

# ACP's Quality Improvement Training Program for Residents in Adult Immunization

Presenters:

Dr. Robert Hopkins, MD, FACP

Rebecca Gehring, MPH

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## 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.



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## 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


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

ACP Quality Connect  <http://www.cdc.gov/flu/fluview/nfs-estimates-nov2014.htm>  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6305a4.htm> 7

## Disparities and Adult Vaccination Rates

Data: NFS 2013, NHIS 2012

Vaccine [Population]	Rate
<b>Influenza</b>	
Influenza [Early 2013 – 2014] – All Adults	39.0%
Hispanic	37.3%
White	39.8%
Black	34.6%
Other	40.7%

ACP Quality Connect  <http://www.cdc.gov/flu/fluview/nfs-estimates-nov2014.htm>  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6305a4.htm>  
[http://www.isummitpartners.org/wp-content/uploads/2015/05/NAIS-spotlight-on-adult-immunization-disparities\\_4-1-15.pdf](http://www.isummitpartners.org/wp-content/uploads/2015/05/NAIS-spotlight-on-adult-immunization-disparities_4-1-15.pdf) 8

## Adult Immunization and Performance Measures

- Adult immunization activities are HEDIS measures

HEDIS 2015 Measures	Commercial	Medicaid	Medicare
Flu vaccination for adults [18 – 64]	✓	✓	
Flu vaccination for adults [65+]			✓
Pneumococcal vaccination status for older adults			✓

## 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

FOR PHYSICIANS:			MORE RESOURCES FOR:
CLINICAL INFORMATION	RUNNING A PRACTICE	EDUCATION & RECERTIFICATION	RESIDENTS & FELLOWS

Home > Running a Practice > Quality Improvement > Quality Connect

**Running a Practice**

- > [Practice Management](#)
- > [Payment & Coding](#)
- > [Physician & Practice Timeline](#)
- > [Quality Improvement](#)
- > [Quality Connect](#)
- > [Practice Assessment Tools](#)
- > [Near Miss Registry](#)
- > [Medical Lab Evaluation](#)
- > [Health Information Technology](#)
- > [Delivery & Payment Models](#)
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### Adult Immunization & Quality Improvement for Residents

ACP's Quality Connect Adult Immunization and Quality Improvement for Residents training program will teach residents about the science of adult immunizations and provide evidence-based strategies for increasing vaccination rates. Residency programs can use the program materials in ambulatory and inpatient settings to meet ACGME requirements for quality improvement.

- > [Background information and the curriculum overview](#)

#### Program and Curriculum Materials

[Facilitator Guide](#)  
A step-by-step guide, for resident program directors, that outlines how to implement the training program.

**Training Module Presentations (PowerPoint)**  
Immunization experts developed two slide decks, including sample case studies and examples that are part of the training program.

- > [Module 1 - Clinical Science of Adult Immunization](#)
- > [Module 2 - Quality Improvement in Adult Immunization](#)

[Example QI Projects](#)  
Detailed instructions on how to develop a quality improvement cycle, with real-world practice examples that support the training curriculum.

[Program Evaluation](#)  
Use this evaluation to evaluate residents who participate in the training.

[ACP Adult Immunization Resources](#)  
Visit ACP's additional adult immunization resources.

## 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
    - <http://annals.org/article.aspx?articleid=1819123>
  - Standards for Adult Immunization Practice from the National Vaccine Advisory Committee (NVAC)
    - <http://www.publichealthreports.org/issueopen.cfm?articleID=3145>
    - <http://www.cdc.gov/vaccines/hcp/patient-ed/adults/for-practice/standards/>

## Recommended Program Timeline

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

Time	Activity
Month 1	Conduct pre-survey/baseline assessment of adult immunization in facility
Month 2	Present module activities and identify quality improvement activities
Month 3 – 5	Implement the quality improvement activity with regular monitoring of progress
Month 6	Conduct a post-survey/follow-up assessment

## 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/>
  - Posted to Residency Facebook Page: <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

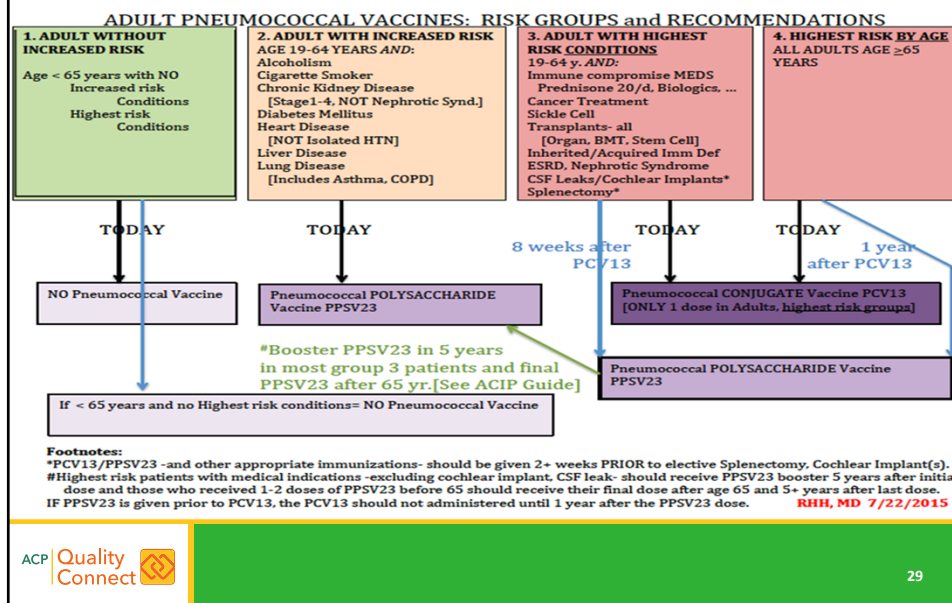
## Example QI Project 1

- 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

## Standing Order Example and Algorithm



## 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>

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## Questions?

- For questions about the training program, please contact Rebecca Gehring at [rgehring@acponline.org](mailto:rgehring@acponline.org)
- Additional Resources:
  - ACIP Adult Schedules:  
<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/>

