Evaluation of Health Care Worker Vaccination Rates in Utah Outpatient Clinics

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Vaccines

- Important public health achievement
- Cost-effective strategy for preventing diseases
- Reduces health care costs for communicable diseases
- Schedule recommended by the Centers for Disease Control and Prevention
Vaccines and Populations

- Focus usually on childhood population
- Especially important for vulnerable populations
  - Children
  - Elderly
  - Immunocompromised
  - Patients
- Also important for health care workers
Vaccines and Health Care Workers

- Necessity of HCW vaccinations
  - At risk for contracting and spreading communicable diseases
- Recommendations*
  - One pertussis
  - One tetanus every 10 years
  - Two MMR
  - Two varicella
  - Three Hepatitis B
  - Seasonal influenza
  - One meningococcal
- Recommendations identical for US and Utah**

*Immunization Action Coalition, 2014a
**Utah Department of Health, 2010a
How are We Doing in America?

- Hepatitis B: 68%*
- Influenza: 80%*
- No firm data on pertussis, MMR, or varicella
  - Suboptimal*

* Centers for Disease Control and Prevention, 2011
How are We Doing in Utah?

- Hospital-based HCWs
  - Influenza: 82%*
- Long-term care HCWs
  - Influenza: 53%*
- Outpatient HCWs

<table>
<thead>
<tr>
<th>Vaccine Type</th>
<th>Pediatrics</th>
<th>Family Practice</th>
<th>Oncology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>66% (n = 31)</td>
<td>57% (n = 52)</td>
<td>79.2% (n = 19)</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>63.8% (n = 30)</td>
<td>52.7% (n = 48)</td>
<td>62% (n = 15)</td>
</tr>
<tr>
<td>Tdap</td>
<td>59.6% (n = 28)</td>
<td>37.4% (n = 34)</td>
<td>41.7% (n = 10)</td>
</tr>
<tr>
<td>MMR</td>
<td>42.6% (n = 20)</td>
<td>25% (n = 23)</td>
<td>41.7% (n = 10)</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>42.6% (n = 20)</td>
<td>32% (n = 29)</td>
<td>25% (n = 6)</td>
</tr>
<tr>
<td>Varicella</td>
<td>34% (n = 16)</td>
<td>18% (n = 16)</td>
<td>21% (n = 5)</td>
</tr>
</tbody>
</table>

*Utah Department of Health, 2010b
**But...**

<table>
<thead>
<tr>
<th>Vaccine Policy</th>
<th>Pediatrics</th>
<th>Family Practice</th>
<th>Oncology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended but <em>no consequence</em></td>
<td>50% (n = 23)</td>
<td>37% (n = 30)</td>
<td>39.1% (n = 9)</td>
</tr>
<tr>
<td>Recommended with <em>termination</em> as consequence</td>
<td>15.2% (n = 7)</td>
<td>23.5% (n = 19)</td>
<td>17.4% (n = 4)</td>
</tr>
<tr>
<td>Recommended with consequence <em>other than termination</em></td>
<td>19.6% (n = 9)</td>
<td>18.5% (n = 15)</td>
<td>30.4% (n = 7)</td>
</tr>
</tbody>
</table>
Barriers to Vaccinating Health Care Workers

- Common barriers*
  - Lack of access to vaccine while working
  - Belief that vaccine is unnecessary**
  - High staff turnover
  - Cost of vaccine
- Barriers in Utah outpatient clinics
  - Time/resources
  - Employee freedom

*Centers for Disease Control and Prevention, 2014
**FitzSimons, Hendrickx, Lernout, Badur, Vorsters, and Van Damme, 2014
†National Foundation for Infectious Diseases, 2008
Positively Influencing HCW Vaccination Rates*

- Employer should assume cost of vaccination
  - Economic benefits
- Address misconceptions
  - Vaccine effectiveness
  - Need for vaccination
  - Vaccine safety
- Send a CLEAR message from highest administrative authority**
- Vaccine mandates

*Marshall, Tetu-Mouradjian, & Fulton, 2010
**Talbot, Dellite, Hebden, Sama, & Cuny, 2010
A Quick Word About Vaccine Mandates

- Unpopular*
- MOST are effective*
  - Instituted by over 400 health care institutions nationwide**
  - Increases vaccination by eightfold#
  - Virginia Mason Medical Center in Seattle, WA = 98% after mandate¶
  - Children’s Hospital of Philadelphia = 99.9%^[1]

*Marshall, Tetu-Mouradjian, & Fulton, 2010
**Immunization Action Coalition, 2014b
#Centers for Disease Control and Prevention, 2010
¶Babcock, Geneinhart, Jones, Dunagan, & Woeltje, 2010
^Offit, 2010
Ethical Considerations

- Public trust damaged when HCWs recommend vaccines for patients but avoid the vaccines themselves
- HCWs choose their profession, vaccination is consistent with professional obligations
- Being immune is part of being a “healer” in the profession
- Health care institutions have an obligation to reduce risk to patients
- When safety and liberty are in conflict, limiting personal liberties may be justifiable

*Galanakis, Jansen, Lopalco, & Giesecke, 2013*
Where Do We Go From Here?

- Every nurse responsible for patient safety
- Advocate for vaccine policies
  - Mandate?
- Make recommendations for facilities and follow through
References


