Introduction
In the United States, approximately 42,000 adults die each year of vaccine-preventable diseases, and rates of vaccination among adults is alarmingly low. In partnership with the Michigan Department of Health and Human Services (MDHHS), the Michigan Primary Care Association (MPCA) has been conducting quality improvement (QI) initiatives at 25 participating community health centers in Michigan, with a goal of raising awareness of the importance of immunizations across the life span and increasing adult coverage rates.

The Centers for Disease Control and Prevention (CDC) recommends the below practice standards for all health care professionals:
- Assess immunization status of all patients at every clinical encounter.
- Strongly recommend the vaccines the patients need.
- Administer needed vaccines or refer patients to a vaccine provider.
- Document vaccines received by patients.

This QI project developed as a direct result of MPCA’s partnership with MDHHS over the past four years, which included the development of CHC Immunization Report Cards and quarterly CHC Rate & Rank Report cards for participating Federally Qualified Health Centers in the state.

Participating Health Centers
Twenty-five health centers at 75 delivery sites in rural, urban, and suburban locations across the state participate in the QI project:
- Advantage Health Centers
- Alcona Health Center
- Baldwin Family Health Care
- Bay Mills Health Center
- Central City Integrated Health
- Cherry Health
- Community Health & Social Services (CHASS)
- East Jordan Family Center
- Family Health Center, Inc.
- Family Medical Center of Michigan, Inc.
- Great Lakes Bay Health Centers
- Hamilton Community Health Network, Inc.
- InterCare Community Health Network
- Institute for Population Health
- Isabella Citizens for Health, Inc.
- Muskegon Family Care
- MyCare Health Center
- Northwest Michigan Health Services, Inc.
- Sterling Area Health Center
- The Wellness Plan Medical Centers
- Thunder Bay Community Health Services
- Traverse Health Clinic
- Upper Great Lakes Family Health Center
- Wayne County Healthy Communities Health Centers
- Western Wayne Family Health Centers

To date, MPCA has conducted 40 site visits to help health center staff implement the project. Both MPCA and MDHHS would like to recognize these health centers for their dedication and diligence related to the QI project.
QI Strategies in Action
Participating health centers implemented or are in the process of implementing 95.8 percent of QI strategies designed to meet the CDC’s adult immunization practice standards. Adopted QI strategies fell into four main categories: improved use of the Michigan Care Improvement Registry (MCIR); data-driven population health management; provider, staff, and patient education; and MDHHS material promotion.

Improved Use of MCIR
The Adult Immunization Quality Improvement Project encouraged participating health centers to use MCIR to assess vaccination records and overdue vaccines. Health centers accomplished this by using their electronic health records (EHR) of previously administered adult vaccines and comparing them to MCIR records. Health centers were also interested in MCIR features that would allow bidirectional transmission of MCIR information, allowing for more accurate recordkeeping and minimizing errors of under- and-over immunization of patients.

Data-Driven Population Health Management
Participating health centers also implemented a number of data-driven strategies designed to identify high-risk populations and streamline scheduling. This included:

- Improved use of MDHHS Community Health Center Site-Level Quarterly Report Cards.
- Development of a routine assessment of adult patient populations to make adult immunizations a standing order protocol.
- Use of MPCA’s integrated data system to identify high-risk populations for immunization needs and create custom reports.
- Text reminders for patients who missed or are due for services.
- Adding immunizations to chief complaint for patients with diabetes and COPD.
- Scheduling the next vaccination series at patient checkout.

Provider, Staff, and Patient Education
As part of a campaign to provide education to all staff and providers on the importance of adult immunizations, participating health centers:

- Learned why vaccines are especially important for patients with diabetes and other chronic conditions, such as hypertension or asthma.
- Trained front desk/scheduling staff on appropriateness of scheduling subsequent adult immunization appointments.
- Implemented a reminder and recall system and schedule for immunizations.
- Increased signage in lobby and patient rooms.
- Leveraged existing educational resources, such as MDHHS’ INE and PPEPI programs for nurse and physician education (offering free continuing education credits), as well as the CDC’s “You Call the Shots” and “Pink Book” webinars.
MDHHS Materials Promotion
Promoting MDHHS materials and resources was critical to the Adult Immunization Quality Improvement Project. This included increasing awareness of resources related to the Michigan hepatitis A (HAV) outbreak, adopting the Michigan Adult Vaccine Program, and ensuring signed vaccination refusals were documented and entered into MCIR.

Attacking the Hepatitis A Outbreak
Michigan’s community health centers are key responders to the ongoing HAV outbreak in Michigan and have supported MDHHS efforts to target, vaccinate, and protect vulnerable populations. From 2016 to 2017, there was an 85 percent increase in doses reported for adults, and in 2018, community health centers administered nearly 19,000 doses of HAV vaccines to adults 18 years and older — an increase of 166 percent over 2017.

Conclusion
Michigan’s community health centers serve nearly 500,000 adults, making these local health care organizations the ideal vehicle to promote patient awareness and improved vaccination rates. As a result of the Adult Immunization Quality Improvement Project and the partnership between MDHHS and MPCA, Michigan’s community health centers have developed a heightened sense of awareness of the importance of adult vaccines and have taken greater preventive measures by immunizing more adults against vaccine-preventable diseases and death.

For more information, contact Simmi Isaac, MPCA’s associate director of operational excellence, by emailing sisaac@mpca.net or calling 517.827.0471.

Resources
- MDHHS Immunization Program
- Quick Looks: Provider Vaccination Fact Sheets
- Refusal to Consent to Vaccination Form (Adult)
- Immunization Update for Office Staff Education
- Physician Immunization Updates
- MCIR Bidirectional Data
- CDC Immunization Schedules