Mandatory Influenza Vaccination for Healthcare Workers

Prof. Keith Woeltje, Washington University School of Medicine

A Webber Training Teleclass

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Nothing to disclose.

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BJC HealthCare

Hosted by Paul Webber
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Special thanks to:

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Overview

- Influenza Epidemiology
- Influenza Vaccination of HCWs
- Benefits and Barriers to "going mandatory"
- BJC experience:
  - 2008 – 09
  - Update from 2009 – 10
- Others' experience

Influenza Epidemiology

- >200,000 influenza associated hospitalizations per year
- ~36,000 excess deaths per year
- Leading cause of vaccine-preventable death in US every year
- Asymptomatic infections occur
- Viral shedding precedes symptom onset
- HCWs work sick

Prevention and Control of Influenza, MMWR 8/2008

Influenza in Healthcare Settings

- Outbreaks – hospital and long-term care
- Nosocomial transmission
- Exposure evaluation = costly and labor-intensive
  - HCWs & patients
  - Post-exposure prophylaxis

Influenza Control: Vaccination

- Recommended for healthcare workers (HCWs) since 1984
- Part of comprehensive influenza control plan
  - Early identification and isolation of patients
  - Use of appropriate PPE
  - Education of staff and patients about respiratory hygiene
  - Exposure management plans

Prevention and Control of Influenza, MMWR 8/2008; Hayward et al. BMJ 2006; 333:1241; Carman et al. Lancet 2000; 335: 93; Thomas RE et al. Lancet Infect Dis 2006; 6: 273

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Influenza Vaccination of HCWs

- Decreases absenteeism
- Decreases nosocomial cases of influenza
- Decreases morbidity/mortality among patients in long term care settings

Prevention and Control of Influenza, MMWR 8/2008; Hayward et al. BMJ 2006; 333:1241; Carman et al. Lancet 2000; 335: 93; Thomas RE et al. Lancet Infect Dis 2006; 6: 273; Salgado ICHE 2004. Cunney ICHE 2000.

Optimizing Vaccination of HCWs

- Recommended practices:
  - Free, Convenient, Education, Incentives/Rewards, Leadership, Champions
  - Declination statements
    - Mixed results
- National rates of HCW vaccination remain low
  - 44.4% in 2006-07; 49% 2007–08; 62% 2009-10
  - 2009 H1N1: 39.3%

Prevention and Control of Influenza, MMWR 8/2008; Striker SHEA abstract #680; MMWR April 2010.

Mandatory Vaccination

- Rationale:
  - Protection of public (patient) health
    - Like schools, other HCW vaccines (Hep B)
  - First, do no harm
  - Safe vaccine
  - (Also protects HCWs)
  - Inadequacy of years of voluntary efforts
- "Intentions and principles do not protect patients; results are needed." A. Pavia
  - See hand hygiene, SSI, "never events"

Pavia A. CID editorial Feb 2010

Mandatory Vaccination: Ethics

- Lots of literature
- Principles at stake:
  - Autonomy (HCW), individual rights
  - Non-malfeasance
  - Protection of public health ("state interest in public welfare")
  - Have less coercive methods been tried (and failed)

Strasser PB. AAOHN Journal 2007; 50 (1): 34. vanDelden et al. Vaccine 2008; 26:5562. Talbot TR. ICHE 2008; 29(2) 107. Tilburt et al. Vaccine 2008; 26 (Suppl4): D27. Helms et al. BMJ 2008; 337. Isaacs et al. BMJ 2008; 337. Anikeeva et al. AmJPublic Health; 2009; 99(1) 24; O'Neal, Converso, Olsen. AJN 2010; Stewart. NEJM 2009; Poland GA et al. Vaccine 2005; Sullivan et al. ExpertRevVaccines2009; Steckel. AAOHN 07.

SHEA POSITION PAPER

Revised SHEA Position Paper: Influenza Vaccination of Healthcare Personnel

SHEA views influenza vaccination of HCP as a *core patient and HCP safety practice* with which noncompliance should not be tolerated. It is the professional and ethical responsibility of HCP and the institutions within which they work to prevent the spread of infectious pathogens to their patients through evidence-based infection prevention practices, including influenza vaccination. *Therefore, for the safety of both patients and HCP, SHEA endorses a policy in which annual influenza vaccination is a condition of both initial and continued HCP employment and/or professional privileges.* The implementation of this policy should be part of a multifaceted, comprehensive influenza infection control program; it must have full, visible leadership support with the expectation for influenza vaccination fully and clearly communicated to all existing and applicant HCP; and it must have ample resources and support to implement and to sustain the HCP vaccination program. This recommendation applies to all HCP working in all healthcare settings, regardless of whether the HCP have direct patient contact or whether the HCP are directly employed by the facility. It also applies to all students, volunteers, and contract workers. SHEA recommends that only exemptions due to recognized medical contraindications to influenza vaccination be considered.

ICHE 2010

Mandatory Vaccination: Practicalities

- Defining mandatory
  - What is mandatory: Vaccine? Vaccine/Declination?
  - Exemptions: Medical? Religious? Personal belief?
  - Consequences of non-compliance
    - Suspension/Termination of employment
    - Mandatory mask use
      - Monitoring and enforcement, consequences
      - Privacy/HIPPA issues
      - Protection (of HCW and pt) vs. punishment
- Reporting results
  - Vaccination rates (vs compliance rates)

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Increasing utilization…

- High interest level
- Abstracts and anecdotes at SHEA 2010
- "Honor Roll for Patient Safety"
  - Immunization Action Coalition
  - http://www.immunize.org/laws/influenzahcw.asp

  e.g.: Hopkins, U of IA, HUP/CHOP, Dept of Defense, (New York State), Loyola University Health System, UC Davis Health System
- Position Statements: IDSA, National Patient Safety Foundation, ACP, APIC
- Regulatory interest in vaccine offerings, vaccination rates…

Mandatory Program: (Potential) Barriers

- Fear of negative impact on employee-employer relationship
  - May be mitigated by clear communication, consistency, education, leadership,
- Fear of litigation
- Fear of union reaction
- Defining and dealing with exemptions, non-compliance
  - Masking? Suspension? Dismissal?

Mandatory Program: (Potential) Barriers

- Anti-vaccine movement; persistent misinformation
  - Educational opportunities!
  - Ease of access to anti-vaccine materials (Internet)
    - Vaccines contain poisons, toxins
    - Vaccines erode immunity; superiority of "Natural immunity"
    - Vaccines cause disease: autism, SIDS
    - Conspiracy theories: profit motivations of medical community, "in league with" vaccine manufacturers, cover-ups of adverse events
    - Vaccines used to sterilize target populations
    - Alternative medicine: homeopathy, diets, vitamins
- Listen!

Anna Kata. Post-modern Pandora' box: Anti-vaccine misinformation on the Internet. Vaccine 2010. (Dept Anthropology, McMaster U, Ontario). Paul Offit.

Mandatory Program: Benefits

- Improved vaccination coverage (Goal!)
  - Herd immunity
  - Patient protection
  - (Decreased absenteeism)
    - Maintenance of workforce = patient safety issue
- Expectation of compliance; culture of safety
- Public expectation (Moms-on-the-street test)
- Facility ready for vaccination rate to be used as a standard/reportable measure
- Strength in numbers!

Reminders for mandatory programs

- Vaccination = one part of a comprehensive influenza control program
- Still need early identification/isolation of patients
- Still need education, FAQs for employees
- Still wise to have incentives, campaign themes, publicity
- Keep focus on safety and protection of patients and staff

Setting – BJC HealthCare

- Large non-profit healthcare organization
- 11 acute care hospitals in Missouri and Illinois
  - Urban, suburban, rural
  - Size 46 - 1250 beds
  - Two teaching hospitals (1 adult, 1 pediatric)
- 3 long-term care facilities
- Home care, medical groups, behavioral health, occupational medicine
- > 25,000 employees

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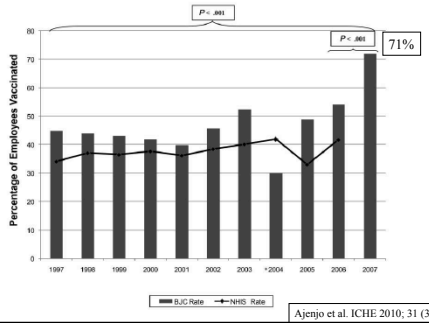
BJC Influenza campaigns

- Annual campaigns:
  - Free, convenient vaccine
  - Publicity, encouragement, incentives, raffles
  - Educational programs
  - Successful practices shared among facilities
- Annual HCW vaccination rates between 40 – 54% from 1997-2006

BJC Influenza campaign: 2007

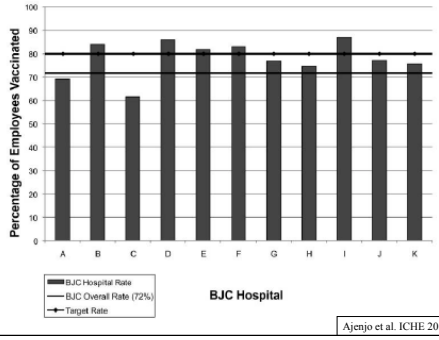
- Vaccination rates added to the BJC quality scorecard (goal 80%)
  - Leadership incentives by performance on score card measures
- Declination statements implemented for employees refusing vaccination
  - Declination stated value of vaccine for protection of self/family/patients
  - Not truly mandatory but highly encouraged
  - Lots of time and effort (not resulting in vaccination)

BJC Employee Vaccination Rates: 1997 - 2007



Ajenjo et al. ICHE 2010; 31 (3).

2007 BJC Influenza Vaccination Rates: By Hospital



Ajenjo et al. ICHE 2010; 31 (3).

2007 Results

- 17,894/ 25,199 active employees vaccinated (71.1%)
- ~ 4000 (16%) signed declination statements
- >3000 (13%) neither vaccinated nor signed declination statement

Ajenjo et al. ICHE 2010; 31 (3).

2008 Influenza Vaccination Policy

- Influenza vaccination = "condition of employment"
- All BJC employees, regardless of job function
  - Included all clinical staff, medical groups, hospital-employed and housestaff MDs, non-clinical staff, contracted clinical personnel, volunteers
  - Caveat: many private practice MDs and WUSM faculty and staff not BJC employees

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Program Communication

- Communication through managers, BJC newspaper, Town Hall Meetings, Intranet site, letters to employees, FAQs
- BJC CEO letter in BJC weekly newspaper explaining rationale for mandatory vaccination

"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*

Policy Implementation

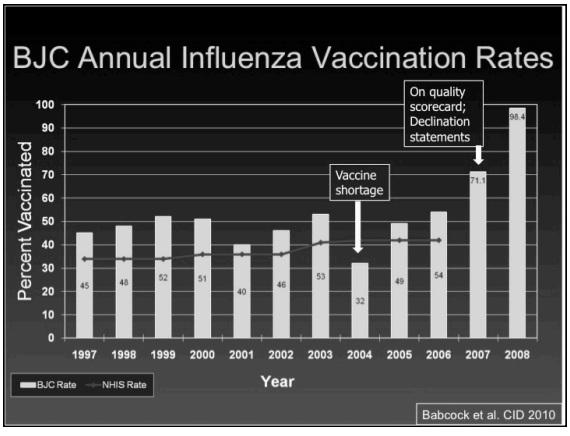
- Free vaccine available, multiple sites and times, multiple brands starting October 2008
  - Included thimerosal free, LAIV
- Off site vaccination required documentation
- Exemptions could be requested
- Not vaccinated/exempt by 12/15/08 = suspension without pay (30 days or until vaccinated)
- Not vaccinated/exempt by 1/15/09 = termination

Exemption Process

- Religious accommodations required a letter to Human Resources from the employee stating a religious conviction opposed to vaccination
- Medical exemptions required a letter from a physician stating a medical contraindication to vaccination
  - Reviewed by occupational health nurses, with review by medical director if needed

Results: 2008 - 09

- Active Employees: 25,980
  - Vaccinated: 25,561 (98.4%)
  - Exemptions: 411 (1.59%)
    - Medical Exemptions: 321
    - Religious Exemptions: 90
- Policy Compliant = 25,972 (99.96%)
  - Non-compliant: 8 (0.03%)



Lessons Learned

- Misinformation about influenza and the vaccine is common, among employees and their physicians
  - A pre-printed medical exemption form was developed with definitions of the accepted contra-indications
- Fewer employees sought exemptions (~400) than had signed declination statements the prior year (~4000)

2009 Update

- Seasonal AND H1N1
  - "Not a good year to start a mandatory program…" T. Frieden, CDC
- Concerns re: H1N1
  - Fear of worse disease = increased interest in vaccine (while not available)
  - Fear of "new vaccine" = decreased interest in vaccine (once available)

2009 Decision-making

- Lots of discussion of H1N1 vaccine, availability issues
  - "It's the flu, right? We have a vaccine, right?"
- Seasonal AND H1N1 both mandatory
  - Different deadlines for seasonal and H1N1
  - Deadlines for H1N1 varied by facility depending on county and availability

2009 Preliminary Results

- Seasonal influenza vaccination
  - 97.8% vaccinated
  - 2.1% exempt
  - 99.9% policy compliant
- H1N1 influenza vaccination
  - 96.8% vaccinated
  - 2.9% exempt
  - 99.7% policy compliant

Limitations/Generalizability

- Many attending physicians in private practice or employed by affiliated university, not covered by policy
  - ~ 900 (100%) residents/fellows complied
  - Hospital employed MDs and employed medical groups complied
- Economic factors
- Increasing rates the year before going mandatory might have continued to rise

Other Examples: Virginia Mason

- VMMC: 2005, >5000 employees
  - All hospital employees and MDs
  - No declinations allowed; religious or medical accommodations could be requested
    - If approved: mask all season

Other Examples: HCA

- Hospital Corporation of America, 2009
  - 163 hospitals, 112 surgery centers, 400 MD practices in US and UK
  - ~ 150,00 health care workers
  - Average 58% vaccination rate (20-74%)
  - Leadership; patient safety message
  - Religious, medical and personal belief exemptions allowed
  - 2009 seasonal influenza vaccination rate: 96.4%
    - 3.6% declined for any reason

Courtesy of Ed Septimus, MD; Abstract SHEA 2010

BJC Acknowledgements

- BJC Council of Occupational Health Professionals
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- BJC Infection Prevention and Epidemiology Consortium
  - Clay Dunagan, BJC VP of Quality
  - Infection Prevention Specialists
- BJC Pharmacists
- BJC Administration, Human Resources and Legal Services

Questions????

The Next Few Teleclasses

04 Nov. 10	Using Social Marketing to Prevent Healthcare Associated Infection Speaker: Dr. Hugo Sax, University of Geneva Hospitals, Switzerland
09 Nov. 10	(British Teleclass) Why are Noroviruses Such Successful Pathogens in Healthcare Settings? Speaker: Dr. Christine Moe, Emory University
18 Nov. 10	Infection Prevention Strategies in the Home Care Setting Speaker: Mary McGoldrick, Home Health Systems Inc.
02 Dec. 10	Validation of Special Ventilation Systems in Healthcare Facilities Speaker: Andrew Streifel, University of Minnesota
09 Dec. 10	Do Decolonization Strategies Work for MRSA? Speaker: Dr. Andrew Simor, Sunnybrook Health Sciences Centre
16 Dec. 10	Clostridium difficile: The Sinister Spore Saga Speaker: Dr. Michelle Alfa, Diagnostic Services Manitoba

www.webbertraining.com.schedulep1.php