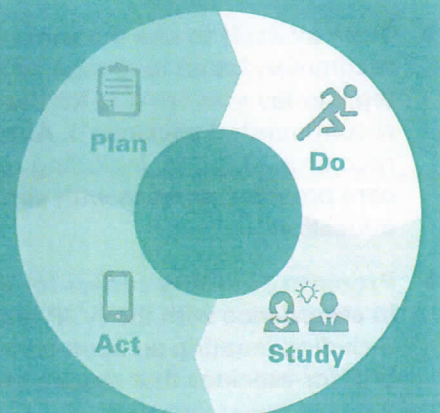# Improving Vaccination Rates:
## Examples of actions taken by Integrated Delivery Systems

The Institute for Healthcare Improvement (IHI) encourages organizations who are looking to make improvements to follow the Model for Improvement.[1]

**The Model for Improvement asks 3 questions:**

1. What are we trying to accomplish?

2. How will we know that a change is an improvement?

3. What changes can we make that will result in improvement?

...and then employs **Plan-Do-Study-Act** (PDSA) cycles for small, rapid-cycle tests of change. IHI uses the Model for Improvement in all of its improvement efforts.[1]

Plan — Do — Act — Study

## Plan: Awareness

> **Gain agreement** across your health system, department, and/or care team that preventing diseases through vaccination is important, is a priority, and should be improved.

> **Set vaccination rate improvement goals** within your health system, department, and/or patient care team.

> **Define vaccination rate measurement guidelines**, including how vaccination rates will be measured (by provider, location, in aggregate, etc.), how often rates will be run, appropriate goals and benchmarks, as well as how to raise awareness and communicate vaccination rate information.

> **Assign or designate** an individual or team of individuals to manage the improvement project.

> **Consider patient engagement strategies** to ensure vaccination rate improvement project is as successful as possible (eg, a millennial patient vs a baby boomer, a multi-dose vaccine vs a single-dose vaccine, content and communication preferences).

> **Identify** what vaccination process might be changing, who will be making the changes, and when they will be made.

> **Define** what a possible new vaccination process would look like and where the process be implemented.

> **Reach out to systems** that have done similar vaccination rate improvement projects to understand workflow, IT, process, operational, and project management considerations.

## Do: Implement the Process for Improvement

> **Measure vaccination rates** by provider team and track providers compared to the system rates.

> **Identify gaps** of care or areas of low vaccination rates (eg, adult vaccination rates, etc).

> **Review rates** with quality and prevention and wellness/vaccination committees within your system. This may lead to increased accountability, transparency, and tracking of best practices for improving rates.

> **Train and educate provider teams** on disease prevention, urgency of improving vaccination rates, and baseline rates.

> **Highlight vaccine gaps in care in the Electronic Health System (EHR)** through reminders and advanced electronic identification and engagement features:

> – before the patient visit (outreach, education, registry platforms)

> – during the visit (vaccination overdue alerts, identification through wellness templates)

> – after the visit (after-visit summaries, patient portal reminders)

# Do: **Implement the Process for Improvement** (continued)

> **Recommend same-day, on-site vaccination** for appropriate patients based on the Centers for Disease Control and Prevention's Advisory Committee for Immunization Practices (ACIP) schedule.

> **Train all staff** to use the same consistent vaccine recommendation language as appropriate (eg, "today you are due for the following recommended vaccines"). Automate these recommendations, including real-time health care provider phrases with simultaneous patient education.

> **Promote standing orders** for all vaccines that are in accordance with the ACIP recommendations including creating an open electronic order in the EHR for vaccines that require more than 1 dose.

> **Engage the patient** about vaccination and other wellness opportunities due now or due soon. This can be through a letter, phone, e-mail, live, or via the patient portal)

> – before the visit (eg, consumer education on prevention & wellness needs)

> – while waiting to see a provider (eg, rooming sheet, electronic patient integration tool)

> – after the office visit (eg, future wellness checkups)

# Study: **Building the Process for Improvement**

> **Run vaccination rates at predetermined timelines** (plan) to ascertain if goals were met.

> **Evaluate** if the process for improving vaccination rates that was incorporated worked effectively. Consider what worked well and what might need to be modified to meet vaccination rate goals more broadly.

> **Share** improvement practices to encourage similar rate improvements across locations/care teams.

> **Discuss ideas** for process improvement (including use of health information technology, education resources, communication, and outreach) at committee meetings and implement widely.

# Act: **Tracking and Measuring the Process for Improvement**

> **Commission an organizational committee** made up of clinical, operational, and information technology members to proactively address ongoing prevention and wellness improvement needs of patient population.

> **Present routine updates** to staff, showing the entire system's vaccination rate progress along with location-level and provider-level benchmarks. Include vaccine rates by patient diagnosis disease, if appropriate, to capture patients at increased risk for vaccine-preventable disease due to underlying chronic conditions.

> **Post** care team's and provider's vaccination rates in a dashboard in the EHR to increase awareness of changing rates and allow for celebration.

> **Communicate and train** the staff on updates to vaccination process.

> **Publish** vaccination rate improvement project results for other systems to learn and replicate.

**References: 1.** Institute for Healthcare Improvement (IHI). Science of improvement. http://www.ihi.org/about/Pages/ScienceofImprovement.aspx. Accessed February 7, 2018.

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