**Solution:** Promoting Patient Safety Through Employee Influenza Vaccination

**Organization:** Howard County General Hospital

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### IDENTIFICATION:
An important facet of patient safety is protecting our patients from infection. We perform hand hygiene, we implement device bundles, we proactively screen patients for resistant organisms. One thing we don’t always take advantage of is the strategies that require little or no effort at all. Seasonal influenza vaccine is recommended by the Centers for Disease Control (CDC) for all healthcare workers as the most effective way to prevent influenza virus infection. Ensuring the availability of the influenza vaccine for healthcare workers is also a Joint Commission Standard. Despite the strong support in favor of vaccination, many hospitals continue to struggle with lack of vaccine acceptance by healthcare workers. The literature is replete with recommendations and suggestions to improve vaccination rates and many states offer grants to help healthcare facilities boost influenza vaccination programs.

### PROCESS:
At Howard County General Hospital in Columbia, Maryland, a new strategy was implemented during the 2008/2009 influenza season. The hospital has been actively developing a Pandemic Influenza Plan and testing various portions of it in various state- and county-wide exercises. One part of the plan that needed to be actively tested was the mass prophylaxis portion. In an effort to test the mass prophylaxis plan and improve staff influenza vaccination rates, the two initiatives were combined. The hospital held a Pandemic Influenza Vaccine Drill in which the seasonal influenza vaccine was used as the simulated pandemic influenza vaccine. The premise behind the drill was that there was a new vaccine available for pandemic influenza and that the hospital had enough supply to offer it to all staff. The goal was to get at least 80% of on-duty staff through the vaccine clinic during a 12-hour time period. In testing the plan with real influenza vaccine, we were able to measure throughput in a life-like scenario with real staff. In planning for this event, we spoke to neighboring facilities who had successfully implemented the same strategy. One major challenge was determining the location of the drill clinic. Hospital renovations made our original choices for clinic sites unavailable. The only space that would accommodate the expected volumes and enable a smooth flow was a back hallway in the basement. Because this location is not well-traveled, directional signs were posted. Another challenge was staggering the flow of employees reporting to the clinic in such a way to avoid potential bottlenecks. A list of departments and staff expected to be on duty during the time period of the drill clinic was reviewed and a tentative schedule was developed based on a calculation of estimated throughput for the clinic using the formula:

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\text{TP divided by (HPP minus S) divided by PPH} = \text{PODS}
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- \(\text{TP} = \text{Total population}\)
- \(\text{HPP} = \text{Number of hours of operation}\)
- \(\text{S} = \text{Set up time for clinic}\)
- \(\text{PODS} = \text{Points of distribution}\)
The schedule was arranged so that department managers would send their staff to the clinic two at a time, with all departments on a staggered start time. Department managers were also asked to identify contacts for their areas to be used during the drill as needed. Sign off sheets were used for each area to keep a real time tally of how many from each area had participated. Since reasons for declining the vaccine are an important focus for targeted vaccination efforts, it was the expectation that any staff member who had clocked in report to the clinic at the appointed time whether or not they planned to receive the vaccine. Those who declined vaccination were provided with additional counseling and information from the Employee Health staff. All clinic attendees received information on the seasonal influenza vaccine as well as Pandemic Influenza Planning.

**SOLUTION:**
During the 12-hour time period that the drill was held, 671 participants were processed through the clinic at a rate of approximately 56 per hour. During peak hours, as many as 70 participants were processed. A total of 452 accepted and 219 declined the vaccine. The top reason for declining the vaccine was allergies/medical reasons (n=25), although the majority of those who declined chose not to provide a reason. Other reasons included illness at the time of the drill (n=7) and fear that the vaccine causes illness (n=14). Of note, several staff members who had come to the clinic planning to decline vaccination reported that they changed their minds after getting additional information to dispel influenza vaccine misperceptions. The clinic was well received by participants and provided the ideal opportunity to test our plan to provide prophylactic medication to the hospital staff efficiently in the event that it was necessary.

**Lessons Learned:**
Conducting a Pandemic Influenza Vaccination Drill in which seasonal influenza vaccine is offered is an effective method for testing emergency preparedness plans as well as boosting healthcare worker vaccination rates. Although healthcare facilities have developed mass prophylaxis plans for the administration of medications, there are few opportunities to exercise the plans in a realistic manner. The Pandemic Influenza Vaccination Drill at Howard County General Hospital proved to be a useful strategy to combine efforts and maximize resources. Efforts to encourage healthcare worker influenza vaccination can be supplemented with this type of exercise. Additions to the plan for the next season include the use of a card swipe mechanism at the clinic entry to better track throughput and additional modalities for educating staff that report to the clinic. This is not the only method used at Howard County General Hospital to improve healthcare worker vaccination rates, but it has proven to be a useful one on many different levels. Another important lesson learned is that despite continued efforts to dispel myths about the influenza vaccine, many continue to hold the perception that the vaccine can cause influenza.