

Select AIRA 2020 National Meeting Presentations: Working with End Users

Tuesday, September 1, 2020 3-4 PM ET

AIRA Webinar Series

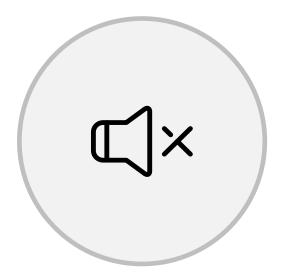
- Each Tuesday
- Now through September 22, 2020
- 3-4 PM ET
- Join Us!

Webinar Series at a Glance

Week 1	CDC Panel Discussion: Advancing IIS Together
Week 2	The Immunization Gateway Portfolio
Week 3	Data Quality
Week 4	Data Use
Week 5	Marking with End Hears
weekb	Working with End Users
Week 6	IIS Operations
Week 6	IIS Operations



Before We Get Started



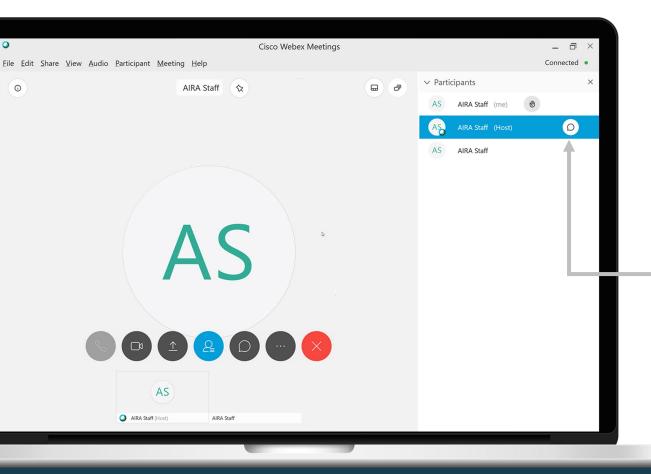
All phone lines are muted



This meeting is being recorded and will be posted on the AIRA repository



Question & Answer



How do I ask a question?

There will be time allotted for Q&A following the presentation.



Send an e-mail to: info@immregistries.org



Select the chat icon next to the host and type question into the chat box.

Today's Speakers

- Danielle Reader-Jolley, AIRA Consultant
- Maddie Grimm, CIIS School Coordinator, Colorado Department of Public Health and Environment
- Sean Bevins, Vaccine Ordering Module Coordinator, Colorado Department of Public Health and Environment
- Sudha Setty, MPH, IQIP Coordinator, Minnesota Department of Health





Ramping Up: A Review of AIRA's Onboarding Best Practices

Presented by Danielle Reader-Jolley

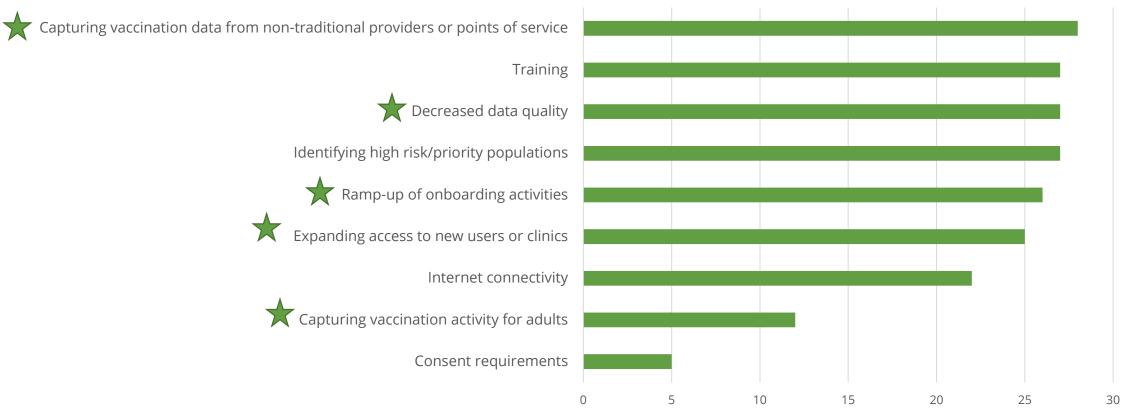
Onboarding Guide

 Onboarding Consensus-based Recommendations

- Published on AIRA Repository: January 10, 2019
- http://repository.immregistries.org/ resource/onboarding-consensusbased-recommendations/



AIRA Mass Vaccination Quick Survey April 2020 (n=49) Mass Vax Concerns





AIRA Adult Data Capture Survey July 2020 (n=56) Barriers/Challenges

- Top programmatic and technical barriers:
 - Staffing challenges/limited resources ★
 - Onboarding of new providers ★
 - Inability/inexperience of vendors to send HL7 messages ★
 - Data quality monitoring ★
 - Provider training



Document Overview

PROCESS - IMPROVEMENTS AND BEST PRACTICES



STEP 1: DISCOVERY & PLANNING

- Registration
- IIS Site Enrollment
- Kick Off Call
- Forms Completion
- Other Pre-Prep Activities (Checklists, Self-service testing, Code comparisons,

 Etc.)



STEP 2: DEVELOPMENT AND TESTING

- Connectivity and transport
- Testing environments/ platforms
- Use of test data or production data
- Volume of records needed for testing/validation
- Technical vs. programmatic testing
- Importance of ACKs
- Self-service opportunities



STEP 3: PRODUCTION APPROVAL

- Production approval
- Pre-production forms completion
- Training (optional)
- Move provider credentials to Prod



STEP 4: ONGOING MONITORING

- Short-term production monitoring
- Long-term production monitoring
- Re-onboarding triggers



SPECIAL: QUERY/ RESPONSE

- Differences in processes and procedures compared to standard interfaces (VXU only)
- Discovery and Planning
- Development and Testing
- Production
 Approval and
 Monitoring
- Additional steps

IMPLEMENTATION CONSIDERATIONS AND BEST PRACTICES

EHRS & IMPORTANCE OF STANDARDS



- Understanding EHR staffing structures and product business models
- · Coding to standards
- Implementation of multi-state solutions
- Special guidance for pharms or other specialty vaccinators

MANAGING THE BACKLOG



- Limited resources and staffing
- Managing a queue (tracking, prioritization, timelines)
- Creating efficiencies (check lists, prerequisites, pre-prep activities, reporting hubs)

DOCUMENTATION



- Posting documents to website
- Communicating standards and state-specific requirements
- Communicating expectations and thresholds for success
- Simplifying onboarding plans and documents
- Information repositories for staff

COMMUNICATION



- Welcome emails
- · Kick-off calls
- Pre-production/close-out calls
- Proactive communications
- EHR vendor-provider-IIS dynamics





Typical Onboarding Process









General Challenges from Onboarding Guide

- Providers are spending weeks or months waiting to onboard
- Providers are spending weeks or months in the onboarding process after they begin actively onboarding
- Jurisdictions have implemented local requirements or local interpretations of the HL7 standard requiring one-off solutions
- Existing processes are heavily dependent on IIS onboarding resources
- Existing interfaces using legacy standards and technologies



Challenge: Too Long Waiting to Onboard

- Implement an online registration tool
- Use information collected in the registration tool to automatically trigger subsequent steps in the onboarding process
- Provide a readiness checklist that includes completion of all required forms, ability to produce a correctly formatted HL7 2.5.1 message, and support for required code sets
- Direct provider/EHR vendor to educational resources:
 - Onboarding Plans and Checklists
 - HL7 Requirements and Resources
- Eliminate unnecessary pre-requisites and waiting periods

Challenge: Too Long in Process

Solutions:

- Maintain a tool to track and document provider progress throughout the onboarding process
- Implement testing tools to help automate portions of the testing process

DATA QUALIT REVIEW AND DATA

VALIDATION

- Identify and create opportunities for providers/EHR vendors to conduct independent testing and issue resolution
- Test in a production-quality environment using 2-weeks worth of production/production-quality data
- Determine the level of data quality testing that is appropriate for the onboarding process (can vs. should; onboarding vs. monitoring)

Challenge: Off-Standard Requirements

- Align with HL7 implementation guidance and standard code sets except where otherwise required by state law
- Support and promote the current CDC- and ONC-endorsed standards for HL7 messaging and transport
- Develop short delta guides for noting where the jurisdiction deviates from the HL7 implementation guide
- Improve community interpretation of implementation guidance around common problem areas (e.g. VFC, OBX, ACK, CVX)



Challenge: Reliance on IIS Staff

- Focus IIS resources on providers with the most interest and readiness to proceed (readiness, resources, enthusiasm)
- Implement testing tools to help automate portions of the testing process
- Identify and create opportunities for providers/EHR vendors to conduct independent testing and issue resolution
- Eliminate/minimize manual data quality review activities to the extent possible

Challenge: Legacy Standards/Technologies

- Support and promote the current CDC- and ONC-endorsed standards for HL7 messaging and transport for IIS interfaces (e.g. HL7 2.5.1 and SOAP/WSDL)
- Use improved onboarding process(es) to bring older interfaces up to speed
- Leverage abbreviated testing protocols when updating existing interfaces



Overarching Strategies

- Minimize variation across jurisdictions. Strive to align with HL7 implementation guidance and standard code sets except where otherwise required by state law or mandate.
- Manage expectations through well-crafted onboarding documentation and proactive written and verbal communication between stakeholders.
- Identify opportunities to reduce reliance on IIS staff participation by automating manual processes and strategically leveraging IIS reports and supporting tools/technologies.
- Create opportunities for onboarding providers and EHR vendors to conduct preliminary testing and issue resolution independently.
- Leverage general momentum and provider enthusiasm by focusing IIS resources on providers with the most interest and readiness to proceed.

Thinking Bigger...



- Increase the number of bidirectional interfaces
 - Providers very often use their EHR interface to review immunization records/forecasts
 - Dedicated chapter "Onboarding: Bidirectional HL7 Query/Response"
- Improve saturation of both patient and vaccination data in the IIS
 - Legacy data loads (AIRA's *Importing Legacy Data to Improve IIS Saturation: Recommendations and Implementation Considerations*)
 - Strategic data partners (e.g. Medicaid, health plans, pharmacies)
- Retain providers onboarded in conjunction with COVID-19 who routinely offer vaccination services for ongoing, active reporting



Tips for IIS: Preparing for a COVID-19 Vaccine

ONBOARD IMMUNIZING PARTNERS

Onboarding all traditional and non-traditional vaccine providers now will save

programs valuable time later.

- 2 ALIGN WITH **STANDARDS**Ensuring your IIS aligns with standards facilitates connections with data-sharing partners, such as electronic health records (EHR) systems.
- ELIMINATE **DATA EXCHANGE** LIMITATIONS
 Changes to local laws or policies may be necessary to ensure timely and complete exchange of data to support routine and pandemic vaccination efforts.
- EXPAND **CONSUMER ACCESS**Providing consumers with access to immunization records and forecasting empowers patients to better manage their healthcare and decreases the record request burden on IIS programs and providers.



Thank You!

Danielle Reader-Jolley

AIRA Independent Consultant dreaderjolley@immregistries.org or info@immregistries.org



Colorado's Implementation of Collaborative IIS Help Desk Resources

Colorado Immunization Information System

Division of Disease Control and Public Health Response

Sean Bevins, BA, English

Maddie Grimm, BA, MPH Candidate

August 2020



Overview

Colorado has developed collaborative training and troubleshooting resources to address technical assistance needs of immunization providers and schools. Our innovative methods of assisting callers have:

- reduced wait times
- reduced call volume
- decreased chronic issues
- increased the amount of time to dedicate to creating additional training resources and further develop our IIS.



Background: The Help "Desks"

Help Desks	Purpose	Users Served
Vaccine Ordering Module (VOM) Help Desk	-assist all VFC clinics with issues regarding vaccine inventory, reconciliations, and returns	560 Vaccines for Children (VFC) clinics
Colorado Immunization Information System (CIIS) Help Desk	-CIIS account setup & problem solving -unlock/reset passwords	6,700 active users and 300 new users per month
CIIS School Coordinator	-assist schools in submitting the annual aggregate immunization data -use CIIS to 'enroll' students for running sitewide reports	3,600+ schools and licensed childcares



Main Challenges

Help Desks	Common Issues	Time & Resources Dedicated
Vaccine Ordering Module (VOM) Help Desk	-educating and updating users on the complexities of the VOM system -navigating the root issue for clinics and retraining to prevent issues in the future	-multiple online resources such as job aids and training videos -average call with a clinic ranges between 5 minutes to 1 hour
Colorado Immunization Information System (CIIS) Help Desk	-users locked out of their account -public requests for immunization records	-constant but quick password related calls (average about 2 minutes) -creating/editing user accounts (1-2 hours a day) -processing immunization record requests (1-2 hours a day)
CIIS School Coordinator	-difficulty enrolling students in CIIS -checking for exemptions	-can range from a few minutes to several hours spent enrolling students



Personalized Job Aids & Screenshots: VOM Reconciliations

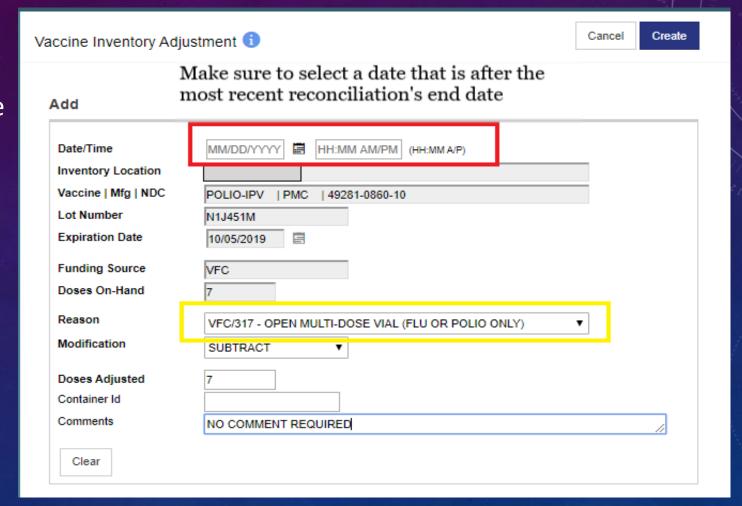
Example 1: Simplistic, eye catching, straight to the point graphics that help resolve an issue quickly and visually

ccine Returns	S ? i Learn More			Cancel ☐ Links ▼	Submit To VFC Program	Update
dit						
Clinic			Last Approved Return Date	Created By		
LAKE COUNTY PUBLIC	HEALTH AGENCY		06/29/2020			
Return Number	Return Status		Return Type *	Return Reason *		
R08122020015300	IN WORK	~	RETURN ONLY ✓	EXPIRED VACCINE	~	
Return Created Date	Date Submitted to Program		Date Submitted to VTrckS			
08/12/2020	MM/DD/YYYY 🗏		MM/DD/YYYY 🗏			
Label Shipping Method *	•		Description	Number of Shipping Labels *		
EMAILED TO PROVIDER	REMAIL STORED IN VTRCKS	~		1		
Clinic Comments						



Personalized Job Aids and Screenshots: VOM Reconciliations

Example 2:
Calling
attention to the
fields that
cause the most
confusion and
adding small
direct
reminders for
clinics

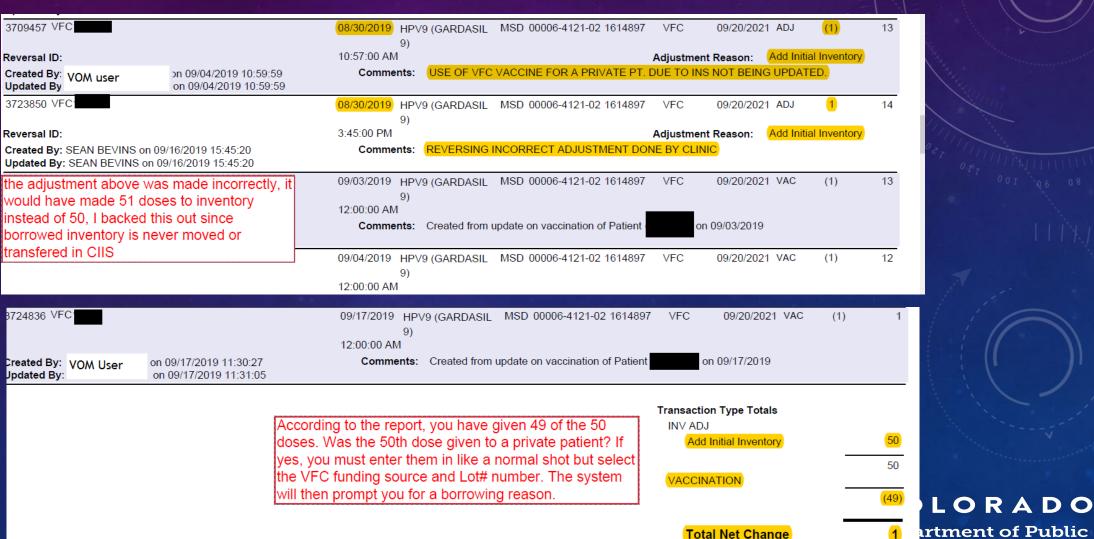




Personalized Job Aids & Screenshots: VOM Reconciliations

Example 3:

Highlighting specific errors found in Inquiry reports with comment boxes asking direct questions for resolution of the issue at hand



th & Environment

One-on-One Walkthroughs: School/Child Care reporting

- Colorado's Annual Aggregate Immunization Data Reporting for Schools and Child Cares
 - must submit de-identified, FERPA-compliant aggregate data including:
 - number of compliant/non compliant students
 - number of medical, religious, and personal exemptions for all vaccines and each vaccine
 - number of students up-to-date for each vaccine
- Use CIIS features to simplify process:
 - School Roster File Import
 - Student Roster with Immunization Status-CO



School/Child Care reporting

- CIIS 'School Roster File Import' job aid and sample template
 - allows users to upload a roster which will match students to CIIS profiles and "enroll" them in their school or child care
 - sample template: color-coded to match chart (on right)
 - offer to review roster before upload
 - once enrolled, users can run a report that populates all data needed for reporting requirement



COLORADO How to Use the Student Roster File
Department of Public Import-

https://ciis.state.co.us/school

CIIS school users are able to upload rosters of their students into CIIS to "enroll" in their site, instead of manually enrolling students. By enrolling your students in CIIS, you will be able to use reports including the <u>Rosters with Immunization Status - CO</u> and the <u>School Certificate of Immunization (Batch) Report</u> to assist with the annual <u>Immunization data reporting requirement</u>.

Note: We highly recommend using the school roster template to create your school roster.

1. Begin by creating your school roster using the <u>school roster template</u>. The roster must be saved in .csv format. For guidance on saving a file as a .csv, <u>please see here</u>. Our template includes all of the required fields, and several additional fields. See below for the various roster fields that are required (red), recommended (green), optional (blue), and not recommended (yellow). These colors, as well as the formatting listed in the top row, match the columns in our roster template. Formatting examples are included in italics. Note: Do not delete or hide any columns in the roster template. If they are removed, CIIS will be unable to match the columns, leading to a failed upload.

Required (BOLD AND CAPS)	Highly Recommended (Bold)	Optional	Not Recommended (Italicized)
Student ID	Student Address Line 1 and 2	Student Middle Name	Student School District
Student Last Name	Student City	Guardian/Primary Contact Last Name	Student School / Child Care Name
Student First Name	Student State (CO)	Guardian/Primary Contact First Name	Note: If you do enter school district and school name, it must match exactly the school district and school name in CIIS. We recommend not including it at all to avoid this issue.
Student Gender (M or F)	Student Zip	Guardian/Primary Contact Relationship to Student	
Student Date of Birth (mm/dd/yyyy)	Student Primary Phone Number (XXX-XXXX-XXXXX)	Guardian/Primary Contact Phone Number (XXX-XXX-XXXX)	
	Student Grade (CC:Child Care; K:Kindergarten, Pre-K:Pre-Kindergarten;1 -12) (Note: if you do not include the student's grade level, the School Immunization Requirements box will		



COLORADO

Department of Public
Health & Environment

Monthly First Friday Newsletter

- Monthly publication including job aids, guidance, and reminders about trending events or issues
- Content is written by CIIS and Immunizations Staff
- Topics:
 - VFC Tip of the Month
 - CIIS Training Tip of the Month
 - VOM Tip of the Month
 - Data Quality Tip of the Month
 - 'Never Fear, an Immunization Nurse is Here'
 - Upcoming Webinars (CIIS Training)
 - Additional announcements and blurbs (ie: school immunization reporting reminders, expiring flu reminders, etc)
 - Staff Featurette!



Monthly First Friday Newsletter



COLORADO

Department of Public Health & Environment

Colorado Immunization Information System (CIIS)

First Friday Update: August 7, 2020

Welcome to the August First Friday Newsletter. As we start getting into flu season, take a look at the guidance for off-site immunization clinics, and take a "world tour" of Immunizations Around the World with the return of our *Never Fear an Immunization Nurse is Here* article. Make sure to check out this month's featurette of Phyllis Bourassa (and her pups), the CIIS Training and Outreach Unit Supervisor! Please let us know how we can assist you and your organization during this time. You can contact the CIIS Help Desk at cdphe.ciis@state.co.us or 1-888-611-9918. *Please note*: Email is the recommended mode of communication. While our staff is working remotely and assisting with COVID-19 response efforts, we will do our best to provide our CIIS users with the high quality customer service and technical assistance with which they are accustomed.

INCLUDED IN THIS ISSUE

- I. <u>VFC Tip of the Month Off-Site Vaccination</u> Clinic Guidance
- II. <u>VOM Tip of the Month Returning Flu Vaccine</u> Through the Returns Module
- III. CIIS Tip of the Month Entering Patient
 Precautions and Contraindications in CIIS
- IV. Never Fear, an Immunization Nurse is Here Immunizations Around the World

VFC Tip of the Month - Off-Site Vaccination Clinic Guidance

I'm Phyllis Bourassa-



-the CIIS Training and Outreach Unit Supervisor In

CIIS Tip of the Month - Entering Patient Precautions and Contraindications in CIIS

If a patient has laboratory-confirmed immunity to a particular disease, or a healthcare provider verified history/diagnosis of varicella, you can add this information to a patient's record as a precaution/contraindication in CIIS.

If a patient has a precaution/contraindication in their CIIS record, you will see a red circle with a white cross icon on the patient's Immunizations Home screen. You can click on the icon to view the details of the precaution/contraindication.

Once you have selected the patient whose record you want to work with in CIIS, you can also view and enter precautions/contraindications from the Action menu (as shown in the job aid below), or from the CIIS green menu bar by clicking on the Precautions/Contraindications sub-module under Patients. Please note: Some precautions/contraindications may have an expiration date (e.g., pregnancy). If you enter an expiration date in the Patient Precautions/Contraindications screen, the CIIS Recommender only considers the precaution/contraindication from the Effective Date to the Expiration Date.

For simple instructions on adding precautions/contraindications in CIIS, please view this job aid.

If you would like more information on this topic or on accessing CIIS Training resources, please contact the CIIS Help Desk at cdphe.ciis@state.co.us.

Never Fear, an Immunization Nurse is Here - Immunizations Around the World

Clinical staff may find the following resources helpful when assessing foreign immunization records and immunization coverage information for various countries. These resources can also be fun to view when imagining world traveling (with limited opportunities) during the coronavirus pandemic.

- Centers for Disease Control and Prevention (CDC): "Foreign Language
 <u>Terms: Aids to Translating Foreign Immunization Records</u>" lists foreign terms
 for vaccines and vaccine-preventable diseases (VPDs).
- Immunization Action Coalition (IAC): The "Quick Chart of Vaccine-Preventable Disease Terms in Multiple Languages" lists vaccine terms in eastern and western European languages.
- The World Health Organization (WHO): "WHO vaccine-preventable diseases: monitoring system, 2020 global summary"
 - The summary provides the following information for each country:
 - Number of reported cases for each VPD
 - Latest available immunization schedule
 - Official country estimates for immunization coverage
- The <u>Vaccine Safety Net</u> is a network of WHO-endorsed websites that may include immunization schedules and educational resources for various countries
- Immunize Immunization Canada: "Immunize Immunization Canada" gives an
 overview of Canada's immunization service delivery system. It also includes
 educational materials for Canadian health care providers, patients, and



Results

Implementation of these collaborative resources have led to:

- Decrease in clinics calling every month
- VOM Help Desk: created over 90 personalized screenshots/guidance
- reduced reconciliation calls from 10-20 minutes down to 5 minutes or less, or merely an exchange of emails
- Decreased wait time for call-back
- Increased confidence in CIIS users



Recommendations

- Consider starting a monthly newsletter to include guidance, job aids, reminders on current events, etc.
- Strongly recommend clinics reach out via email for the opportunity to send personalized screenshots
- Inquire with IIS Vendor what enhancements can be made for password resets
- Canned email responses are a great way to save time and standardize responses to clinics for common issues
- Using common programs like Microsoft Paint to edit and customize screenshots



Questions?

Maddie Grimm: maddie.grimm@state.co.us

Sean Bevins: sean.bevins@state.co.us





Scanning the Void: A MIIC All-User Survey

Sudha Setty, MPH

September 1st, 2020

PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

Minnesota Immunization Information Connection (MIIC)

- Minnesota's statewide immunization information system (IIS)
- Created in 2002
- 8.9 million clients
- 105 million immunizations
- 8-9 thousand active users



Purpose

- In 2019, we sent out our first all-user survey to assess user experience with:
 - MIIC features
 - Communications
 - Outreach activities
 - MIIC help desk services



Stakeholders and Collaborative Writing



- MIIC is...a lot
 - Many stakeholders: local public health, users from many provider organizations
 - High pressure from stakeholders to create and disseminate a survey



Collaborative Writing Process

- Parallel writing processes
 - MIIC regional coordinator performance feedback
 - MIIC business function leads
 - Immunization Program leadership review and oversight of final draft



Survey Testing

- Survey tool
 - Written and distributed in Verint
 - Tested by staff before distribution



Survey Distribution

- Between July 17, 2019 and August 2, 2019:
 - 10576 Surveys Distributed
 - 2292 completed
 - 22% response rate



Results



Role	Number	Percent
Advanced Practice Registered Nurse (APRN)	43	2%
Child Care Personnel	129	6%
Clinic/Hospital Administrator	33	1%
Licensed Practical Nurse (LPN)	375	16%
Licensed School Nurse (LSN)	109	5%
Medical Assistant (CMA)	234	10%
Pharmacist (PharmD)	157	7%
Pharmacy Technician	24	1%
Physician (MD/DO)	12	1%
Physician Assistant (PA)	11	0%
Public Health Nurse (PHN)	135	6%
Registered Nurse (RN)	519	23%
School Personnel (non-clinical)	105	5%
Other:	407	18%
Grand Total	2293	

Tribal Health Participation

Is your facility an I/T/U?	Number
No	2218
Yes	75
Grand Total	2293



Results

- Confidence in overall application
- MIIC components
- Support and Outreach
 - Collected free text comments on each aspect



Confidence in overall application

- Immunization history
 - Over 90% of respondents found the MIIC immunization history easy or very easy to use and interpret
- Forecaster
 - Almost 100% of respondents found the forecaster easy or very easy to use and interpret



Confidence in overall application

- Data Quality
 - 80% of respondents confident or very confident in MIIC data quality
 - Those that responded not confident:
 - Timeliness
 - Demographic errors
 - Adult data



MIIC Components Use

- Assessment
 - Measures immunization rates
 - IQIP cornerstone
- Client Follow Up
 - Identifies due and overdue clients
 - Reminder/recall tool



MIIC Component Use

- Assessment
 - Only 10% of respondents use this function
 - Of those that use it, 80% run reports to share with colleagues
 - 60% run reports on a regular basis (annually, monthly, weekly)



MIIC Component Use

- Client Follow Up
 - Only 5% of respondents use this function
 - Respondents that reported not using this function:
 - 72% did not use any method to find and reach out to due and overdue clients



MIIC Support

- Help Desk
 - Central support for application
 - Email and phone
- MIIC Regional Coordinators
 - 7 local public health contractors statewide
 - Specialize in primary care and local public health support



MIIC Support

- 95% of respondents who have contacted the MIIC help desk said they were satisfied or very satisfied with service
- 95% of respondents who have contacted their MIIC regional coordinator said they were satisfied or very satisfied with service



High level take aways

- A need to continue building confidence in MIIC
- Most features are "very easy" or "easy" to use
- Some features are not used at all by many users
 - Will prioritize promotion of these components
- Need for training for all user and organization types
- Good reviews of regional outreach coordinators and MIIC Help Desk



Next Steps

- Audit of current training materials
 - Check through them for necessary updates
 - Ensure they match current functionality and workflow
- Increase promotion of certain features
 - More demand for them during pandemic
 - Feature them during IQIP visits





Thank you!





Questions?

- Join us on Mentimeter! www.menti.com
- Use the code: 43 79 10 1
- Submit your questions
- Scroll and vote () for the questions you want answered
- Or you can still click the chat icon
 (()) to submit a question in
 WebEx

Week 6: IIS Operations



Tuesday, September 8, 2020, 3 – 4 p.m. ET

Business Continuity Planning to Support IIS During the COVID-19 Pandemic

Miriam Muscoplat, Minnesota Department of Health

Standard Operating Procedures: Development and Management for IIS Programs

Kelly McDonald, HLN Consulting LLC

System Requirements for IIS: A Resource for your Procurement, Planning, and Development Efforts

■ Erin Roche, Public Health Informatics Institute

