The Impact of an Adult Immunization Composite Measure in Indian Health Service

National Adult Immunization Coordinators Partnership
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Disclaimer and Conflicts of Interest

- The findings and opinions expressed in this presentation are those of the author and do not necessarily reflect the view of the Indian Health Service.
- The presenters have no conflicts of interest to disclose.
Overview

- Background
- Defining the Adult Immunization Composite Measure (AICM)
- Challenges and Successes
- Current Status of the AICM
- Future of an AICM
Total AI/AN population 5.2 million (1.7%)
  - AI/AN alone (2.9 M, 0.9%)
  - AI/AN in combination with another race: (2.3 M, 0.7%)

567 federally recognized tribes

65 state recognized tribes

Tribal enrollment
  - Each tribe establishes criteria for defining tribal membership
  - Blood quantum, historical documentation

List of state and federally recognized tribes:
Indian Health Service

- Part of the Dept. of Health and Human Services since 1955

- Federal health care provider for eligible AI/AN people
  - Must be a member of a federally recognized tribe (567)
  - Not an entitlement program

- Healthcare to 2.2 million AI/AN (~42% of the total AI/AN population)

- Highly de-centralized system
  - 12 administrative regions and 170 service units

- Per capita healthcare expenditures*:
  - FY 2015 IHS expenditure on user population: $3,688
  - Total CY 2014 U.S. population expenditure: $9,523

*Source: IHS 2016 Profile https://www.ihs.gov/newsroom/factsheets/ihsprofile/
Indian Health Service

Service Population: 2.2 Million
Adult Vaccine Coverage
IHS National
FY16 Q4 - FY17 Q4

Data source: National Immunization Reporting System (NIRS):
https://www.ihs.gov/NonMedicalPrograms/lhores/immunizations/index.cfm?module=immunizations&option=home
Beyond Influenza and Pneumococcal vaccine

- The adult immunization schedule has grown more complex with the recent introduction of several new vaccines.

- 2012 National Adult Influenza and Immunization Summit, NVPO and NQF all aligned with recommendations to develop and test adult immunization composite measure.

- We focused on developing a measure that included all ACIP-recommended adult vaccines for healthy adults based on age.

- Standards for adult immunization encourage ALL providers to assess, recommend, and refer/vaccinate patients for ALL vaccines.
Rationale for Composite Measure?

- Provides a broad perspective on the system of vaccination at a facility
  - Rather than a campaign to increase coverage with one vaccine, encourages a systematic approach for all vaccines

- Multiple measures make it challenging to implement broad-based immunization quality improvement activities

- “Composite measures can enhance measurement to extend beyond tracking performance on separate measures and can provide a potentially deeper view of the reliability of the care system”

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Vaccines Included</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>19–59</td>
<td>Tdap ever; Tdap or Td within 10 years (Tdap/Td)</td>
<td>Influenza</td>
</tr>
<tr>
<td>60–64</td>
<td>Tdap/Td; Zoster</td>
<td>Influenza</td>
</tr>
<tr>
<td>≥ 65</td>
<td>Tdap/Td; Zoster; Pneumococcal polysaccharide-23 (PPSV-23) or pneumococcal conjugate (PCV-13)</td>
<td>Influenza</td>
</tr>
</tbody>
</table>

Guiding Principals:
1. Focus on routine, age-based vaccine recommendations
2. Keep it simple
Adult Immunization Composite Measures *
Appropriately Vaccinated Per Age Recommendations
FY17 Q1 – FY17 Q4, IHS National

* 19-59 years with Tdap ever and Tdap/Td <10 years; 60-64 years with Tdap ever and Tdap/Td <10 years and Zoster; 65+ years with Tdap ever and Tdap/Td <10 years and Zoster and Pneumo; and 19 years and older with appropriately vaccinated per age recommendation.

Data source: National Immunization Reporting System (NIRS):
https://www.ihs.gov/NonMedicalPrograms/IHPS/immunizations/index.cfm?module=immunizations&option=home
Challenges and Successes with Implementing the Adult Immunization Composite Measure
Adult Immunization Composite Measure with and without Influenza Vaccine, by Clinical Site

Vaccine. 2018 Aug 6;36(32 Pt B):4952-4957
Contextual Analysis

- Site Visits
  - Structured interviews with providers, administrators and study coordinators

- Processes
  - Documentation of immunizations given in clinic
  - Obtaining data when given by outside providers
  - Billing, insurance coverage and patient assistance
  - Vaccine storage
  - Staff roles
Successes
Commonly identified successful staff activities included:

- All providers and staff support immunizations
- Providers want team-specific reports of immunization coverage
- Composite measure reporting improves accountability

“Our provider will help with patient education for hesitant patients or people with a lot of questions. She is very supportive of the nurse’s recommendations about which vaccines are due.”
Successes

Successful patient education and engagement included:

- Talking with patients as an effective way to overcome resistance
- Understanding that patients generally support and desire immunizations
- Patients request vaccines
- Patient education materials available

[The AICM] "helps the adult population to realize that they’re important“... "awareness increased and the nursing staff was more apt to try to ... encourage those vaccines."
Challenges

Commonly identified challenges included:
- Storage, handling and cost of herpes zoster vaccine (Zostavax®)
- Patient education
- Overcoming vaccine hesitancy

"[For] everything that we produce there are maybe 30 things that they get on their way out that is saying the opposite".
Recommendations

- Develop uniform processes around immunization
- Provide visual displays such as graphs of immunization trends
- Make sure to set up EHR reminders before using the AICM
- Provide training presentation for nurses on Adult Immunizations
Current Status of the Adult Immunization Composite Measure in Indian Health Service
Percent Coverage for AICM by Age Group and Overall, IHS GPRA Results, 2017

Data from 165 Health Programs

Data Source: IHS Clinical Reporting System (CRS)

GPRA: Government Performance and Results Act
Percent Coverage for AICM by Age Group and Overall, IHS Area “A” GPRA Results, 2017

Data from 6 facilities

Data Source: IHS Clinical Reporting System (CRS)
GPRA: Government Performance and Results Act
Percent Coverage for AICM by Age Group and Overall, IHS Clinic “A” GPRA Results, 2017

Data Source: IHS Clinical Reporting System (CRS)  GPRA: Government Performance and Results Act
Future Outlook
National Context – The time is now

National interest in establishing additional adult immunization quality measures

- National Adult Immunization and Influenza Summit
  - Quality Measures Working Group 2012
  - Pilot project to assess feasibility and evaluate usefulness of an adult composite measure (VA and IHS)
- Contract with the National Committee for Quality Assurance (NCQA - keepers of the HEDIS set) to develop and evaluate:
  - Maternal Immunization Composite Measure (Tdap, Flu)
  - Adult Immunization Composite Measure

2019 HEDIS Measure

- Inclusion of an Adult Immunization Composite Measure
AICM Measure in your State

- How can you implement an adult immunization composite measure in your state?
  - Monitor your adult coverage rates on a regular and consistent basis (e.g. monthly, quarterly)
  - Develop similar parameters for an ACIM within your IIS
  - Develop reports within your IIS for your program and providers to display adult coverage rates
    - Breakdown by age groups and geographic areas
  - Compare the rates between the age groups to identify gaps in coverage
  - Provide feedback on the adult individual or composite rates with your providers regularly (e.g. post online, newsletter, etc.)

- Provide education and training to your providers on adult immunizations
- Compare other national data measures to your state IIS (e.g. HEDIS) adult rates
Conclusions

- We developed and implemented an Adult Immunization Composite Measure capable of assessing the overall function of adult immunization services at all levels of IHS
- We identified factors related to successes and challenges in implementing this measure
- The measure is flexible and can be modified as adult immunization recommendations change
- We are already developing new recommendations for herpes zoster vaccine
Thank you!

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