

The Need to Grow the Infection Prevention Workforce in Home Infusion Therapy

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Introduction

Infection preventionists who perform surveillance for central line-associated bloodstream infections (CLABSIs) in hospitals receive training in application of rigorous surveillance definitions. However, in the home infusion setting where CLABSIs also occur, the approach for training and methods to perform surveillance has not been well defined.

Objective

In this qualitative study, we sought to characterize how home infusion surveillance staff are trained in CLABSI surveillance and to identify barriers to CLABSI surveillance in the home infusion setting.

Methods

We interviewed 21 surveillance staff members of five non-profit home infusion agencies covering portions of 13 states and Washington, DC across the Mid-Atlantic, Northeast, and Midwest. We aimed to recruit and interview at least 2 staff integrally involved in CLABSI surveillance, using a combination of purposive and snowball sampling. Interview questions were developed using the Systems Engineering in Patient Safety (SEIPS) 2.0 framework. Data were analyzed in MAXQDA, and inductively and deductively coded. These interviews are part of a larger study, some of whose findings have been previously discussed in prior publications. Data specific to training home infusion surveillance staff in CLABSI surveillance are presented (Table 1).

Results

Many of the CLABSI surveillance staff had received no formal training in CLABSI surveillance. Instead, many either learned on the job (often from predecessors who also had not been formally trained), drew from previous clinical experience, perused online resources, or attended conferences. A lack of (1) resources for learning, (2) formal training offered by their agencies, and (3) awareness of professional development resources were identified as barriers to CLABSI surveillance training in the home infusion setting.

Conclusion

Our findings indicate a current lack of formal training in CLABSI surveillance for staff performing CLABSI surveillance in home infusion therapy. This workforce can be strengthened by providing home infusion-specific standardized training, perhaps through adaptations of resources used for training surveillance staff in other settings.

Results

Theme	Illustrative Quote
Description of Training in CLABSI Surveillance	
• No formal training received	“Well, you know, really there wasn’t any formal education. It was just kind of, you know, learn by fire.” Surveillance Nurse, Agency 2
• Learn on the job	“I think how I learned was just it was explained to me by the gal who works full time in... this department, and she just sat down with me and showed me what she does and how we screen patients to see if they are potential CLABSI or not” Clinical Nurse, Agency 3
• Experience	“I’ve been in the home infusion world for like a long time [chuckles], like over 20 years, so I can’t, I don’t even think I could answer [how I learned about CLABSI surveillance]. I mean, it’s just something that you know, like, at this point.” Clinical Nurse, Agency 2
• Rely on clinical experience, not surveillance	“I have been an Intravenous (IV) access nurse for, oh, more than 12 years, so just in my general work, you know, I was an IV nurse at the hospital. I was a peripherally inserted central catheter (PICC) line nurse.” Clinical Nurse, Agency 2
• Rely on what physician states	“It’s just using the, you know, the physician’s notes and trying to understand why the patient was admitted and if indeed it’s related to their central line.” Surveillance nurse, Agency 2
• Read resources online	“I looked online just to understand what I could about CLABSIs, you know, did my own self-education.” Clinical Nurse, Agency 2
• Supplement training with courses	“I go to a conference usually every two years and because I’ve been here 20 I’ve been to a lot of conferences that, and then I’ll just pick like...The Infusion Nurses Society (INS) or the Association for Vascular Access (AVA) organizations have annual conferences and so when I go there they’re always talking about CLABSI..., so I always go to their seminars.” Surveillance Nurse, Agency 3
• Peer to peer learning from other agencies	“So, an example would be... the previous fall we [learned that other organizations] had like a rate in home care that was totally not near any of the rates that we were reporting, and so when we go through that we’re asking like what are you doing then. Well, one of the things that they’re doing is, they don’t have any parents change any of the [central line] dressings and every one of their nurses is responsible for every single dressing change, which is a huge difference than many of us.... So that just led us to some discussion of, well, no wonder your rate is so good.” Quality Specialist, Agency 1
• Learning over time based on mistakes	“...I don’t know, it’s kind of trial and error, really. I don’t want to miss anything, so I think you’ve got to pay special attention to detail when it comes to that because it’s easy to miss things if you’re not hitting all the different steps” Surveillance Nurse, Agency 4
Description of Barriers to Training in CLABSI Surveillance	
• Need standardized resources	“[Training] was one on one, so I feel like I learned from the previous and then our quality and education full-time nurse, you know, she maybe learned a little bit from me. There really hasn’t been any formal orientation process for that, which would be nice, but it’s just kind of been learning from each other, so asking questions..., but definitely it would be something that if we grow our quality department and orientation or some sort of more standardized process would be nice.” Clinical Nurse, Agency 3
• Being unaware of resources (including Certification in Infection Control)	“So, but no, I don’t have any formal-formal training. I’m not a, I don’t know if there’s like a certification in CLABSI reviews, but [chuckles] I do not have that.” Clinical Nurse, Agency 3
• Discomfort in skill level of trainers	“I should say that we’ve never formally been trained to perform CLABSI. Like I know when you hire IPs at the hospital they sit through National Healthcare Safety Network (NHSN) courses. I’ve played around with those courses some on my own, but there’s never been any formal training for CLABSI [surveillance].” Infection Preventionist Nurse, Agency 1
• Lack of formal training by their organization	“So just kind of that one on one with your preceptor, but I don’t ever remember any kind of formal courses offered by the organization related to that for our infusion nurses.” Nurse Manager, Agency 5

Table 1: Results from the interviews focusing on CLABSI surveillance training

