

Reporting Healthcare Personnel Influenza Vaccination Through the National Healthcare Safety Network: Current Status and Future Plans

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Outline

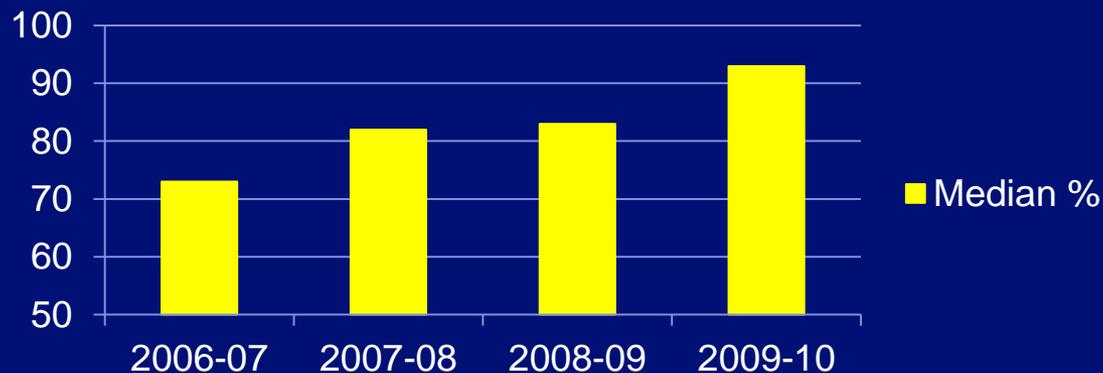
- **Background & reporting requirements**
- **Current status of reporting**
- **Year one evaluation results**
- **Successes & challenges**
- **Future directions**

BACKGROUND AND REPORTING REQUIREMENTS

Value of Standardized Public Reporting of HCP Influenza Vaccination

- Variation in how hospitals measure healthcare personnel (HCP) influenza vaccination¹
- Measurement and feedback of rates raises coverage^{2,3}

Employee Influenza Vaccination³



- NVAC recommends standardizing HCP vaccination measurement as part of reaching 90% coverage⁴

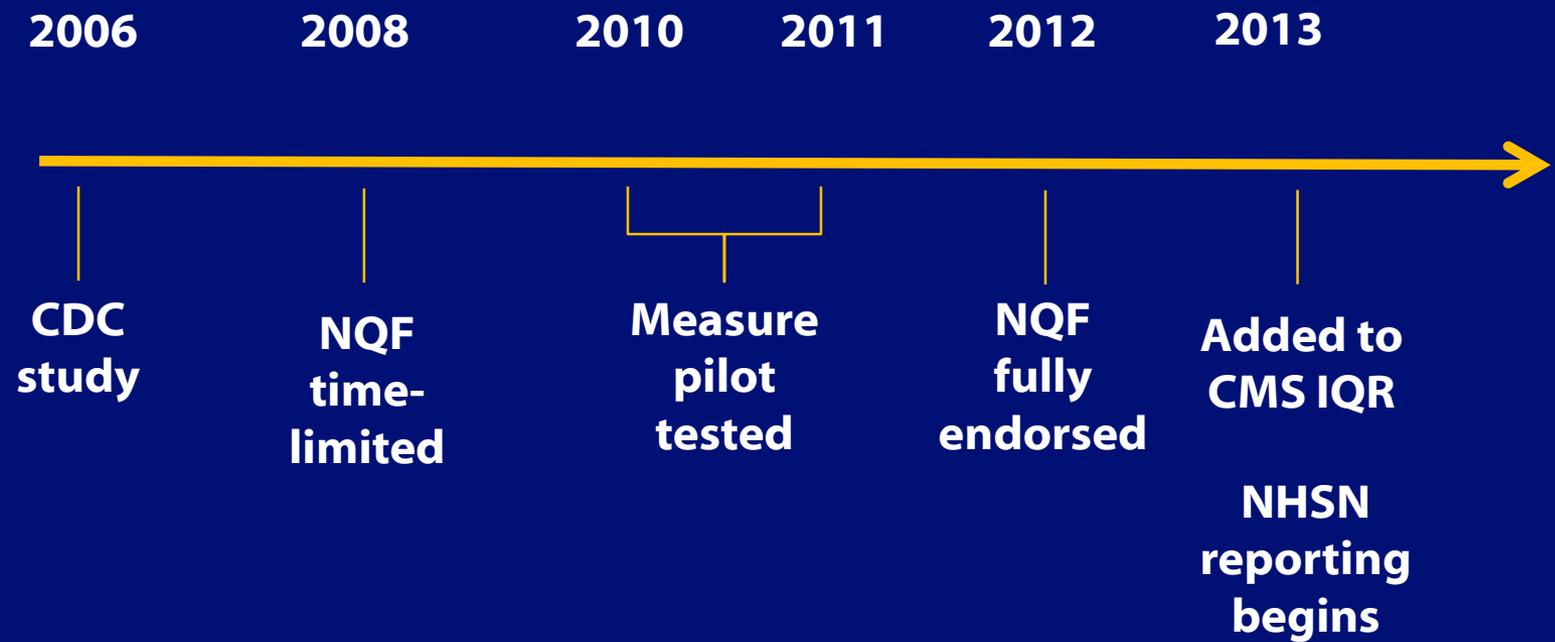
1. Lindley et al. Infect Control Hosp Epidemiol. 2009; 30:1150-1157.

2. Guide to Community Preventive Services – Vaccination: <http://www.thecommunityguide.org/vaccines/providerassessment.html>

3. Helms et al. Vaccine. 2011; 29:3483-3488.

4. NVAC report: http://www.hhs.gov/nvpo/nvac/influenza_subgroup_final_report.pdf

National Healthcare Safety Network (NHSN) HCP Influenza Vaccine Reporting



NQF: National Quality Forum; IQR: Hospital Inpatient Quality Reporting Program

CMS Hospital Inpatient Quality Reporting Program

- **Incentive program for inpatient acute care hospital units**
- **Quality measures established by rule and updated annually**
- **Non-reporters risk 2% decrease in annual payment update**
- **HCP influenza vaccination measure incorporated beginning January 1, 2013**

Measure Specifications

- **Four denominator categories:**
 - Employees
 - Licensed independent practitioners
 - Adult students/trainees and volunteers
 - Other contract personnel (optional)
- **Five numerator categories**
 - Vaccinated at facility
 - Vaccinated elsewhere & provided documentation
 - Medically contraindicated
 - Declined vaccination
 - Status unknown

Reporting Notes

- All HCP who physically work in the facility for one day or more between October 1 and March 31
- Regardless of clinical duties or patient contact
- Includes full- and part-time HCP, per diem/PRN, etc.
- Vaccination received any time between when vaccine becomes available and March 31
- Numerator data reported separately for each of the three required HCP groups (denominator categories)
- Single summary report for influenza season due May 15

Comparison of NHSN with Other HCP Influenza Vaccination Data Sources

| NHSN HCP Reporting | Other HCP Data Sources |
|-----------------------------------|-------------------------------|
| Hospital-based HCP | HCP in all settings |
| Estimates for broad groups | Occupation-specific estimates |
| Facility-level summary data | Individual-level data |
| Near-census | Survey sample |
| Documentation for some elements | Self-reported |
| Tied to incentive & feedback loop | No incentive to report |
| | |

CURRENT STATUS OF REPORTING

Increase in Facilities Reporting HCP Influenza Vaccination to NHSN

| | 2012-2013 | 2013-2014 |
|------------------------------------|------------------|------------------|
| Employees | 4,226 | 4,254 |
| Licensed independent practitioners | 3,943 | 4,063 |
| Students/trainees & volunteers | 3,629 | 3,880 |

Median HCP Vaccination Coverage: 2013-2014 Influenza Season*

| | Employees | Students, trainees & volunteers | Licensed independent practitioners |
|-----------------------------|------------|---------------------------------------|--|
| No. hospitals reporting | 4,254 | 3,880 | 4,063 |
| No. (%) of HCP | 5.7M (71%) | 1.2M (15%) | 1.2M (14%) |
| Vaccinated | 90% | 92% | 72% |
| Vaccinated at facility | 80% | 43% | 29% |
| Vaccinated elsewhere | 7% | 29% | 19% |
| Contraindicated | 1% | 0% | 0% |
| Declined | 5% | 0.2% | 0.3% |
| Unknown status | 1% | 2% | 20% |

* Preliminary data; do not cite without permission.

Source: Centers for Disease Control & Prevention National Healthcare Safety Network.

Increased HCP Influenza Vaccination: 2013-2014 vs. 2012-2013 Seasons

| | 2013-2014 | Compared to 2012-2013* |
|------------------------------------|-----------|---------------------------|
| Employees | | |
| Vaccinated | 90% | Increased |
| Unknown | 1% | Similar |
| Students/trainees & volunteers | | |
| Vaccinated | 92% | Increased |
| Unknown | 2% | Similar |
| Licensed independent practitioners | | |
| Vaccinated | 72% | Increased |
| Unknown | 20% | Decreased |

* Noted differences are ≥ 5 percentage points.

Source: Centers for Disease Control & Prevention National Healthcare Safety Network.

YEAR ONE EVALUATION RESULTS

Structure of Year One Evaluation of NHSN HCP Influenza Vaccination Reporting

- **CDC and ORISE conducted a mixed-methods evaluation of the first year of reporting for HCP influenza vaccination**
 - Semi-structured interviews with sample of hospitals
 - Internet-based survey of 1,000 hospitals
 - Stratified sampling by bed size and census region
- **Evaluation conducted February – September 2013**
 - Theme saturation reached at 46 interviews
 - Survey response rate of 68% (n=680)
 - Results of evaluation being drafted for publication

Brief Results: Qualitative Evaluation

- **Hospitals used multiple strategies to collect data:**
 - Develop new or adapt existing databases
 - Collaborate across departments to share information
- **Facilitators of data collection:**
 - Small number of HCP at facility
 - Data collection systems in place / prior experience
 - Notifying HCP of data collection requirements in advance
- **Challenges to data collection:**
 - Large number of HCP in facility, particularly non-employees
 - Lack of tracking system or difficulty getting data on non-employees
 - Difficulty in tracking HCP who work in facility irregularly
 - **Difficulty identifying HCP in facility for ≥ 30 days**

Brief Results: Quantitative Evaluation

- **Quantitative results bear out qualitative findings**
- **Paper records more common than electronic for all HCP**
- **Key reported barriers to data collection were:**
 - Time & resource commitment
 - Counting & gathering data on licensed independent practitioners
 - Irregular schedules, multiple facilities and data sources
 - Documentation for HCP vaccinated elsewhere
- **Majority of facilities perceived data as “very accurate” for all HCP groups**

Successes and Challenges of HCP Influenza Vaccination Reporting through NHSN

▪ Successes

- Hospital reporting is largely complete
- Hospitals perceive reported data as accurate
- Reported vaccination coverage has increased since 2012-2013

▪ Challenges

- Hospitals remain challenged to track and report data on licensed independent practitioners
- Unclear if expansion of the measure to require additional HCP (e.g. contractors) is feasible for hospitals
- Variable hospital policies on documentation may limit comparability
- Providing training and technical assistance for 7,000+ new facilities

Future Directions for HCP Influenza Vaccination Reporting through NHSN

- **CMS added NQF 0431 to its quality reporting programs for additional facilities beginning October 1, 2014:**
 - Ambulatory surgery centers
 - Long-term acute care hospitals
 - Inpatient rehabilitation facilities
 - Hospital outpatient departments
- **CDC will undertake NQF measure maintenance in May 2015**
- **CMS published a proposed rule on May 6, 2014 that would incorporate NQF 0431 into quality reporting for inpatient psychiatric facilities beginning October 1, 2015**

Questions?

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