



# Recommendations for guide development to increase adult vaccination rates in primary care

## Introduction

This report presents an overview of physician perspectives and recommendations to improve adult vaccination rates in primary care settings. Drawing from extensive qualitative data, it outlines key challenges, solutions and actionable steps across multiple domains including education, workflow, reminders, resources, updated formularies and vaccine schedules and cross-cutting solutions. Direct quotes from physicians are included to illustrate real-world experiences and support the recommendations.

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## 1. STAFF EDUCATION

### Challenges

- Lack of standardization and variation in staff training around vaccines.
  - *“... providing a more streamlined, standardized way to educate our staff so that everyone feels comfortable talking about vaccines would definitely change the culture of how we educate our patients in the clinic.”*
- Assumptions that staff and clinicians uniformly support and/or are educated about vaccines, leading to inconsistent messaging, which can contribute to patient confusion and reduced trust.
  - *“Whatever few minutes I have with a patient isn’t enough time to be able to make it a valid case for vaccine ... it presents to the patient a very confusing scenario of divergent opinions.”*
- Medical assistants (MAs) often lack licensing to administer vaccines, creating bottlenecks.
  - *“Not all of our medical assistants are MA licensed ... a licensed provider had to do all the vaccinations and that was just taking a lot of extra time.”*
- Staff may not recognize their role in vaccine promotion, despite being the first point of contact within the practice.
  - *“I don’t know if all of them recognize how important of a role they can play.”*
- Knowledge gaps about vaccine-preventable diseases due to their re-emergence.
  - *“You’re talking about a population of providers that they don’t know the hallmarks of measles. They’ve not seen it.”*

### Solutions and actionable steps

- Conduct regular in-service trainings with incentives (e.g., stipends, breakfast sessions).
  - *“It was really useful ... for the staff to know what was it that they were giving, but also for us clinicians to remember how bad it was in the past.”*
- Empower staff with education and clear protocols to support vaccine conversations.
  - *“I think empowering the other members of the team to do some of that education could be really helpful.”*
- Find and train with vaccine champions to capitalize on education and workflow improvements.
- Create leadership roles for vaccine champions to support education and workflow.
- Provide visual guides and retraining on vaccine-preventable diseases.
- Have strong buy-in from leadership/health care system to support vaccines; make vaccine counseling and administration a priority.

## 2. WORKFLOW

### Challenges

- Inconsistent protocols and missed opportunities during visits.
- Limited MA engagement in vaccine review during intake.
  - “MAs ... can often review vaccines ... that was sort of an organizational change we had.”
- Lack of reminders for multi-dose vaccines for the human papillomavirus vaccine.
  - “Just figuring out how to remind people to come back for their third dose ... often gets forgotten.”

### Solutions and actionable steps

- Engage the whole team in vaccine promotion. Create a strong work environment supporting vaccine promotion, education and administration.
  - “The whole team needs to be on the same page ... setting it up from multiple people on the team improves that uptake.”
- Streamline workflow with pre-visit information and consistent protocols.
  - “Keeping people in the exam room until they got the vaccine ... really makes a huge difference.”
- Normalize vaccines through practice culture and events.
  - “Fall vaccine Saturday ... therapy dogs and balloons ... really effective.”
- Use EHR tools to flag overdue vaccines and support opportunistic vaccination.
  - “Having those tools within your EHR that at least flag you ... is really helpful.”

## 3. REMINDERS

### Challenges

- Providers struggle to recall vaccine data during visits.
- Lack of tailored tools for specific patient populations.
  - “I think Epic doesn't have as much info about specific patient populations.”

### Solutions and actionable steps

- Integrate shared decision-making tools into EHRs and patient portals.
  - “If there was like a shared decision-making tool ... that would be helpful.”
- Build specific patient profiles and structured fields in EHRs.
  - “Persons who inject drugs ... having those small ... structured fields ... is a quick and easy resource.”
- Use a third party to help manage vaccine logistics.
  - “Having VaxCare to also basically do the work and keep the inventory there has been incredibly helpful.”

## 4. RESOURCES

### Challenges

- Skepticism toward government handouts and lengthy articles.
- Difficulty creating culturally appropriate materials for diverse populations.

### Solutions and actionable steps

- Provide bite-sized videos, infographics and quick fact sheets for clinicians, care teams/staff, as well as patients.
  - “I need something bite-sized ... something quick ... something I can listen to in my car.”
- Compile a list of neutral, evidence-based websites.
  - “I try to point them to the CDC ... but also nongovernment website resources.”
  - “I think it's helpful to have some nongovernment website resources.”
- Develop a repository of vaccine-specific FAQs.
- Offer suggested patient-facing language and visuals.

## 5. UPDATED FORMULARIES AND VACCINE SCHEDULES

### Challenges

- Frequent changes in vaccine standards and insurance coverage.
  - “Keeping up with vaccinations as a primary care doctor ... is definitely a giant factor in vaccine work.”
- Difficulty determining what is covered and where vaccines are available.
  - “Which insurance? What's covered? What's not covered? It's almost too much trouble figuring out. Wait a minute, can I get a pneumonia vaccine for this patient now or not? Is it going to be covered or not? Does the patient have to worry about having to pay for it? Do they have to go out to the Walgreens for it? COVID? And RSV? And all of those? Sometimes it's in our clinic, sometimes it's not.”

### Solutions and actionable steps

- Provide centralized, updated vaccine schedules and formularies.
- Create accessible tools like apps or flip books.
  - “There's an app that I use now for the pneumonia vaccine ... super easy.”
- Build a repository that includes schedules, coverage and insurance details.

## 6. SOLUTIONS (CROSS-CUTTING)

### Challenges

- Time constraints during visits limit vaccine discussions.
- Lack of standardized protocols and trained staff.

## Solutions and actionable steps

- Use nurse visits and standing orders to administer vaccines efficiently.
- Push information and forms to patients before visits to prepare them.
- Schedule preventive care appointments separate from chronic care.
- Train and empower staff to administer vaccines.
  - *“Train staff so they can vaccinate patients ... ensure all are trained.”*
- Build trust and relationships over time.
  - *“Good relationships are a good indicator of a patient following through with recommendations.”*
- Normalize vaccine messaging and use consistent language across the team.

## CONCLUSION

Improving adult vaccination rates in primary care requires a multifaceted approach that addresses education, workflow, technology and communication. By implementing standardized protocols, empowering staff, integrating reminders and providing accessible resources, practices can overcome barriers and foster a culture of vaccine promotion. The insights and quotes from physicians in this report highlight the importance of teamwork, trust and sustained engagement to achieve meaningful improvements in public health.

## Appendix

### Methods

This qualitative study classified states into categories of high- or low-vaccine uptake based on the CDC FluVaxView data for the 2023-2024 season, adults (>18 years). Participation eligibility included practicing family physicians who provide vaccinations in either high- or low-uptake states. Various networks, such as the American Academy of Family Physicians (AAFP) State Chapters, AAFP Member Services and word-of-mouth, were used for recruiting individual physicians. All participants provided informed consent prior to the start of interviews. All interviews were conducted on Microsoft Teams; each one was recorded and transcribed. Trained qualitative researchers interviewed participants from April to July 2025. Family physician input informed the interview guide before interviews began. The interview guide contained questions regarding physician views on patient reasons for not receiving vaccinations, barriers related to different populations and patient groups, potential solutions to these challenges and considerations for policy. Interviewees received \$100 in remuneration for their time and effort. Each interview lasted no more than 60 minutes. The study team created a codebook based on the interview guide. Three coders used the initial codebook to code two interview transcripts. After coding, the coders discussed discrepancies, and modifications were made. Each coder used the revised codebook to code two more transcripts. After an additional conversation, the codebook was refined, and a final test was performed. Each coder agreed on the changes after which the codebook was finalized. Atlas.ti, a qualitative software program, was used for data organization and coding. Atlas.ti was used to assess intercoder reliability, with a result of 91% agreement. Inductive content analysis was used for theme development. Quotes were edited for clarity while retaining their original meaning and tone.

This study was approved by the AAFP Institutional Review Board.

### AAFP vaccination practice resource

The following resource outlines integrating evidence-based strategies into practice. [https://www.aafp.org/content/dam/AAFP/documents/patient\\_care/covid19/clinicians-covid-sdmt.pdf](https://www.aafp.org/content/dam/AAFP/documents/patient_care/covid19/clinicians-covid-sdmt.pdf)

## Demographic characteristics (N=32)

Characteristic	n, %
<b>Credentials</b>	
MD	30, 94%
DO	2, 6%
<b>Gender</b>	
Male	10, 31%
Female	22, 69%
<b>Race</b>	
African American	1, 3%
Asian	5, 16%
Caucasian/white	22, 69%
Hispanic	1, 3%
More than 1 race	3, 9%
<b>Age</b>	
31-40	12, 38%
41-50	13, 41%
51-60	3, 9%
61-70	4, 13%
<b>Years in practice</b>	
1-10	16, 50%
11-20	9, 28%
21-30	3, 9%
31-40	4, 13%
<b>Primary community served</b>	
Frontier	1, 3%
Rural	7, 22%
Suburban	11, 34%
Urban	13, 41%
<b>Practice type</b>	
Academic medical center	6, 19%
Hospital system/employed	9, 28%
FQHC/FQHC look alike	5, 16%
Independent/private practice	12, 38%
<b>Patient population served</b>	
Predominantly nonwhite	15, 47%
Predominantly white	17, 53%
<b>Vaccine offered in practice</b>	
COVID-19	22, 69%
Influenza	30, 94%
RSV	12, 38%
Tdap/Td	30, 94%
MMR	28, 88%
Chickenpox	25, 78%
Shingles	21, 66%
HPV	28, 88%
Pneumococcal	29, 91%
Hep A	27, 84%
Hep B	28, 88%
Meningococcal	28, 88%
Hib	21, 66%
Mpox	2, 6%