASTEligible	Discharge/Transfer AST Eligible
dtASTPerformed	Discharge/Transfer AST Performed
du	Util Ratio
DU_PatDays	NHSN Patient-Days
DU_Units	No. of NHSN Units
ecComment	EC Test Method Comment
ecPrimary	EC 1st Test Method
ecPrimaryDesc	EC 1st Test Method
ecSecondary	EC 2nd Test Method
ecSecondaryDesc	EC 2nd Test Method
edition	Edition Date of Vaccine Information Statement
EENT_CONJcount	EENT/CONJ Count
EENT_EARcount	EENT/EAR Count
EENT_EYEcount	EENT/EYE Count
EENT_ORALcount	EENT/ORAL Count
EENT_SINUcount	EENT/SINU Count
EENT_URcount	EENT/UR Count
EENTcount	EENT Count
emergency	Emergency Procedure?
empDate	Date of Employment
empDateYH	Employment Yr/Half
empDateYM	Employment Yr/Mon
empDateYQ	Employment Yr/Qtr
empDateYr	Employment Year
empStatus	Employee Status
encounters	Encounters
endoscope	Endoscopic Approach?
enrollNum	Enrollment Number
entbComment	ESP Test Method Comment
entbPrimary	ESP 1st Test Method
entbPrimaryDesc	ESP 1st Test Method
entbSecondary	ESP 2nd Test Method
entbSecondaryDesc	ESP 2nd Test Method
entComment	ENTSP Test Method Comment
entPrimary	ENTSP 1st Test Method
entPrimaryDesc	ENTSP 1st Test Method
entSecondary	ENTSP 2nd Test Method
entSecondaryDesc	ENTSP 2nd Test Method
ERTA	Ertapenem
ERYTH	Erythromycin
esbl	ESBL Screening?
esblRpt	How ESBL Reported
esblRptDesc	How ESBL Reported Description
ethnicity	Ethnicity
ethnicityDesc	Ethnicity Description
eventDate	Event Date
eventID	Event ID
eventType	Event Type
eventTypeDesc	Event Type Description
evntDateYH	Event Yr/Half
evntDateYM	Event Yr/Mon
evntDateYQ	Event Yr/Qtr
evntDateYr	Event Year
evntToDisDays	Days: Event to Discharge
exemptOrg	Exempt Organization from Audit
expDate	Exposure Date
expDateYH	Exposure Yr/Half

Variable Name	Label
expDateYM	Exposure Yr/Mon
expDateYQ	Exposure Yr/Qtr
expDateYr	Exposure Year
expID	Exposure ID
expireDate	Expiration Date
exptype	Exposure Type
facActivated	Facility Activated
facility	Facility?
facOwner	Facility Ownership
facOwnerDesc	Facility Ownership Description
facToSpecDays	Days: Fac Admit to Spec Collect
facType	Type of Facility
facTypeDesc	Type of Facility Description
failRate_Offer	Failure Rate Not Offered/Med Elig HRI
fax	Fax
fearNeedle	Declination Reason Fear of Needles/Injections?
fearSideEffects	Declination Reason Fear of Side Effects?
fedRecord	Federal Record
fistula	Fistula?
fistulaAccDate	Fistula Access Date
fistulaAccDateUnk	Fistula Access Date Unknown
floorNotify	Other Action: Floor Notified?
fluidSource	Body Fluid Type
fluidSourceDesc	Body Fluid Type Description
fluidSourceOth	Other Body Fluid Type
fluidType	Type of Fluid
fluidTypeDesc	Type of Fluid Description
fluidTypeOth	Other Type of Fluid
fluMethodA	HRIIV Method A?
fluMethodB	HRIIV Method B?
fluseason	Flu Season
fluVaccSubtype	Flu Vacc Subtype
fluVaccSubtypeDesc	Flu Vacc Subtype Description
fluVaccType	Type of Flu Vaccination
fluVaccTypeDesc	Type of Flu Vaccination Description
followUpHere	Follow-Up to be Done Here?
GATI	Gatifloxacin
gender	Gender
GENT	Gentamicin
gg	Gown and Gloves
GG_adhRate	Gown/Glove Adherence Rate
ggIndicated	Gown/Glove Indicated
ggUsed	Gown/Glove Used
GI_GEcount	GI/GE Count
GI_GITcount	GI/GIT Count
GI_HEPcount	GI/HEP Count
GI_IABcount	GI/IAB Count
GI_NECcount	GI/NEC Count
GIcount	GI Count
glove_adhRate	Glove Adherence Rate
gloveCount	Glove Barrier Count
gName	First Name
gown_adhRate	Gown Adherence Rate
gownCount	Gown Barrier Count
graft	Graft?
graftAccDate	Graft Access Date
graftAccDateUnk	Graft Access Date Unknown
group	Drug Group
groupType	Type of Group
groupTypeOth	Other Group Type
guideWire	CL Exchanged Over Guidewire?
handHygiene	Hand Hygiene Performed?
hbigDate	HBIG Date

Variable Name	Label
hbigGiven	HBIG Given?
hcwDrug	Drug
hcwDrugDesc	Drug Description
hcwGName	HCW First Name
hcwid	HCW ID
hcwMName	HCW Middle Name
HCWNAME	Employees name
hcwPregStatus	HCW Pregnant?
hcwRaceaab	HCW Race-Black/African American?
hcwRaceamin	HCW Race-American Indian/Alaska Native?
hcwRaceasian	HCW Race-Asian?
hcwRaceNH_PI	HCW Race-Native Hawaiian/Pacific Islander?
hcwRacewhite	HCW Race-White?
hcwSurname	HCW Last Name
hcwTempEmp	Temp Employee?
hcwTrimester	Trimester
hemoAdvRxnID	Adverse Reaction ID
hemoCode	Code System
hemoProductAPLAS	#Aph plasma TXed
hemoProductAPLAT	#Aph Platelets TXed
hemoProductARBC	#Aph RBC TXed
hemoProductCRYO	#Cryo TXed
hemoProductGRAN	#Grans TXed
hemoProductLYMP	#Lymps TXed
hemoProductWPLAS	#WB Plasma TXed
hemoProductWPLAT	#WBPlatelets TXed
hemoProductWRBC	#Whole Bld RBCs TXed
hepBVacc	Hepatitis B Vaccine Given?
hepBVaccDate	Date of First Hepatitis B Vaccine
hh	Hand Hygiene
HH_adhRate	Hand Hygiene Adherence Rate
HHcount	Hand Hygiene Count
hhIndicated	Hand Hygiene Indicated
hhPerformed	Hand Hygiene Performed
HHRate	Hand Hygiene Rate
holdCmt	Hold Comment
Hosp_mean	NHSN Hosp Pooled Mean
hosp_pctl10	NHSN Hosp 10th Percentile
hosp_pctl25	NHSN Hosp 25th Percentile
hosp_pctl50	NHSN Hosp 50th Percentile
hosp_pctl75	NHSN Hosp 75th Percentile
hosp_pctl90	NHSN Hosp 90th Percentile
hospCount	Hosp Incident Count
hospFistulaCount	Hosp Incident Count Fistula
hospGraftCount	Hosp Incident Count Graft
hospIncident	Hospitalization?
hospPCLCount	Hosp Incident Count Perm Central Line
hospPortCount	Hosp Incident Count Port
hospRate	Hosp Incident Rate
hospTCLCount	Hosp Incident Count Temp Central Line
howAccred	Hospital Accredited
howAccredDesc	Hospital Accredited Description
howDisc	How Incident First Discovered
howDiscDesc	How Incident First Discovered Description
howDiscOth	How Incident First Discovered - Other
howInjured	What Caused the Injury to Occur
howInjuredDesc	What Cuased the Injury to Occur Description
howInjuredOth	What Caused the Injury to Occur Other
hpro	Type of Hip Prosthesis Procedure
hproDesc	HPRO Description
hrLabor	Duration of Labor - hr
hrsDuty	Hours on Duty
htFeet	Patient Height - ft

Variable Name	Label
htInches	Patient Height - in
htMetric	Patient Height - meters
humanAnalysis	Analysis Result Human?
id2	Patient ID2
IDR_pctl	Incidence Density Percentile
IDR_pval	Incidence Density p-value
IDR1_pctl	Incidence Density Percentile #1
IDR1_pval	Incidence Density p-value #1
IDR2_pctl	Incidence Density Percentile #2
IDR2_pval	Incidence Density p-value #2
IMI	Imipenem
immune	Immune?
immuneAntib	Antibody
immunocomp	Immunocompromised
implant	Implant?
implicated	Implicated?
inaVIS	Inactivated Influenza VIS?
incASTPositive	Discharge/Transfer AST Positive
Incid_mean	NHSN Incid Pooled Mean
Incid_pctl10	NHSN Incident 10th Percentile
Incid_pctl25	NHSN Incident 25th Percentile
Incid_pctl50	NHSN Incident 50th Percentile
Incid_pctl75	NHSN Incident 75th Percentile
Incid_pctl90	NHSN Incident 90th Percentile
incidCode	Incident Code
incidCodeDesc	Incident Code Description
incidCount	Total Incident Count
incidFistulaCount	Total Incident Count Fistula
incidGraftCount	Total Incident Count Graft
incidID	Incident ID
incidID2	Local Log ID
incidPCLCount	Total Incident Count Perm Central Line
incidPortCount	Total Incident Count Port
incidRate	Total Incident Rate
incidResult	Incident Result
incidResultDesc	Incident Result Description
incidSummary	Incident Summary
incidTCLCount	Total Incident Count Temp Central Line
indication	Indication
indicationdesc	Indication Description
inf	Infections
infAgent	Infectious Agent
infAgentDesc	Infectious Agent Description
infCountAll	All SSI Model Infection Count
infCountComplex	Complex AR Model Infection Count
infPath1	Infection Pathogen 1
infPath2	Infection Pathogen 2
infPath3	Infection Pathogen 3
infPathDesc1	Infection Pathogen 1 Description
infPathDesc2	Infection Pathogen 2 Description
infPathDesc3	Infection Pathogen 3 Description
infType	Infection Type
infTypeDesc	Infection Type Description
injuryDevice	Device
insDateYH	Insertion Yr/Half
insDateYM	Insertion Yr/Mon
insDateYQ	Insertion Yr/Qtr
insDateYr	Insertion Year
insertDate	Insertion Date
inserterID	Inserter ID
insertSite	Insertion Site
insertSiteDesc	Insertion Site Description
insGName	Inserter First Name

Variable Name	Label
insOthOccupation	Inserter Occupation Other
insSurname	Inserter Last Name
interXferDays	Days: Inter-Facility Transfer
ISBTcomp	ISBT-128 Compliant
JOBTITLE	Job title
KLEB	Organism MDR-Klebsiella
KLEB_admPrevBldCount	KLEB Blood Admission Prevalence LabID Count
KLEB_admPrevCOCount	KLEB CO Admission Prevalence LabID Count
KLEB_admPrevCount	KLEB Admission Prevalence LabID Count
KLEB_admPrevHOCount	KLEB HO Admission Prevalence LabID Count
KLEB_admPrevRate	KLEB Admission Prevalence Rate
KLEB_bldIncCount	KLEB Blood Incident LabID Count
KLEB_BSIAdmPrevRate	KLEB BSI Admission Prevalence Rate
KLEB_BSIIncDensRate	KLEB BSI Incidence Density Rate
KLEB_BSIIncRate	KLEB BSI Incidence Rate
kleb_gg	Gown/Glove KLEB?
kleb_hh	Hand Hygiene KLEB?
KLEB_incCount	KLEB Incident LabID Count
kleb_infSurv	Inf Surv KLEB?
kleb_labID	Lab ID KLEB?
KLEB_labidCount	KLEB LabiD Count
KLEB_MDROIncDensRate	Overall KLEB Infection/Colonization Incidence Density Rate
KLEB_MDROIncRate	Overall KLEB Infection/Colonization Incidence Rate
KLEB_pctAdmPrevCO	KLEB Percent Admission Prevalence/Community-Onset
KLEB_pctAdmPrevHO	KLEB Percent Admission Prevalence/Healthcare Facility-Onset
KLEB_prevRate	Overall KLEB Prevalence Rate
klebCount	KLEB HAI Count
KLEBRate	KLEB HAI Rate
kpComment	KP/KO Test Method Comment
kpPrimary	KP/KO 1st Test Method
kpPrimaryDesc	KP/KO 1st Test Method
kpro	Type of Knee Prosthesis Procedure
kproDesc	KPRO Description
kpSecondary	KP/KO 2nd Test Method
kpSecondaryDesc	KP/KO 2nd Test Method
labAccred	Accredited Laboratory
LAI	Local Access Infection
LAI_mean	NHSN LAI Pooled Mean
LAI_pctl10	NHSN LAI 10th Percentile
LAI_pctl25	NHSN LAI 25th Percentile
LAI_pctl50	NHSN LAI 50th Percentile
LAI_pctl75	NHSN LAI 75th Percentile
LAI_pctl90	NHSN LAI 90th Percentile
LAICount	LAI Count
LAIFistulaCount	LAI Count Fistula
LAIGraftCount	LAI Count Graft
LAIPCLCount	LAI Count Perm Central Line
LAIPortCount	LAI Count Port
LAIRate	LAI Rate
LAITCLCount	LAI Count Temp Central Line
lastDischargeDate	Last Discharge Date
lastDisDateYH	Last Discharge Yr/Half
lastDisDateYM	Last Discharge Yr/Mon
lastDisDateYQ	Last Discharge Yr/Qtr
lastDisDateYr	Last Discharge Year
laVIS	Live, Attenuated Influenza VIS?
lcbiPath	LCBI Pathway
lcbiPathDesc	LCBI Pathway Description
leukoReduce	Only Leukocyte-Reduced
LEVO	Levofloxacin
LineDU	CL Util Ratio
LineDU_Mean	NHSN Line DU Pooled Mean
LineDU_Pctl10	NHSN Line DU 10th Percentile

Variable Name	Label
LineDU_Pctl25	NHSN Line DU 25th Percentile
LineDU_Pctl50	NHSN Line DU 50th Percentile
LineDU_Pctl75	NHSN Line DU 75th Percentile
LineDU_Pctl90	NHSN Line DU 90th Percentile
lineType	CL Cath Type
lineTypeDesc	CL Cath Type Description
lineTypeOther	CL Cath Type Other
linkedIncid1	Linked Incident 1
linkedIncid2	Linked Incident 2
linkedIncid3	Linked Incident 3
linkedproc	Linked Procedure
LNZ	Linezolid
locAdmDateYH	Loc Admission Yr/Half
locAdmDateYM	Loc Admission Yr/Mon
locAdmDateYQ	Loc Admission Yr/Qtr
locAdmDateYr	Loc Admission Year
localAccInf	Local Access Infection
location	Location
locationAdmitDate	Location Admission Date
locationType	Location Type
locbeds	Location Beds
locbedsize	Location Bedsize
locCDC	CDC Location
locCDCDesc	CDC Location Description
locImport	Location Import?
locLabel	Location Label
locStatus	Location Status
locToSpecDays	Days: Loc Admit to Spec Collect
lotNum	Lot Number
lotNumber	Lot Number
LRI_BRONcount	LRI/BRON Count
LRI_LUNGcount	LRI/LUNG Count
LRIcount	LRI Count
ltacsetting	LTAC Setting
ltacsettingDesc	LTAC Setting Description
m100Ver	M100 Version
majTeach	Major Teaching
manufacturer	Manufacturer
manufacturerDesc	Manufacturer Description
mask_adhRate	Mask Adherence Rate
maskCount	Mask Barrier Count
mdroIncompleteFlag	Incomplete?
mdroInfPlan	In MDRO Plan
medAff	Affiliated with Med School?
medical	Declination Reason Medical Contraindications?
medID	med ID
medReaction	Adverse Reaction to Medication?
medstartdate	Medication Start Date
medstartDateYH	Medication Start Yr/Half
medstartdateYM	Medication Start Yr/Mon
medstartdateYQ	Medication Start Yr/Qtr
medstartDateYr	Medication Start Year
medstopdate	Medication Stop Date
medstopDateYH	Medication Stop Yr/Half
medstopdateYM	Medication Stop Yr/Mon
medstopdateYQ	Medication Stop Yr/Qtr
medstopDateYr	Medication Stop Year
medType	Type of Affiliation
medTypeDesc	Type of Affiliation Description
MERO	Meropenem
methdiskdiff	Disk Diffusion used to Confirm VRS?
methetest	Etest used to Confirm VRS?
methother	Other Method used to Confirm VRS?

Variable Name	Label
methothersfy	Other Method used to Confirm VRS
methrepeatprimary	Repeat Primary Test to Confirm VRS?
methvancagar	Agar Screen Plate used to Confirm VRS?
mName	Middle Name
modelRiskAll	Risk using All SSI Model
modelRiskComplex	Risk using Complex AR Model
modExtentALIQ	ModProduct: Aliquot
modExtentDEGLY	ModProduct: Deglycerolizing
modExtentIRRAD	Mod Prod: Irradiation
modExtentLEUKO	Mod Prod: Leukoreduction
modExtentNONE	Modify Prod: None
modExtentPLASMA	Mod Prod: Plasma reduction
modExtentPOOL	Mod Prod: Pooling
modExtentWASH	Mod Prod: Washing
modifyDate	Last Modified
modifyUserID	Modify User ID
monthfrom	From Month
months	Months
months1	Months
months2	Months
monthto	To Month
MOXI	Moxifloxacin
MRSA	Organism MRSA
MRSA_admASTadhRate	MRSA Admission AST Adherence Rate
MRSA_admASTEligible	MRSA Admission AST Eligible
MRSA_admASTPerformed	MRSA Admission AST Performed
MRSA_admASTPrevRate	MRSA AST Prevalence Rate
MRSA_admPrevBldCount	MRSA Blood Admission Prevalence LabID Count
MRSA_admPrevCOCount	MRSA CO Admission Prevalence LabID Count
MRSA_admPrevCount	MRSA Admission Prevalence LabID Count
MRSA_admPrevHOCount	MRSA HO Admission Prevalence LabID Count
MRSA_admPrevRate	MRSA Admission Prevalence Rate
mrsa_astEligible	AST Eligible MRSA
mrsa_astTiming	AST Timing MRSA
MRSA_bldIncCount	MRSA Blood Incident LabID Count
MRSA_BSIAdmPrevRate	MRSA BSI Admission Prevalence Rate
MRSA_BSIIncDensRate	MRSA BSI Incidence Density Rate
MRSA_BSIIncRate	MRSA BSI Incidence Rate
MRSA_dtASTadhRate	MRSA Discharge/Transfer AST Adherence Rate
MRSA_dtASTEligible	MRSA Discharge/Transfer AST Eligible
MRSA_dtASTPerformed	MRSA Discharge/Transfer AST Performed
mrsa_gg	Gown/Glove MRSA?
mrsa_hh	Hand Hygiene MRSA?
MRSA_incASTPos	MRSA Discharge/Transfer AST Positive
MRSA_incASTRate	MRSA AST Incidence Rate
MRSA_incCount	MRSA Incident LabID Count
mrsa_incidence	Incidence MRSA?
mrsa_infSurv	Inf Surv MRSA?
mrsa_labID	Lab ID MRSA?
MRSA_labidCount	MRSA LabiD Count
MRSA_MDROIncDensRate	Overall MRSA Infection/Colonization Incidence Density Rate
MRSA_MDROIncRate	Overall MRSA Infection/Colonization Incidence Rate
MRSA_pctAdmPrevCO	MRSA Percent Admission Prevalence/Community-Onset
MRSA_pctAdmPrevHO	MRSA Percent Admission Prevalence/Healthcare Facility-Onset
mrsa_prevalence	Prevalence MRSA?
MRSA_prevASTPos	MRSA Admission AST Positive
MRSA_prevRate	Overall MRSA Prevalence Rate
mrsaadm	MRSA AST Adm
mrsaCount	MRSA HAI Count
mrsadt	MRSA AST D/T
mrsainc	MRSA AST Incidence
mrsaprev	MRSA AST Prevalence
MRSARate	MRSA HAI Rate

Variable Name	Label
MSSA	Organism MSSA
MSSA_admPrevBldCount	MSSA Blood Admission Prevalence LabID Count
MSSA_admPrevCOCount	MSSA CO Admission Prevalence LabID Count
MSSA_admPrevCount	MSSA Admission Prevalence LabID Count
MSSA_admPrevHOCount	MSSA HO Admission Prevalence LabID Count
MSSA_admPrevRate	MSSA Admission Prevalence Rate
mssa_astEligible	AST Eligible MSSA
mssa_astTiming	AST Timing MSSA
MSSA_bldIncCount	MSSA Blood Incident LabID Count
MSSA_BSIAdmPrevRate	MSSA BSI Admission Prevalence Rate
MSSA_BSIIncDensRate	MSSA BSI Incidence Density Rate
MSSA_BSIIncRate	MSSA BSI Incidence Rate
mssa_gg	Gown/Glove MSSA?
mssa_hh	Hand Hygiene MSSA?
MSSA_incCount	MSSA Incident LabID Count
mssa_incidence	Incidence MSSA?
mssa_infSurv	Inf Surv MSSA?
mssa_labID	Lab ID MSSA?
MSSA_labidCount	MSSA LabiD Count
MSSA_MDROIncDensRate	Overall MSSA Infection/Colonization Incidence Density Rate
MSSA_MDROIncRate	Overall MSSA Infection/Colonization Incidence Rate
MSSA_pctAdmPrevCO	MSSA Percent Admission Prevalence/Community-Onset
MSSA_pctAdmPrevHO	MSSA Percent Admission Prevalence/Healthcare Facility-Onset
mssa_prevalence	Prevalence MSSA?
MSSA_prevRate	Overall MSSA Prevalence Rate
mssaCount	MSSA HAI Count
MSSARate	MSSA HAI Rate
mucMem	Mucous Membrane Exposure?
mult	Multiplier
multiCompCDC1	CDC Code Multiple Component 1
multiCompCDC10	CDC Code Multiple Component 10
multiCompCDC2	CDC Code Multiple Component 2
multiCompCDC3	CDC Code Multiple Component 3
multiCompCDC4	CDC Code Multiple Component 4
multiCompCDC5	CDC Code Multiple Component 5
multiCompCDC6	CDC Code Multiple Component 6
multiCompCDC7	CDC Code Multiple Component 7
multiCompCDC8	CDC Code Multiple Component 8
multiCompCDC9	CDC Code Multiple Component 9
multiCompCDCDesc1	CDC Code Description Multiple Component 1
multiCompCDCDesc10	CDC Code Description Multiple Component 10
multiCompCDCDesc2	CDC Code Description Multiple Component 2
multiCompCDCDesc3	CDC Code Description Multiple Component 3
multiCompCDCDesc4	CDC Code Description Multiple Component 4
multiCompCDCDesc5	CDC Code Description Multiple Component 5
multiCompCDCDesc6	CDC Code Description Multiple Component 6
multiCompCDCDesc7	CDC Code Description Multiple Component 7
multiCompCDCDesc8	CDC Code Description Multiple Component 8
multiCompCDCDesc9	CDC Code Description Multiple Component 9
multiCompCode1	Multiple Component Code 1
multiCompCode10	Multiple Component Code 10
multiCompCode2	Multiple Component Code 2
multiCompCode3	Multiple Component Code 3
multiCompCode4	Multiple Component Code 4
multiCompCode5	Multiple Component Code 5
multiCompCode6	Multiple Component Code 6
multiCompCode7	Multiple Component Code 7
multiCompCode8	Multiple Component Code 8
multiCompCode9	Multiple Component Code 9
multiCompProductType1	Product Type Multiple Component 1
multiCompProductType10	Product Type Multiple Component 10
multiCompProductType2	Product Type Multiple Component 2
multiCompProductType3	Product Type Multiple Component 3

Variable Name	Label
multiCompProductType4	Product Type Multiple Component 4
multiCompProductType5	Product Type Multiple Component 5
multiCompProductType6	Product Type Multiple Component 6
multiCompProductType7	Product Type Multiple Component 7
multiCompProductType8	Product Type Multiple Component 8
multiCompProductType9	Product Type Multiple Component 9
multiCompUnits1	Number of Units Multiple Component 1
multiCompUnits10	Number of Units Multiple Component 10
multiCompUnits2	Number of Units Multiple Component 2
multiCompUnits3	Number of Units Multiple Component 3
multiCompUnits4	Number of Units Multiple Component 4
multiCompUnits5	Number of Units Multiple Component 5
multiCompUnits6	Number of Units Multiple Component 6
multiCompUnits7	Number of Units Multiple Component 7
multiCompUnits8	Number of Units Multiple Component 8
multiCompUnits9	Number of Units Multiple Component 9
multiProc	Multiple Procedures
name	Facility Name
natlPooledMean	NHSN Aggregate Pooled Mean
nhsn_mean	NHSN Rate
nhsndu_mean	NHSN Ratio
NHSNRate	NHSN Rate
nhsnRatio	NHSN Ratio
noBarrier	No Barrier Used by HCW
nonDevice	Non-device Sharp Object
nonImmune	Non-Immune?
nonImmuneSfy	Non-Immune Specify
noninfBleeding	Bleeding
noninfClotting	Clotting
noninfOther	Other
nonIrradBlood	Patient Received Non-Irradiated Blood?
numAdmits	Number of Admissions
numAdms	Admissions
numAPLASAliq	No. APLAS Aliquots
numAPLASUnits	No. APLAS Units Transfused
numAPLATAliq	No. APLAT Aliquots
numAPLATUnits	No. APLAT Units Transfused
numARBCAliq	No. ARBC Aliquots
numARBCUnits	No. ARBC Units Transfused
numBeds	Number of Beds
numCLDays	Central Line Days
numContr	# HRI Declining Vacc Medical
numCRYOUnits	No. CRYO Units Transfused
numddays	Device Days
numDDD	Number of DDDs
numDec	# HRI Declining Vacc Personal
numDecline	# HRI Declining Vacc
numencounters	Encounters
numExp	Number Expected
numExpAll	All SSI Model Number Expected
numExpComplex	Complex AR Model Number Expected
numFistulaPats	Number of Patients Fistula
numGraftPats	Number of Patients Graft
numGRANAliq	No. GRAN Aliquots
numGRANUnits	No. GRAN Units Transfused
numHighRiskAdm	# HRI Administered Vacc
numHighRiskPrev	# HRI Prev Vacc
numHiObsBeds	Number of High Observation Beds
numICP	Number of ICPs
numICUBeds	Number of ICU Beds
numInSurg	No. Yearly Inpatient Surgeries
numLumens	Number of Lumens
numLYMPAliq	No. LYMP Aliquots

Variable Name	Label
numLYMPUnits	No. LYMP Units Transfused
numMedElig	# Med Elig HRI
numMedEligWilling	# Med Elig Willing HRI
numOtherBeds	Number of Other Beds
numotherbedsltac	Number of Other Beds - LTAC
numOutSurg	No. Yearly Outpatient Surgeries
numPatDays	Patient Days
numpatientdays	Patient Days
numPats	Patient Months
numPCLDays	Perm Central Line Days
numPCLPats	Number of Patients Perm Central Line
numPortPats	Number of Patients Port
numPrev	# Patients Prev Vacc
numProc	Number of Procedures
numRBCType	No. RBC Type ands Screen Procedures
numRBCXMat	No. RBC Crossmatch Procedures
numSCABeds	Number of Specialty Care Beds
numTCLDays	Temp Central Line Days
numTCLPats	Number of Patients Temp Central Line
numTotal	Total Number
numTotBeds	No. Total Beds
numUCathDays	Urinary Catheter Days
numUmbCDays	Umbilical Catheter Days
numUnits	# of Units
numVac	# Vaccinated
numVentBeds	Number of Ventilator Beds
numVentDays	Ventilator Days
numWPLASAliq	No. WPLAS Aliquots
numWPLASUnits	No. WPLAS Units Transfused
numWPLATUnits	No. WPLAT Units Transfused
numWRBCAliq	No. WRBC Aliquots
numWRBCUnits	No. WRBC Units Transfused
numXfusFTE	No. Transfusion FTEs
numXfusMLT	No. Transfusion MLT
numXfusMT	No. Transfusion MT
numXfusPhy	No. Transfusion MT
objectAction	Right
objectModifier	Modifier
objectName	Name
occCDC	CDC Occupation
occCDCDesc	CDC Occupation Description
occLabel	Occupation Label
occOther	Other Occupation
occStatus	Occupation Status
occUnknown	Occupation Unknown
occupation	Occupation
occurComment	How the Injury Occurred
occurDate	Date of Occurance
occurDateTime	Date/Time of Occurance
occurDateYH	Occurance Yr/Half
occurDateYM	Occurance Yr/Mon
occurDateYQ	Occurance Yr/Qtr
occurDateYr	Occurance Year
occurLocation	Occurance Location
occurLocCDC	Occurance CDC Location
occurLocCDCDesc	Occurance CDC Location Description
occurLocLabel	Occurance Location Label
occurTimeApprox	Occur Time Approximate?
occurTimeUnk	Occur Time Unknown?
occurToDisc	Occurance To Discovery Time
OFLOX	Ofloxacin
ointmentApp	Antiseptic ointment applied?
onset	Onset

Variable Name	Label
onsetDesc	Onset Description
orgAdminUserID	Admin User ID
orgAdmUsername	Adm User Name
orgAnalysis	Analysis Result Organizational?
orgContactID	Contact ID
orgID	Org ID
OSHA_E	Where the event occurred
OSHA_F	Description of injury or illness
OSHA_G	Classify the case: Death
OSHA_H	Classify the case: Days away from work
OSHA_I	Classify the case: Job transfer or restriction
OSHA_J	Classify the case: Other recordable cases
OSHA_K	Away from work
OSHA_L	On job transfer or restriction
OSHA_M1	Injury
OSHA_M2	Skin disorder
OSHA_M3	Respiratory condition
OSHA_M4	Poisoning
OSHA_M5	Hearing loss
OSHA_M6	All other illnesses
othAnalysis	Analysis Result Other?
othAnalysisSfy	Other Analysis Result
otherAction	Other Action: Other?
otherActionSfy	Other Action
otherAdvRxn	Other Adverse Reaction
otherPainSfy	Other Pain
otherSignSfy	Other Sign
othFacLoc	Name of Other Facility
othReasonInsert	Reason for Insertion Other
outpatient	Performed in Outpatient Setting?
OX	Oxacillin
P_pctl	Proportion Percentile
P_pval	Proportion p-value
P1_pctl	Proportion Percentile #1
P1_pval	Proportion p-value #1
P2_pctl	Proportion Percentile #2
P2_pval	Proportion p-value #2
paComment	PA Test Method Comment
paPrimary	PA 1st Test Method
paPrimaryDesc	PA 1st Test Method
parentOrgID	Group Org ID
paSecondary	PA 2nd Test Method
paSecondaryDesc	PA 2nd Test Method
patAnalysis	Analysis Result Patient?
patBloodGroup	Patient Blood Group
patdays	Patient Days
patDischarge	Discharged in Past 3 Months?
patGName	Patient First Name
pathIdentified	Pathogen Identified
pathogen	Pathogen
pathogen1	Pathogen 1
pathogen2	Pathogen 2
pathogen3	Pathogen 3
pathogenDesc	Pathogen Description
pathogenDesc1	Pathogen 1 Description
pathogenDesc2	Pathogen 2 Description
pathogenDesc3	Pathogen 3 Description
patID	Patient ID
patient1	Patient 1 ID
patient10	Patient 10 ID
patient2	Patient 2 ID
patient3	Patient 3 ID
patient4	Patient 4 ID

Variable Name	Label
patient5	Patient 5 ID
patient6	Patient 6 ID
patient7	Patient 7 ID
patient8	Patient 8 ID
patient9	Patient 9 ID
patMName	Patient Middle Name
patRaceaab	Patient Race-Black/African American?
patRaceamin	Patient Race-American Indian/Alaska Native?
patRaceasian	Patient Race-Asian?
patRaceNH_PI	Patient Race-Native Hawaiian/Pacific Islander?
patRacewhite	Patient Race-White?
patReact	Associated Patient Reaction?
patSurName	Patient Last Name
PBC	Positive Blood Culture?
PBC_mean	NHSN PBC Pooled Mean
PBC_pctl10	NHSN PBC 10th Percentile
PBC_pctl25	NHSN PBC 25th Percentile
PBC_pctl50	NHSN PBC 50th Percentile
PBC_pctl75	NHSN PBC 75th Percentile
PBC_pctl90	NHSN PBC 90th Percentile
PBCCount	PBC Count
PBCFistulaCount	PBC Count Fistula
PBCGraftCount	PBC Count Graft
PBCPCLCount	PBC Count Perm Central Line
PBCPortCount	PBC Count Port
PBCRate	PBC Rate
PBCTCLCount	PBC Count Temp Central Line
PCLAB_CLDays	NHSN Perm Central Line-Days
PCLAB_CSEPcount	Perm CLA BSI/CSEP Count
PCLAB_LCBIcount	Perm CLA BSI/LCBI Count
PCLAB_Mean	NHSN PCLAB Pooled Mean
PCLAB_Pctl10	NHSN PCLAB 10th Percentile
PCLAB_Pctl25	NHSN PCLAB 25th Percentile
PCLAB_Pctl50	NHSN PCLAB 50th Percentile
PCLAB_Pctl75	NHSN PCLAB 75th Percentile
PCLAB_Pctl90	NHSN PCLAB 90th Percentile
PCLAB_Units	No. of NHSN Units
PCLABcount	Perm CLA BSI Count
PCLABRate	Perm CLA BSI Rate
PCLineAccDate	PC Line Access Date
PCLineAccDateUnk	PC LIne Access Date Unknown
pctAuto	Percent Auto Done
pctBoth	Percent Both Done
pctManual	Percent Manually Done
pctPatAcute	% Patients Discharged to Acute Care
pctPatHome	% Patients Discharged to Home
pctPatRecov	% Patients Discharged to Recovery Care
pctProcSurg	% Procedures that are Surgical
pctRBCXMatElec	Percent RBC Crossmatch Electronically
pctRBCXMatSero	Percent RBC Crossmatch Serologically
PENG	Penicillin G
percInjury	Percutaneous Injury?
percvdIneffect	Declination Reason Perceived Ineffectiveness?
permCentralLine	Permanent Central Line
phleTeam	Are Specimens Drawn by a Dedicated Phlebotomy Team?
phleTeamPct	Percent drawn by Dedicated Phlebotomy Team
phyProdReq	Physician On-Line Product Request
physNotify	Other Action: Physician Notified?
phyTestReq	Physician On-Line Test Request
pi_adhRate	PI Adherence Rate
piActivity	Activity at Time of Injury
piActivityDesc	Activity at Time of Injury Description
piActivityOth	Other Activity At Time of Injury

Variable Name	Label
piCount	PI Skin Prep Count
PIP	Piperacillin
PIPTAZ	Piperacillin/Tazobactam
plans	Plan
planYM	Plan YM
PLineDU	Perm CL Util Ratio
PLineDU_Mean	NHSN Perm Line DU Pooled Mean
PLineDU_PatDays	NHSN Perm Line Patient-Days
PLineDU_Pctl10	NHSN Perm Line DU 10th Percentile
PLineDU_Pctl25	NHSN Perm Line DU 25th Percentile
PLineDU_Pctl50	NHSN Perm Line DU 50th Percentile
PLineDU_Pctl75	NHSN Perm Line DU 75th Percentile
PLineDU_Pctl90	NHSN Perm Line DU 90th Percentile
PNEU_PNU1count	Pneu/PNU1 Count
PNEU_PNU2count	Pneu/PNU2 Count
PNEU_PNU3count	Pneu/PNU3 Count
PneuCount	Pneu Count
pneuPlan	VAP Plan?
port	Port?
portAccDate	Port Access Date
portAccDateUnk	Port Access Date Unknown
positionAdvRxn	Dedicate Position for Investigation Adverse Reactions
positionIncident	Dedicate Position for Transfusion Errors
posPatID	Transfusion Services Patient ID Technology
posPatIDDesc	Trans Serv ID Technology Description
posPatIDSysBARCODE	PosPatID: Bed ID Band Barcode
posPatIDSysMECHBAR	PosPtID: Mech Barrier
posPatIDSysOth	Other Positive Patient ID Technology
posPatIDSysOTHER	PosPtID: Oth
posPatIDSysRFID	PosPatID: Radio Frequ ID
posPatIDSysWRISTBND	PosPtID: TX ID Wristband
posPatIDUsagePRODADM	Pos Pt ID use: Prod Admin
posPatIDUsageSPECCOL	PosPt ID use: Specimen Col
postProc	Post-Procedure
ppnuPlan	PPP Plan?
PPP_Mean	NHSN PPP Pooled Mean
PPP_Pctl10	NHSN PPP 10th Percentile
PPP_Pctl25	NHSN PPP 25th Percentile
PPP_Pctl50	NHSN PPP 50th Percentile
PPP_Pctl75	NHSN PPP 75th Percentile
PPP_Pctl90	NHSN PPP 90th Percentile
PPP_Units	No. of NHSN Units
PPPCount	PPP Count
PPPRate	#NAME?
prepDry	Skin Prep Agent Dry?
prevASTClinicalPositive	Prevalent Cases AST/Clinical Positive
prevASTKnownPositive	Prevalent Cases AST/Known Positive
prevDisMons	Months: Last Discharge to Fac Admit
preventComment	What Could Have Prevented the Injury
prevPos	Previous Organism Infection
prevRate_HRIAdm	Prevalence Rate HRI/Adm
prevRate_NotPreVaccAdm	Prevalence Rate Not Prev Vacc/Adm
prevRate_PreVaccAdm	Prevalence Rate Prev Vacc/Adm
prevRate_PreVaccHRI	Prevalence Rate Prev Vacc/HRI
procCode	Procedure Code
procCodeDesc	Procedure Code Description
procCount	Procedure Count
procDate	Procedure Date
procDateYH	Procedure Yr/Half
procDateYM	Procedure Yr/Mon
procDateYQ	Procedure Yr/Qtr
procDateYr	Procedure Year
procDurationHr	Duration of Procedure - hr

Variable Name	Label
procDurationMin	Duration of Procedure - min
procICD9Code	Procedure ICD9 Code
procID	Procedure ID
procToEvntDays	Days: Procedure to Event
prodDestroy	Product Action: Destroyed?
prodIssue	Product Action: Issued?
prodNA	Product Action: Not Applicable?
prodRetrieve	Product Action: Retrieved?
product	Product
productDesc	Product Description
productOth	Other Product
prodXfus	Product Action: Transfused?
protoCrit	Case Definition Criteria
protoCritDesc	Case Definition Criteria Description
protoGrade	Grade
protoGradeDesc	Grade Description
protoRelation	Relationship
protoRelationDesc	Relationship Description
prsFistula	Fistula with Pus/Red/Swell?
prsGraft	Graft with Pus/Red/Swell?
prsPCLine	Perm Central Line with Pus/Red/Swell?
prsPort	Port with Pus/Red/Swell?
prsTCLine	Temp Central Line with Pus/Red/Swell?
PSNoPlan	No PS Plan?
PSRptPlanID	Report Plan ID
QUIDAL	Quinupristin/Dalfopristin
rate	=&txtRateLabel
rateYM	Year/Month
RBCXMatElec	Electronic RBC Crossmatch
RBCXMatSero	Serologically RBC Crossmatch
RBCXMatUnk	Unknown RBC Crossmatch
rcpntHLA	Recipient HLA Specificity
rcpntHLADesc	Recipient HLA Specificity Description
rcpntHNA	Recipient HNA Specificity
rcpntHNADesc	Recipient HNA Specificity Description
rcpntPath1	Recipient Pathogen 1
rcpntPath2	Recipient Pathogen 2
rcpntPath3	Recipient Pathogen 3
rcpntPathDesc1	Recipient Pathogen 1 Description
rcpntPathDesc2	Recipient Pathogen 2 Description
rcpntPathDesc3	Recipient Pathogen 3 Description
rcpntTestPerform	Test Performed on Recipient?
rcpntTestPositive	Recipient Test Results Positive?
reactionTimeUnk	Reaction Time Unknown?
reasonInsert	Reason for Insertion
reasonInsertDesc	Reason for Insertion Description
recFollowUp	Was Follow-up Recommended?
recordCorrect	Other Action: Record Corrected?
recorderType	Insertion Recorder
religious	Declination Reason Religious Objections?
REPR_EMETcount	REPR/EMET Count
REPR_EPIScount	REPR/EPIS Count
REPR_OREPcount	REPR/OREP Count
REPR_VCUFcount	REPR/VCUF Count
REPRcount	REPR Count
resample	Other Action: Sample Recollected?
respInfection	Declination Reason Respiratory Infection?
RIF	Rifampin
risk	Risk
riskCat	Risk Category
rootCause	Root Cause Analysis?
route	Route of Administration
routeDesc	Route of Administration Description

Variable Name	Label
routeDrugAdmin	Drug Administration Route
rptSeqD	DA Seq
rptSeqM	MA Seq
rptSeqP	PA Seq
saComment	SA Test Method Comment
safeFeatureCDC	CDC Safety Feature
safeFeatureCDCDesc	CDC Safety Feature Description
salutation	Salutation
saPrimary	SA 1st Test Method
saPrimaryDesc	SA 1st Test Method
saSecondary	SA 2nd Test Method
saSecondaryDesc	SA 2nd Test Method
satStorageAMB	Satellite Store: Amb Care
satStorageEC	Satellite Store: ER
satStorageOR	Satellite Store: OR
satStorageOth	Satellite Storage Other
satStorageOTHER	Satellite Store: Oth
scopeOfUse	Scope Of Use
scopeOfUseDesc	Scope Of Use Description
screenAUTO	Type and Screen: Auto
screenBOTH	Type and Screen: Both
screenMANUAL	Type and Screen: Manual
secBSI	Secondary BSI?
sermComment	SM Test Method Comment
sermPrimary	SM 1st Test Method
sermPrimaryDesc	SM 1st Test Method
sermSecondary	SM 2nd Test Method
sermSecondaryDesc	SM 2nd Test Method
servClassCANCER	Service: Cancer
servClassDISEASE	Service: Chronic
servClassGENMS	Service: Gen Med Surg
servClassOBGYN	Service: ObGyn
servClassORTHO	Service: Ortho
servClassOth	Satellite Storage Other Classification
servClassOTHER	Service: Oth
servClassPEDCANCER	Service: Child Cancer
servClassPEDDISEASE	Service: Child Chronic
servClassPEDMS	Service: Child Gen Med Surgl
servClassPEDORTHO	Service: Child Ortho
setting	Setting
sharpPurpose	Purpose of Sharp
sharpPurposeDesc	Purpose of Sharp Description
sharpPurposeOth	Other Purpose of Sharp
sharpPurposeProc	Procedure of Sharp
sharpPurposeProcDesc	Procedure of Sharp Description
sharpPurposeProcOth	Other Procedure of Sharp
sharpType	Type of Sharp
singleCompCDC	CDC Code Single Component
singleCompCDCDesc	CDC Code Description Single Component
singleCompCode	Single Component Code
singleCompProductType	Single Component Product Type
sir	SIR
SIR_pval	SIR p-value
sir95ci	95% Confidence Interval
SIRAll	All SSI Model SIR
SIRAll_pval	All SSI Model SIR p-value
SIRAll95CI	All SSI Model 95% Confidence Interval
SIRComplex	Complex AR Model SIR
SIRComplex_pval	Complex AR Model SIR p-value
SIRComplex95CI	Complex AR Model 95% Confidence Interval
skinActivity	Activity at Time of Injury
skinActivityDesc	Activity at Time of Injury Description
skinActivityOth	Other Activity At Time of Injury

Variable Name	Label
skinExp	Skin Exposure?
skinIntact	Skin Intact?
skinPrepALC	Skin Prep: Alcohol?
skinPrepCHG	Skin Prep: Chlorohexidine gluconate?
skinPrepPI	Skin Prep: Povidone iodine?
spcEvent	Specific Event
spcEventDesc	Specific Event Description
spcOrgType	Specific Organism
spcSSICount	Spc Event SSI Count
spcSSIRate	Spc Event SSI Rate
specBodySite	Specimen Body Site
specBodySiteDesc	Specimen Body Site Description
specDateYH	Spec Collected Yr/Half
specDateYM	Spec Collected Yr/Mon
specDateYQ	Spec Collected Yr/Qtr
specDateYr	Spec Collected Year
specimenDate	Date Specimen Collected
specimenSource	Specimen Source
specimenSourceDesc	Specimen Source Description
specLabelADDR	Spec Labels: Adressogr
specLabelCOMPBED	Spec Labels: Bedside dev
specLabelCOMPLAB	Spec Labels: lab comp requ
specLabelHAND	Spec Labels: Handwritten
specLabelOth	Other Label
specLabelOTHER	Spec Labels: OTH
spinalLevel	Spinal Level
spinalLevelDesc	Spinal Level Description
srcPtAntiHBS	Source Pt Hep B Antibody Status
srcPtAntiHBSDesc	Source Pt Hep B Antibody Status
srcPtAntiHCV	Source Pt Hep C Antibody Status
srcPtAntiHCVDesc	= Source Pt Hep C Antibody Status
srcPtELISA	Source Pt HIV EIA Status
srcPtELISADesc	Source Pt HIV EIA Status
srcPtHBEAG	Source Pt Hep B e Antigen Status
srcPtHBEAGDesc	Source Pt Hep B e Antigen Status
srcPtHBSAG	Source Pt Hep B Surface Antigen Status
srcPtHBSAGDesc	Source Pt Hep B Surface Antigen Status
srcPtHCVPCR	Source Pt Hep C PCR Status
srcPtHCVPCRDesc	Source Pt Hep C PCR Status
srcPtHCVSupl	Source Pt RIBA Status
srcPtHCVSuplDesc	Source Pt RIBA Status
srcPtHIVConf	Source Pt HIV Confirmatory Test
srcPtHIVConfDesc	Source Pt HIV Confirmatory Test
srcPtHIVKnown	Source Pt HIV Status Known?
srcPtHIVStage	Source Pt HIV Stage
srcPtHIVStageDesc	Source Pt HIV Stage Description
srcPtKnown	Source Pt Known?
srcPtRapidHIV	Source Pt Rapid HIV Test
srcPtRapidHIVDesc	Source Pt Rapid HIV Test
srcPtTakeDrug	Source Pt Taking Anti-retroviral Drugs?
srcPtTotalHBC	Source Pt Hep B Total Antibody Status
srcPtTotalHBCDesc	Source Pt Hep B Total Antibody Status
srcPtViralLoad	Source Pt Viral Load
ss_abdpain	Abdominal Pain?
ss_backpain	Back Pain?
ss_blprhigh	Increase Blood Pressure?
ss_blprlow	Decrease Blood Pressure?
ss_chills	Chills?
ss_chstPain	Chest Pain?
ss_dkUrine	Dark Urine?
ss_fever	Fever?
ss_flnkPain	Flank Pain?
ss_headache	Headache?

Variable Name	Label
ss_hematuri	Hematuria?
ss_hemoglob	Hemoglobinemia?
ss_hemorrh	Diffuse hemorrhage?
ss_hypox	Hypoxemia?
ss_jaundc	Jaundice?
ss_nausea	Nausea?
ss_oliguria	Oliguria?
ss_other	Other Sign?
ss_othPain	Other Pain?
ss_othRash	Other Skin Rash?
ss_shock	Shock?
ss_shortBr	Shortness of Breath?
ss_sitePain	Infusion Site Pain?
ss_urticar	Urticaria?
SSI_Mean	NHSN SSI Pooled Mean
SSI_Pctl10	NHSN SSI 10th Percentile
SSI_Pctl25	NHSN SSI 25th Percentile
SSI_Pctl50	NHSN SSI 50th Percentile
SSI_Pctl75	NHSN SSI 75th Percentile
SSI_Pctl90	NHSN SSI 90th Percentile
SSI_Units	No. of NHSN Units
SSICount	SSI Count
ssiplan	SSI Plan?
SSIRate	SSI Rate
ssn	SSN
SST_BRSTcount	SST/BRST Count
SST_BURNcount	SST/BURN Count
SST_CIRCcount	SST/CIRC Count
SST_DECUcount	SST/DECU Count
SST_PUSTcount	SST/PUST Count
SST_SKINcount	SST/SKIN Count
SST_STcount	SST/ST Count
SST_UMBcount	SST/UMB Count
SSTcount	SST Count
state	State
status	Status
statusDate	Status Date
statusDesc	Status Description
stemaComment	STEMA Test Method Comment
stemaPrimary	STEMA 1st Test Method
stemaPrimaryDesc	STEMA 1st Test Method
stemaSecondary	STEMA 2nd Test Method
stemaSecondaryDesc	STEMA 2nd Test Method
summaryType	Summary Type
summaryYH	Summary Yr/Half
summaryYM	Summary Yr/Mon
summaryYQ	Summary Yr/Qtr
summaryYr	Summary Yr
superDegree	Supervisor Degree
superGName	Supervisor First Name
superMName	Supervisor Middle Name
superSurname	Supervisor Last Name
superTitle	Supervisor Title
supervisor	Supervisor HCW ID
suprName	Supervisor Name
surgeonCode	Surgeon Code
surgeryForCDAD	Surgery for CDAD complications
surgGName	Surgeon First Name
surgMName	Surgeon Middle Name
surgStatus	Surgeon Status
surgSurname	Surgeon Last Name
surName	Last Name
surveyYear	Survey Year

Variable Name	Label
swClass	Wound Class
swClassDesc	Wound Class Description
SYS_DIcount	SYS/DI Count
SYScount	SYS Count
TCLAB_CLDays	NHSN Temp Central Line-Days
TCLAB_CSEPcount	Temp CLA BSI/CSEP Count
TCLAB_LCBIcount	Temp CLA BSI/LCBI Count
TCLAB_Mean	NHSN TCLAB Pooled Mean
TCLAB_Pctl10	NHSN TCLAB 10th Percentile
TCLAB_Pctl25	NHSN TCLAB 25th Percentile
TCLAB_Pctl50	NHSN TCLAB 50th Percentile
TCLAB_Pctl75	NHSN TCLAB 75th Percentile
TCLAB_Pctl90	NHSN TCLAB 90th Percentile
TCLAB_Units	No. of NHSN Units
TCLABcount	Temp CLA BSI Count
TCLABRate	Temp CLA BSI Rate
TCLineAccDate	TC Line Access Date
TCLineAccDateUnk	TC Line Access Date Unknown
techAnalysis	Analysis Result Technical?
tempCentralLine	Temporary Central Line
TETRA	Tetracycline
TICAR	Ticarcillin
TICLAV	Ticarcillin/Clavulanic Acid
timeInjury	When Injury Occurred
timeInjuryDesc	When Injury Occurred Description
title	Title
TLineDU	Temp CL Util Ratio
TLineDU_Mean	NHSN Temp Line DU Pooled Mean
TLineDU_PatDays	NHSN Temp Line Patient-Days
TLineDU_Pctl10	NHSN Temp Line DU 10th Percentile
TLineDU_Pctl25	NHSN Temp Line DU 25th Percentile
TLineDU_Pctl50	NHSN Temp Line DU 50th Percentile
TLineDU_Pctl75	NHSN Temp Line DU 75th Percentile
TLineDU_Pctl90	NHSN Temp Line DU 90th Percentile
TMZ	Trimethoprim/Sulfamethoxazole
TOBRA	Tobramycin
totHrOth	Hrs for Other Inf Cntl Activities
totHrSurv	Hrs for Surveillance
totNotOffered	# HRI Not Offered Vacc
totNotVaccinated	# HRI Not Prev Vacc
totOffered	# HRI Offered Vacc
totSamples	Priors Year Samples Collected
totTested	Tested
transmit	Declination Reason Concern of Transmitting Vaccine Virus?
transplant	Transplant?
trauma	Trauma
traumaLev	Certified Trauma Level
traumaLevDesc	Certified Trauma Level Description
UCAB_CSEPcount	UCA BSI/CSEP Count
UCAB_LCBIcount	UCA BSI/LCBI Count
UCAB_Mean	NHSN UCAB Pooled Mean
UCAB_Pctl10	NHSN UCAB 10th Percentile
UCAB_Pctl25	NHSN UCAB 25th Percentile
UCAB_Pctl50	NHSN UCAB 50th Percentile
UCAB_Pctl75	NHSN UCAB 75th Percentile
UCAB_Pctl90	NHSN UCAB 90th Percentile
UCAB_UCDays	NHSN Umb Cath-Days
UCAB_Units	No. of NHSN Units
UCABcount	UCA BSI Count
UCABRate	UCA BSI Rate
umbCatheter	Umbilical Catheter?
UmbCDU	Umb Cath Util Ratio
UmbCDU_Mean	NHSN Umb Cath DU Pooled Mean

Variable Name	Label
UmbCDU_Pctl10	NHSN Umb Cath DU 10th Percentile
UmbCDU_Pctl25	NHSN Umb Cath DU 25th Percentile
UmbCDU_Pctl50	NHSN Umb Cath DU 50th Percentile
UmbCDU_Pctl75	NHSN Umb Cath DU 75th Percentile
UmbCDU_Pctl90	NHSN Umb Cath DU 90th Percentile
unitHLA	Unit HLA Specificity
unitHLADesc	Unit HLA Specificity Description
unitHNA	Unit HNA Specificity
unitHNADesc	Unit HNA Specificity Description
unitImplicated	Unit Implicated?
unitNumber	Unit Number
unitPath1	Unit Pathogen 1
unitPath2	Unit Pathogen 2
unitPath3	Unit Pathogen 3
unitPathDesc1	Unit Pathogen 1 Description
unitPathDesc2	Unit Pathogen 2 Description
unitPathDesc3	Unit Pathogen 3 Description
unitsDestroyed	Single/Multiple Units Destroyed
unitTestPerform	Test Performed on Unit?
unitTestPositive	Unit Test Results Positive?
unknownVIS	Unknown VIS?
urinaryCath	Urinary Catheter
urinaryCathdesc	Urinary Catheter Description
UTI_ASBcount	UTI/ASB Count
UTI_OUTIcount	UTI/OUTI Count
UTI_SUTIcount	UTI/SUTI Count
UTIcount	UTI Count
utiPlan	CAU Plan?
vaccAdmin	Vaccination Administered?
vacccount	Vaccination Count
vaccdate	Vaccination Date
vaccDateYH	Vaccination Yr/Half
vaccDateYM	Vaccination Yr/Mon
vaccDateYQ	Vaccination Yr/Qtr
vaccDateYr	Vaccination Yr
vaccDeclined	Vaccination Declined?
vaccDegree	Vaccinator Degree
vaccDocumented	Vacc of HCW Documented?
vaccDocumentedDesc	Vacc of HCW Documented Description
vaccGName	Vaccinator First Name
vaccid	Vaccination ID
vaccinatorFlag	Is HCW a Vaccinator?
vaccinatorid	Vaccinator HCW ID
vaccMName	Vaccinator Middle Name
vaccOffered	Vaccination Offered?
vaccrate	Vaccination Rate
vaccSurname	Vaccinator Last Name
vaccTitle	Vaccinator Title
vacctype	Type of Vaccination
vacctypeDesc	Type of Vaccination Description
VAI	Vascular Access Infection
VAI_mean	NHSN VAI Pooled Mean
VAI_pctl10	NHSN VAI 10th Percentile
VAI_pctl25	NHSN VAI 25th Percentile
VAI_pctl50	NHSN VAI 50th Percentile
VAI_pctl75	NHSN VAI 75th Percentile
VAI_pctl90	NHSN VAI 90th Percentile
VAICount	VAI Count
VAIFistulaCount	VAI Count Fistula
VAIGraftCount	VAI Count Graft
VAIPCLCount	VAI Count Perm Central Line
VAIPortCount	VAI Count Port
VAIRate	VAI Rate

Variable Name	Label
VAITCLCount	VAI Count Temp Central Line
VANC	Vancomycin
Vanc_mean	NHSN Vanc Pooled Mean
Vanc_pctl10	NHSN Vanc 10th Percentile
Vanc_pctl25	NHSN Vanc 25th Percentile
Vanc_pctl50	NHSN Vanc 50th Percentile
Vanc_pctl75	NHSN Vanc 75th Percentile
Vanc_pctl90	NHSN Vanc 90th Percentile
vancCount	Vanc Count
vancFistulaCount	Vanc Count Fistula
vancGraftCount	Vanc Count Graft
vancPCLCount	Vanc Count Perm Central Line
vancPortCount	Vanc Count Port
vancRate	Vanc Rate
vancTCLCount	Vanc Count Temp Central Line
VAP_Mean	NHSN VAP Pooled Mean
VAP_Pctl10	NHSN VAP 10th Percentile
VAP_Pctl25	NHSN VAP 25th Percentile
VAP_Pctl50	NHSN VAP 50th Percentile
VAP_Pctl75	NHSN VAP 75th Percentile
VAP_Pctl90	NHSN VAP 90th Percentile
VAP_PNU1count	VA Pneu/PNU1 Count
VAP_PNU2count	VA Pneu/PNU2 Count
VAP_PNU3count	VA Pneu/PNU3 Count
VAP_Units	No of NHSN Units
VAP_VDays	NHSN Ventilator Days
VAPcount	VA Pneu Count
VAPRate	VA Pneu Rate
vascAccInf	Vascular Access Infection
vaStationCode	VA Station Code
VentDU	Vent Util Ratio
VentDU_Mean	NHSN Vent DU Pooled Mean
VentDU_Pctl10	NHSN Vent DU 10th Percentile
VentDU_Pctl25	NHSN Vent DU 25th Percentile
VentDU_Pctl50	NHSN Vent DU 50th Percentile
VentDU_Pctl75	NHSN Vent DU 75th Percentile
VentDU_Pctl90	NHSN Vent DU 90th Percentile
ventUsed	Ventilator?
verifyPatDOB	PT ID verify: DOB
verifyPatGENDER	PT ID verify: Gend
verifyPatGNAME	PT ID verify: PTFName
verifyPatMRN	PT ID verify: MRN
verifyPatOth	Other Patient ID Verification Item
verifyPatOTHER	PT ID verify: OTH
verifyPatSPECSYS	PT ID verify: TXIDSys
verifyPatSURNAME	PT ID verify: PTLName
verifyPatVERBAL	PT ID verify: PTVerbal
version	Version
viralLoadMonth	Month of Last Viral Load
viralLoadUndetect	Source Pt Viral Load Undetectable?
viralLoadYear	Year of Last Viral Load
viralTest	Perform Viral Testing
visBloody	Body Fluid Visibly Bloody?
visEditionDate	VIS Edition Date
VRE	Organism VRE
VRE_admASTadhRate	VRE Admission AST Adherence Rate
VRE_admASTEligible	VRE Admission AST Eligible
VRE_admASTPerformed	VRE Admission AST Performed
VRE_admASTPrevRate	VRE AST Prevalence Rate
VRE_admPrevBldCount	VRE Blood Admission Prevalence LabID Count
VRE_admPrevCOCount	VRE CO Admission Prevalence LabID Count
VRE_admPrevCount	VRE Admission Prevalence LabID Count
VRE_admPrevHOCount	VRE HO Admission Prevalence LabID Count

Variable Name	Label
VRE_admPrevRate	VRE Admission Prevalence Rate
vre_astEligible	AST Eligible VRE
vre_astTiming	AST Timing VRE
VRE_bldIncCount	VRE Blood Incident LabID Count
VRE_BSIAdmPrevRate	VRE BSI Admission Prevalence Rate
VRE_BSIIncDensRate	VRE BSI Incidence Density Rate
VRE_BSIIncRate	VRE BSI Incidence Rate
VRE_dtASTadhRate	VRE Discharge/Transfer AST Adherence Rate
VRE_dtASTEligible	VRE Discharge/Transfer AST Eligible
VRE_dtASTPerformed	VRE Discharge/Transfer AST Performed
vre_gg	Gown/Glove VRE?
vre_hh	Hand Hygiene VRE?
VRE_incASTPos	VRE Discharge/Transfer AST Positive
VRE_incASTRate	VRE AST Incidence Rate
VRE_incCount	VRE Incident LabID Count
vre_incidence	Incidence VRE?
vre_infSurv	Inf Surv VRE?
vre_labID	Lab ID VRE?
VRE_labidCount	VRE LabiD Count
VRE_MDROIncDensRate	Overall VRE Infection/Colonization Incidence Density Rate
VRE_MDROIncRate	Overall VRE Infection/Colonization Incidence Rate
VRE_pctAdmPrevCO	VRE Percent Admission Prevalence/Community-Onset
VRE_pctAdmPrevHO	VRE Percent Admission Prevalence/Healthcare Facility-Onset
vre_prevalence	Prevalence VRE?
VRE_prevASTPos	VRE Admission AST Positive
VRE_prevRate	Overall VRE Prevalence Rate
vreadm	VRE AST Adm
vreCount	VRE HAI Count
vredt	VRE AST D/T
vreinc	VRE AST Incidence
vreprev	VRE AST Prevalence
VRERate	VRE HAI Rate
whendetected	When Detected
whendetectedDesc	When Detected Description
whenDisc	When Discovered Process Code
whenDiscDesc	When Discovered Process Code Description
whenDiscOth	When Discovered Other
whenInjSafe	When Did Injury Occur
whenInjSafeDesc	When Did Injury Occur Description
whenInjSafeOth	When Did Injury Occur Other
whenOccur	When Occurred Process Code
whenOccurDesc	When Occurred Process Code Description
whenOccurOth	When Occurred Other
whoDevice	Who Was Holding Device
whoDeviceDesc	Who Was Holding Device Description
workphone	Work Phone
wound	HCW Wound
woundDesc	HCW Wound Description
wtEnglish	Patient Weight - lb
wtMetric	Patient Weight - kg
xfusAdvRxn	Adverse Transfusion Events enter in Hospital Wide System
xfusAdvRxnSys	System Used
xfusComp	Computerized Transfusion Service
xfusCompSysCERNERC	CompsysTX: Cerner Classic
xfusCompSysCERNERM	CompsysTX: Cerner Millenium
xfusCompSysHCLL	CompsysTX: HCLL
xfusCompSysHEMOC	CompsysTX: Hemocare
xfusCompSysHORIZON	CompsysTX: Horizon BB
xfusCompSysLIFELINE	CompSysTX: Lifeline
xfusCompSysMEDITECH	CompsysTX: Meditech
xfusCompSysMISIS	CompsysTX: Misis
xfusCompSysOth	Other Computerized Service
xfusCompSysOTHER	CompSysTX: Other

Variable Name	Label
xfusCompSysSOFTBANK	CompSysTX: Softbank
xfusCompSysWESTSTAR	CompSysTX: Western Star
xfusCompSysWYNDGATE	CompsysTX: Wyndgate
xfusIntPat	Transfusion System Interface with Patient Reg System
xfusRelation	Relationship of Transfusion to Death
xfusRelationDesc	Relationship of Transfusion to Death Description
xfusServALBUM	ProdAdminTX: Albumin
xfusServFACTOR	ProdAdminTX: Factors
xfusServIM	ProdAdminTX:IMIG
xfusServIV	ProdAdminTX:IVIG
xfusServNone	ProdAdminTX: None
xfusServRHIG	ProdAdminTX: RHIg
xfusStorage	All Units Stored in Transfusion Area
yearfrom	From Year
yearto	To Year
zip	Zip