Welcome!

- Welcome to ACP’s webinar on the Quality Improvement Training Program for Residents in Adult Immunization!

- House-keeping items:
  - We are recording today’s webinar.
  - **Please keep your phone on mute when not talking.**
  - Please hold your questions to the end of the presentation.
  - Feel free to use the chat feature on the right side of your screen to ask questions.
Today’s Speakers

- **Dr. Robert H Hopkins, Jr., MD, FACP**
  - Professor of Internal Medicine and Pediatrics and Director of the Division of General Internal Medicine at the University of Arkansas for Medical Sciences

- **Rebecca Gehring, MPH**
  - Associate, Center for Quality, American College of Physicians

Learning Objectives:

- Learn about ACP’s resident training materials focused on quality improvement and adult immunization
- Understand how to use the prepared materials in your training program and setting
- Learn best practices and lessons learned from using the materials
Why Adult Immunization is Important

Dr. Robert H Hopkins, Jr., MD, FACP

Why Adult Immunization

- Vaccine preventable diseases (VPD) kill more Americans annually than traffic accidents, breast cancer, or HIV/AIDS
  - Most physicians recognize value of childhood immunization
  - Morbidity and mortality is higher in adults from VPD
- Adult immunization rates are far lower than national goals
- Common measure of quality preventive care
  - Inpatient and outpatient
  - Adult, obstetric, and pediatric
  - Primary and specialty care
- Many elements in process which can be improved
  - Front desk, nursing/MA, physician, and checkout
### Adult Vaccination Rates = POOR!

**Data:** NFS 2013, NHIS 2012

<table>
<thead>
<tr>
<th>Vaccine [Population]</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td></td>
</tr>
<tr>
<td>Influenza [Early 2013 – 2014] – All Adults</td>
<td>39.0%</td>
</tr>
<tr>
<td>[All] 18 – 49 years</td>
<td>31.4%</td>
</tr>
<tr>
<td>[All] 50 – 64 years</td>
<td>39.1%</td>
</tr>
<tr>
<td>≥ 65 years</td>
<td>61.8%</td>
</tr>
<tr>
<td>HCW [19 – 64 years]</td>
<td>62.9%</td>
</tr>
<tr>
<td>PPS23 &amp; PCV13</td>
<td></td>
</tr>
<tr>
<td>High risk 19 – 49 years</td>
<td>20.0%</td>
</tr>
<tr>
<td>≥ 65 years</td>
<td>59.9%</td>
</tr>
<tr>
<td>Tetanus/Pertussis</td>
<td></td>
</tr>
<tr>
<td>[19 – 64 years, received past 10 years]</td>
<td>64.2%</td>
</tr>
<tr>
<td>Shingles [Zoster] age 60+</td>
<td>20.1%</td>
</tr>
<tr>
<td>Hepatitis B Vaccine</td>
<td></td>
</tr>
<tr>
<td>[High risk 19 – 49 years]</td>
<td>35.3%</td>
</tr>
<tr>
<td>HPV Vaccine</td>
<td></td>
</tr>
<tr>
<td>[women 19 – 26 years]</td>
<td>34.5%</td>
</tr>
</tbody>
</table>

Disparities and Adult Vaccination Rates

**Data:** NFS 2013, NHIS 2012

<table>
<thead>
<tr>
<th>Vaccine [Population]</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td></td>
</tr>
<tr>
<td>Influenza [Early 2013 – 2014] – All Adults</td>
<td>39.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>37.3%</td>
</tr>
<tr>
<td>White</td>
<td>39.8%</td>
</tr>
<tr>
<td>Black</td>
<td>34.6%</td>
</tr>
<tr>
<td>Other</td>
<td>40.7%</td>
</tr>
</tbody>
</table>

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[Links to data sources]
Adult Immunization and Performance Measures

- Adult immunization activities are HEDIS measures

<table>
<thead>
<tr>
<th>HEDIS 2015 Measures</th>
<th>Commercial</th>
<th>Medicaid</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu vaccination for adults [18 – 64]</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Flu vaccination for adults [65+]</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>Pneumococcal vaccination status for older adults</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
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Quality Improvement Training Program for Residents in Adult Immunization: Overview

Rebecca Gehring, MPH
Training Program Overview

- Designed to teach residents:
  - Science of adult immunizations
  - Provide evidence-based strategies to increase vaccination rates
  - Quality improvement skills
- This program will help your program meet the ACGME requirements for quality improvement in ambulatory and inpatient settings
- Piloted at Johns Hopkins University Hospitals and the University of Arkansas for Medical Sciences
Training Program Materials

- **Facilitator Guide**
  - Assist program faculty in delivering content
  - Includes information on:
    - Audience and setting
    - Equipment and materials
    - Timing and instruction of the program
    - Active learning tools
- **Quality Improvement (QI) Project Examples**
  - Detailed instructions to develop quality improvement cycles
  - ‘Real-world’ practice based examples

Training Program Materials (cont.)

- **Two Modular Presentations** (customizable)
  - PowerPoint format, includes patient case studies
    - The Science of Adult Immunization
    - Quality Improvement in Adult Immunization
- **Program Evaluation** (customizable)
  - Assess impact of the program at your institution
- **Resource List** with basic, user-friendly links
- **Access to ACP’s QI Platform** is available (registration required)
  - Includes additional resources and QI support
Overview of Module 1

- **Science of Adult Immunization**
  - Adult immunization rates and ACIP recommended schedule
    - Vaccines: Influenza, Pneumococcal, Tdap, Hepatitis B, HPV, MMR, Varicella, and Zoster
  - Vaccination among special populations:
    - Diabetics
    - Healthcare workers
    - Pregnant women
    - The elderly

Overview of Module 2

- **Quality Improvement in Adult Immunization**
  - Standards for Adult Immunization Practice
  - Strategies to Increase Adult Immunization
  - What is Quality Improvement?
  - Example Quality Improvement Projects
  - Additional Resources
Before you start the training program...

- Consider reviewing the following resources:
  - The Advisory Committee on Immunization Practice’s Recommended Adult Immunization Schedule
  - Standards for Adult Immunization Practice from the National Vaccine Advisory Committee (NVAC)
    - [http://www.publichealthreports.org/issueopen.cfm?articleID=3145](http://www.publichealthreports.org/issueopen.cfm?articleID=3145)

Recommended Program Timeline

- Program duration is approximately six months
- Recommended timeline for program implementation:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>Month 1</td>
<td>Conduct pre-survey/baseline assessment of adult immunization in facility</td>
</tr>
<tr>
<td>Month 2</td>
<td>Present module activities and identify quality improvement activities</td>
</tr>
<tr>
<td>Month 3 – 5</td>
<td>Implement the quality improvement activity with regular monitoring of progress</td>
</tr>
<tr>
<td>Month 6</td>
<td>Conduct a post-survey/follow-up assessment</td>
</tr>
</tbody>
</table>
Lessons Learned and Best Practices

Dr. Robert H Hopkins, Jr., MD, FACP

University of Arkansas for Medical Sciences
Implementation

- Implemented in 2014 – 2015
- Drs. Bob Hopkins and Nick Gowen
  - Started in late October
- Hosted two educational seminars presenting modules
  - First module Grand Rounds – October 2014
    - 80 Attendees
    - Faculty, Residents, Students
  - Second module – April 2015 (scheduling issue):
    - 40 Attendees
    - Residents
Activities

- **Active Learning Activity**
  - 3 interactive topic-based quizzes, on adult immunization principles, posted to residency Blog: May and June [http://uams-im.blogspot.com/](http://uams-im.blogspot.com/)
  - Posted to Residency Facebook Page: [https://www.facebook.com/uamschiefs](https://www.facebook.com/uamschiefs)

- **Clinical Decision Support**
  - Team training on immunization to non-MD staff
  - Work with IT to develop immunization best practice advisory (BPA) for EMR
  - Standing orders: Influenza, Tdap, Pneumococcal
  - Posted reminders

- **Social Media: ‘Immuni-Tweets’ @ArAdultImmDoc**
  - Posted exclusively on immunization topics, averaging 2 tweets/week

Active Learning Strategies

- **Critical to make this program**
  - Actively engage learners
  - Makes the presentation ‘locally relevant’

- **Learning strategies for group activities:**
  - Use questions to promote reflection on the material
  - Ask participants to consider the information and share ‘their take’
  - Make connections between individuals, ideas and concepts, and the various concerns or trouble spots that are raised in the discussion
  - Observe how the conversation unfolds
  - Look for participants listening intently, but not participating
Facilitation and Participation

- Discussion aimed to explore new ideas with time for thinking about how concepts might be applied to practice
- Participants should be empowered to share their views with the group to foster group learning
- At the end of each module:
  - Ask each participant to identify strategies they think will be both effective and important for increasing adult immunization
  - Needs/teams in inpatient, outpatient settings will be different but should include learners, faculty, non-MD team members
  - Barriers will not be the same in every practice setting

Resident Engagement Strategies

- Critical to learning in any generation
- Use existing communication mechanisms
  - Twitter, Google Drive, SharePoint, e-newsletters, blog, etc.
    - @ArAdultImmDoc followed by ~50 individuals at end June 2015
  - Serial quizzes on topics in modules
    - Used a Blog and Facebook
    - Three immunization quizzes
      - Average participation was 21 people per quiz
    - Next time: fewer questions, more frequently, start earlier, with incentives
Team Quality Improvement (QI) Projects

- Select a QI project focused on adult immunization
  - Team based approach
  - Teams should have varying QI experience
  - Resident/Attending ‘Champion Dyad’ is common model
- Use information from modules and QI examples to implement the projects

How to Obtain Immunization Data

- Important to understand your current immunization rates
- Helpful to teach residents how/where to find data
  - Chart Reviews: Review 10 – 20 charts for Tdap status
  - EMR Query: % DM registry patients with HBV vaccination
  - System: Influenza for inpatients 9/1-4/1
Example QI Project 1

- PCV13 is recommended for all adults 65+
  - Paid for by Medicare/MCD, Private plans [ACA Mandate]
- QI Team: Attending, 2 residents, LPN, MA Team
- Plan
  - Q1: What is PCV13 rate in 65+ adults in Resident CC?
    - Audit 20 charts of patients seen 7/1-8
    - Rate: 8 out of 20 = 40%
  - Q2: What are potential barriers to increase rate?
    - Vaccine availability, Knowledge of the provider, team, patient, or System constraints

Example QI Project 2

- DO
  - Q3: What are we going to do about this?
    - Education: Team training about standing orders and tools
- STUDY
  - Repeat Audit: 20 charts of patients seen 7/15-30
  - Rate: 7 out of 20 = 35%
- ACT
  - Continue current intervention, reassess in 1 month
  - Add a patient information poster in exam room
Lessons Learned and Best Practices

- Residents and faculty are busy
  - ‘Bite sized’ interventions > Blow up/Start over
  - Context is important for teams and projects
    - What matters to team?
    - Are all relevant ‘players at the table’?
    - Inpatient projects for inpatient focused
  - Use tools ‘your people’ are already using
  - Too much time between sessions dilutes potential effect

- Once residents buy into QI
  - Keep them engaged in process improvement
Future Uses

- Plans to use materials in 2015 – 2016 year
  - Module 1 in Grand Rounds in November
  - Followed within 4 weeks by ambulatory module sessions for Module 2
    - 4 weeks in row for all resident groups
  - Begin QI/PDSA1 on week of module 2
  - Shorter quizzes on Blog focus on ambulatory block team

Access the Materials Today!

Find the training materials here:
https://www.acponline.org/running_practice/quality_improvement/projects/residents_immunization.htm
Questions?

- For questions about the training program, please contact Rebecca Gehring at rgehring@acponline.org
- Additional Resources:
  - ACIP Adult Schedules: [http://www.cdc.gov/vaccines/schedules/hcp/adult.html](http://www.cdc.gov/vaccines/schedules/hcp/adult.html)
  - ACP Center for Quality: [https://www.acponline.org/running_practice/quality_improvement/](https://www.acponline.org/running_practice/quality_improvement/)
  - ACP Immunization App: [http://immunization.acponline.org/app/](http://immunization.acponline.org/app/)