

Changing the Game for Hand Hygiene Conversations

Rachel Schwartz, PhD,^{a,b} Paul J. Sharek, MD, MPH^{c,d}

In the April 2017 issue of *Hospital Pediatrics*, Linam¹ wrote of the need to promote a culture in which health care workers, patients, and families are encouraged to speak up about observed hand hygiene failures. He notes that this is a challenging task and cites cases in which, despite witnessing inadequate hand hygiene procedures, observers chose to remain silent.² A study by Longtin et al³ reported that of 194 patients surveyed, over 75% reported that they would not feel comfortable asking a nurse or physician to perform hand hygiene. There were a variety of reasons given for this inability to ask, including the perception that providers should already know when to perform hand hygiene, the belief that this request is not part of the patient's role, a feeling of embarrassment or awkwardness about asking, and fear of reprisal. Attempts to address the interpersonal barriers that impede patients' and families' abilities to request that providers perform hand hygiene are still nascent. Designing effective strategies to overcome the barriers to speaking up requires a more robust understanding of the provider, patient, and family dynamic, in addition to novel approaches that target the interpersonal challenges that underlie this communicative exchange.

Although increasing emphasis is being placed on developing a "patient safety culture" within hospital systems,⁴ without addressing the interpersonal dynamics that prevent parents from requesting that providers perform hand hygiene, it seems unlikely that sustainable advances in hand hygiene compliance can be made. Studies have revealed that parents feel more comfortable requesting that providers perform hand hygiene when they are explicitly invited to do so.⁵⁻⁷ However, it is not clear that such a reminder is always welcome; indeed, Kim et al⁸ noted that although 79% of the 334 patients and/or families they surveyed supported the idea of speaking to providers about a hand hygiene event, only 26% of physicians and 31% of the nurses surveyed supported such questioning. In a study by Pittet et al,⁹ when 254 health care workers were asked what they would do if they were patients, only 37% said they would ask a nurse to perform hand hygiene and only 29% said they would ask a doctor. Twenty-five percent of the health care workers in the Pittet et al study⁹ reported that they feared having patients request that providers perform hand hygiene would create tension. Although researchers have examined the reasons behind providers' reluctance to support such patient participation and have suggested a refusal to delegate power, perceived time constraints, and a sense that patients' questioning may undermine the provider-patient relationship,^{9,10} these challenges would require systems-level changes that are beyond the scope of what is immediately implementable. Instead, we need to develop strategies that can mitigate the challenges of such hand hygiene requests for both parents and providers.

www.hospitalpediatrics.org

DOI: <https://doi.org/10.1542/hpeds.2017-0205>

Copyright © 2018 by the American Academy of Pediatrics

Address correspondence to Rachel Schwartz, PhD, VA Palo Alto Health Care System, Ci2i, 795 Willow Road, Menlo Park, CA 94025. E-mail: raschwartz@stanford.edu

HOSPITAL PEDIATRICS (ISSN Numbers: Print, 2154-1663; Online, 2154-1671).

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

Dr Schwartz conceptualized and designed the article and drafted the initial manuscript; Dr Sharek reviewed and revised the manuscript; and both authors approved the final manuscript as submitted.

^aVA Palo Alto Health Care System, Center for Innovation to Implementation, Menlo Park, California, ^bCenter for Health Policy and Center for Primary Care and Outcomes Research, Stanford University School of Medicine, Stanford, California; ^cDivision of Hospital Medicine, Department of Pediatrics, Stanford University School of Medicine, Stanford, California and ^dCenter for Quality and Clinical Effectiveness, Lucile Packard Children's Hospital, Palo Alto, California



FIGURE 1 Example of a hand hygiene token exchange.

PROPOSED SOLUTION: THE STAR SYSTEM

One approach for enabling patients and parents to more comfortably request that providers perform hand hygiene would be to create a dynamic in which each act of performing hand hygiene is consistently followed by having the provider (or parent or visitor washing their hands) deliver a token to the pediatric patient. After a certain number of tokens are collected, the child receives a prize. Each prize thus represents a certain number of hand hygiene performances and, if publicly charted, can serve to highlight the institution's commitment to patient safety. In this way, the child becomes invested in collecting instances of hand hygiene compliance, the parent or family member is empowered to be able to remind the provider that the child is collecting tokens as part of a shared provider-patient goal, and providers can observe how their acts of hand hygiene contribute to institutional performance that fosters a patient safety culture (Fig 1).

The costs of implementing such an initiative are negligible; tokens could take the form of star stickers tracked on a paper constellation chart or could be ink stamps. If a constellation chart approach were selected, each patient's goal could be to earn enough stars to complete specific constellations, thus incorporating an educational element. After a certain number of constellations were completed, the prize could be for the child to place a larger star sticker on the hospital-wide chart, demonstrating that a set number of hand hygiene performances had been achieved.

This larger chart could be displayed in a prominent location and could become a source of pride for staff and patients alike.

STRATEGIES FOR SUCCESSFUL IMPLEMENTATION

Adapting the hand hygiene game may be necessary to meet the needs and constraints of each delivery system. However, the underlying approach of uniting patients, families, and providers in a game that fulfills a shared goal provides a new model for facilitating conversations around infection control. Recently, we have seen initiatives "gamifying" hand hygiene by employing smart phones and affordable sensors to serve as monitoring systems.¹¹ Although our proposal is aligned with this movement toward systems-level competition in support of improved hand hygiene practices, unlike other solutions, our proposal eliminates the need for all wearable devices and instead engages patients and families as active partners in improving hand hygiene practices. Whereas formerly, fear of creating tension and difficulty navigating power differentials may have prevented patients, families, and staff from speaking up, by providing a symbolic token that can take the place of an uncomfortable request, we can begin to shift the dynamic. Instituting a practice in which the request for a token stands in for the request for an infection control-promoting behavior can mitigate the unintentional shaming of providers that lies at the core of the difficulties around making such a request for hand hygiene. When a hand hygiene game is endorsed at all levels of a care-delivery institution, the message it delivers is that everyone is invested in creating a safe environment for pediatric patients.

REFERENCES

1. Linam WM. Speaking up: the next step to improving health care worker hand hygiene. *Hosp Pediatr*. 2017;7(4):245–246
2. Okuyama A, Wagner C, Bijnen B. Speaking up for patient safety by

hospital-based health care professionals: a literature review. *BMC Health Serv Res*. 2014;14:61

3. Longtin Y, Sax H, Allegranzi B, Hugonnet S, Pittet D. Patients' beliefs and perceptions of their participation to increase healthcare worker compliance with hand hygiene. *Infect Control Hosp Epidemiol*. 2009;30(9):830–839
4. Sammer CE, Lykens K, Singh KP, Mains DA, Lackan NA. What is patient safety culture? A review of the literature. *J Nurs Scholarsh*. 2010;42(2):156–165
5. Buser GL, Fisher BT, Shea JA, Coffin SE. Parent willingness to remind health care workers to perform hand hygiene. *Am J Infect Control*. 2013;41(6):492–496
6. Wu KS, Lee SS, Chen JK, et al. Hand hygiene among patients: attitudes, perceptions, and willingness to participate. *Am J Infect Control*. 2013;41(4):327–331
7. Bellissimo-Rodrigues F, Pires D, Zingg W, Pittet D. Role of parents in the promotion of hand hygiene in the paediatric setting: a systematic literature review. *J Hosp Infect*. 2016;93(2):159–163
8. Kim MK, Nam EY, Na SH, et al. Discrepancy in perceptions regarding patient participation in hand hygiene between patients and health care workers. *Am J Infect Control*. 2015;43(5):510–515
9. Pittet D, Panesar SS, Wilson K, et al. Involving the patient to ask about hospital hand hygiene: a National Patient Safety Agency feasibility study. *J Hosp Infect*. 2011;77(4):299–303
10. Longtin Y, Sax H, Leape LL, Sheridan SE, Donaldson L, Pittet D. Patient participation: current knowledge and applicability to patient safety. *Mayo Clin Proc*. 2010;85(1):53–62
11. Klein F, Severijns C, Albiez D, Seljutin E, Jovanović M, Eyvazi Hesar M. The hygiene games. *Stud Health Technol Inform*. 2016;225:658–662