INFLUENZA VACCINATION AS A CONDITION OF EMPLOYMENT AT AN INTEGRATED HEALTH SYSTEM: A SIX-YEAR REVIEW

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PROBLEM
Annual Caregiver influenza vaccination has been demonstrated to reduce rate of transmission from staff to patients. Voluntary participation has failed to achieve CDC targets in most settings. Mandated vaccination programs have raised concerns regarding staff opposition and legal challenges.

BACKGROUND
Influenza remains a significant contributor to mortality and morbidity in the United States, with 9,146 related hospitalizations and 175 pediatric deaths in the 2015-16 flu season. Healthcare workers are both victims and vectors of influenza. Numerous hospital outbreaks of influenza have been associated with infected caregivers. Influenza vaccination of healthcare workers is believed to be protective for both caregivers and patients.

Aurora’s voluntary caregiver influenza vaccination program failed to achieve CDC target goals of 90%, remaining in the 70% range despite free on-site vaccination and encouragement. In 2011 Aurora, following CDC recommendations, instituted a program requiring annual influenza vaccine as a condition of employment for all caregivers.

OBJECTIVES
To evaluate the safety and efficacy of the influenza vaccination as a requirement of employment program after the initial six years of deployment.

To evaluate caregiver acceptance and satisfaction with the program.

METHODS
An interprofessional “flu team” meets regularly throughout the year, establishing vaccine ordering, distribution, communications, and protocols.

Following an annual late summer “Kickoff Day,” all caregivers are required to attend one of over 100 caregiver flu vaccination sessions or document vaccination through another provider. Those failing to meet the requirement or attain an exemption are given warning and counseling; non-adherence by an early winter deadline results in termination.

Two exemptions are available: Medical exemption for those caregivers with either contraindications to the vaccine or prior systemic reactions; and a Personal Belief exemption for those with opposition to vaccinations.

Medical exemptions may be given for the current year for limited conditions, or duration of employment for systemic reactions. Personal Belief exemptions must be renewed annually. In 2016 an email survey was made available to all caregivers through the system intranet home page, asking about their satisfaction with the influenza program.

RESULTS
Vaccination Rates: The influenza program has resulted in 98% vaccination of caregivers each year since its inception.

Exemption Requests: Medical exemption requests:

- Dropped significantly after the first year
- Most approved requests were due to documented severe systemic reactions to vaccine and thus granted for the duration of employment (83%)
- New requests varied from 72 to 127 per subsequent year
- Approval rates have been 84-95%, reflecting a conscious decision by the committee to defer to the treating clinician’s judgment even in cases where evidence suggests use of the influenza vaccine, e.g. patient using dalcumab for Multiple Sclerosis.

Personal Belief exemption requests:
- Grew from 33 in 2011 to 64 in 2016.
- Reasons for the growth of these exemptions included:
  1. Broadening of the legal definition to any “strongly held personal beliefs”;
  2. Expansion of the program to include network clinicians, including a number of chiropractors who made up the largest category of caregivers requesting religious exemptions; and
  3. Expansion of the program to include contracted workers who did not necessarily have a healthcare education or orientation.

- Although no explicit religious accommodation is required, in the 2016-17 season, 65% of requesters volunteered a specific creed, with 95% of these citing Judeo Christianity (e.g. quoting Old or New Testament verses, referring to ‘Bible’ or ‘Jesus’) with veganism, Islam and Native Based Indigenous Spirituality faiths being noted by 1-2 caregivers each.

CONCLUSIONS
Although laborious, implementing an influenza program as a condition of employment is feasible, effective at reaching targeted vaccination rates, and reasonably accepted by caregivers.

Our effort was unable to identify whether compulsory influenza vaccination impacted caregiver absenteeism due to changes in our system coding of absenteeism.

REFERENCES
3. Adding justice to the plea for public health ethics arguments for mandatory seasonal influenza immunization for healthcare workers. Journal of Medical Ethics 2017;43:163-166

Resignations and Terminations:
- In 23rd year, resignation of 2 full time and 9 part-time regularly scheduled healthcare workers was attributed to the vaccination requirement. Thirty “zero assigned” HCW also resigned.
- Resignations attributable to the influenza requirement diminished over time
- Unknown whether the requirement impacted acceptance of employment with Aurora.

PATIENT SAFETY: No patient complaints or documented instances of caregiver-patient influenza transmission have occurred since implementing the program.

Caregiver Satisfaction: 1931 caregivers completed the survey (approximately 6.4% of all employees). A 5-point Likert scale was used to assess level of agreement with the statements listed in the table. Caregivers expressed the highest level of agreement with the statement that “the program makes it convenient to get vaccinated” (89% agree or strongly agree) and the lowest level of agreement with “the program keeps me healthier” (54% agree or strongly agree).

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
<tr>
<td>The Aurora caregiver flu program improves the health and safety of our patients and caregivers</td>
<td>377 (71%)</td>
<td>100 (18%)</td>
<td>10 (2%)</td>
<td>2 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Aurora’s flu vaccination program makes it convenient for me to get vaccinated</td>
<td>377 (71%)</td>
<td>100 (18%)</td>
<td>10 (2%)</td>
<td>2 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>The Aurora healthcare flu program has kept me healthier</td>
<td>377 (71%)</td>
<td>100 (18%)</td>
<td>10 (2%)</td>
<td>2 (0%)</td>
<td>0 (0%)</td>
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<tr>
<td>I am proud to work for an organization whose priority is to protect the well-being of patients and caregivers</td>
<td>917 (98%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
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