

for the testing was not always clearly stated, the majority of these tests seemed to be tests of cure.

The greatest discordance between the clinical definition and the surveillance definition was among residents admitted to the LTCF who had already received a diagnosis of and therapy for CDI. Of 25 cases, 18 (72%) were undetected by the surveillance definition. Testing obtained at the LTCF for some of these residents who were already known to have CDI detected the remaining 7 cases (28%) with the surveillance definition. Table 1 shows additional details regarding the discrepancies between the clinical and surveillance definitions of CDI.

In a single VA LTCF, the NHSN surveillance definition, based on nonduplicative testing, underestimated the clinical incidence of CDI by approximately 25%. The surveillance definition successfully captured CDI cases involving residents with disease onset and treatment at the LTCF. The most notable inaccuracy for the surveillance definition is that it did not reliably account for CDI in residents who were admitted to the LTCF who were already receiving therapy, thus underestimating the incidence of disease. Modifying the surveillance definition to include residents admitted to the LTCF who are receiving therapy for CDI may offer a practical strategy to reduce this discrepancy. Additional inaccuracies stemmed from inappropriately ordered *C. difficile* testing. Testing ordered for LTCF residents already receiving treatment for known CDI led to overestimates of disease incidence; addressing this involves provider education. Testing ordered for residents with recurrent CDI or for those ultimately determined to be asymptomatic carriers with diarrhea due to other causes accounted for less than 10% of the discrepancies between the clinical and surveillance definitions. Similarly, residents with CDI who were transferred to acute care before being tested and were thus missed by the surveillance definition accounted for just 4% of cases.

To our knowledge, this is the first comparison of the incidence of CDI using the NHSN surveillance definition with the clinically defined disease CDI among LTCF residents. Our study has some limitations. It is based on a retrospective cohort of residents from a single VA LTCF. Both the closed system (ie, most residents come from the affiliated VA hospital), the predominantly male population, and the providers' practice patterns may limit applicability of our findings to other LTCFs. Our findings suggest that including residents admitted to the LTCF with known CDI in the surveillance definition may improve the accuracy of the definition.

ACKNOWLEDGMENTS

We thank David A. Nace for his helpful comments. R.L.P.J. gratefully acknowledges the T. Franklin Williams Scholarship with funding provided by Atlantic Philanthropies, the John A. Hartford Foundation, the Association of Specialty Professors, the Infectious Diseases Society of America, and the National Foundation for Infectious Diseases.

Financial support. This work was supported by the National Institutes of Health (R03-AG040722 to R.L.P.J.).

Potential conflicts of interest. All authors report no conflicts of interest relevant to this article. All authors submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest, and the conflicts that the editors consider relevant to this article are disclosed here.

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Presented in part: ID Week 2013; San Francisco, California; October 2–6, 2013.

Infect Control Hosp Epidemiol 2014;35(11):1435–1436

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Point-Prevalence of Healthcare-Associated Infection in China in 2010: A Large Multicenter Epidemiological Survey

To the Editor—Healthcare-associated infections (HAIs) represent a major health and economic burden upon healthcare facilities worldwide and are an important cause of morbidity and mortality. Studies have shown that the HAI prevalence varies from 3.5% to 19.3% in Europe and North America.^{1–4} However, few studies have reported the HAI prevalence in China. In particular, large survey data samples are lacking. Currently, there are no HAI point-prevalence data that are representative of the entire country in English literature. In fact, China has acquired and accumulated considerable amounts of survey data and experience regarding the point-prevalence of HAIs in hospitals. In early 2001, the National

Healthcare-Associated Infection Surveillance System (NHAISS), a surveillance network of HAIs and antimicrobial use, was established.⁵ Since then, biennial point-prevalence surveys (PPSs) have been performed by NHAISS to characterize HAIs and general statuses of antimicrobial use in China.^{6,7} Herein, we would like to describe the survey data from 2010.

A 1-day survey of randomly selected inpatients was conducted at participating hospitals. The survey method has been previously described.⁵ All hospitals submitted their data via a web-based system, namely the National Healthcare-Associated Infection Control Office Automation System (<http://oa.yygr.cn/index.asp>). According to the NHAISS, surveys were conducted at 740 hospitals (secondary or tertiary hospitals) across mainland China in 2010. Of the 407,208 patients involved, 14,674 had developed 1 or more HAI (3.60% [95% confidence interval (CI), 3.54%–3.66%]). Lower respiratory tract infection was the most common type of HAI (8,739 [59.55%] of 14,674 cases) and included post-operative pneumonia (1,392 [9.49%] of 14,674 cases), followed by upper respiratory tract infection (2,169 [14.78%] of 14,674 cases), urinary tract infection (1,570 [10.70%] of 14,674 cases), surgical site infection (1,302 [8.87%] of 14,674 cases), skin and soft-tissue infection (909 [6.19%] of 14,674 cases), and gastrointestinal infection (753 [5.13%] of 14,674 cases). A total of 6,965 pathogens were isolated from patients with HAI. *Pseudomonas aeruginosa* was the most commonly isolated pathogen (1,196 [17.17%] of 6,965 isolates), followed by *Escherichia coli* (936 [13.44%] of 6,965), *Acinetobacter baumannii* (767 [11.01%] of 6,965), *Klebsiella pneumoniae* (747 [10.73%] of 6,965), and *Staphylococcus aureus* (615 [8.83%] of 6,965). The antimicrobial use prevalence (AUP) was 49.63% (202,085 of 407,208). Among the patients who received antimicrobials in the survey, 49.99% received antimicrobials for therapy. An additional 39.17% of these patients were given antimicrobials for prophylaxis, and 10.84% were given antimicrobials for both therapy and prophylaxis. Furthermore, 67.96%, 30.08%, and 1.95% received 1, 2, and 3 or more antimicrobials, respectively. In our previously published article,⁵ the AUP of patients at tertiary hospitals in mainland China included in PPSs exhibited a dynamic declining trend, with rates of 54.79%, 52.68%, 46.92%, and 45.21% in 2001, 2003, 2005, and 2008, respectively.

The NHAISS is the largest nationwide monitoring network of HAIs and antimicrobial use in China. Six national PPSs of HAI have been performed, and reliable data detailing the HAIs and antimicrobial use in hospitalized patients has been obtained. However, the survey data cannot yet assess the economic burden of HAIs. Instead, these surveys provide basic information regarding the monitoring of HAIs in China. These data have enabled us to estimate the magnitude of HAIs. Furthermore, repeated periodic surveys comprise an efficient method with which to measure trends and the foundation from which we can develop or change the HAI control

program. After all, our common expectations are HAI reduction and rational use of antimicrobials.

ACKNOWLEDGMENTS

We thank the directors and other staff members of the healthcare-associated infection departments in the surveyed hospitals as well as the physicians and nurses who contributed to the surveys. The information contained in this publication does not necessarily reflect the opinion of the National Health and Family Planning Commission of the People's Republic of China

Financial support. Hunan Provincial Science Fund (no. 2012SK3200).

Potential conflicts of interest. All authors report no conflicts of interest relevant to this article. All authors submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest, and the conflicts that the editors consider relevant to this article are disclosed here.

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Infect Control Hosp Epidemiol 2014;35(11):1436–1437

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