Response to Allen-Bridson and Pollock

To The Editor—We appreciate the opportunity to respond to Allen-Bridson and Pollock and thank them for their thoughtful letter. We value the data provided in their letter, which helps to illustrate that the overall under-ascertainment of clinically meaningful catheter-associated urinary tract infection (CAUTI) is likely to be lower than we reported in our study, which was purposively constrained to urinary tract-related bloodstream infection. We also recognize that surveillance and clinical definitions are used for different purposes and may not always align.

We would, however, like to raise the following salient points. First, although the Centers for Disease Control and Prevention (CDC) National Health Safety Network (NHSN) CAUTI measures are surveillance based, they are widely used for quality improvement assessment, are tied to compensation, and are often used interchangeably as clinical CAUTI events deemed "potentially preventable." Thus, it is important for the surveillance measures to be considered clinically relevant.

Second, using historical data containing CAUTIs reported under previous definitions, the CDC reported that the recent change in the CAUTI definition led to a drop in the CAUTI standardized infection ratio to 0.55, with a corresponding reduction in number of attributable events.[1] Many hospitals might mistakenly view this reduction based purely on definitional change as improvement, thereby no longer focusing on inappropriate urinary catheter use. Additionally, the capture of data regarding previously attributed bacteremic CAUTIs through reclassification as central-line bloodstream infection (CLABSIs) denotes a shift in diagnosis and not necessarily an improved diagnosis of CLABSI. The NHSN CLABSI definition is one of exclusion; thus, bacteremia with no other primary source defined by NHSN often ends up being labeled CLABSI. Attributing bacteremia due to urinary tract infection as CLABSI may pose issues because the preventive and therapeutic measures for CAUTI and CLABSI differ.

Third, we agree that with a clinician-based approach, it is difficult to objectively measure for accuracy of diagnosis. However, patients labeled by clinicians as having CAUTI that receive antimicrobials represent a population that includes symptomatic CAUTI and asymptomatic bacteriuria. These are both relevant safety issues for patients in the hospital setting: one is related to device harm and the other is associated with unnecessary antimicrobial harm.

Finally, our conclusion was to consider alternative modifications to the CAUTI surveillance definition; clinician-based diagnosis was provided as one possible example. We further advocate the use of the device utilization ratio as an objective measure that reflects all potential risks (infectious and non-infectious) associated with the urinary catheter.[2]

We applaud the CDC for their efforts in enhancing patient safety. Although we are not promoting clinician-based diagnosis of CAUTI as the panacea, we believe that taking it and other alternatives into consideration have a place in modifying and improving the CAUTI definition. While this process will require several iterations before deriving a surveillance definition that best represents the clinical practice of CAUTI prevention and care, it will be a worthwhile pursuit because it will provide an incredibly powerful tool that can be used to both prevent CAUTI and reduce inappropriate antimicrobial use.

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Accounting for Competing Events in Multivariate Analyses of Hospital-Acquired Infection Risk Factors

To the Editor—We congratulate Brown et al[1] for the excellent review article about the necessary issues that need to be addressed in multivariate analyses of hospital-acquired infection (HAI) risk factors. We agree that 4 statistical issues should