Introduction

The Michigan Care Improvement Registry (MCIR) is a state-wide population-based EHR that was implemented in 1999 for health care providers to track children’s vaccinations. Since 2016, the MCIR has been continuously populated with birth records. For the Michigan Public Health Code, health care providers are required to report vaccine doses to the MCIR within 72 hours of administration, for children aged less than 20 years. Since 2004, the MCIR has been a living registry. While Michigan health care providers are not mandated to report adult immunizations, the Michigan Department of Health and Human Services (MDHHS) strongly encourages use of the registry for the adults and monitors ever-increasing reporting to the registry.

As of February 2017, over 7 million adults have a MCIR record and 8.8 million individual vaccines have been recorded in MCIR for adults. With more providers playing a role in adult vaccinations and in reporting data, Michigan has the capacity to measure progress, identify areas for improvement, and develop targeted educational interventions.

For example, the Michigan Vaccination Snapshot for Urgent Care was distributed to support the increasing role and critical opportunity urgent care settings have in increasing patient recognition by the number of urgent care facilities that report adult vaccines to MCIR in the past 5 years.

Additional examples of data-driven interventions include press releases, continuing education modules, newsletter articles, white papers, and report cards.

Methods

Michigan achieves data-driven interventions due to the contributions of many team members:

- MCIR Staff who enroll health care providers, offer help desk support, and perform searches for HLT2 messaging.
- Immunization Field Representatives and Local Health Department staff who interface with immunization providers in MI.
- MCIR Epidemiologists who pull MCIR data into SAS and generate reports.
- Health Communication/Edcuators who translate data and reports into educational pieces.
- Immunization Nurse Educators who provide clinical guidance on vaccine administration and management, and the immunization schedules and ACIP recommendations.

Below is the Michigan Lagagette for how we report & analyze data, coordinate & distribute messages, and ultimately work to increase awareness of Michigan’s vaccination coverage rates and motivate collective action.

Measures

1. **Letter to Urgent Care Medicine with Vaccination Snapshot**

   Urgent Care facilities can useImmunization Snapshot to identify in-need adult patients. Monthly urgent care is an important part of the healthcare system, and urgent care visits account for a greater percentage of viral infections compared to community health centers which are important. It is important that urgent care providers be notified of all adult immunizations including PCV13.

2. **Quarterly Immunization Report Cards: By County-Level Report & By Health Center Site-Level Report**

   County and health center level report cards include data for the past 1 year. The report cards highlight data for current and prior periods.

3. **Target Audience:**

   - Immunization Field Representatives, nurse practitioners, medical assistants, pharmacy, nurses, physicians, and other health care certified providers in public immunizations

4. **MCIR featured in the educational presentation?**

   - In our educational presentation, MCIR data is used to support teaching vital population-based interventions. The data depicts the percentage of fully vaccinated adults. MCIR has been able to measure progress, identify areas for improvement, and develop targeted educational interventions.

Discussion

Despite remarkable evidence that vaccines significantly decrease the morbidity and mortality of serious diseases, adult immunizations are largely underutilized in the United States and in Michigan. The 2015 Behavioral Risk Factor Surveillance System (BRFSS) estimated 57.7 percent of MI adults, ages 65 years and older, reported receiving an influenza vaccine within the past year; whereas an estimated 72.8 percent of this population reported ever receiving pneumococcal vaccine. A study that further analyzed BRFSS data found that reported rates of influenza and pneumococcal vaccination were positively associated with receipt of Td or Tdap vaccine in adult populations.

Vaccines have greatly decreased or eradicated many infectious diseases that formerly harmed many infants, children, and adults. However, the strains and bacteria that cause vaccine-preventable diseases (VPDs) still exist and can be easily passed on to people who are not fully protected by vaccines. The success of a vaccine in protecting communities depends on the extent of vaccine coverage. With enough people immunized against a disease, it is difficult for the disease to get a foothold in the community.

The Michigan Department of Health and Human Services Division of Immunization's mission is to minimize and prevent the occurrence of vaccine-preventable diseases within our state. The success of the immunization program is to work to implement effective strategies and strengthen partnerships with our stakeholders to eliminate vaccine-preventable diseases in Michigan.

Michigan works to connect immunization providers to available state and national immunization coverage rates as well as highlight critical national benchmarks to work towards. We routinely publish and distribute data-driven interventions and connect these interventions with available provider resources and best practices.

References:

Immunization Credits:
Created by Tor J. Luck & Focus with the Noun Project.