hospitals and in different countries likely reflect variability in the acuity of illness, the frequency with which other forms of intravascular access are utilized, and other variables. Certainly, understanding the underpinnings of these differences is a fruitful area of future investigation. Last, we agree with Curran et al[2] that our derivation of the denominator for our incidence density calculation was less than ideal. Nevertheless, at the very least, we hope that our calculations allow an approximation of the frequency with which such infections occur, and we hope that our study raises awareness in the healthcare community at large that serious bloodstream infections still arise from peripheral venous catheters and that such infections may fly under the radar of detection, because we have focused so much of our infection control efforts on central venous catheters and other device-related infections.

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Public Reporting of *Clostridium difficile* and Improvements in Diagnostic Tests

To the Editor—Fong and colleagues[1] make some important points about the impact of changing methods for the laboratory diagnosis of *Clostridium difficile* on public reporting schemes. Like that of the authors, our own institution decided to discontinue the use of a toxin enzyme immunoassay (EIA) due to widespread reports of poor sensitivity and specificity. We, too, encountered a significant increase in our laboratory positivity and disease incidence rates.

In line with international guidelines,[2-4] we adopted a 2-step diagnostic approach, screening first with glutamate dehydrogenase and then confirming with a reflex polymerase chain reaction (PCR) test (Cepheid GeneXpert). For the 4 months before the change, we had a laboratory positivity rate of 2.49% (53 of 2,146 specimens tested); this more than doubled to 5.55% (98 of 1,767 specimens tested) in the 4 months after the change. This also had a dramatic affect on our rate of *C. difficile* infection (CDI), which increased from 3.6 per 10,000 (0.036%) to 7.1 per 10,000 (0.071%) occupied bed–days. We have demonstrated that this change was not due to change in antimicrobial prescribing, change in patient population or increasing nosocomial transmission, or change in environmental contamination rates.[5]

PCR and other methods will detect colonized patients as well as infected ones, and although both groups pose a potential reservoir for transmission, they should be treated differently for clinical management as well as epidemiological data reporting. The rate of patient colonization is not well understood, with a wide range of figures quoted in the literature. It is important, therefore, to corroborate the laboratory test with clinical history and examination; we have found that approximately 10% of patients with a positive PCR test are probably colonized rather than truly infected.

Figure 1 shows the rate of CDI experienced in our organization from September 2009 to July 2011. (The improved diagnostic algorithm was introduced in September 2010.) It appears that 10 months after the introduction of the new testing method, rates of CDI have stabilized and are beginning to decrease. This may be the result of improved case ascertainment (of both infected and colonized patients), which, when appropriately treated and/or isolated, could be expected to result in decreased ongoing transmission.

In England, the Department of Health introduced a mandatory reporting scheme for *C. difficile* in 2004, with a target for all acute National Health Service (NHS) trusts to reduce CDI by 30% compared to a base level in 2007–2008. This was achieved 2 years ahead of schedule in 2009, and a new *C. difficile* objective was applied to NHS organizations from April 2011. This is based on a sliding scale, requiring the worst performers to make the greatest improvements, with a maximum target CDI rate of 4.5 per 10,000 occupied bed–days. There are severe financial penalties for trusts failing to meet this target, amounting to 0.1% of the contract value for each percentage above the baseline, capped at a maximum of 2%.

For a 1,100-bed organization with a target of no more than 155 cases of *C. difficile* per year, such as ours, exceeding the target by 20 cases (13%) could amount to a fine of 1.4% of contract value (this equates to around £9 million, with each additional case costing more than £400,000). These contract terms are part of the standard mandatory NHS contract, and

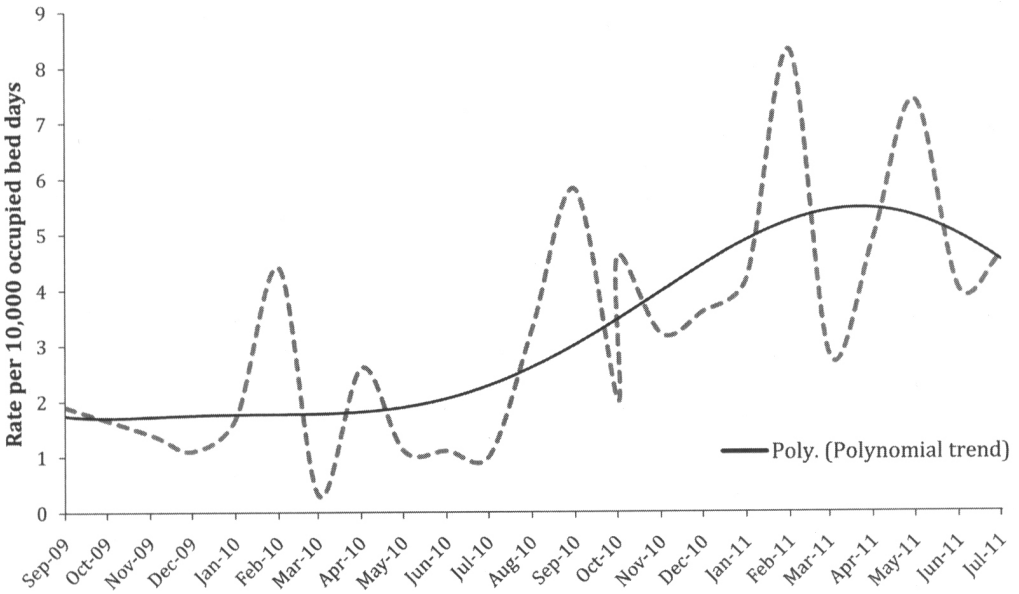

FIGURE 1. Rate of *Clostridium difficile* infection experienced in our organization from September 2009 to July 2011.

the primary care trust (local purchaser of services) has no flexibility over amending them.

We surveyed 170 English NHS laboratories and found that the vast majority (more than 70%) were using a toxin EIA as a single method, despite guidance not to. Testing for *C. difficile* is poorly standardized, with a large disparity between methods used, criteria for testing, and positivity rates. This disparity hinders effective epidemiological monitoring and suggests that comparisons and penalties imposed resulting from breaching targets set on the basis of these figures are unfair.[6]

Unfortunately, the Department of Health has adopted a somewhat inflexible approach to adjusting for this disparity, despite acknowledging that such changes can legitimately affect individual organizations' infection rates.[7]

We would suggest that one of the reasons for the widespread use of toxin EIAs in England is the reluctance to change to a method with a better case ascertainment, thus risking severe financial penalties.

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