Opportunities for Developing Measures for Adult Vaccines

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Why Quality Measures? VA Program Demonstrates Success of Measurement to Improve Vaccination Rates

In 1995, the VA developed and implemented performance measures to improve flu and pneumonia vaccination rates in VA hospitals nationwide.

<table>
<thead>
<tr>
<th></th>
<th>1995 (%)</th>
<th>2003 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumococcal</td>
<td>20%</td>
<td>28%</td>
</tr>
<tr>
<td>Influenza</td>
<td>85%</td>
<td>70%</td>
</tr>
</tbody>
</table>


Results
- Immunization rates for both diseases increased substantially.
- Geographic and other variations were substantially reduced.
- During this time, pneumonia hospitalization rates decreased by 50% among elderly VA patients, but increased among Medicare enrollees by 15%.
- It is estimated that the VA saved $117 for each vaccine administered.
There are Several Barriers for Adult Immunizations That Need to be Addressed to Facilitate Measure Development

A number of factors create barriers to access to adult vaccines

- In the pediatric population, state mandates for school participation and other programs have been effective in overcoming many barriers
- ACA will remove some barriers, but measurement barriers exist
- Ability of expanded measures to demonstrate desirable attributes

Development of vaccine quality measures will be a good first step toward incentivizing providers by delivering actionable information that will support systems for improved clinical performance

Few ACIP Recommendations Have Been Translated Into Quality Measures

<table>
<thead>
<tr>
<th>ACIP Vaccine Recommendation</th>
<th>Healthy Adults</th>
<th>At Risk Adults</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pregnancy</td>
<td>Low Immunity</td>
<td>Greater Exposure</td>
</tr>
<tr>
<td>Tdap</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>N/A*</td>
<td></td>
<td></td>
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<tr>
<td>Influenza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>N/A*</td>
<td></td>
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<tr>
<td>HPV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>N/A*</td>
<td>N/A*</td>
<td></td>
</tr>
<tr>
<td>Zoster</td>
<td>N/A*</td>
<td>N/A*</td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td>N/A*</td>
<td>N/A*</td>
<td></td>
</tr>
<tr>
<td>Meningococcal</td>
<td>N/A*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* N/A denotes that vaccination for this specific sub-population is not recommended by ACIP or is contraindicated for the vaccine
HPV: Human Papillomavirus, MMR: Measles, Mumps, Rubella; Tdap: Tetanus, diphtheria, and pertussis
Note: Measure search was conducted on the websites of National Quality Measures Clearinghouse and National Quality Forum. ACIP recommendations used are the 2011 United States Adult Immunization Schedule, available at ACIP’s website.
In Order to Facilitate the Development of Adult Immunization Measures, Several Questions Must Be Addressed

1. How do we overcome infrastructure barriers to using measures?

2. How do we reduce administrative burden of new measures in a measure-heavy environment?

3. How do we elevate adult immunization as a priority topic for measurement?

How Do We Overcome Infrastructure Barriers to Adult Immunization Measure Use?

Opportunities

- Track vaccination status in patient registries across patient lifetime
- Define and validate quality indicators for population health and chronic conditions
How Do We Reduce Administrative Burden of New Immunization Measures In A Measure-Heavy Environment?

Opportunities

- Harmonize measures with and across quality improvement and value-based purchasing efforts
- Develop/revise composite measures

Creation of New/ Update of Existing Composite Measure

New or Updated Therapeutic-Specific Composite Measure (e.g., Diabetes Care Composite)

New Adult Vaccination Composite Measure (e.g., Vaccination Checklist For Healthy Adults)

How Do We Elevate Adult Immunization as a Priority Topic for Measurement?

Opportunities

- Identify advocate/leader
- Generate evidence
- Educate patients and providers

Measurement is Needed

- Quality provisions in ACA are a great driver for continued focus on measures at the national and state level
Thank You!

- For additional information, please contact Tilithia McBride at:
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  - (202) 459-6251

Appendix: Key Findings from Adult Immunization Quality Measures Landscape
Overview of the Adult Immunization Quality Measure Environment

**Evidence**
- Despite ACIP’s recommendations for adult vaccines, rates remain low
- Quality measures have been identified as a vehicle to increase utilization

**Measure Development**
- Few ACIP recommendations have been translated into quality measures
- Beyond flu/pneumonia, 3 measures exist for hepatitis B; none for Tdap
- Future measures could be developed as individual vaccine measures and/or composite measures of multiple vaccines

**Evaluation**
- NQF-endorsement process poses hurdles for future measures
- Currently 19 NQF-endorsed measures exist for adult vaccines
- Beyond flu and pneumonia, only hepatitis B measures are NQF-endorsed

**Use**
- Flu and pneumonia are the predominant adult vaccine measures used by both public and private organizations
- CMS and HRSA are the only organizations that use measures beyond flu and pneumonia; both use hepatitis B measures

**Value Demonstration**
- Major utilization barriers include provider reimbursement, patient tracking, and inadequate infrastructure for vaccine administration
- New care delivery models may improve care coordination and highlight need for better adult immunization programs

ACIP: Advisory Committee on Immunization Practices
CMS: Centers for Medicare & Medicaid Services
NQF: National Quality Forum
HRSA: Health Resources and Services Administration

Despite ACIP’s Recommendations for Adult Vaccines, Vaccination Rates Remain Low

**Key Findings**
- Despite the existence of clinical practice recommendations for adult immunizations from ACIP, immunization rates remain low for this population
- Quality measures have been identified as a vehicle to increase adult vaccine utilization

**Description:**
- Clinical guidelines
- Position Statements

**Key Organizations:**
- Advisory Committee on Immunization Process (ACIP)
- Centers for Disease Control and Prevention (CDC)
- Infectious Diseases Society of America (IDSA)
- American Gastroenterological Association (AGA)
Few ACIP Recommendations Have Been Translated Into Quality Measures

**Key Findings**

- Few ACIP recommendations have been translated into quality measures
- There are 3 hepatitis B measures and no measures for Tdap
- There are two potential paths for development of future vaccination measures:
  1. Individual measures
  2. Composite measures

**Description**

- Details and specifications of quality/performance measures
- Other relevant practices and frameworks

**Key Organizations**:

- AMA-PCPI - Active Health Management
- AGA - American Gastroenterological Association
- CMS - Centers for Medicare & Medicaid Services
- NCQA - National Committee for Quality Assurance
- HRSA - Health Resources and Services Administration
- CDC - Centers for Disease Control and Prevention
- Tdap - Tetanus, diphtheria, and pertussis

NQF-Endorsement Process Poses Hurdles For Development of Measures for Adult Vaccines

**Key Findings**

- Only 19 NQF-endorsed measures focus on immunizations; 2 of the 3 adult hepatitis B adult vaccine measures are NQF-endorsed
- NQF-endorsement process and evaluation criteria, including demonstrated impact, reliability, and usability, pose hurdles for future adult vaccination measures

**Key Organizations**:

- Professional Societies
- NQF
- ONC

**Description**

- Field testing and validation
- Endorsement
Flu and Pneumonia are the Predominant Adult Vaccine Measures Used by Both Public and Private Organizations

**Key Findings**
- Flu and pneumonia vaccine measures are the predominant adult vaccine measures used to evaluate public and private plans
- Of the quality initiatives evaluated, PQRS and HRSA-FQHC are the only ones that includes adult vaccine measures beyond flu and pneumonia
  - Hep B vaccine for patients with HCV (PQRS)
  - Hep B vaccine for patients with HIV (HRSA)

**Description**
- Quality improvement
- Public reporting
- Shared decision-making
- Accreditation/certification

**Key Organizations:**
- CMS
- NCQA HEDIS
- VA
- Joint Commission
- HRSA
- Private payers

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Many Barriers Have Prevented The Development and Use of Adult Vaccination Measures

**Key Findings**
- Several operational and financial barriers, including provider reimbursement, have prevented the development and use of adult vaccination measures
- New care delivery models (e.g., accountable care organizations, patient centered medical homes) may help improve care coordination and highlight need for better adult immunization programs

**Description**
- Value-based purchasing (VBP)
- Payment and delivery models
- Evidence of impact (e.g., performance measures)

**Key Stakeholders:**
- Private Payers
- CMS
- NCQA
- Academia

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NCQA: National Committee for Quality Assurance
HEDIS: Healthcare Effectiveness Data and Information Set
FQHC: Federally Qualified Health Center
HRSA: Healthcare Resources and Services Administration
PQRS: Physician Quality Reporting System
CMS: Centers for Medicare & Medicaid, NCQA: National Committee for Quality Assurance
Example 1: Possible Inclusion of Hepatitis B Vaccination as Part of a Diabetes Care Composite Measure

- ACIP’s new recommendation that adults aged 60 years or younger with diabetes should receive hepatitis B vaccine could become a part of the D5 measure*

  - Diabetes composite measure (“D5”)
    - Blood pressure <140/90 mmHg
    - LDL-C < 100 mg/dl
    - HbA1c < 8.0%
    - Documented tobacco-free status
    - Daily aspirin use
  - Hepatitis B vaccination

- Developed by Minnesota Community Measurement (MCMN), the D5 is endorsed by NQF, and has been used successfully by Minnesota to increase the “success” rate from 4 percent to more than 50 percent in some clinics
  
  > It is also currently being used by national programs such as Bridges to Excellence and is part of the CMS Medicare Shared Savings Program

* ACIP hepatitis B vaccination recommendation also includes other risk factors in addition to diabetes as well as adults who request it. ACIP: Advisory Committee On Immunization Practices
LDL-C: Low-density Lipoprotein Cholesterol


Example 2: Possible Creation of New Composite Measure from Current ACIP Recommendations

- Similar to D5 measure, a composite measure for all healthy adults* could be created from current ACIP recommendations

  - Possible Vaccine Status Composite Measure For All Adults:
    - Influenza
    - Pneumococcal
    - Tdap/Td
    - HPV
    - Varicella
    - Zoster
    - MMR

  - A vaccine composite measure could be used as a part of the AWV

- An at-risk adult* composite measure may be more difficult to create since the specifications for being at-risk vary with each vaccine preventable disease

* Healthy adults and at-risk adults are specifically defined in the adult immunization schedule for Advisory Committee on Immunization Practices (ACIP), available at ACIP’s website.
HPV: Human Papillomavirus, MMR: Measles, Mumps, Rubella; Tdap: Tetanus, diphtheria, and pertussis; ACA: Affordable Care Act

1. CMS FY 2012 Medicare Physician Fee Schedule