

The PPE spotter role: Supporting best practice in acute and long-term care

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ABSTRACT

Healthcare workers are at high risk of contracting infections including COVID-19 due to close and frequent contact with patients. To promote appropriate use of personal protective equipment (PPE) and to enhance protection of healthcare workers during the COVID-19 pandemic, we trained a team of registered nurses to serve as “PPE Spotters”. This team offered in-person observation, support, feedback, and on-the-spot teaching about proper PPE use and hand hygiene practices. Evaluation showed staff and leaders felt the Spotters effectively promoted best practices for PPE and hand hygiene, and 86% recommended the program continue. PPE Spotters now serve a formal role in the organization, supporting both acute and long-term care.

KEYWORDS: PPE, pandemic, COVID-19, infection control, PPE spotter

BACKGROUND

Healthcare workers are at high risk of contracting infections because of close and prolonged contact with patients. Staff-to-staff transmission of infections, including COVID-19 has also been reported, with crowded staff breakrooms (where staff must remove their masks to eat), presenting the greatest concern [1], while inconsistent PPE use by staff during breaks provides another potential source of transmission [2]. High-touch surfaces and poor ventilation inside breakrooms may also contribute to transmission of infections among staff [3, 4]. Consequently, proper use of PPE, good respiratory etiquette and impeccable hand hygiene are integral to preventing the spread of infectious organisms. Since the start of the COVID-19 pandemic, many healthcare organizations have developed innovative approaches to assist staff with appropriate use of PPE while conserving PPE supplies, and supported the ongoing practice of excellent hand hygiene. In some healthcare organizations, the role of the infection prevention and control (IPAC) team is extended to appropriate PPE use teaching, monitoring, and coaching. In the past year, published literature has offered examples of new supporting roles, such as PPE Spotters: personnel who assist staff with proper donning and doffing of PPE and reduce the misuse of PPE [5, 6].

PPE Spotters in a Chicago hospital educated staff on the types of PPE equipment needed for various tasks, and it was shown that the misuse of N95 respirators (specific for filtering

airborne particles) decreased following implementation of the Spotter role [6]. A Pennsylvania hospital noted that their “PPE Subject Matter Experts” effectively provided shoulder-to-shoulder support, which resulted in delivery of optimal PPE training to care providers during the pandemic [5]. The role of the PPE Spotter is also significant in ensuring effective communication among care staff and leadership teams, including IPAC, during uncertain times [5]. Frost et al. further suggest that PPE “donning and doffing is best performed under close observation by a PPE Spotter” who is empowered to intervene if there is a breach in PPE, thus allowing for “focused attention” on the importance of proper PPE use [7]. In April 2020, our IPAC team created a “PPE Spotter” role and trained registered nurses (RNs) for this position. A formal evaluation of this role was conducted four months later. At present, there are no other known published studies on the evaluation of the PPE Spotter role during the COVID-19 pandemic.

METHODS

Our organization includes acute care hospitals, long-term care centres, and community clinics.

In addition to the PPE Spotter program, our organization created “Screeners” who were positioned at each site’s public entrances to administer health questionnaires and monitor PPE use by those entering the facility.

Conflicts of Interest: The authors declare that they have no conflict of interest.

Acknowledgements: We are grateful for the support of Camille Ciarniello, the original PPE Spotters, Ali RajabiMemar and Eleanor Marsh, as well as the other nurses who have filled the PPE Spotter role.

Twenty RNs were trained as PPE Spotters, some of whom filled the role temporarily. PPE education sessions reached close to 1,600 staff across the organization. RNs from disciplines including IPAC and surgical services (available due to temporary shut-down of surgeries), as well as members of the Professional Practice Office were trained as PPE Spotters. Training was conducted by staff from IPAC and the Professional Practice Office, and included a refresher course in IPAC guidance around infection control (including COVID-19) and PPE use, as well as tips on using a coaching approach when offering staff support with PPE use and hand hygiene. PPE Spotters primarily worked day shifts, and initially visited units across acute care to offer support in best practice related to the use of PPE and infection control principles. The Spotters watched for opportunities to assist staff with using PPE, offering in-person observation, feedback and on-the-spot teaching about proper PPE use and hand hygiene.

The Spotters also led PPE education sessions, offered to all staff who provided direct care and those in non-clinical roles including security, food-service staff, and patient transfer personnel. Spotters created and distributed laminated posters to demonstrate proper donning and doffing of masks, gowns, and gloves, as well as signage to denote PPE required in patients' rooms and other care areas. In some medical units, Spotters also led decluttering efforts to facilitate thorough cleaning of the area.

Four months after introducing the PPE Spotters in acute care areas, the program was evaluated in an organization-wide survey offered to all staff, using distribution lists that included approximately 3,000 staff. Survey questions included demographics, Likert-scale perceptions, and an open-ended question to solicit suggestions for improving the program. The survey was advertised in organizational newsletters, and a gift card draw was created to encourage responses. In total, 221 responses were received from a diverse set of staff and clinicians. Results were compiled and shared in the organization's newsletter.

RESULTS

Survey results showed strong support for the PPE Spotter program, with 86% (173/202) of respondents recommending the program continue. Seventy-four percent (163/219) of respondents were aware of the Spotter program and 53% (112/213) reported having had interactions with a PPE Spotter. Overall, 61% (124/203) of respondents agreed that the PPE Spotter program was helpful in supporting best practice for PPE and hand hygiene on the units. Feedback from staff indicated they appreciated PPE Spotters for being "patient yet clear with their approach to correcting PPE practices," and also greatly appreciated clarity about donning PPE for specific indications, especially pertaining to airborne precautions. Additionally, the Spotters' "in-the-moment feedback" was stated to be more valuable than "audits shared later". Respondents also emphasized their appreciation for PPE educators and advocated that this resource "be [offered] in every hospital area". Sixty-one percent (125/204) of

respondents agreed that PPE Spotter support was helpful in reducing the potential spread of COVID-19. One senior leader noted, "I believe the support of the Spotters has been instrumental...I believe that when we support each other to don and doff safely, we save lives. Thank you!" (Sandra Barr, MHA, email communication, June 3, 2020). The survey also generated many suggestions to expand and improve the PPE Spotter program, including offering PPE Spotters in long-term care sites, adding evening and weekend shifts, and emphasizing a supportive approach in all interactions.

In August 2020, the PPE Spotter program was expanded to all long-term care sites and the PPE Spotter role has since been formalized with dedicated staff.

DISCUSSION AND CONCLUSION

As the COVID-19 pandemic enters its second year, and with several new variants reported in recent months, healthcare organizations face the prospect of ongoing need for PPE and hand hygiene support for healthcare workers. The nature of the COVID-19 pandemic and associated outbreaks of disease make it difficult to attribute the support offered by roles like the PPE Spotter to a reduction in the number of COVID-19 outbreaks or the duration of these outbreaks. Other new practices adopted since the pandemic, such as the Screeners, may affect this outcome. However, staff and leaders believe that the support and education offered by the PPE Spotters contributed to reducing the transmission of COVID-19 and number of outbreaks across facilities. Additionally, the expansion of the Spotter program to long-term care sites, where the workforce consists of primarily supportive roles such as care aides who may have less experience of PPE use, has received overwhelming support by site leaders. This evaluation is limited by the low number of responses received, relative to the number of staff employed at our organization. We believe the additional strain placed on staff by working during the pandemic reduced the number who were able to respond to the survey. Future evaluations of the PPE Spotter program could assess staff perceptions of practice change related to PPE Spotter support as well as the effectiveness of the program in long-term care sites. The implementation of a PPE Spotter program is a promising practice for infection prevention and control in both acute and long-term care settings, especially given the Spotter role requires little additional training for practicing RNs and has been well received by staff and leaders.

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