Example Dialysis Event Bloodstream Infection (BSI) Standardized Infection Ratio (SIR)

Vascular Access Type	Number of Observed BSIs	A Patient-months	B 2014 NHSN BSI Rate/100 Patient-months	C = A x B Number of Predicted BSIs
Graft	1	102	0.39	0.40
Other Access	0	3	0.67	0.02
Any CVC	3	72	2.16	1.56
All	**4**	**291**	**.**	**2.28**

➢ Across all vascular access types, this facility observed 4 BSIs and 291 patient-months.
➢ Mutiply (A) the number of patient-months for each vascular access type at the facility by (B) the BSI Rates Stratified by Vascular Access Type from NHSN Dialysis Event Data 2014, to calculate (C) the number of predicted BSIs for each vascular access type. These products (C) are then summed together for a total of 2.28 predicted BSIs for the facility.
➢ The SIR is calculated by dividing the number of observed BSIs (4) by the predicted number of BSIs (2.28).

$$SIR = \frac{Observed\ (O)\ HAIs}{Predicted\ (P)\ HAIs}$$

➢ This ratio results in an SIR 1.75, which means that this facility observed 75% more BSIs than were expected based on the national average.