Leveraging Immunization Information Systems for Performance Measurement:
*PQA update on proposed measure for reporting of vaccinations to IIS*

Hannah Fish, PharmD, CPHQ

Who is the Pharmacy Quality Alliance?

**Mission Statement:**
Improve the quality of medication management and use across health care settings with the goal of improving patients’ health through a collaborative process to develop and implement performance measures and recognize examples of exceptional pharmacy quality.

- Created in 2006 as a public-private partnership
- Multi-Stakeholder, Member-Based, Non-Profit
- Transparent & Consensus Based Process
- Nationwide Measure Developer
The Shift from Volume to Value

**Medicare Fee-for-Service**

**GOAL 1:** Medicare payments are tied to quality or value through alternative payment models, and 30% by the end of 2018

**GOAL 2:** Medicare fee-for-service payments are tied to quality of care, and 85% by the end of 2028

**NEXT STEPS:** Testing of new models and expansion of existing models will be critical to reaching incentive goals


Federal Quality Improvement Programs

<table>
<thead>
<tr>
<th>Hospital Quality</th>
<th>Physician Quality</th>
<th>PAC Quality</th>
<th>Payment Models</th>
<th>Population Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Meaningful use EHR incentive</td>
<td>• Merit-based Incentive Payment (MIPS)</td>
<td>• Inpatient rehabilitation facility</td>
<td>• Medicare Shared Savings Program (ACOs)</td>
<td>• Medicare Part C</td>
</tr>
<tr>
<td>• Inpatient quality reporting</td>
<td>• Maintenance of certification</td>
<td>• Nursing Home Compare measures</td>
<td>• Hospital value-based purchasing</td>
<td>• Medicare Part D</td>
</tr>
<tr>
<td>• Outpatient quality reporting</td>
<td>• LTCH quality reporting</td>
<td>• Hospice quality reporting</td>
<td>• Physician Feedback</td>
<td>• Medicaid Adult Core Measures</td>
</tr>
<tr>
<td>• Ambulatory surgical centers</td>
<td>• Home health quality reporting</td>
<td></td>
<td>• ESRD QIP</td>
<td>• Medicaid Child Core Measures</td>
</tr>
<tr>
<td>• Readmission reduction program</td>
<td></td>
<td></td>
<td>• Innovations Pilots</td>
<td>• Health Insurance Exchange Quality Reporting System (QRS)</td>
</tr>
<tr>
<td>• HAC payment reduction program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• PPS-exempt cancer hospitals</td>
<td></td>
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<tr>
<td>• Inpatient psychiatric facilities</td>
<td></td>
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</tr>
</tbody>
</table>
HHS\(^1\) National Quality Strategy (NQS): Direction for Measure Development

PRIORITIES\(^2\):
- Health and Well-Being
- Prevention and Treatment of Leading Causes of Mortality
- Person- and Family-centered Care
- Effective Communication and Care Coordination
- Patient Safety
- Affordable Care

The Triple Aim and priority areas set the agenda for measure development, endorsement and implementation.

Healthy People
Healthy Communities

Affordable Care

Better Care

Healthy People 2020 Goals

<table>
<thead>
<tr>
<th>Vaccine Type</th>
<th>Percent of Adults Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza Age 18+</td>
<td>38.1% (Baseline) 70.0% (Goal)</td>
</tr>
<tr>
<td>Pneumococcal Age 65+</td>
<td>60.0% (Baseline) 90.0% (Goal)</td>
</tr>
<tr>
<td>Pneumococcal Age 18-64 High Risk</td>
<td>16.6% (Baseline) 60.0% (Goal)</td>
</tr>
<tr>
<td>Herpes Zoster Age 60+</td>
<td>6.7% (Baseline) 30.0% (Goal)</td>
</tr>
</tbody>
</table>

1. HHS: Department of Health and Human Services

Baseline data for influenza vaccination represents the percentage of adults who received the vaccine during the 2010-2011 influenza season (Minimum Data Set (MDS), CMS; National Health Interview Survey (NHIS), CDC/NCHS)

Baseline data for pneumococcal vaccination represents the percentage of adults in 2008 who had ever received the vaccine (National Health Interview Survey (NHIS), CDC/NCHS)

Baseline data for herpes zoster represents the percentage of adults in 2008 who had ever received the vaccine (National Health Interview Survey (NHIS), CDC/NCHS)
If you cannot measure it...
you cannot monitor it.

If you cannot monitor it...
you cannot manage it.

If you cannot manage it...
you cannot improve it

Dr. H. James Harrington

What is a Healthcare Performance Measure?

• Healthcare performance measures are tools used to quantify the quality or cost of care provided to patients and their families.

• They allow us to gauge the quality of care that is provided and help us understand whether and how much improvement activities improve care and outcomes.
# How is a Performance Measure Calculated?

## Numerator

*People who actually receive the action*

## Denominator

*People who are eligible to receive the action (such as treatment or screening)*

## Exclusions

*People who are not eligible for the action for specific, defined reasons*

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## Immunization Measures in Federal Programs

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total Federal Programs</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent IZ Status</td>
<td>4</td>
<td>PQRS; Medicaid CHIPRA; Health Insurance Marketplaces; MIPS</td>
</tr>
<tr>
<td>Childhood IZ Status</td>
<td>4</td>
<td>PQRS; Medicaid CHIPRA; Health Insurance Marketplaces; MIPS</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>1</td>
<td>PQRS</td>
</tr>
<tr>
<td>HPV in females</td>
<td>1</td>
<td>Medicaid CHIPRA</td>
</tr>
<tr>
<td>Influenza</td>
<td>9</td>
<td>Hospital Inpatient Quality Reporting, Inpatient Rehabilitation Facility, Nursing Home Compare Measures, LTCH Quality Reporting, Home Health Quality Reporting, Medicare Shared Savings Program, Medicaid Adult Core, Health Insurance Marketplaces, Medicare Part C</td>
</tr>
<tr>
<td>Influenza Healthcare Professionals</td>
<td>8</td>
<td>Hospital Inpatient Quality Reporting, Outpatient Quality Reporting, Ambulatory Surgical Center Quality Reporting, Inpatient Rehabilitation Facility, LTCH Quality Reporting, PPS Exempt Cancer Hospitals, Inpatient Psychiatric facilities, ESRD QIP</td>
</tr>
<tr>
<td>Influenza Screening</td>
<td>4</td>
<td>PQRS; Home Health Quality Reporting, Medicare Shared Savings Program, MIPS</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>6</td>
<td>Hospital Inpatient Quality Reporting, PQRS, Home Health Quality Reporting, Medicare Shared Savings Program, MIPS</td>
</tr>
<tr>
<td>Pneumococcal Screening</td>
<td>1</td>
<td>Home Health Quality Reporting</td>
</tr>
<tr>
<td>Registry Submission Capability</td>
<td>1</td>
<td>Medicare and Medicaid EHR Incentive: Meaningful Use Stage 2 Core</td>
</tr>
</tbody>
</table>
Examples of Immunization Measures

Influenza Vaccination for Adults Age 18 and Older
- The percentage of adults 18 years of age and older who self-report receiving an influenza vaccine within the measurement period. This measure collected via the CAHPS 5.0H adults survey for Medicare, Medicaid, commercial populations.

Pneumonia Vaccination Status for Older Adults
- Percentage of patients 65 years of age and older who ever received a pneumococcal vaccination.

Influenza Vaccination Coverage Among Healthcare Personnel
- Percentage of healthcare personnel (HCP) who receive the influenza vaccination.

Prioritizing Measure Development
Recommended Adult Immunization Schedule

Prioritizing Measure Gaps: Adult Immunization

NQF Priorities for Measure Development

1. HPV catch-up for ages 19-26
2. TDaP/Pertussis vaccine for ages 19-59
3. Zoster vaccine for ages 60-64
4. Zoster vaccine for ages 65+
5. Composite with other preventative services
6. Composite—TDaP and flu for pregnant women
7. Composite—Influenza, pneumococcal, Hepatitis B in diabetes
8. Composite—Influenza, pneumococcal, Hepatitis B in ESRD
9. Composite—Hep A and B in chronic liver disease
10. Composite of all AHIP vaccines for healthcare workers
National Adult Immunization Plan

- Outlines actions to achieve optimal prevention of infectious diseases and their consequences through vaccination of adults
- Establishes four key goals to guide implementation and support stakeholder efforts to improve adult immunizations

Goal 1: Strengthen adult immunization infrastructure
Goal 2: Improve access to adult vaccines
Goal 3: Increase community demand
Goal 4: Foster innovation in adult vaccine development

PQA Adult Immunization Task Force
PQA Immunization Measures in Development

• Immunization Information System (IIS) Registry Reporting

• Assessment of Adult Immunization Status in Medication Therapy Management (MTM) and ACIP Compliance following Status Assessment

• Up-to-date Vaccination Status for Persons with Diabetes
Immunization Information System Reporting (IISR)

- **Description**
  - The percentage of claims for administered adult vaccinations that are recorded in the Immunization Information Systems during the measurement period.

- **Denominator**
  - A specified random sample from the eligible population of medical and prescription claims for administration of vaccines within a specific state or territory during the measurement period.

- **Numerator**
  - Of the claims included in the denominator, the number that had a matching IIS record.

Immunization Information System Reporting (cont.)

- **Data Source**
  - Prescription and/or medical claims, IIS records

- **Level of Analysis**
  - Health plan or PBM, specific to a state or U.S. territory

- **Next Steps**
  - Measure testing
Select Preliminary IISR Measure Testing Results

Table 1. Select IIR Preliminary Results

<table>
<thead>
<tr>
<th>Age (y)</th>
<th>Type of Vaccine(s) Queried</th>
<th>Type of Claim(s) Submitted</th>
<th>Type of Provider(s) Administering Vaccine</th>
<th>Documentation of Vaccination Present in the IIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Hepatitis B Immune Globulin</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>yes</td>
</tr>
<tr>
<td>49</td>
<td>Mening Vac A,C,Y-W-135 Dip/Pf</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>yes</td>
</tr>
<tr>
<td>18</td>
<td>Measles, Mumps, Rubella, &amp; V</td>
<td>Medical</td>
<td>Family Practice</td>
<td>yes</td>
</tr>
<tr>
<td>54</td>
<td>Hemophilus Influenza B Vacc</td>
<td>Medical</td>
<td>Family Practice</td>
<td>yes</td>
</tr>
<tr>
<td>18</td>
<td>Pneumococcal Conjugate Vacc</td>
<td>Medical</td>
<td>Rheumatology</td>
<td>yes</td>
</tr>
<tr>
<td>19</td>
<td>Hepatitis B Virus Vaccine/Pf</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>yes</td>
</tr>
<tr>
<td>42</td>
<td>Hepatitis A Virus Vaccine/Pf</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>no</td>
</tr>
<tr>
<td>54</td>
<td>Influenza Virus Vaccine, Who</td>
<td>Medical</td>
<td>Family Practice</td>
<td>no</td>
</tr>
<tr>
<td>32</td>
<td>Flu Vaccine Ts 2014-15 (4 Yr +)</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>no</td>
</tr>
<tr>
<td>90</td>
<td>Diph,Pertuss(Acell),Tet Vac/Pf</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>no</td>
</tr>
<tr>
<td>56</td>
<td>Hepatitis B Virus Vaccine/Pf</td>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>yes</td>
</tr>
</tbody>
</table>

Challenges and Barriers to Implementation

- State variability in IIS reporting requirements
- IIS data quality and matching
- Implementation of standards and best practices
- Bidirectional capabilities
Questions?

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