**Perspective**

**Infection Prevention Education Simplified: The Pros and Cons of Using CDC’s Project Firstline**

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Education is an important component of a successful infection prevention program. Although most infection preventionists recognize the need for education, there is limited time to devote to this endeavor. The Centers for Disease Control and Prevention released an educational program to help educate frontline healthcare workers about infection prevention principles. It can be a useful resource to meet the educational needs in a healthcare organization or facility; however, there are some barriers to using the program as written.

**INTRODUCTION**

Education has always been an important part of Infection Prevention. It is one of the essential activities of an Infection Prevention Program.1 Although most Infection Preventionists understand the importance of education, it is not always an easy task to accomplish due to time constraints and competing priorities. Devoting the time to deliver the information can be more daunting than creating the actual content. There are multiple sources for valuable infection prevention content that are available through a variety of delivery methods including presentations, webinars, podcasts, and articles. Although there are multiple educational resources, there is still a struggle to create and deliver content specific to frontline healthcare workers. One study found that Infection Preventionists devote 9% of their total time to education and research.2 According to the Association for Professionals in Infection Control and Epidemiology (APIC) mega-survey published in 2017, Infection Preventionists have multiple responsibilities and job duties within the infection prevention program.3 Even though their workload has increased, the commitment of additional resources is lacking.1 During the COVID-19 outbreak, the lack of knowledge related to infection prevention principles in healthcare was apparent in multiple facilities. While most infection preventionists were not completely surprised by the educational gap, it was discouraging to discover an enormous chasm between infection prevention and the frontline staff. Not only did this contribute to the increase in COVID-19 cases, but there was also an increase in other healthcare associated infections.4 Because the pandemic revealed the issues surrounding infection prevention, efforts were made to begin to close the enormous educational gap.

**OVERVIEW**

Project Firstline was created by the Centers for Disease Control and Prevention (CDC) as a means to educate frontline healthcare workers of all types, which is implied by the title of the program. They collaborated with various healthcare entities and provided funding to further this mission. They created multiple videos and job aides to assist in educating frontline staff on basic principles of infection prevention. In addition, they created presentations that could be completed at different time intervals with accompanying scripts to guide the conversation. The intent was to provide consistent materials that were approved by the CDC who makes most of the recommendations related to infection prevention. It can be used as written in most instances with most audiences. The content is relevant to clinical staff, support staff, infection preventionists, and community leaders. It is a comprehensive educational program that covers everything from germs to ventilation.

There is also a method for implementing the program in various settings. It begins with conducting a learning needs assessment. The CDC provides a sample that can be used and distributed. This assessment includes questions such as job role, common infection prevention topics, and preferred learning methods. This assessment is key to implementation. It is similar to the Infection Prevention Risk Assessment that infection preventionists conduct at the beginning of the year to determine the priorities for the Infection Prevention Program. The next step is developing a learning plan. This includes determining the venue, method of training, materials, and speakers. While CDC does provide most of the materials, certain facilities and groups may need more learning aids. This is particularly true in the healthcare groups that are not working in an acute care setting because they are less familiar with the concepts. Finally, there are metrics associated with the program. These
measures are used to communicate with CDC about the progress of the program.

PROJECT FIRSTLINE PROS

Project Firstline materials provide a solid foundation for creating a comprehensive educational program for frontline staff. First, there is less work on the front end. Because they have created content for a wide range of topics, an Infection Preventionist could choose a topic and get started immediately. Next, the materials are from a credible source. The CDC is well-known for research and publishing multidisciplinary recommendations from experts in the field. Also, the scripts for the presentations make it very easy to begin using them even if you are not comfortable with public speaking or are unfamiliar with the content. This would be an ideal situation if an experienced infection preventionist is delegating some of the educational tasks to more inexperienced infection preventionists or other clinicians. Additionally, many of the presentations have a corresponding video where a credible speaker explains the concepts. While the videos may seem elementary to some, they provide supportive information for those who prefer to learn on their own time via video. It also provides the language that can be used to effectively communicate with those who are not experts in infection prevention. In addition, the content is applicable to multiple audiences regardless of their education or role. This is valuable because it takes away the need to create multiple versions of the same educational content. Additionally, the educational sessions are set up to be given at various time intervals. This allows flexibility for the infection preventionist. Depending on time constraints, this educational content could be presented at either a standing meeting or a special session dedicated just to infection prevention. Finally, content that is delivered using the tools and videos that are provided by CDC do not require further approval to count activities towards the Project Firstline grant for project participants.

PROJECT FIRSTLINE CONS

While Project Firstline resources provide a solid foundation, there is a downside of using the materials without any modification. First, the content is not facility-specific. It is meant to apply to various healthcare settings, but not specifically to any particular group. Second, it may not be updated quickly to reflect all of the current recommendations because it provides general guidance. Throughout the COVID-19 pandemic there have been multiple updates to the guidance, and it has not always been reflected in the Project Firstline materials. Additionally, other regulatory groups have their own requirements that may not be covered in the sessions. Next, the first several sessions of Project Firstline are primarily devoted to COVID-19. While these principles could be applied to other respiratory illnesses, COVID-19 is discussed frequently. Also, if an audience prefers printable materials, they are not readily available for all of the topics. There are some job aids that could be printed, but there are not many one page resources provided by CDC. Another common complaint is that the content is too elementary for advanced practice audiences. The subject is presented in very simple terms so that it is applicable to multiple audiences. For some advanced practitioners this can be a turn off. In addition, the website is not very intuitive. The materials are grouped together, but it is not always clear where to find the resources. Finally, it doesn’t address compliance deviations. Some infection prevention breaches do not occur because the healthcare worker did not perform the right action. Instead, it occurred because the healthcare worker chose not to perform the right action for a variety of reasons. In this case, more education would not change the outcome because it is related to behavior rather than a knowledge deficit.

CONCLUSION

Overall, Project Firstline is an excellent resource for Infection Preventionists seeking to provide education in a variety of ways. As described, the content is credible and applies to multiple job roles; however, further research is needed to determine how to make it resonate with all levels of healthcare providers. Additionally the approval process needs to be easier so that changes can be made timely and efficiently. Infection prevention education is always going to be a part of the healthcare curriculum so this endeavor should be prioritized at the national level.

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