Use of the Intranet to Improve Influenza Vaccination Rates Among Health Care Workers

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System Hospitals

Cleveland Clinic
Euclid Hospital
Fairview Hospital
Hillcrest Hospital
Huron Hospital

Lakewood Hospital
Lutheran Hospital
Marymount Hospital
South Pointe Hospital

Location, Location, Location
The Cleveland Clinic

- 40,000 employees
- Electronic medical record in use for outpatients; gradual implementation for inpatients
- Use of intranet makes sense-standardization of information, methods, data at diverse sites

Patient Safety/Infection Control Initiatives at The Cleveland Clinic

- Improving influenza vaccinations among health care workers
- Improving hand hygiene
- Reducing risk of surgical site infections
  - Efficacy of decolonization of *S. aureus* nasal carriage prior to open heart surgery
- Improving antimicrobial use
  - Penicillin skin testing

Need for Healthcare Personnel Immunization Programs: Influenza Vaccination Rates, 1996-97

<table>
<thead>
<tr>
<th>% Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>All adults ≥ 65 yrs. of age</td>
</tr>
<tr>
<td>Healthcare personnel at high risk*</td>
</tr>
<tr>
<td>All healthcare personnel**</td>
</tr>
</tbody>
</table>

Source: 1997 National Health Interview Survey

**Cleveland Clinic health care workers: 34% in 2003**

Influenza Vaccination for Healthcare Workers

- Healthcare worker influenza vaccinations are supported by
  - National Foundation of Infectious Diseases
  - CDC Advisory Committee on Immunization Practices (ACIP)
  - CDC Healthcare Infection Control Practices Advisory Committee (HICPAC)
- Healthcare Worker Influenza Vaccination
  - Improves patient outcome
  - Decreases worker absenteeism
  - Is a measurable patient safety indicator
- Recommend monitoring and documentation of immunization and declination rates (as of 2006)
Why Should We Promote Influenza Vaccination for HCWs at the Cleveland Clinic?

- It is not pleasant to have the flu!
- Patient safety issue
  - Nosocomial influenza (HCW to patient) is a risk that can be mitigated
  - Have you washed your hands? And have you had your flu shot?
- JCAHO Guidelines
- Business model
  - Reduce illness leave
- Avoid presenteeism
- Health outcomes research
  - If model works for CCF has implications for 10 million HCWs nationwide

Influenza Immunizations
Cleveland Clinic Employees

- Flu clinics for all employees
- Nursing in-patient units and ambulatory clinics will be providing vaccine to unit/clinic employees in October–November
- Family Health Centers will also have vaccine available to patients and HCWs in October
- Mandatory participation system via the Intranet
Mandatory Participation

Thank you. Your response has been submitted.

Employee ID: XXXXXXXX
Employee Name: 
Submit Code: 162017 7 27 17 AM

Submit another employee  Go to information page

2007 Employee Influenza Vaccination Program

• All CCHS hospitals participating
• Leadership dashboard showing participation rates in
development by Medical Operations
• Hope to have ready by start of program October 29
• Request leadership encourage participation by all
employees

CCF Employee Flu Vaccine Rate

2003 Season (All employees -Includes Main Campus and RMP)

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent vaccinated</th>
</tr>
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<tbody>
<tr>
<td>1997</td>
<td>27.5</td>
</tr>
<tr>
<td>1998</td>
<td>20.5</td>
</tr>
<tr>
<td>1999</td>
<td>21.6</td>
</tr>
<tr>
<td>2000</td>
<td>22.4</td>
</tr>
<tr>
<td>2001</td>
<td>21.6</td>
</tr>
<tr>
<td>2002</td>
<td>27.4</td>
</tr>
<tr>
<td>2003</td>
<td>33.8</td>
</tr>
</tbody>
</table>

National average for health care workers: 34%

Use of the Intranet to Enhance Influenza Vaccination

Healthcare Personnel Influenza Vaccination Program 1997-2005

Overall Vaccination Rate

Percent Vaccinated

Year 1997 1998 1999 2000 2001 2002 2003 2004 2005

Percent Vaccinated

Year 1997 1998 1999 2000 2001 2002 2003 2004 2005

Cleveland Clinic Employee Influenza Immunization Program 1997-2006

Vaccination Rate

- Participation rates declined from 89% to 81%
- Vaccination rates fell from 55% to 51%

2006 Employee Influenza Vaccination Program

• Participation rates declined from 89% to 81%
• Vaccination rates fell from 55% to 51%

CCHS Employee Participation

- Seven hospitals participated
- Hospitals with higher participation rates had higher vaccination rates

Programs

Examples of multidisciplinary collaboration facilitated by QPSI

- Hand hygiene – First line of defense against hospital acquired infection
- Surveillance for multi-drug resistant organisms
- IHI Bundles and Catheter related bloodstream infections
- Surgical Infection Prevention
- Influenza Vaccination Program

Challenges for Employee Influenza Vaccination Program

- Geography
- Workplace culture
- Barriers to accurate determination of compliance rates
- Ability to link processes with outcomes – opportunity to enhance practice
Dashboard: Portal for Providers, Payers and Patients

What Should Be Provided?

- Focus on process measurements as well as "rates" and "numbers"
- Drill down to variety of levels of specific and sensitive information
- Providers could use to assess "real time" quality improvement
- Payers could use to assess outcomes
- Health care workers could use to assess safety
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