



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

American Journal of Infection Control

journal homepage: www.ajicjournal.org

Brief Report

Rewarding and recognizing frontline staff for success in infection prevention

Alice A. Gaughan MS^{a,*}, Daniel M. Walker PhD, MPH^{a,b}, Matthew J. DePuccio PhD, MS^a, Sarah R. MacEwan PhD^a, Ann Scheck McAlearney ScD, MS^{a,b}

^a The Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Services and Implementation Science Research (CATALYST), College of Medicine, The Ohio State University, Columbus, OH

^b Department of Family and Community Medicine, College of Medicine, The Ohio State University, Columbus, OH



Key Words:

Healthcare-associated infections
Management practices
Qualitative methods
Rewards

A B S T R A C T

Management practices help support efforts to prevent healthcare-associated infections (HAIs). Providing rewards and recognition to frontline staff is one management practice found to be in use by hospitals that are higher-performers in HAI prevention. Using data from interviews with hospital managers and frontline staff at 18 US hospitals, our study identifies how managers can use reward and recognition programs as motivational tools to sustain frontline HAI prevention efforts.

© 2020 Association for Professionals in Infection Control and Epidemiology, Inc. Published by Elsevier Inc. All rights reserved.

BACKGROUND

Healthcare-associated infections (HAIs) cause patient morbidity and mortality that is often preventable.¹ Clinical practices are critical to the prevention of HAIs, but are implemented with varying effectiveness,² suggesting that management practices also influence infection prevention efforts.³ Hospitals that are higher performers with respect to HAI prevention have reportedly adopted management strategies to support these initiatives, including providing rewards and recognition to frontline staff around their efforts to prevent HAIs.³

Previous research indicates that reward and recognition programs that acknowledge healthcare workers' accomplishments can make

Abbreviations: CAUTI, catheter-associated urinary tract infection; CLABSI, central line-associated bloodstream infection; HAI, healthcare-associated infection; ICU, intensive care unit

* Address correspondence to Alice A. Gaughan, MS, The Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Services and Implementation Science Research (CATALYST), The Ohio State University College of Medicine, 460 Medical Center Drive, Suite 530, Columbus, OH 43210.

E-mail address: Alice.Gaughan@osumc.edu (A.A. Gaughan).

Conflicts of interest: None to report.

Funding: This research was supported by a grant from the Agency for Healthcare Research and Quality [Grant# R01HS024958]. The views expressed in this paper are solely those of the authors and do not represent any US government agency or any institutions with which the authors are affiliated. The funding source played no role in study design, data acquisition, analysis, or decision to report these data. The findings and conclusions in this report are those of the authors and do not represent the views of the Agency for Healthcare Research and Quality or the US Federal Government.

workers feel more appreciated, mitigate fatigue,⁴ and provide motivation to deliver better patient care.³ Understanding the characteristics of reward and recognition programs in the context of HAI prevention can potentially inform how this management practice can support frontline staff in these efforts. To characterize the types of reward and recognition programs that hospitals have deployed to acknowledge effective HAI prevention efforts on the frontline, we examined these types of programs as part of a larger study of management practices that support HAI prevention.⁵

METHODS

Study design

We conducted site visits to US hospitals from September 2017 to November 2019 to learn about management practices that contribute to successful prevention of HAIs. The study was focused on catheter-associated urinary tract infections and central line-associated bloodstream infections, but also considered general infection prevention efforts.

Study sites and participants

The study sample was comprised of 18 hospitals from 10 states. We recruited hospitals that varied with respect to their central line-associated bloodstream infection and catheter-associated urinary

Table 1
Characteristics of hospital study sites

Site	Region	Bed size	Performance relative to national average		Number of key informants
			CAUTI	CLABSI	
1	Midwest	500+	Better	Average	33
2	Midwest	100-500	Average	Average	13
3	Northeast	100-500	Worse	Average	16
4	South	100-500	Average	Better	9
5	Northeast	100-500	Average	Average	21
6	West	100-500	Average	Average	21
7	West	500+	Average	Average	38
8	South	500+	Better	Better	11
9	Northeast	500+	Average	Better	19
10	Northeast	100-500	Average	Better	14
11	Midwest	100-500	Average	Average	14
12	Midwest	100-500	Average	Average	14
13	Midwest	500+	Worse	Better	22
14	Midwest	500+	Better	Average	18
15	Northeast	500+	Better	Better	11
16	South	500+	Better	Better	15
17	South	100-500	Average	Better	11
18	South	500+	Worse	Average	18

tract infection rates compared to the national average (ie, better, worse, or average) based on 2016 data from Hospital Compare. We also considered variability among hospitals on the basis of geographic region and organizational characteristics (eg, size). Hospital characteristics are presented in [Table 1](#).

Data collection

Across sites we held in-person one-on-one or group interviews with 318 key informants who were either unit managers or frontline nursing staff. The total number of key informants at each hospital is provided in [Table 1](#). Interviews were conducted using a semi-structured interview guide that included questions about management practices surrounding infection prevention. Interviews lasted an average of 28 minutes and all interviewees provided informed consent to participate in the study. All interviews were audio-recorded, transcribed verbatim, and de-identified. The Institutional Review Board of The Ohio State University approved this study.

Data analysis

Interview transcripts were analyzed using a deductive dominant thematic analysis,⁶ allowing for categorization of data based on general themes derived from the interview guides, as well as identification of emergent themes. This approach allowed for comparison of themes across sites and enabled us to characterize meaningful rewards for success in infection prevention.

RESULTS

Across interviews, both managers and frontline staff mentioned how successful efforts in HAI prevention were recognized with both tangible rewards and intangible recognition. Hospitals sometimes set aside money for tangible staff rewards such as parties, food, and swag (eg, jackets). Nurses acknowledged that success in infection prevention often resulted in celebrations on their unit. They expressed excitement and appreciation of pizza parties and felt that special rewards, such as new scrub jackets, motivated their unit to support HAI prevention efforts. Managers also reported how they had congratulated frontline staff for success in infection prevention by providing cost-free recognition such as acknowledgements in emails, huddles, flyers, and newsletters, as well as giving staff

preferences in work scheduling. Nurses shared that managers offered recognition for success in infection prevention and for procedural adherence, such as audit documentation. They explained that individuals and teams received kudos in front of their peers through group emails, verbally during huddles, and by posting infection prevention achievements in breakrooms. Success on a unit was also displayed in public-facing areas where patients and families could see it. Representative quotes from managers and frontline staff addressing both tangible rewards and intangible recognition for success in infection prevention is presented in [Table 2](#).

DISCUSSION

Our study characterizes how managers provide meaningful rewards and recognition to their frontline staff to celebrate their success in HAI prevention. These strategies included providing tangible rewards, such as parties, food, and swag, as well as providing recognition in staff huddles, newsletters, or emails.

Our findings are particularly relevant given the context of the coronavirus disease 2019 (COVID-19) outbreak as frontline staff have been inundated with information about infection prevention strategies aimed to combat the spread of COVID-19. Under these unusual conditions, staff are likely experiencing greater stress, fatigue, and emotional exhaustion as they need to address increased patient care demands, negotiate workforce challenges, and struggle with equipment shortages.⁷

With any heightened focus on maximizing clinical efforts, it may be easy to let recognition of frontline staff fall by the wayside. Yet to sustain workforce morale and calm anxiety that staff are likely experiencing in such times of crisis,⁸ managers must make efforts to clearly communicate they value frontline staff and their extraordinary efforts.^{9,10} Further, to accommodate social distancing, this recognition may need to shift to modes such as emails and other types of efforts rather than in-person approaches. It is thus perhaps more important now than ever for hospitals to support their frontline staff and communicate that they are appreciated for their hard work.

Our findings are subject to several limitations. First, as our work was qualitative and largely exploratory, our intent was not to establish causality, but to provide insight into reward and recognition practices that were perceived to be positive by the frontline staff we interviewed. In addition, as our study took place prior to the emergence of COVID-19, we are unable to examine how rewards and

Table 2
Methods of motivating frontline staff with rewards and recognition for infection prevention efforts

Type of motivation	Perspectives of managers
Rewards	<p>"Yeah, so we just had a party, a big party... we had like a huge banner made that we hung outside. We made poster boards, and we ordered a cake. And we invited other units to come and celebrate our success."</p> <p>"Every nurse is getting a goody bag that says, 'You're a lifesaver.'" [with lifesaver candies inside.]</p> <p>"Last year we had trophies made up for different CAUTIs and CLABSI and people who met those goals or exceeded them got little trophies to display on their unit. And candy."</p>
Recognition	<p>"A lot of individual recognition like, so-and-so had no infections... and that is recognized at huddle in front of your peers."</p> <p>"... trauma, neuro [neurology] ICU because they were, I'd say, 190 days or something like that without an infection. We announced it at bed huddle and everyone was made to feel a part."</p> <p>"Recognition, and there's hospital-wide emails you know. They'll have all the units on there and the amount of days they have gone and things like that. A lot of times we will get signs on the door that says you've gone 100 days."</p> <p>"They post newsletters and it might even be on the internet and that kind of thing. Everybody sees that throughout the organization... and they [frontline staff] are very proud of it."</p>
Type of motivation	Perspectives of frontline staff
Rewards	<p>"Our unit was recently awarded because it has been two years since our last CAUTI and three years since our last CLABSI. We had a big cake party and a big picture of us, a video of us."</p> <p>"We actually all got new scrub jackets and that was like the best ever. I think it motivates us as a unit."</p> <p>"We were CLABSI-free for a year and we had like, they brought in, they catered food and we had like a little party after a year. Oh, I mean we don't say no to food so, we liked it."</p> <p>"They did ice cream one time and pizza for so many months of not having CAUTIs or CLABSI. Which is nice because we are nurses and we always like food."</p>
Recognition	<p>"We send a weekly email. We do actually give acknowledgement of people who have done, you know, 100% or something with their documentation."</p> <p>"Well our manager always sends us kudos when we don't have any hospital-acquired [infections]. When everything is going smooth, she always sends us an email saying great job—you guys did really good."</p> <p>"We'll post it up by the elevator so we can see it, so patients can see it, their families can see it. It would say like, 'Congrats!'"</p>

recognition practices may need to be modified due to the unique circumstances of this pandemic. In future work it will be of interest to learn how managers' use of rewards and recognition continued or was altered during the pandemic, especially given the unique circumstances of COVID-19.

CONCLUSIONS

Providing motivation and encouragement to frontline staff can support efforts to prevent HAIs. Hospitals can take inspiration from these existing strategies to provide meaningful rewards and recognition for frontline efforts, especially as they face the extraordinary challenges of the COVID-19 pandemic.

Acknowledgments

The authors thank Lindsey Sova, Jaclyn Volney, Toby Weinert, Jeanette Gardner, Natalie Gaines, Caroline Sugar, and Meg Suttle, all affiliated with the authors' organization, for their assistance with this project. They also are grateful to the hospital managers, directors, and frontline staff who participated in this study.

References

- Schreiber PW, Sax H, Wolfensberger A, Clack L, Kuster SP. The preventable proportion of healthcare-associated infections 2005–2016: systematic review and meta-analysis. *Infect Control Hosp Epidemiol*. 2018;39:1277–1295.
- Lipitz-Snyderman A, Needham DM, Colantuoni E, et al. The ability of intensive care units to maintain zero central line-associated bloodstream infections. *Arch Intern Med*. 2011;171:856–858.
- McAlearney AS, Hefner JL, Robbins J, Harrison MI, Garman A. Preventing central line-associated bloodstream infections: a qualitative study of management practices. *Infect Control Hosp Epidemiol*. 2015;36:557–563.
- McClelland LE, Gabriel AS, DePuccio MJ. Compassion practices, nurse well-being, and ambulatory patient experience ratings. *Med Care*. 2018;56:4–10.
- McAlearney AS, Hefner JL, Sieck CJ, et al. Searching for management approaches to reduce HAI transmission (SMART): a study protocol. *Implement Sci*. 2017;12:82.
- Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. *Nurs Health Sci*. 2013;15:398–405.
- The Lancet. COVID-19: protecting health-care workers. *Lancet*. 2020;395:922.
- Adams JG, Walls RM. Supporting the health care workforce during the COVID-19 global epidemic. *JAMA*. 2020;323:1439–1440.
- Martland A, Huffines M, Henry K. Surge priority planning COVID-19: critical care staffing and nursing considerations. 2020. Available at: <http://www.chestnet.org/Guidelines-and-Resources/Resources/Surge-Priority-Planning-COVID-19-Critical-Care-Staffing-and-Nursing-Considerations>. Accessed July 23, 2020.
- Dewey C, Hingle S, Goelz E, Linzer M. Supporting clinicians during the COVID-19 pandemic. *Ann Intern Med*. 2020;172:752–753.