

Population Health Management: Focus on Vaccination

GEISINGER HEALTH SYSTEM

Geisinger Health System is one of the nation's largest integrated health service organizations, widely recognized for its innovative use of the electronic health record and the development of innovative care delivery models. Serving more than 3 million residents throughout 45 counties in central, south-central and northeast Pennsylvania, and in southern New Jersey with the addition of AtlantiCare, Geisinger has repeatedly garnered national accolades for integration, quality, and service.

For decades, Geisinger Health System has been a leader in re-engineering care delivery. A leader in care delivery and health care innovations, Geisinger Health System has leveraged an approach to care delivery that helps to enhance patient outcomes.

Geisinger is one of the country's "most wired" health care companies with an electronic health record (EHR) system in all outpatient clinics, patient portal, and other digital means of delivering care. In 1996, Geisinger was one of the first care delivery systems to implement an EHR system.

"We believe strongly that successful vaccination programs are the most important way to help protect our community from many communicable diseases. Indeed, vaccinations have had a significant impact in our society over the past 100 years. Accordingly, it has long been a priority for our health system, as for all quality health systems, to organize and coordinate effective vaccination programs."

Lisa M. Esolen, MD, FIDSA

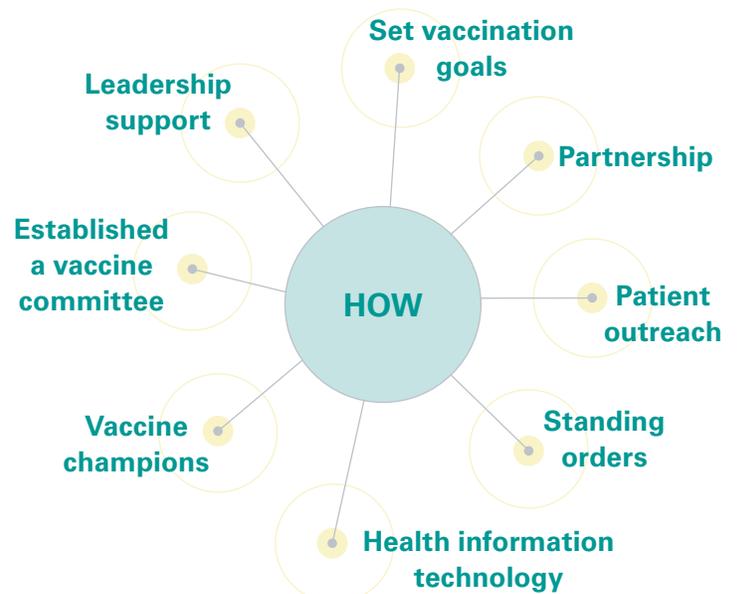
Medical Director, Infection Prevention Medical Director,
Occupational Health Asst Chief, Quality & Patient Safety
Geisinger Health System

PRIORITY: FOCUSING ON VACCINES

A stronger focus on vaccination aligns with Geisinger's population health management initiatives, patient experience, patient centered approach to care, community health initiatives, quality goals, and value-based care model. As vaccine preventable disease outbreaks were occurring in Geisinger's community and across the nation, Geisinger reacted. The system quickly analyzed their vaccination rates and compared them to *Healthy People 2020* goals. The need to make system changes to increase vaccination rates became an immediate priority.

RESULTS

In 2016, based on these simple approaches to increase vaccination rates and impact public health, Geisinger met *Healthy People 2020* goals for all ACIP-recommended adolescent and adult vaccinations.



PRIORITY: FOCUSING ON VACCINES

Geisinger's Commitment to Prevention and Improving Vaccination Rates

Vaccinations are an important part of wellness and prevention, the volume-to-value health care model, and the Affordable Care Act first dollar coverage for prevention.

Since outbreaks of vaccine-preventable diseases were occurring in their community and throughout the country, Geisinger self assessed their vaccination rates and compared them to *Healthy People 2020* goals. Leadership was disappointed to see vaccination gaps in care. This inspired leadership to implement simple steps to improve their processes, utilize health information technology (HIT), and increase the impact in population health. This decision to prioritize vaccination as a coordinated care approach was communicated broadly to all providers and clinic staff.

IMPLEMENTING CHANGE**Leadership Support**

Leadership support was an essential component of this project. The support for this initiative came from the Physician Bundle Leader and the performance improvement committee leader. These leaders demonstrate continuous commitment to achieving Geisinger's vaccination and population health goals.

"We set goals for vaccination rates that initially seemed out of reach, but a team approach and constant diligence to improving our processes has brought great success. The benefit to our patients cannot be underestimated."

Amy Howell, MD
Geisinger CPSL Bundle Leader

Establishing a Vaccine Committee

- **Purpose:** To assess current vaccination processes, current vaccination rates, and barriers to achieving vaccination goals. This committee also creates the support needed to achieve these goals.
- **Committee members:** Multidisciplinary
- **Sponsorship:** Physician Bundle Champion and Director of Performance Improvement
- **Meeting frequency:** Routinely

Vaccine Champions

- **Role:** The vaccine champion plays an important role in the system-wide vaccine standardization process. To help develop organizational support, one person from each clinical site is appointed to the role of vaccine champion, serving as an advocate and a go-to resource for vaccination in each office.
- **Responsibilities:** Responsibilities of the vaccine champion include identifying vaccination barriers, monitoring vaccine errors, managing inventory, and supporting system-wide strategies to increase vaccination rates.
- **Education:** The champions are asked to attend a biannual vaccine champion meeting prepared by the vaccine committee.
- **Educational topics:**
 - A vaccine update by pharmacy
 - New vaccines or label changes
 - Implementing standing orders
 - Proper charting and changes in EHR system
 - Proper administration practices
 - Approaches for discussing vaccination with patients/parents
 - Any issues the offices are encountering regarding vaccination

The vaccine champions are responsible for presenting this information to their offices.

- **Recognition:** The offices with the best vaccination rates or most improved rates are recognized with a framed certificate. They are asked to share their best practices with the group.

Optimization of Health Information Technology

The organization's use of optimized HIT enables it to proactively identify the preventive care required by a patient or class of patients.

Geisinger's innovative use of health information technology to promote patient-centered and coordinated team care has been standardized and replicated throughout the system. A multifaceted approach is used to increase vaccination rates.

- **Routine visibility into vaccinations rates:**

- **Monthly reports:** Each month a report is pushed out to each office highlighting clinic or provider vaccination rates for all ACIP-recommended vaccines and highlighting any clinics that meet their defined goals.

BEFORE PATIENT VISIT



Reports Used

- **Anticipatory Reports and Predictive Analytics:** This report aims to use information in the data and optimize the use of outpatient visits by making sure patients know what to expect for the visit. Offices can also generate this report prior to the morning huddle. This offers the ability to view which patients may be missing a vaccine and allows the care team to prepare for a specific vaccine discussion with the patient during their visit.
- **Missed Opportunities Report:** Clinical staff and physicians can utilize this report to look at patient populations and to visualize which vaccines a patient is eligible for but never received. To lessen missed vaccination opportunities, Geisinger has adopted a culture where every visit is an opportunity to assess vaccination status.

Outreach

Geisinger continues to innovate ways to enhance patient and provider engagement. Vaccine outreach has been achieved through use of the patient portal, text messaging, mobile apps, telephone, and mail.

Geisinger's care gaps team analyzes reports through HIT to identify patients who are missing a vaccine by age or chronic condition, or missing a vaccine that is part of a series. A member of the care gaps team will reach out to the patient through the patient's preferred

"Our nurse vaccine champions do a tremendous job in coordinating our vaccination efforts at each site. Our vaccine distribution and storage is more efficient, and our staff and patients are better informed because of the work they do."

Michael Ashton, MD

Geisinger CPSL Director of Performance Improvement

mode of communication to make them aware of a missing vaccination. After the care gaps team discusses the missed vaccine with the patient, the patient is then transferred to the appointment line to schedule an appointment.

DURING THE PATIENT VISIT:

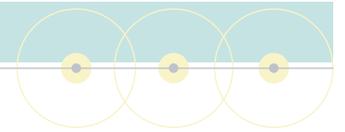


BPA: A Useful Tool

Best practice alerts (BPA) within their EHR system notifies the clinical staff the patient needs a vaccine. The BPA is age based or chronic condition based. The clinical staff can then fulfill the BPA by administering the vaccine, noting a refusal, or pend the order if a vaccine prescription is needed for pharmacy. Disease/vaccine facts have been added to certain BPAs to assist the staff in their discussion with the patient. The BPA is a useful tool; however, it is the implementation of the tool that is important to the system of care.

Implementing the Vaccine BPA – Standing Orders

Geisinger realizes the process of administering vaccines can be unnecessarily complicated by higher priority demands on the HCP's time, leading to a higher rate of missed vaccination opportunities. Since all care team members function at the top of their license, standing orders for the clinical staff are in place for ACIP-recommended adult vaccines. By establishing system wide standing orders and empowering the clinical staff to complete them, efficiency improves and missed opportunities are decreased. Success of the standing orders are related to the empowerment, education, and standardization of process and protocols throughout Geisinger clinics.



• How Geisinger empowers clinical staff to use standing orders:

- Geisinger leadership fosters an environment of trust and helping employees learn from successes and failures.
- Nurses are seen as an important part of the care team.
- The team shares a goal of helping to keep patients healthy.
- The clinic's monthly vaccination rates are sent to the office with the Bundle Leader's comments and posted so that the entire care team can view them.
- Nurses have a voice in the decision making processes that affect clinical practice.
- Disease/vaccine, and technical training are provided to clinical staff so they can confidently make decisions based on standing orders.
- Processes and procedures are clearly defined for each standing order.
- Expectations of working at the top of their license is clearly communicated.

Registry

The state registry has been important to Geisinger in creating a comprehensive vaccination record. In the past, the clinic had to pull vaccination administration information from the registry into their EHR system. The EHR system has since been updated so that registry information is automatically populated into the patient's chart.

POST VISIT:

After the visit the patient receives a post-visit summary including vaccinations received. Those with access to the patient portal can view their vaccination records. For vaccines that are part of a series, the next appointment is made prior to the patient leaving the office.



GEISINGER'S APPROACH TO PRIORITIZE VACCINATION

Implemented an organizational structure to help reach vaccination goals:

- The vaccine committee leads and educates the vaccine champions to implement, carry out vaccine objectives, and report on barriers and progress.
- The staff has increased use of their EHR system to improve pre-visit, time of visit, and post-visit vaccine activities.
- Monthly reports are generated and sent out to show clinic and provider vaccination rates.
- Reports are used to fill gaps in care like missed opportunities and assessing vaccination status.

Improved quality care:

- Standing orders and best practice alerts were established for clinical staff members.
- Staff education and training helped to address the needs of clinical staff members.
- Best practice alerts were customized to help with patient discussions.

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