Using the AAFP Office Champions Quality Improvement Model to Improve Adult Immunization Rates

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Dr. Epling earned his medical degree from Tufts University School of Medicine in Boston, Massachusetts. He completed an internship at the U.S. naval hospital in Charleston, South Carolina, and a family medicine residency at the Medical University of South Carolina in Charleston. He also completed a faculty development fellowship in evidence-based practice, policy, and education at State University of New York (SUNY) Upstate Medical University in Syracuse and a vaccine science fellowship with the AAFP. Dr. Epling maintains an active clinical family medicine practice and has taught family medicine, evidence-based medicine, and clinical prevention to all levels of learners throughout his career. His principal research interests include evidence-based medicine; translation of research into practice; quality improvement and human performance technology; and technology integration in medical education and practice. His clinical research areas of focus include clinical preventive services (i.e., screening, vaccination, preventive medication, behavioral risk counseling) and intimate partner violence. He has participated in several vaccination-related work groups on the state and national levels, and he joined the USPSTF in January 2016.
Learning Objectives

1. Make strong recommendations for adult vaccines in their practice.

2. Reduce missed opportunities to immunize.

3. Implement evidence-based strategies to improve immunization rates.

Audience Engagement System

Step 1

Step 2

Step 3
Delivering Clinical Preventive Services

• Is hard
  – Time crunch
  – Informed consent
  – “Uninformed dissent”

Delivering Clinical Preventive Services

• Is important
  – Improves health
  – Pay for performance
  – Borsky, et al (2018) – 8% of adults receive all recommended preventive services

Adult Vaccines

• Barriers:
  – No infrastructure (like for kids)
  – Payment is way too variable
  – Schedules are confusing

ACIP Adult Immunization Schedule
ACIP Adult Immunization Schedule

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Pregnancy</th>
<th>Condition-based</th>
<th>Congenital or perinatal HIV infection</th>
<th>Immunocompromising condition (including ALL &amp; many others)</th>
<th>Any other condition</th>
<th>Chronic liver disease</th>
<th>Chronic kidney disease</th>
<th>Diabetes</th>
<th>Human immunodeficiency virus (HIV) infection</th>
<th>Immunosuppressive therapy</th>
<th>Non-HIV immunosuppressive therapy</th>
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<tbody>
<tr>
<td>IPV or EV</td>
<td>3 doses</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>3 doses</td>
<td>YES, annually</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HepB</td>
<td>3 doses</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>1 dose only on day of birth</td>
<td>YES, annually</td>
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<td></td>
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<tr>
<td>MMR</td>
<td>1 dose at age 1, 2, or 4 years</td>
<td>PRECAUTION</td>
<td>1 dose at age 1, 2, or 4 years</td>
<td>1 dose at age 1, 2, or 4 years</td>
<td>YES, annually</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Var</td>
<td>4 doses</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>4 doses</td>
<td>YES, annually</td>
<td></td>
<td></td>
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<tr>
<td>HPV</td>
<td>2 doses at age 15 to 26 years</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>2 doses at age 15 to 26 years</td>
<td>YES, annually</td>
<td></td>
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<tr>
<td>MCV4</td>
<td>4 doses</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>4 doses</td>
<td>YES, annually</td>
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<td></td>
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<tr>
<td>PCV13</td>
<td>1 dose</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>1 dose</td>
<td>YES, annually</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPSV23</td>
<td>1, 2, or 3 doses depending on age and indication</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>1, 2, or 3 doses depending on age and indication</td>
<td>YES, annually</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemoph F</td>
<td>2 or 3 doses depending on vaccine</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>2 or 3 doses depending on vaccine</td>
<td>YES, annually</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Haemoph Y</td>
<td>2 or 3 doses depending on vaccine</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>2 or 3 doses depending on vaccine</td>
<td>YES, annually</td>
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<tr>
<td>MMR2</td>
<td>2 or 3 doses depending on indication, then booster every 5 yrs if risk remains</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>2 or 3 doses depending on indication, then booster every 5 yrs if risk remains</td>
<td>YES, annually</td>
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<td></td>
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<tr>
<td>OPV</td>
<td>3 doses</td>
<td>CONTRAINDED</td>
<td>PRECAUTION</td>
<td>3 doses</td>
<td>YES, annually</td>
<td></td>
<td></td>
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</tbody>
</table>

Adult Vaccines

• And we don’t do well...
Adults Vaccines: Pneumococcal

BRFSS data

[Map and chart showing vaccination coverage by state and year for pneumococcal vaccine]

https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/data-reports/general-population/trend/index.html

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Adult Vaccines: VZV

[Map and chart showing vaccination coverage by state and year for VZV vaccine]

https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/data-reports/general-population/trend/index.html
2018 AAFP Immunization Survey

- Sent to 5000 US FPs, 13% response rate
- 92% vaccinate – more adults than kids
- 32% use Immunization Info System
- 34% refer elsewhere for imms (pharmacy)
- Cost is biggest barrier to patient imms

Poll Question 1

Which statement is true about adult vaccinations in family medicine?

A. There are five different schedules for adult vaccines.
B. Cost and coverage are major barriers to vaccines.
C. Rates of adult vaccination are generally higher than those of child vaccination
D. The recommended schedule is simple
AAFP Office Champions Projects

- Child and Adolescent (2014)
- Adolescent (2015)

AAFP Child/Adol Office Champs

- Practice assessment, manual, support, METRIC modules
- 19 practices completed
- Small-modest increases in vaccine rates
- Helpful: Strong physician recommendations, AAFP resources, reminders and standing orders, schedules in exam rooms
AAFP Adolescent Office Champs

- Practice assessment, manual, support, METRIC modules
- 20 practices, notable increases in rates
- **Helpful**: Strong physician recommendations, AAFP resources, reminders and standing orders, schedules in exam rooms (similar to child/adol)

AAFP Adult Immunization Champions Project

- 25 practices
- Mostly family medicine (some multispecialty)
- 2 chart reviews (active pts)
- Flu, VZV, PCV13, PPSV23
- Rates for all vaccines increased from 16-32% above baseline
AAFP Adult Immunization Champions Project

• Champions – physician and practice staff
• In-person champion sessions
  – start and end of project
• Regular listserv communication, encouragement

AAFP Adult Immunization Champions Project

• Strong Provider Recs for Vaccines
• Reducing Missed Opportunities
• Increasing use of IIS
• Implementing evidence-based strategies
• Focus on vulnerable populations (SDH)
Poll Question 2

The AAFP Adult Immunization Champions Project encouraged ALL BUT WHICH of the following?

A. Focus on vulnerable populations  
B. Reducing missed opportunities for vaccines  
C. Dismissing vaccine hesitant patients from practice.  
D. Increasing use of immunization info systems

AAFP Adult Immunization Champions Project

• Action plans adopted by practices:
  – Immunization status in routine clinical encounter (16)  
  – Using IIS (16)  
  – Using EHR reminders/alerts (16)  
  – Specific notifications to patients about vaccines (17)  
  – Provider education about vaccines (9)  
  – Standing orders, extended hours (23)
AAFP Adult Immunization Champions Project

• Barriers: Data
  – Communication with pharmacies, health depts
  – Reminder/alert fatigue
  – Transient populations
  – Entry from fax/paper difficult
  – Bidirectional communication with IIS lacking

• Barriers: Logistical
  – Unable to do standing orders
  – Difficult for patient to get to health department
  – Pts selectively refusing vaccines
  – Educating patients that adults need vaccines too
  – Timing of pneumococcal vaccines
  – RZV availability, ? need over VZV
AAFP Adult Immunization Champions Project

• Worked well
  – Practice culture (no tolerance for vaccine hesitancy)
  – Video of practice physicians recommending vaccines
  – "every visit is an opportunity"
  – "AMA forms" to decline vaccines
  – Community partnerships - data sharing, etc.
  – Community education about vaccines

FPM – 5 steps for vaccines

KEY TACTICS FOR IMPROVING FLU VACCINATION RATES

1. Find a champion
2. Use standing orders
3. Optimize your documentation
4. Provide regular reminders
5. Give ongoing feedback

Standing Orders

ELEMENTS OF A STANDING ORDER FOR VACCINES

- Which populations should receive the vaccine.
- Who should not receive the vaccine based on indications, contraindications, or precautions.
- How to administer the vaccine (including vaccine name, dosage, and route of administration).
- What information is required by federal law (e.g., the Vaccine Information Statement).
- How to document the vaccination in the medical record.
- What medical emergencies may occur during vaccine administration and how to manage them.
- How to report adverse events that occur after vaccine administration.


"Evidence-based Interventions"

- Patient reminder/recall systems

- Enhanced access (home visits, free vax)
- Physician payment, reminders, audit/feedback
  - Thomas RE, Lorenzetti DL. Interventions to increase influenza vaccination rates of those 60 years and older in the community. Cochrane Database of Systematic Reviews. 2018;(5). doi:10.1002/14651858.CD005186.pub4
Poll Question 3
Which of the following works well to increase vaccinations rates in practice?

A. Patient reminder/recall systems
B. Reserving vaccinations for health maintenance visits only
C. Encouraging providers to stay silent about vaccines
D. Restricting vaccine access to the office only

Online Vaccination Resources

- https://www.cdc.gov/vaccines/
- http://www.nfid.org/about-vaccines
- http://www.immunize.org/
AAFP Vaccine Science Fellowship

• Develop a cadre of family physicians interested in and knowledgeable about vaccines - ultimate goal of increasing immunization rates.
• 10th anniversary in 2019!
• ~20 family physicians completed
• Work in local, state and national positions

Practice Recommendations

• Make strong physician recommendations for vaccines
• Orient practice culture to promote vaccines
• Think vaccines at routine visits
• Implement: standing orders, patient/provider reminders, audit/feedback
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Questions