



# IQIP Core Strategies

CDC Annual IQIP Training  
New IQIP Coordinators  
Day 1: May 15, 2023

Sheryl Pouech, MPH  
Public Health Analyst, Contractor

# Learning objectives

- Be able to provide an overview of the four IQIP core strategies
- Understand each strategy's rationale as to why it is a core strategy
- Become knowledgeable of best practice examples for each strategy

# Topics





- Introduction to IQIP Core Strategies
- Facilitate return for vaccination
- Leverage IIS functionality to improve immunization practice
- Give a strong vaccine recommendation (include HPV if provider has adolescent patients)
- Strengthen vaccination communications
- Overlap of core strategies
- Resources

# Introduction to IQIP Core Strategies

# Overview

- IQIP promotes and supports the implementation and improvement of **four provider-level strategies** designed to help increase on-time vaccination
- For provider locations not implementing these strategies: participation in IQIP introduces and promotes a new approaches that providers can add to their existing vaccination workflow
- For provider locations already implementing one or all of these strategies: participation in IQIP allows the opportunity to improve current strategy implementation

For Project Year 5, the IQIP core strategy *Schedule the next vaccination visit before the patient leaves the provider location* has been expanded and renamed as *Facilitate return for vaccination*.

IQIP Core Strategies	
Facilitate Return for Vaccination 	Leverage IIS Functionality to Improve Immunization Practice 
Give a Strong Vaccine Recommendation 	Strengthen Vaccination Communications 

# Breakdown of Core Strategies

Each strategy breakdown will include the following:

- Strategy overview
- Strategy rationale
- Best practices for strategy implementation
  - Not an exhaustive list
  - Examples of activities for each strategy

**Facilitate Return for Vaccination**

# Facilitate Return for Vaccination (Updated Strategy)

*Schedule the next vaccination visit before the patient leaves the provider location*



*Facilitate return for vaccination*

- On average, ***Schedule the next vaccination visit before the patient leaves the provider location*** was the least selected strategy by providers for all project years since IQIP began
- Broadened strategy to include additional methods to get patients back into the office (focusing on vaccination visits) – use of effective scheduling protocol, taking action to prevent missed opportunities, ensuring parents are aware of future appointments, and implementing reminder and recall systems



# Facilitate Return for Vaccination

## Strategy Overview

- It is essential that providers communicate with parents the importance of returning for subsequent vaccination appointments in accordance to the ACIP schedule
- This strategy focuses on implementation of clinical and clerical processes that addresses possible barriers to patients returning for vaccination

# Facilitate Return for Vaccination

## Strategy Rationale

- A 2017 [AAP clinical report](#) asserts that making families aware of when vaccines are needed and scheduling follow-up appointments before they leave are crucial steps to increase adolescent vaccination coverage
- Studies from [2010](#) and [2016](#) of seasonal influenza vaccine uptake demonstrated the success of a variation of scheduling default vaccination appointments that require parents to opt out instead of opting in
- A [2018 Cochrane review](#) of 75 studies concluded that the use of reminder and recall systems in primary care settings likely improve vaccination coverage across all age groups

# Facilitate Return for Vaccination

## Best Practices for Strategy Implementation

- **Conduct routine training** – current ACIP recommended immunization schedules to inform when to schedule patients for subsequent visits
- **Maintain accurate patient contact information** – support scheduling and reminder and recall efforts
- **Take action to prevent missed opportunities** – routinely generating lists of patient upcoming appointments using various technologies via EHR, IIS based, or scheduling software platforms; screening patients for vaccination eligibility at each visit regardless of type of visit (e.g., sick visit, well-child, sport physicals, etc.); and maintaining accurate vaccination records

# Facilitate Return for Vaccination

## Best Practices for Strategy Implementation (continued)

- **Use effective scheduling protocol** – scheduling the next appointment (e.g., well-child visit, nurse-only, etc.) prior to the patient leaving the office either in the exam room or at check-out; scheduling the next vaccination visit and the next well-child visit to occur the same day whenever possible; offering various types of appointments (e.g., nurse-only appointments, vaccination-only clinic days, etc.) where vaccinations can occur
- **Inform parents of future due dates for vaccines** – giving parents a copy of current immunization record and list of future recommended vaccines with clear due dates
- **Implement reminder and recall systems** – using more than one method (e.g., text messages, portal messages, e-mails, post cards, phone calls, etc.) to remind patients of upcoming appointments
- **Track no-shows and cancelled appointments** and contact those patients, within the same week, to reschedule

# Leverage IIS Functionality to Improve Immunization Practice

# Leverage IIS Functionality to Improve Immunization Practice

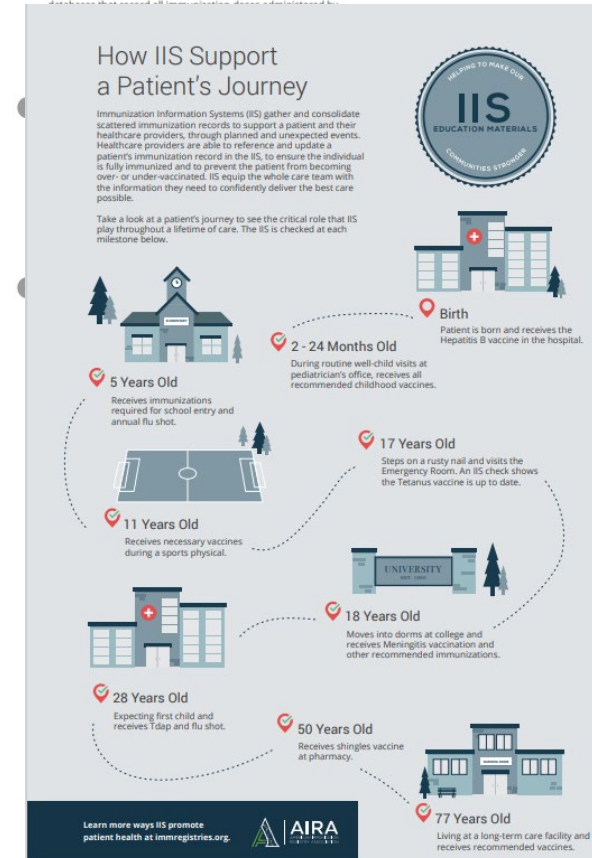
## Strategy Overview

- When providers ensure their patients' vaccination data are well-maintained in the IIS, they can use its functionality more effectively to determine appropriate patient vaccinations and self-monitor their performance
- Use of jurisdictional IIS can directly contribute to efforts to increase vaccination coverage for a provider's patient population by:
  - providing vaccination recommendations
  - provider-level vaccination coverage assessments
  - reminder/recall for patients due or overdue for their vaccinations
- IQIP consultants can help providers understand their role in ensuring IIS data for their patients are accurate, timely, and complete so that assessment reports are accurate



## IIS 101: The Basics

IIS /i-i-s/ Noun, plural: confidential, population-based, computerized database that record all immunization doses administered by...



# Leverage IIS Functionality to Improve Immunization Practice

## A note about EHR Data

If the provider considers their electronic health record (EHR) records to be more timely, complete, or accurate than their IIS records, consultants could explore:

- Rationale for the provider's perspective and options for synchronizing the data across both platforms
- Opportunities for IIS functionality to complement use of their EHR
- Options for synchronizing EHR data with IIS

# Leverage IIS Functionality to Improve Immunization Practice

## Strategy Rationale

Several studies\* describe the numerous advantages IIS offer providers in their vaccination practice:

- Timely and complete IIS data also prevent over-vaccination, as demonstrated by a 2015 [study](#) of influenza vaccination in children
- A 2021 [review](#) of studies on patient reminder and recall—which many IISs facilitate—concluded that reminder and recall is one of the most effective and cost-effective tools for both childhood and adolescent vaccine delivery

\*For more IIS studies, visit the CDC's IQIP Program's website ([IQIP Strategies | CDC](#)) for more information



# Leverage IIS Functionality to Improve Immunization Practice

## Best Practices for Strategy Implementation

- **Verify and update patient contact information** – at each appointment to support reminder and recall efforts
- **Report** – all historical and administered vaccination data to the IIS routinely to support complete and up-to-date patient records
- **Assess immunization status** – for patient active/inactive status and doses due at every patient encounter, including drop-ins and sick visits
- **Use a prompt system** – notify staff of when vaccinations are due for every patient encounter, including drop-ins and sick visits

# Leverage IIS Functionality to Improve Immunization Practice

## Best Practices for Strategy Implementation (continued)

- **Generate patient line lists** – routinely done to identify patients not up to date and overdue, to determine future due dates for vaccinations
- **Generate practice-level coverage reports** – done at regularly scheduled intervals for single vaccine and combination series for various age cohorts to assess practice performance
- **Inform parents of all future appointments** – includes future well-child visits, vaccination-only, and follow-up sick appointments, etc.
- **Use reminder and recall functionality** – to communicate with patients about due or overdue vaccines on a frequent basis

**Give a Strong Vaccine Recommendation  
(include HPV if provider has adolescent  
patients)**

# Give a Strong Vaccine Recommendation (include HPV if provider has adolescent patients)

## Strategy Overview

- On-time vaccination depends upon parents choosing to vaccinate their children, and providers play a critical role in leading parents to that decision
- Generally, parents consider their child's health care professionals to be the most trusted information source when it comes to vaccines
- This strategy focuses on the prescriber's interaction with the patient and/or parent and how the provider:
  - introduces the topic of vaccination
  - presents their vaccination recommendations to parents
  - addresses concerns

Revised January 2015

## Preparing for Questions Parents May Ask about Vaccines

Many parents won't have questions about vaccines when you give your strong recommendation and use language that assumes parents will accept vaccines for their child.

If a parent questions your recommendation, this does not necessarily mean they will not accept vaccines. They consider you their most trusted source of information when it comes to vaccines and sometimes parents simply want your answers to their questions. This sheet outlines some of the topics most parents ask about and tips for how to answer their questions.

### Questions about the vaccine schedule and number of vaccines

Some parents may be concerned that there are too many vaccines or that their child will receive too many at one time. But, they may not understand that following the recommended vaccine schedule provides the best protection at the earliest possible time against

- Share your experience of how these serious diseases still exist and explain that outbreaks still occur in the U.S. For example:
  - From year to year, measles cases in the U.S. can range from roughly less than 100 to a couple hundred. However, in 2014, health departments reported cases in 667 people from 27 states.
  - Between 1970-2000, health officials reported fewer than 8,000 cases of whooping cough each year in the U.S. But since 2010, health officials have reported between 15,000 and 50,000 cases of whooping cough each year to CDC.
- Teach parents that diseases eliminated in the U.S. can infect unvaccinated babies if travelers bring the diseases from other countries. If you need up-to-date information on specific diseases, share [Disease Fact Sheets](#) with parents.
- Remind parents that many vaccine preventable diseases can be especially dangerous for young children and there's no way to tell in advance if their child will get a severe or mild case. Without vaccines, their child is at risk for getting seriously ill and suffering pain, disability, and even death from diseases like measles and whooping cough.

*"I know you didn't get all these vaccines when you were a baby. Neither did I. However, we were both at risk of serious diseases like Hib and pneumococcal meningitis that can lead to deafness or brain damage. Today, we're able to protect your baby from 14 serious diseases before his second birthday with vaccines."*

### Questions about known side effects

It is reasonable for parents to be concerned about possible reactions or side effects listed on [Vaccine Information Statements](#). Vaccines, like any medication, can cause some side effects. Many of these effects are minor, treatable, and last only a few days.

**PARENTS MAY ASK:** *Will my child be okay if she has a side effect? I know someone whose baby had a serious reaction—will my baby too?* To respond, you can:

- Remind parents that most side effects are mild and go away within a few days.



### Questions about whether vaccines are more dangerous for infants than the diseases they prevent

Because vaccines are very effective, many parents have a case of a vaccine-preventable disease firsthand. They may wonder if vaccines are necessary and if the risks of infants outweigh the benefits of protection from vaccine-preventable diseases.

**PARENTS MAY ASK:** *Are these diseases that dangerous that my baby will catch this disease? Will ingredients hurt my baby more than possibly getting the disease?* To respond, you can:



# Give a Strong Vaccine Recommendation (include HPV if provider has adolescent patients)

## Strategy Rationale

Several studies have linked making a strong vaccination recommendation to increased vaccine confidence and acceptance, thus increasing vaccination coverage:

- Parents in a 2013 [study](#) were less likely to have concerns about vaccinating their child if they received vaccination information from their child's doctor than if they received vaccination information from other sources
- Results from a 2016 [national survey](#) of parents and adolescents showed that high-quality provider recommendations were positively associated with HPV vaccine uptake and negatively associated with refusal and delay
- A 2011 [study](#) on low HPV vaccination rates found that a lack of provider recommendations contributed to under-vaccination. Providers trained to use the presumptive announcement approach for HPV vaccination saw greater increases in HPV vaccination coverage among their patients relative to coverage among control clinics in a 2017 [randomized clinical trial](#)

# Give a Strong Vaccine Recommendation (include HPV if provider has adolescent patients)

## Best Practices for Strategy Implementation

- **Use effective communication approaches** (e.g., presumptive language, bundling approach, and sandwiching recommendations, etc.) – when recommending vaccines
- **Prevent missed opportunities** – recommending vaccines when they are due and recommending multiple vaccines at the same time if the ACIP schedule indicates the patient is due for more than one vaccine at the time of the visit
- **Listen to parents** – seek to understand the concerns behind parents' questions before responding and willing to listen and acknowledge parents' concerns plays a role in building trust

# Give a Strong Vaccine Recommendation (include HPV if provider has adolescent patients)

## Best Practices for Strategy Implementation (continued)

- **Reduce disparities/promote vaccine equity** – training prescribers to recognize the diversity within the community they serve and acknowledge the systemic, cultural and/or historic reasons some patients may have low confidence in vaccines
- **Receive routine training** – prepare for and focus on the vaccination discussion with parents on the current ACIP Recommended Routine and Catch-Up Immunization Schedules

**Strengthen Vaccination Communications**



# Strengthen Vaccination Communications

## Strategy Overview

- Patients and parents can feel more confident about vaccinating when everyone in the practice shares the same message
- Covers both internal communications (i.e., during staff meetings and staff training to refine clinic workflows) and external communications (i.e., posting flyers and patient handouts in accessible locations throughout the practice)
- From the front desk to the exam room to checkout, everyone plays an important role in supporting vaccination
  - Increase positive vaccination messaging throughout the practice
  - Provide accurate, easily accessible information on vaccines
- Combat mis/disinformation and improve vaccine confidence by using messengers to convey accurate information about vaccines
  - Engage in effective vaccine conversations with parents to ensure parents can have their concerns addressed and feel affirmed in their decision to vaccinate their child

## How Nurses and Medical Assistants Can Foster a Culture of Immunization in the Practice

CE Instructions for  
WD4272R: How Nurses and Medical Assistants Can Foster a  
Culture of Immunization in the Practice  
(Credit expires 12/4/2023)

### To receive continuing education (CE)

In order to receive continuing education (CE) for WD4272R *How Nurses and Medical Assistants Can Foster a Culture of Immunization in the Practice*, please visit [TCEO](#) at [www.cdc.gov/getCE](http://www.cdc.gov/getCE) and follow the [9 Simple Steps](#) by 12/4/2023. Pass the posttest at 80%.

If you have any questions or problems, contact CDC/ATSDR Training and Continuing Education Online via email at [ce@cdc.gov](mailto:ce@cdc.gov). You may also contact the CE Coordinator at NCIRD, Melissa Barnett at [MBarnett2@cdc.gov](mailto:MBarnett2@cdc.gov)

**PROGRAM DESCRIPTION:** Research shows that healthcare professionals are the most trusted source of information for parents when it comes to vaccines for their child. Nurses and medical assistants have a key role to play in improving vaccine acceptance and fostering a culture of immunization in the practice as they are in contact with parents throughout the office visit. This CE activity features practical strategies to improve vaccination rates in the practice, including how to deliver clear and concise vaccine recommendations and address parents' frequently asked questions. By highlighting key points before, during, and after a patient's visit to support vaccine conversations, this presentation will reinforce best practices for improving vaccination rates. Find out how to develop a culture of immunization in your practice.

**OBJECTIVES:** At the conclusion of the session, the participant will be able to:

Describe strategies nurses, medical assistants, pharmacists, and other healthcare professionals can utilize to foster a culture of immunization where all members of the practice work together to successfully communicate with parents and patients about childhood and adolescent vaccinations.

Describe the burden of vaccine-preventable diseases and the benefits of vaccination, including the role of vaccination in keeping children healthy. Describe how to deliver clear and concise vaccine recommendations for boys and girls ages 0-18, including flu vaccine during flu season.

Describe strategies to improve competence of healthcare professionals around addressing parental concerns regarding childhood and adolescent vaccinations, including how to handle conversations during outbreaks.

Increase awareness of resources to facilitate vaccine conversations with parents.

### **FACULTY/CREDENTIALS:**

Virginia Chambers, CMA, Department Faculty Chair and Program Director, Medical Assisting Program at Portland Community College  
Andrea Polkinghorn, RN Enterprise Immunization Strategy Leader, Sanford Health

ORIGINATION DATE: 12/4/2019

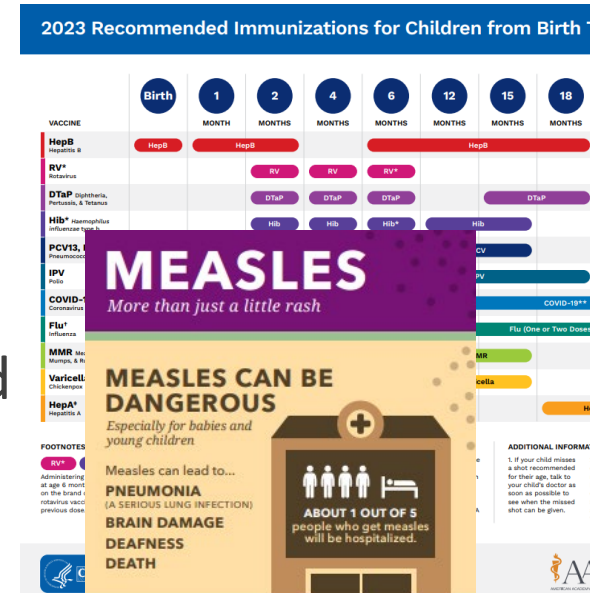
RENEWAL DATE: 12/4/2021

EXPIRATION DATE: 12/4/2023

# Strengthen Vaccination Communications

## Strategy Overview (Continued)

- Use of different approaches in vaccination messaging and promoting vaccination-related content:
  - Posting flyers and posters in the waiting room and examination room
  - Disseminating emails and newsletters including
  - Including content on practice website and social media accounts
- Includes the development or updating of a vaccination policy which is promoted with parents



**MEASLES**  
More than just a little rash

**MEASLES CAN BE DANGEROUS**  
Especially for babies and young children

Measles can lead to...  
**PNEUMONIA** (A SERIOUS LUNG INFECTION)  
**BRAIN DAMAGE**  
**DEAFNESS**  
**DEATH**

ABOUT 1 OUT OF 5 people who get measles will be hospitalized.

**SYMPTOMS OF MEASLES**  
 RASH OF TINY RED SPOTS (STARTS ON HEAD)  
 EAR INFECTION

**MEASLES IS HIGHLY CONTAGIOUS**  
Here's how it's spread...

**MEASLES IS HIGHLY CONTAGIOUS**  
Here's how it's spread...

**MEASLES IS HIGHLY CONTAGIOUS**  
Here's how it's spread...

**The Journey of Your Child's Vaccine**

Before a new vaccine is ever given to people, extensive lab testing is done that can take several years. Once testing in people begins, it can take several more years before clinical studies are complete and the vaccine is licensed.

**How a new vaccine is developed, approved and manufactured**

The Food and Drug Administration (FDA) sets rules for the three phases of clinical trials to ensure the safety of the volunteers. Researchers test vaccines with adults first.

**PHASE 1**  
20-100 healthy volunteers

- Is the vaccine safe?
- Does the vaccine seem to work?
- Are there any serious side effects?
- How is the size of the dose related to side effects?

**PHASE 2**  
several hundred volunteers

- What are the most common short-term side effects?
- How are the volunteers' immune systems responding to the vaccine?

**PHASE 3**  
hundreds or thousands of volunteers

- How do people who get the vaccine and people who do not get the vaccine compare?
- Is the vaccine safe?
- Is the vaccine effective?
- What are the most common side effects?

**FDA licenses the vaccine only if:**

- It's safe and effective
- Benefits outweigh risks

Vaccines are made in batches called lots. Manufacturers must test all lots to make sure they are safe, pure and potent. The lots can only be released once they have their safety and quality. The FDA inspects manufacturing facilities regularly to ensure quality and safety.

**Talking to Parents About Infant Vaccines**

Parents consider you their most trusted source of information when it comes to vaccines. When talking to parents about vaccines, make a strong, effective recommendation and allow time for parents to ask questions. Hearing your answers to their questions can help parents feel more confident vaccinating their child according to CDC's recommended immunization schedule.

**Are vaccines safe for my child?**  
Yes. Millions of children safely receive vaccines each year. The U.S. has a long-standing vaccine safety system that ensures vaccines are as safe as possible.

**Is there a link between vaccines and autism?**  
No. Many people want answers about the causes of autism—including me. But well-designed and conducted studies that I can share with you show that MMR vaccine is not a cause of autism.

**Why do vaccines start so early?**  
We vaccinate children early because they are susceptible to diseases at a young age. Young children also have the highest risks of complications that could lead to hospitalization or death.

**What do you think of delaying some vaccines or following a non-standard schedule?**  
There is no data to support that spacing out vaccines offers safe or effective protection from these diseases. Any time you delay a vaccine, you leave your baby vulnerable to disease. It's really best to stay on schedule.

**Why are so many doses needed for each vaccine?**  
Getting every dose of each vaccine provides your child with the best protection. Depending on the vaccine, he/she may need more than one dose to build high enough immunity to prevent disease or to boost immunity that fades over time.

**What are the side effects of the vaccines?**  
Most vaccine side effects are very minor, like soreness where the shot was given, fussiness, or a low-grade fever. These typically only last a couple of days and are treatable. Serious reactions are very rare. If your child experiences any reactions that concern you, call us.

**For more information, visit [cdc.gov/vaccines/conversations](https://cdc.gov/vaccines/conversations)**

Last updated JULY 2019

# Strengthen Vaccination Communications

## Strategy Rationale

Studies have linked providers vaccination communications to vaccination acceptance and confidence:

- This [continuing education module](#) demonstrates how positive vaccine communication from nurses and medical assistants can play an important role in supporting vaccine acceptance
- A 2017 [study](#) found increased on-time vaccination among infants whose parents were provided with web-based content about vaccines including social media options while pregnant

# Strengthen Vaccination Communications

## Best Practices for Strategy Implementation

- **Promote vaccination policy for patients** – sharing practice-wide vaccination policy with all new and existing patients and including the policy in new patient packets, displaying in waiting area and exam rooms
- **Promote patient and parent education** – including vaccine-related promotional material (e.g., practice vaccination policy, ACIP schedule, educational one-pagers, etc.) in welcome packets for new patients and in accessible locations throughout the practice
- **Update and train staff** – incorporating routine and current vaccine-related content (e.g., the ACIP schedule, increasing vaccine confidence, how to address common questions and also mis/disinformation about vaccines, etc.) in training curricula and promoting CMEs, MOCs, and other continuing education that focuses on vaccine education

# Strengthen Vaccination Communications

## Best Practices for Strategy Implementation (continued)

- **Promote vaccination on the practice's website and social media** – incorporating vaccine-related content and have protocols to ensure the content is routinely updated
- **Reduce disparities / promote vaccine equity** – making sure patient materials in languages spoken within the provider's community are available
  - Use images in communications that are inclusive of the diversity of the population served and promotes positive health behaviors
  - See [Health Equity Guiding Principles for Inclusive Communication | Gateway to Health Communication | CDC](#) for resources on promoting health equity

# Overlap of IQIP Core Strategies

# Implementation Examples of IQIP Core Strategies

## Overlapping

Best Practice Example	Overlapped Strategies
<p><b>Conduct routine training</b> on current ACIP-recommended immunization schedules</p>	<ul style="list-style-type: none"> <li>➤ <b>Facilitate Return for Vaccination</b></li> <li>➤ <b>Strengthen Vaccination Communications</b></li> </ul>
<p><b>Maintain accurate patient contact information</b> to support scheduling and reminder and recall efforts</p>	<ul style="list-style-type: none"> <li>➤ <b>Facilitate Return for Vaccination</b></li> <li>➤ <b>Leverage IIS Functionality to Improve Immunization Practice</b></li> </ul>
<p><b>Implement reminder and recall systems</b> using more than one method (e.g., text messages, portal messages, e-mails, post cards, phone calls, etc.)</p>	<ul style="list-style-type: none"> <li>➤ <b>Facilitate Return for Vaccination</b></li> <li>➤ <b>Leverage IIS Functionality to Improve Immunization Practice</b></li> </ul>
<p><b>Reduce disparities/promote vaccine equity</b> by recognizing the diversity within the patient population being served and acknowledge the systemic, cultural and/or historic reasons some patients may have low confidence in vaccines</p>	<ul style="list-style-type: none"> <li>➤ <b>Give a Strong Vaccine Recommendation</b></li> <li>➤ <b>Strengthen Vaccination Communications</b></li> </ul>

# **Available Resources to Support IQIP Core Strategy Implementation**



# Resources

- Additional resources for IQIP program coordinators and consultants are available in the **IQIP Resources Toolkit** located in the IQIP Library. Follow the path below to find CDC-developed and partner resources on each strategy:

## **IQIP Library > Program Management > IQIP Resources Toolkit**

- Once in the **IQIP Resources Toolkit**, there are sub-folders for each of the core strategies
- There is also a stand-alone Excel file called the **IQIP Resources Index**. This index contains resources for each one of the core strategies
  - Users of the index should consult the “**About This Index**” tab for navigation guidance

# Thank you

The email address for the CDC IQIP Program: [IQIP@CDC.gov](mailto:IQIP@CDC.gov)

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

