Implementing Effective Strategies To Increase Influenza Vaccination Rates And Reduce Staff Resistance To Vaccination

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Topics of Discussion

- Background
- Meeting recommendations
- BJC HealthCare experience
- Change model
- Policy development and implementation
- Policy implementation
Background
Influenza Facts

• Highly infectious febrile respiratory illness
• Infects up to 20% population in U.S.
  – 3,400 - 49,000 deaths in the U.S. annually*
  – More than 200,000 excess hospitalizations
• Leading cause of vaccine-preventable death in U.S. every year
• Asymptomatic infections occur
• Viral shedding precedes symptom onset
• Healthcare personnel (HCP) work ill

*CDC. MMWR. 2010;59:1057-1062
## Deaths Due to Vaccine Preventable Disease - US, 2005*

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number of Deaths</th>
<th>Infant Deaths</th>
<th>Rate per 100,000</th>
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</thead>
<tbody>
<tr>
<td>Influenza/pneumonia</td>
<td>63,001</td>
<td>265</td>
<td>21.3</td>
</tr>
<tr>
<td>Viral Hepatitis</td>
<td>5,529</td>
<td>0</td>
<td>1.9</td>
</tr>
<tr>
<td>Pertussis</td>
<td>31</td>
<td>28</td>
<td>0.0</td>
</tr>
<tr>
<td>Measles</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Polio, Varicella, Mumps, Tetanus and Diphtheria</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Influenza Impact On Health Care

• Healthcare-associated transmission:
  – Increases morbidity, mortality and length of stay

• Increased census and employee absenteeism

• Additional $1-3 billion in health care costs in the U.S.

• Health and productivity costs are $87 billion

• Exposure evaluations are costly and labor-intensive
Influenza In Long-Term Care

- Residents of long-term care (LTC) facilities are at high risk for influenza and influenza-related complications
- Influenza vaccine is 30 – 40% effective in frail elderly persons
- Annually 13 – 34% of LTC facilities report influenza outbreaks
  - 25 - 60% attack rates in residents
  - Case-fatality rates 10 – 20%
  - 14% hospitalization rates
  - 23% HCP attack rates
- HCP vaccination reduced influenza-related mortality in residents 30 – 40%
- Lower mortality in facilities with higher HCP vaccination rates
Influenza Immunization For HCP

• U.S. Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention (ACIP) has recommended for healthcare personnel (HCP) since 1984
• Purpose: prevent healthcare-associated transmission
• Core patient and HCP safety practice
• Nationally, HCP immunization rates remain low
  – 63.5% 2010
  – Long Term Care: 50 – 65% the last three years
  – Healthy People 2020 goal – 90%
Benefits of Annual Immunization

- Improved patient safety, decreased HAIs
- Create herd immunity (80%)
- Reduce absenteeism by 50%
- 28% fewer lost work days to respiratory illness
- Employee cost savings: decreased medical costs, decreased use of antibiotics, 44% fewer doctor visits
- Healthier and more productive employees
- Critical societal workforce vaccinated during outbreaks
HCP Reasons for Not Getting Vaccinated

- Fear of adverse reactions
- Make me sick/give me the flu
- Flu is not serious
- Will not get the flu or just do not get sick
- Pain/fear of needles
- Vaccine does not work
- Not at risk of getting the flu
- Pregnant or breast feeding
- Inconvenient or too busy
- Lack of knowledge about the flu vaccine
Reasons for Declination – BJC HealthCare

![Bar chart showing the reasons for declination]

- **Make Sick**: 26%
- **No Reason**: 25%
- **Doesn't Work**: 13%
- **Don't Get Flu**: 11%
- **Allergic**: 8%
- **Afraid of Needles**: 6%
- **Missed Opportunity**: 5%
- **Changed Mind Later**: 4%
- **Other Reason Cited**: 3%
- **Pregnant/Breastfeeding**: 2%
- **Religious Reasons**: 1%
- **MD Advised Against**: 1%
- **Vaccinated Elsewhere**: 1%
- **Already Had Flu**: 0%

*N = 3,402*
Recommendations to Increase HCP Vaccination Rates

- ACIP
- HICPAC
- Joint Commission Standard
- Professional Organizations:
  - APIC
  - SHEA
  - IDSA
Recommendations To Increase Rates

• Hold organized campaigns using effective and proven approaches to increase rates
• Measure and report vaccination rates
• Provide education
• Free, Convenient, Incentives/Rewards, Leadership
• Vaccinate HCP unless contraindication or actively decline with declination statements
• Surveillance for HAI influenza
• Evaluate reasons for non-participation
• Implement enhancements to increase participation
• Consider rates to be a measure of patient safety quality
Joint Commission Standard IC.02.04.01

- Effective 2007
- Establish an annual influenza vaccination program
- Provide vaccination on-site
- Educate about:
  - Flu vaccination
  - Non-vaccine control measures
  - Diagnosis, transmission, and potential impact of influenza
- Evaluate vaccination rates and reasons for non-participation in the organization’s immunization program
- Implement enhancements to increase participation
Joint Commission Standard Revisions

- Applicable to staff and licensed independent practitioners, only when care or treatment is provided onsite, does not apply to telemedicine

- Note: Some jurisdictions mandate that organization limit access to residents by HCP who have declined immunization

- Include improvement of vaccination rates in the infection control plan

- Incremental goals, consistent with achieving the 90% rate for 2020

- Written description of methodology used to determine rates

- Improve rates annually

- Effective July 2012
Professional Organizations Support Mandatory Immunization of HCP

- Society for Healthcare Epidemiology of America (SHEA)
  - Update to position statement
  - Mandatory for all HCP employed and granted privileges, students, volunteers and contract workers
  - Accept medical exemptions, only
- Infectious Diseases Society of America (IDSA)
- American Academy of Pediatrics (AAP)
- Department of Defense (DOD)
- National Patient Safety Foundation
- Immunization Action Coalition – Honor Roll
Mandatory HCP Influenza Immunization

- **Pros**
  - Increased immunization rates
  - Improved employee safety
  - Improved patient safety
  - Shorter vaccination periods
  - Post-exposure work-ups reduced
  - Improved public health

- **Cons**
  - Negative employee reaction
  - Perceive violation of individual rights
Multiple Conditions Of Employment For HCP

- Immunity to:
  - Measles
  - Mumps
  - Rubella
  - Varicella

- TB skin testing

- Infection prevention activities:
  - Proper attire in the OR and isolation precautions
  - No artificial nails

- Care for patients, regardless of diagnosis
Meeting The Recommendations
BJC HealthCare

• Large non-profit healthcare organization
• 13 acute care hospitals in Missouri and Illinois
  – Urban, suburban, rural
  – 3,475 staffed beds (range 40 – 1,111)
  – Two teaching hospitals (1 adult, 1 pediatric)
• 3 long-term care facilities
• Home care, medical groups, behavioral health, occupational medicine
• >27,000 employees
BJC HCP Influenza Immunization

- Comprehensive program since 1997 (always free)
- 2003 – 2006 established a “Best Practice”
  - Standardized and systematic
  - Promote maximum employee participation
  - Establish start and stop date
  - Make vaccine convenient
  - Utilize key partners to administer vaccine
  - Advertise and communicate
  - Education: benefits and risks, dispel myths
  - Offer incentives
  - Catchy themes
  - Monitor participation and report rates to key stakeholders
Immunization Best Practice

• Provide vaccine at post-offer screening
• Conduct vaccination opportunities outside of occupational health, covering all shifts
  – Mass clinic (cafeteria)
  – Roving carts
  – Attending meetings
• Utilize partners to administer vaccine
  – Infection Control Liaisons
  – Nurses on light duty or low census days
Dare to Care – Get Your Flu Shot

Everyone who works in health care should be vaccinated against influenza. Look for signs about your facility’s upcoming flu campaign or contact your Occupational Health office for more information.

Got My Shot. Did You?

Everyone who works in health care should be vaccinated against influenza. Contact your Occupational Health office for more information.

FLU FREE AT BJC

Challenges With A Best Practice Approach

- Time consuming
- Long immunization time period
- Easy for HCP to say “no”
- Incentives cost money
- Increase in participation was incremental
Declination Statements

- Recommendation of some professional organizations

- Meet JC Standard
  - Education
  - Survey for improvement

- HCPs not vaccinated, can transmit influenza

- Demonstrated only moderate increases
BJC HealthCare Best In Class Scorecard

- 2007 HCP influenza immunization added to the Best In Class scorecard (BIC)
- Target set at 80% HCP immunization rate
- Used key role models
- Challenges
  - Time consuming
  - Tracking down employees
  - Long campaign
BIC Results

• Overall 71.1% (range 51% – 87%) vaccinated (18,039/ 25,380)

• 16% (4,071) signed declination statements

• 13% (3,270) neither vaccinated nor signed statement

• Conclusion: did not achieve established goal
Establishing A Vaccination Program

• Change the culture
  – Quality of the technical strategy – ‘Q’
  – Acceptance of change – ‘A’

• Develop policy and procedure

• Challenges to consider

• Focus on consistency and remember the mission
Acceptance Strategy: Accelerating Change and Transition, the ACT Model
Acceptance Strategy

• Lead the way:
  – Have a champion
  – Who says this is important?

• Create a sense of shared urgency:
  – The reason to change NOW

• Focus the vision:
  – Desired outcome of change is clear, legitimate, widely understood and shared
  – Vision must be compelling and vivid enough to create action
  – What does tomorrow look like?
Acceptance Strategy

• Build coalitions and commitment:
  – Consider what coalitions to build and what resistance is inevitable
  – Whose engagement and commitment do we need?
• Chart a transition roadmap:
  – Project plan for building the ‘A’ must be as real as the plan for implementing the ‘Q’
• Align systems and structures:
  – Will I/the organization be supported with the training, tools and rewards to take the risk and to be successful?
• Sustain the momentum:
  – Transition zone of change requires constant attention to fueling the energy for forward action
  – Is this for real?
Technical Strategy: The Policy Development
Policy Approach And Development

• Purpose/initiative – Patient Safety

• Policy Owner – Human Resources

• Implementation process owner – Occupational Health

• Review similar policies/requirements
Policy Intent – Why And Who

• Clearly define purpose
  – Protect patients, employees, employees’ family members and the community from influenza infection through annual immunization

• Determine coverage
  – All BJC HealthCare employees, with and without direct patient care
  – Vendors
  – Contracted clinical personnel
  – Students
  – Volunteers
Policy Elements

• Free of charge

• Program coordination – Occupational Health

• Timeframe for compliance
  – Begin October 15th
  – End December 15th

• New hire process
  – Vaccinated through March 31st
  – Those who refused, refer back to HR
Policy Elements

• Vaccinated at other locations must provide proof of vaccination
  – Receipt
  – Physician note
  – Copy of consent

• Maintenance of records

• Contingency plans
  – Vaccine shortages
  – Shipment delays
Policy Elements

• Medical Exemptions
  – Require documentation using a standardized form to indicate medical contraindication from personal licensed physician (MD/DO)
  – Standard criteria based on CDC guidelines, manufacturer recommendations

• Religious Exemptions
  – Requests for religious accommodation must be provided in writing to Human Resources
Policy Elements

• Management of unvaccinated employees
  – Mask use; when and where?

• Policy compliance

• Vaccination or exemption deadline

• Management of non-compliant HCPs
Collaborate In Policy Development

- Infection Prevention
- Occupational Health
- Infectious Disease
- Human Resources
- Legal Services
- Leadership
- Others
Policy Implementation
Make It Easy For HCP

- Free vaccine
- Readily available, multiple sites and times
- Educate vaccine administrators
- Multiple brands to meet allergies and fears
  - Included thimerosal free, LAIV
- Ensure safety
Keys to Success

• Building the case and getting buy-in
• Senior leadership support
• Plan, plan, plan, and plan again
• Key partnerships and collaboration
• Constant communication
• Remember the mission
• Willingness to compromise
• Be prepared for anything
Employee Influenza Vaccination Rates
Long Term Care 2001 - 2011

- BJC Rate
- NHIS

Best Practice
Pilot Declinations
Vaccine Shortage
BIC Scorecard
Condition of Employment

Percent of Employees Vaccinate

A Note From Steve

Why is BJC requiring flu vaccinations?

“We know how to prevent flu. We know how to protect patients and co-workers from getting the flu. We should use everything we know to make sure that our patients have every opportunity to get better. After all, that’s why we do what we do.”

- Steve Lipstein, BJC President and CEO
What Questions Do You Have?

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