establishing successful surveillance has been the collaboration between the senior nurse, who was responsible for the unit's Hickman line protocols, and the medical microbiologist, who is familiar with NNIS definitions because of interaction with other hospital areas, such as the intensive care unit, and can ensure that the bacteremia data are complete. Use of the NNIS definitions has not been onerous, and has the advantage of being well established in many countries, and therefore data can be compared between centers. Creating separate case definitions for CVC-associated BSI in patients in a hematology unit could be counterproductive, because units considering using surveillance, faced with an expanding choice of definitions, may be less likely to do it at all.

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Ann Graham, RN; William J. Olver, FRCPath

From the Department of Hematology (A.G.) and the Department of Medical Microbiology (W.J.O), Ninewells Hospital and Medical School, Dundee, United Kingdom.

Address reprint requests to William J Olver, FRCPath, Department of Medical Microbiology, Ninewells Hospital and Medical School, Dundee DD1 9SY, Scotland, UK (william.olver@nhs.net).

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Reply to Graham and Olver

To the Editor—We thank Graham and Olver[1] for their interest in our study[2] of catheter-associated bloodstream infection (BSI) in hematology units, and for reporting their own experience of successfully applying the National Nosocomial Infection Surveillance (NNIS) system definition in a Scottish hematology unit. We agree that a standard definition must be employed and that this is essential if benchmarking is to be performed, and we do not support the use of ad hoc or poorly validated case definitions.

Evidently, the work flow and size of the Scottish hematology unit enabled collaboration and regular review by a medical microbiologist. It is not clear, however, how many other hematology units have devoted nursing staff and a medical microbiologist with sufficient time to perform surveillance activities for infection. It would be helpful to know the number of hours required of these nurses during the surveillance period, as a measure of resource requirements. During the first 6 weeks of our study, the number of hours required for review by an infection control practitioner for application of NNIS methodology was monitored (see Figure), and the mean number of hours required was 1.6 hours per 10 beds per week.

Furthermore, Graham and Olver[1] report experience with long-term central venous catheters (CVCs; ie, Hickman catheters), for which data on dates of insertion and removal may be more readily available to assist with the calculation of the denominator (ie, number of devices used per 1,000 CVC-days). In contrast, we studied medium-term CVCs[2] (peripherally inserted and nontunneled), of which a larger number of individual devices are used, recording of the dates of insertion and removal may not be as reliable, and closer direct monitoring is required by surveillance staff to ensure accurate data collection. A standardized strategy must be practical for a range of tunneled, nontunneled, and implanted devices, if it is to be applied to a more broad population of hematology patients.[3]

NNIS methods have been employed in intensive care unit (ICU) populations, and therefore interhospital comparisons

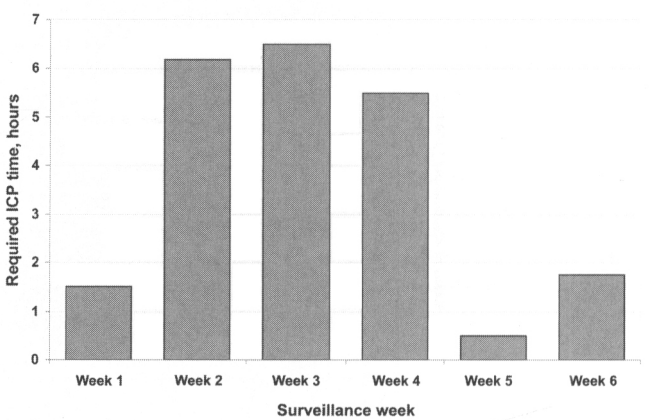

FIGURE. Number of hours required for surveillance of central venous catheter–associated bloodstream infection by an infection control practitioner (ICP) during the first 6 weeks of our study[2] in a 23-bed hematology unit.

may be performed.[4] However, the same argument does not apply for hematology patients, because their risks for infection and the nature of their care (eg, ambulatory care) may not allow for benchmarking with ICU or other populations. We question the notion that a definition that has been used predominantly in ICU populations can simply be extrapolated to non-ICU populations, without comprehensive evaluation.

Recently, the National Healthcare Safety Network (NHSN) definition for laboratory-confirmed BSI has replaced the NNIS definition,[5] and this simplified NHSN definition no longer contains the requirement for the treating physician to institute "appropriate antimicrobial therapy" (criterion 2B of the NNIS system diagnostic criteria) for classification of an infection as CVC-associated BSI. As a result of this change, longitudinal evaluation using historical data will not be possible until baseline data are accrued using the new definition. We therefore believe it is timely to consider the feasibility and applicability of surveillance definitions, in a milieu where many healthcare centers may already be implementing modified definitions for healthcare-associated BSIs.

Robust, multicenter evaluation must be performed prior to the implementation or modification of any standardized surveillance strategy, and findings at our own healthcare center's hematology unit may not reflect the findings at other hematology units. Such an evaluation must include the necessary resource requirements. We suggest that, as a key stakeholder, the hematologist, whose regular clinical contact is incorporated into his or her usual work flow, may be well positioned to inform surveillance activities or to flag potential cases for surveillance personnel. We welcome debate regarding the utility and implementation of a range of case definitions in hematology units, and we do not believe this to be counterproductive to the implementation of surveillance by individual hematology units. Such debate may contribute to future research agendas, in which the validity and ease of implementation can both be evaluated.

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Leon J. Worth, MBBS, FRACP; James Black, MBBS, PhD; Monica A. Slavin, MBBS, FRACP

From the Department of Infectious Diseases, Peter MacCallum Cancer Centre, East Melbourne (L.J.W., M.A.S.), the Centre for Clinical Research Excellence Infectous Diseases, Victorian Infectious Diseases Service (L.J.W., J.B., M.A.S.), and the Nossal Institute for Global Health, University of Melbourne (J.B.), Parkville, Victoria, Australia.

Address reprint requests to Leon Worth, MBBS, FRACP, Department of Infectious Diseases, Peter MacCallum Cancer Centre, St. Andrew's Place, East Melbourne, Victoria, Australia 3002 (leon.worth@petermac.org).

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Has the Time Come to Recommend the Use of Alcohol-Based Hand Rub to Hospitalized Patients?

To the Editor—Methicillin-resistant *Staphylococcus aureus* (MRSA) is a well-known and important nosocomial pathogen worldwide.[1-3] Attempts to control the spread of MRSA have relied mostly on 3 measures: (1) use of alcohol-based hand rub by healthcare workers (HCWs), (2) screening of patients with risk factors for MRSA carriage on admission, and (3) isolation of colonized or infected patients.[4-6] The role played by HCWs in the transmission of MRSA has been established,[5,7] but little is known of the role played by colonized patients in the transmission of MRSA from patient to patient.[8]

Our institution is a 230-bed tertiary care teaching hospital (with a 14-bed intensive care unit) that had 7,590 admissions in 2007. All patients with risk factors for MRSA carriage are screened within 72 hours of hospital admission. The risk factors include transfer from another hospital or nursing home, previous surgical procedure, repeated hospitalization, stay in an intensive care unit during the last 3 years, presence of open wounds, and long-term oxygen therapy. All detected MRSA carriers are placed in isolation. If private rooms are not available, then the MRSA-colonized patients are grouped with other MRSA carriers or placed in rooms occupied by patients without MRSA colonization, and a distance of at least 1 meter between patients' beds has to be assured. If a hospitalized patient is found to carry MRSA more than 72 hours after admission, surveillance cultures of nasal samples are performed for all other patients in the same room and for HCWs who have had contact with the MRSA carrier. The prevalence of MRSA has remained fairly constant during the past 4 years (ie, 4.6–5.1 cases per 1,000 admissions). The proportion of MRSA cases that were acquired by patients at our hospital was substantially reduced (from 50% to 6% of