



INTERNATIONAL  
SOCIETY  
FOR INFECTIOUS  
DISEASES

# GUIDE TO INFECTION CONTROL IN THE HOSPITAL

## CHAPTER 15: Positive Deviance in Infection Prevention

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## KEY ISSUES

Positive deviance (PD) is based on the observation that in every community there are certain individuals or groups, whose uncommon practices enable them to find better solutions to problems than their neighbors or colleagues despite having access to the same resources. These individuals are known as positive deviants.

## KNOWN FACTS

- The PD approach is totally different from the traditional approach for stimulating performance improvement in any area.
- In PD the healthcare workers (HCWs) decide how the work should be done and they promote discovery among their peers.
- The leadership and managers support frontline workers in implementing new ideas into their routine.
- A core principle of PD is the belief that solutions to seemingly intractable problems already exist. Another important concept is that problems are discovered by members of the community, and the positive deviants with a spirit of creativity and innovation will share experiences, discuss these problems, and remove the barriers to find the solutions.
- There are many descriptions of successful stories of PD in different sectors from public health to education to business.
- PD has also been used to control methicillin-resistant *Staphylococcus aureus* (MRSA) in the healthcare setting.
- Using PD can improve hand hygiene compliance. Nurse managers need to facilitate discussion among frontline workers and give positive deviants opportunities to express their feelings about best practices for hand hygiene and to discuss what needs to be changed, what needs to be improved, what is wrong, and what is right.

- One of the strategies from the PD project for improving hand hygiene compliance is to show the number of alcohol gel aliquots dispensed per unit and to compare data and HCW impressions.
- All hospital personnel (doctors, nurses, physical therapists, speech pathologists, nutritionists, and pharmacists) need to act as infection preventionists. Moreover, all hospital quality indicators need to be discussed at group meetings. Priorities need to be analyzed and strategies need to be defined. Everyone should understand some specific processes, such as central venous catheter insertion and hand hygiene compliance, and bring valuable information that could be addressed during PD meetings or case discussions.
- Many solutions were suggested by the positive deviants in hospital settings. Some examples include: changing the position of the alcohol rub dispensers to allow easier access and use; putting alcohol gel dispensers on mobile x-ray machines; changing the procedure for monitoring the consumption of alcohol handrub product, which was initially performed by one single staff member each 48 hours and gradually evolved to become the responsibility of every professional involved with patient care at the end of their shifts.

## Controversial Issues

- Infection control personnel know that improvement processes have a tremendous impact on the quality of care, but the question remains as to how to initiate and sustain these improvements.
- The first step is to decrease the distance between infection control unit personnel and healthcare workers.
- PD promotes ownership of problems by frontline workers, and empowers the positive deviants to implement infection control prevention processes.
- The next step is to accept and support ideas that arise during the team observations in their daily practice.

- At first glance the strategies employed by the deviants may not seem to be very unusual or innovative.
- The PD challenge is to disseminate these strategies to others.
- The leaders need to believe that PD can advance engagement of front line staff in prevention efforts and implementation of all interventions.
- Participants discuss ways to stimulate a discussion with noncompliant individuals in a positive manner.

## SUGGESTED PRACTICE

- Positive deviance tries to improve processes every single day, by analyzing workflow, questioning possible errors, and promoting the view that all tasks are significant as they are important for the final result. And the improvement is continuous as staff, learns together, shares tasks, knowledge and ideas, and continues analyzing all tasks and actions.
- The goal is for the team to be responsible for identifying opportunities for improvement, to propose solutions, and to follow the proceedings.
- The structure and the PD process offer a space for discussion of experiences, ideas, and plans that emerge from team participation.
- The exercise to practice thinking can lead to high-impact actions. An example was the idea to place alcohol gel on portable X-rays machines that traverse the hospital, so that radiologic technicians have the ability to use alcohol gel at any time during their activities.
- Most important is that all the changes that have occurred or are occurring are developed by people performing the tasks. The socialization of thought and attitude become the main role of PD.

## SUGGESTED PRACTICE IN UNDER-RESOURCED SETTINGS:

Positive deviance plays an important role in under-resourced settings by having frontline healthcare workers come up with solutions and practices for better solutions to problems they encounter in their daily work.

## SUMMARY

Positive deviance (PD) may have an important role for infection prevention and patient safety in the hospital. PD has been applied in the healthcare setting to improve hand hygiene compliance, reduce methicillin-resistant *S. aureus* (MRSA), reduce bloodstream infections in an outpatient hemodialysis center, and reduce medication errors. PD promotes dialogue among leaders, managers, and healthcare workers (HCWs), which is a key factor in establishing a safety culture. It also enables cultural changes aimed at empowering frontline workers (the positive deviants) to innovate and improve compliance with infection prevention measures.

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