

# Immunization Quality Improvement: Reaching High-Risk Adults

Sudha Setty, MPH, Miriam Muscoplat, MPH, Jennifer Heath, DNP, MPH, RN
Minnesota Department of Health. St. Paul. MN



# ABOUT MIIC

The Minnesota Immunization Information Connection (MIIC) is a statewide, confidential, web-based information system that contains shared immunization records. This system provides authorized users with the most complete immunization data available in the state. Established in 2002, MIIC contains nearly 71 million immunizations for 7.1 million clients of all ages. It is considered one of the most mature immunization information systems in the nation.

Most immunization data is entered into MIIC directly from electronic health record systems. MIIC also receives data on immunizations administered to Minnesota residents in North Dakota and Wisconsin through data sharing agreements with those states' immunization programs.

# AIM

MIIC is a valuable source of data tracking tools that can be used to improve clinical immunization practice, help providers reach high-risk adults for necessary vaccinations, support public health in assuring adequate population-based immunization coverage, and respond to vaccine-preventable disease threats. Additionally, MIIC supports administration of the Minnesota Vaccines for Children (MnVFC) program and the Uninsured and Underinsured Adult Vaccine (UUAV) program.

# KEY FEATURES/ACTIONS

# • Immunization Clinical Decision Support

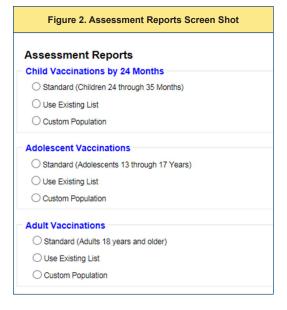
MIIC offers client-specific immunization forecasting based on the latest recommendations from the Advisory Committee on Immunization Practices (ACIP) and that client's age and vaccination history (See Figure 1). This clinical decision support informs the clinician of the vaccines that are overdue or due and recommended vaccination dates.

# Figure 1. Forecaster Screen Shot Client Information Client Name (First - MI - Last) DOB Gender Mother's Maiden Tracking Schedule Chart Number McCREY J. MOUSE 12/13/1948 AGIP 720/18530 AGIP 720/18530 Immunization History Pharmaceuticals Tuberculosis Flu Surveillance Pan Flu History Add Immunization Edit Client Reports Print Print Confidential Voccine Group Date Administered Series Vaccine (Trade Name) Dose Owned? Hist? Edit This client has no immunizations associated with it. Current Ages 69 years, 4 monthly, 2 days Vaccines Recommended by Selected Tracking Schedule Select Vaccine Group Earliest Date Recommended Date Overdup Date Latest Date Current Ages 69 years, 4 monthly, 2 days Vaccines Recommended by Selected Tracking Schedule Select Vaccine Group Earliest Date Recommended Date Overdup Date Latest Date Current Ages 69 years, 4 monthly, 2 days Vaccines Recommended by Selected Tracking Schedule Select Vaccine Group Earliest Date Recommended Date Overdup Date Latest Date Current Ages 69 years, 4 monthly, 2 days Vaccines Recommended 12/13/1995 Maximum Age Exceeded V Influenza 12/13/1995 Maximum Age Exceeded V Influenza 12/13/2011 12/13/2013 V Presumoscoli 12/13/2012 12/13/2013 V Total 12/13/1995

# Assessment Reports

MIIC offers clinic- and county-based immunization coverage reports for children and adolescents. MDH is currently working towards adding an adult assessment report (See Figures 2 and 3). The assessment reports can help clinics and public health:

- Generate baseline immunization rates
- Identify areas for improvement
- Implement practice changes and/or outreach activities



# Figure 3. Adult Assessment Report Mockup Adult Immunization Summary Assessment Test Report Type: Adult Standard Birth Date Range: 02/10/1897 - 02/11/1997 Report Run Date: 02/10/2015 Assessment Date: 02/10/2015 Report Generated by: MIIC MIIC 469 Client Records Assess 30% 10% s given as young as 7 years count toward | 328 | received Tdap age 7 or later | | 469 | clients assessed Tdap 70% Td/Tdap 60% ers. Some high risk adults may recieve PCV13 at a younger age. 27 received at least 1 dose PCV13 age 65 or later PCV13 is recon PPSV23 26% HPV 19% 70 received Zoster age 60 or late 175 clients age 60+ years

# • Lists

The list feature can be used to track immunization histories and immunizations due for a specific group of clients chosen by the user. Instead of looking up each client record one-by-one, the list feature provides a snapshot of the immunization status for an entire group of people at once.

There are numerous uses for lists in MIIC, including:

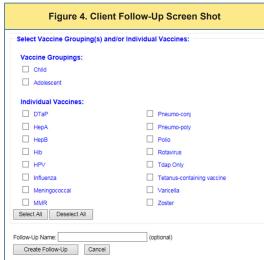
- Tracking immunizations required for child care and school
- Tracking employees' influenza immunizations
- Tracking immunizations for clients with a certain risk factor

# Client Follow-Up

The Client Follow-Up tool identifies clients who are due or overdue for immunizations and facilitates reminder/recall with those individuals (See Figure 4). This tool can be used with the immunization assessment reports to plan and carry out targeted immunization improvement activities.

The Client Follow-Up tool provides the ability to:

- Contact overdue clients for reminder/recall activities
- Create a list of clients at high risk for vaccine preventable disease (e.g., people with asthma or diabetes) to remind them of specific vaccine recommendations
- MDH is working on adding adult vaccines to this feature to target high risk persons in this age group.



# **EXAMPLES OF MIIC DATA USE/OUTCOMES**

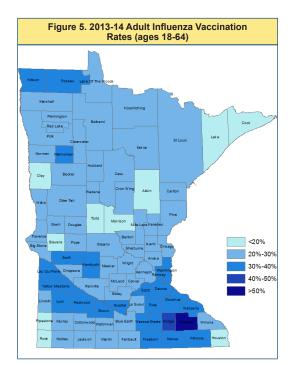
# · Clinic-Based Immunization Quality Improvement

MIIC data and tools are used to support quality improvement activities aimed at raising immunization coverage levels and improving standards of practice at the provider level. These tools give providers the ability to assess baseline clinic coverage levels, set objectives around immunization improvement, and track immunization levels over time.

# MDH Immunization Program Support

The MDH Immunization Program uses MIIC as the main technology platform to make Minnesota vaccine programs easier to manage for providers and more accountable for MDH. Providers can use MIIC to order vaccine, track vaccine shipments, and help with required annual program reports. MDH also uses MIIC to support FluSafe, a voluntary program among hospitals and nursing homes to track health care worker flu vaccination. Participating organizations use MIIC to track health care worker flu vaccinations, and organizations with high flu coverage rates are publicly recognized.

MIIC's newest functionality this year will allow providers to maintain and improve the immunization coverage of adults in Minnesota. MIIC and MDH Immunization Program staff continue to promote the use of the system throughout the state as well as enhance functionality and features to further serve a full range of MIIC users.



Contact: Jennifer Heath, DNP, MPH, RN Infectious Disease Epidemiology, Prevention & Control Minnesota Department of Health P.O. Box 64975, St. Paul, MN 55164-0975 jennifer.heath@state.mn.us phone: 651-201-5414