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Editorial

Mandating influenza vaccination for health care workers: Putting patients and professional ethics over personal preference[☆]

For well over 20 years I have advocated for strategies that would increase influenza vaccine coverage in health care workers (HCWs). What started as advocacy has become passion with the increasing recognition of the paradox between what the data would lead us to do, and the reality of low immunization rates among HCWs who appear to be indifferent to the value of influenza immunization. Now we must recognize the data demonstrating that only requirements for HCW influenza immunization can achieve the goal of adequately protecting patients and HCWs against the considerable morbidity, mortality, and disruption in patient care that occurs on an annual basis [1]. As I elaborate on later, multiple professional organizations and healthcare institutions have come to the same conclusion. Even as of the date of this writing, despite guidelines from the CDC recommending influenza vaccine since the early 1980's, coverage rates among US HCWs one decade into the 21st century are less than 50% [2] (at one level why should we be surprised, given that HCWs still do not wash their hands 163 years ago after Semmelweiss demonstrated the value to our patients of doing so!)!

The imperative to protect patients and HCWs is evident in the evolving US Public Health Service's draft Healthy People 2020 health goals. The proposed goal for HCW influenza immunization is a minimum coverage rate of 90%. Absent requirements to do so, it is evident that such a goal cannot be reached across all hospitals and clinics using voluntary methods on a sustained basis. Continued calls for "more education" as the answer are, as shown now by 30 years of history, doomed to fail and are indifferent to the available data.

Now in the last decade an increasing number of scientists, professional societies, and healthcare organizations have come to the conclusion that the only way to accomplish high sustained rates of HCW influenza immunization is by policies compelling HCWs to receive vaccine. Such requirements are justified when the benefits of such a policy outweigh the risks of harm, when such actions are ethically justifiable, when such actions enhance patient safety, and when uniformity in approach, and elimination of variation, is desirable. These conditions have all been met, justifying such a policy. Further, studies have now demonstrated the relationship between levels of HCW influenza immunization and mortality among the patients they care for [3,4].

To my knowledge the debate regarding mandatory influenza policies has only reached the "tipping point" in the US. It is curious that an equally vigorous debate is not yet occurring in Europe, Asia, South America, and other countries. I may be wrong, and if so invite readers to let me know if other countries are debating such measures.

Perhaps as we celebrate the 30th anniversary of the eradication a disease (smallpox) by vaccination, 2010 would be appropriate as the year that vaccinologists the world over unite in a common statement that influenza vaccination should be required of every HCW with patient contact, and influenza vaccination should be considered an ethical responsibility and patient safety issue – making it a personal issue, a professional issue, and an institutional mandate. Doing so sends several important messages:

- The scientists and physicians most familiar with and knowledgeable about the data relative to influenza vaccines believe this to be a wise course of action and support it.
- Such a policy builds public trust and credibility by letting our patients know we are taking this action to protect them.
- It allows institutions and clinics to demonstrate in a tangible manner that they are serious about patient safety.
- It reinforces the message that influenza vaccines are safe and effective.
- It is consistent with the ethical imperative embedded in all health profession creeds to "first do no harm", and to take all reasonable actions to prevent transmission of diseases in the context of providing patient care.
- It decreases HCW absenteeism, presenteeism, and health care costs – benefiting patients, HCWs, health care institutions, and communities – and enhancing patient safety.

While some abhor talk of "mandates", it is important to examine the principle here. No serious debate exists over identical mandates requiring HCWs to be immune to measles, mumps, rubella, varicella, and to undergo annual PPD testing. Based on the principle of patient and HCW safety concerns, mandates for these vaccines are in place and well-accepted. Other mandates are codified, for various vaccines, in law, Joint Commission requirements, professional society and public health recommendations, and policies put forth by individual hospitals and healthcare systems. Each of these requirements was put into place for the same reasons: the professional and moral imperative to protect patients and providers, the ready availability of safe and effective vaccines, and the otherwise low voluntary uptake of these vaccines by HCWs. We find ourselves in an identical situation now with regard to influenza vaccine coverage of HCWs who care for highly vulnerable patients.

[†] The opinions expressed herein are my personal opinions and do not necessarily reflect the opinions of my employer or any of the organizations I am affiliated with.

As the data are examined and light cast on this issue more professionals, institutions, professional societies, and even patient safety advocacy groups are endorsing such mandates. For example the following professional organizations and healthcare institutions have endorsed and instituted requirements for HCWs to receive annual influenza immunization, as a patient safety issue and standard of care: The Association of Professionals in Infection Control, the American College of Physicians, the Infectious Diseases Association of America, the Society for Healthcare Epidemiology of America, the Virginia Mason Clinic, the Department of Defense (for their HCWs), the Centers for Disease Control and Prevention (for their HCWs), University of Iowa Hospitals, Spectrum Health Hospitals, the Hospital Corporation of America, the State of New York, the Barnes Jewish Health System, MedStar Health System, the Hospital of the University of Pennsylvania, the Children's Hospital of Philadelphia, Emory University Hospital, the University of California-Davis Hospital, University of California-Irvine Hospital, Cook County Health and Hospitals Systems, Children's Hospital of Orange County, CA, Creighton University Hospital, Johns Hopkins University Hospitals, Michigan State University Hospital, New York-Presbyterian Hospital, Loyola University Hospital, the University Hospital of Cincinnati, University of Texas-MD Anderson Hospital, and a myriad of other individual healthcare institutions (for a current list please see the honor roll at the following website: www.immunize.org) Perhaps of most interest is the National Patient Safety Foundation, with the goal of advocating for patient safety, who has recently called for such requirements [5]. In addition, resolutions have now been submitted to the American Medical Association and American Public Health Association annual meetings, as well as others, calling for and endorsing identical policies and requirements.

Unfortunately, such mandates have been resisted - most often by nurses and nursing unions. At one level, this is shocking given the historical mission of nurses as advocates for patient safety and care, and undermines their credibility in this regard. However the profession does not speak with a single voice. Indeed the American Nursing Association (ANA) has called annual influenza immunization of nurses "an ethical duty of every nurse." At the same time however, the ANA has declined to support a mandatory policy. The concern is that this stance is due to their fear of "pushback" reaction from a vocal minority of members, not serious concerns over the efficacy and benefits of such a policy. Other organizations and health care institutions share this concern and have failed to implement mandatory policies for similar reasons – they fear implementing a policy that would enhance patient safety due to concerns over employee pushback. This strains credibility and reveals a focus on priorities that ought not trump patient safety. It is precisely at such a point that courageous leadership, not fear, is required if we are to truly serve the best interests of our patients [1,6].

In an effort to further the debate, and to force transparency in any policy decision-making, I offer 10 questions regarding instituting requirements for HCW influenza immunization whose answers should lead to a clear, explicit, and ethical decision:

- 1. Are influenza vaccines safe and effective in HCWs?
- 2. Are data available demonstrating any other method with which to insure nearly 100% rates of vaccine coverage in HCWs on a *sustained* basis?
- 3. Would a mandatory policy enhance patient safety [7–9]?
- 4. Is there an ethical basis for such a policy [10-13]?
- 5. Is such a policy cost-saving? If not, is it nonetheless feasible and justifiable given the benefits?
- 6. Are adequate alternatives for the rare individuals with medical or religious contraindications to influenza vaccine available?

- 7. Given the available safety and efficacy data, is it ethically acceptable to allow ongoing annual nosocomial, patient to HCW, HCW to patient, and HCW to HCW transmission of influenza, when such transmission has quantifiable and well-known adverse impacts on patient length of stay, morbidity, mortality, and employee staffing; when the means are available to prevent such consequences [13]?
- 8. Is the personal preference of HCWs ethically justifiable over patient safety? If so, shall policies on other HCW vaccine mandates such as measles, rubella, mumps, pertussis, and varicella be revisited and repealed?
- 9. At the level of institutional leadership, should fear of employee push back over such a requirement take preference over patient safety?
- 10. And finally, to make it personal, if your infant daughter was admitted during an influenza epidemic to a pediatric intensive care unit, do you want the HCWs caring for her to be unimmunized based on their fears and personal preference?

The data to answer questions 1–7 are available, clear and unambiguous. My personal opinion on questions 8–10 is a clear-cut no! Those who would differ with this opinion raise vague and unsubstantiated issues and fears such as "requirements undermine the employer–employee relationship", "we'll loose employees over this", "what if someone is harmed by a vaccine", "such a policy doesn't guarantee patients won't still get infected" and other equally fallacious logic. The reality is that such concerns center around two basic issues: unwarranted fear (of side effects, of employee push back, etc.), and a general dislike of requirements. While sympathetic to the western cultural ethos that views mandates with skepticism, in this case it is carried too far and leads to needless harm and deaths.

As a result of a dispassionate examination of the data and answers to these questions, as noted many professional organizations and healthcare institutions have implemented mandatory policies. What have we learned from them? Published and unpublished data reveal the following:

- 1. Mandatory policies lead to sustained and extremely high level influenza vaccine coverage rates [6,14,15].
- 2. Policies that only require declination, rather than require vaccine, are quantifiably far less effective [16].
- 3. Institutions that have implemented mandatory policies have been surprised how little employee push back has occurred at most losing 0-8 employees in organizations of 5000 to 40,000 employees [14,15].
- 4. Institutions that have implemented a mandatory policy have received much in the way of positive press and individual patient and family approval for protecting patient safety [17].
- 5. Institutions that have implemented a mandatory policy have dramatically decreased employee absenteeism (and presumably presenteeism) during the influenza season, as well as nosocomial influenza improving patient safety and decreasing health care costs [18–20].
- 6. Perhaps the most important and telling observation is that no institution that has implemented a mandatory policy has reversed such a policy the only exception has been if inadequate amounts of influenza vaccine are available.

My "peek into the future" is that such requirements will come to pass. Ultimately science will trump innumeracy and denialism; and rationality and the compelling demand for patient safety will prevail. There will be those professions and institutions that will be recognized as leaders in this call to patient safety. Others will comply only because it is mandated. I believe that in the near future we will look back, and as medical and nursing profes-

sions, be severely criticized for not having adopted such measures much earlier given our cultural and professional mandate to protect our patients, fellow HCWs, and communities, from harm. Patients, healthcare payers, and communities have every justifiable right to demand that we do all that is in our power to protect them from spiraling healthcare costs and from transmission of communicable diseases in the context of providing healthcare. In this regard it is gratifying that several studies have demonstrated significant support by HCWs, particularly physicians, for mandatory influenza vaccine policies [21,22]. Further, "score-carding" will be increasingly utilized by patients and payers to make healthcare utilization decisions. In this regard some states are considering mandatory reporting of institutional HCW influenza immunization rates. Those institutions and providers who would value personal preference over patient safety will, predictably, suffer in this regard. They will only know so in retrospect.

It is in the highest tradition of the healing professions to set aside our own self-interests and preferences in the moral imperative to best protect and care for our patients – even if it means accepting some level of self-harm (real or imagined). Under a required policy it is likely that we will rebuild the trust that has historically been recognized as crucial to the healing relationship between patient and provider. Let us not falter in doing what is best for the patients we are privileged to care for – even when it seems difficult to do so. At such times we are at our best.

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