DEVELOPMENT AND EVALUATION OF THE NEW JERSEY IMMUNIZATION INFORMATION SYSTEM (NJIIS) INTEROPERABILITY WEBINAR TRAINING

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Outline

- Introduction to NJIIS
- Webinar Overview
- Development Cycles
- Lessons Learned
- Evaluation Results

NJIIS

- Home Grown Registry
- Operated and maintained by NJDOH/OITS
- Managed by Vaccine Preventable Disease program
- Online inventory module for VFC providers



Current Stats

- Demographic records (children & adults) > 4 million
- Recorded Doses >54 million
- Active providers >10,000
- Active Users >19,000
- All children born in NJ (>80,000 per year) are automatically enrolled in NJIIS through an EBC interface

Total Providers in Production	>575
Web Service	391
	(~220 are bi-directional)
Batch (File Upload/SFTP)	186

Stakeholders

- Private healthcare providers
- Vaccines for Children(VFC) healthcare providers
- EHR technicians and vendor staff



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"It was time to modernize our operation so I installed a new Electronic Holiday Registry, and we'll qualify for government incentives if we can show meaningful use of our EHR."

NJIIS Webinar Training

- Raise awareness of the critical and important role providers play in maintaining accurate Registry data
- Most efficient method to train large number of users
- Training webinar focuses on the importance of data quality
 - Entering data correctly in the EHR
 - Reviewing data submitted into NJIIS
 - Troubleshooting and correcting errors

Webinar Topics

- Basics
 - Intro to NJIIS
- Data Submission and Reporting
 - HL7 data transmission
 - Excel spreadsheet reports
 - Interface reports
- Common Problems and Troubleshooting Scenarios
 - Patient data errors
 - Vaccine data errors
 - Review of available interface resources

Troubleshooting Scenarios

ISSUE	RESULT
Patient consent was not documented in the HL7 message (for those born prior to 1998)	Patient and their vaccination data are not added into NJIIS
Patient name was not an exact match – name triggered multiple possible matches	Patient and their vaccination data are not added into NJIIS
Dose does not match the lot number in NJIIS	Dose is added to NJIIS but not deducted from inventory
Dose-level VFC eligibility is not reported or incorrectly reported as private	Dose is added into NJIIS but not deducted from inventory
EHR sends a message to delete one VFC dose in NJIIS	NJIIS VFC on-hand inventory will increase by one

WEBINAR DEVELOPMENT CYCLES

Webinar Development Cycle

First Version

 \Rightarrow Second Version \Rightarrow

Third Version

Launched: March 2013

Launched: August 2014

Launched: November 2015

Co-hosted with NJ-HITECH with live Q&A

GoToWebinar

Training format restructured into 6 training modules

11 slides Presented Length = 20 minutes

12 slides Presented Length = 40 minutes

28 slides Presented Length = 57 minutes

416 Participants

337 Participants

361 Participants

Current Webinar

• Content added:

- HL7 Data Transmission
- Excel Basics
- 2 additional Troubleshooting Scenarios
- Additional Poll Questions

Restructured the Format

- 6 Modules
- Pre- and Post-Survey

Topics Covered

Module 1

NJIIS Reporting Requirements HL7 Data Transmission

Module 2

NJIIS Forms 'Contact Us' – NJIIS Online Intake Form

Module 3

NJIIS File Upload Page Interface File Statistics Report VFC Dose Statistics Report

Module 4

Interface File Details Report How-To-Guides

Module 5

Excel Spreadsheet Basics Troubleshooting Patient Data

Module 6

Troubleshooting Vaccination Data Resource summary

Troubleshooting Scenario Example

Interface File Statistics Report

- Identify the problem
- Patient multi match – not added into NJIIS
- Note transaction
 ID

Reports correlate to each other using:

- Transaction IDs
- File Name
- Message control ID

Interface File Detail Report

- Patient status – Multi Match
- Patient Status Message
- Lists the possible matches

Corrective action

Find the correct match in NJIIS and correct name in your EHR

Option 1:

File or HL7 message should be resubmitted to NJIIS.

Option 2:

If not possible add the vaccine to the correct registry ID manually & correct the EHR record

Troubleshooting Scenario 2: Patient Not Added into NJIIS

EVALUATION RESULTS

Assessing Knowledge of Subject Matter

Poll Questions

- Presented after each module
- Given up to 1 minute to select the correct answer
- Reinforces the module material
- Keeps participants engaged
- Effective Assessment Tool
 - First Version: **n=102**
 - Updated Poll Questions: n= 168

Poll Questions

QUICKPOLL

The Interface File Statistics Report gives an overview of data submitted to the registry and identifies:

Please select one:

- Data added, updated or deleted
- Number of patients not correctly processed into NJIIS
- Number of vaccines that were not correctly processed into NJ
- All of the above

Poll Questions

Topic: NJIIS Basics

- 1. For patients born before 1/1/1998, to be added to the registry, the Provider's office must:
- 2. Who is responsible for making any corrections to data that is submitted to NJIIS?
- 3. The best way to reach NJIIS support staff is by:
- 4. What do you do if your NJIIS password is not working?

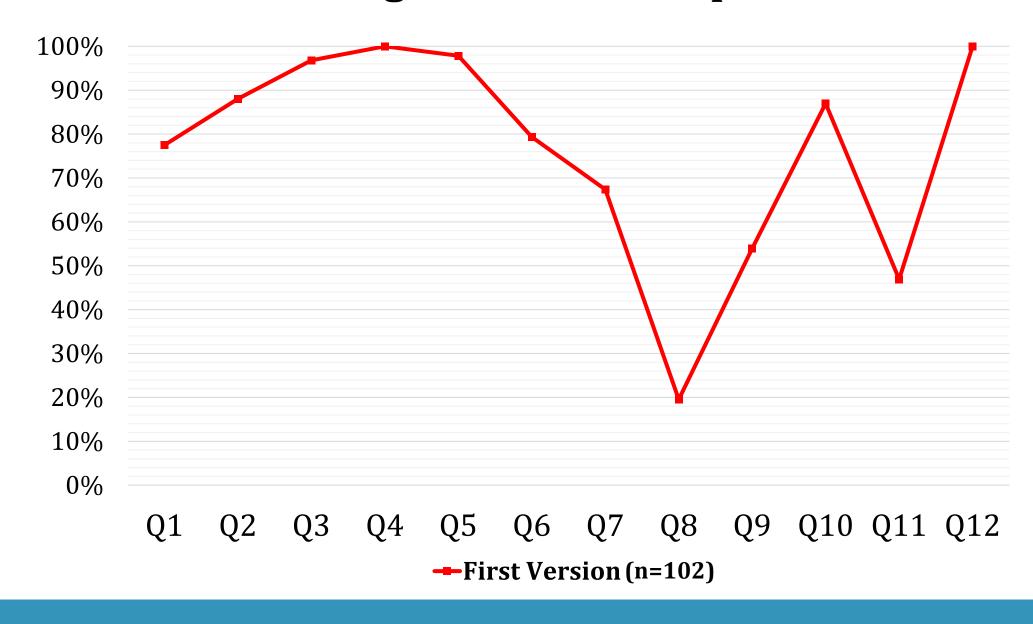
Topic: Reports

- 5. The Interface File Statistics Report gives an overview of data submitted to the registry and identifies:
- 6. What is the longest time frame the File Statistics Report can be run?
- 7. When troubleshooting, which fields are used to compare the Statistics Reports to the Detail Report?
- 8. Which report will tell you why a dose was not added?
- 9. On the Interface File Details Report, the dose status/dose comment provides information about:
- 10. If the Interface File Details Report indicates a patient was found with multiple possible matches, then the provider must:
- 11. On the Interface File Details Report, the dose comment "No matching inventory record found" means

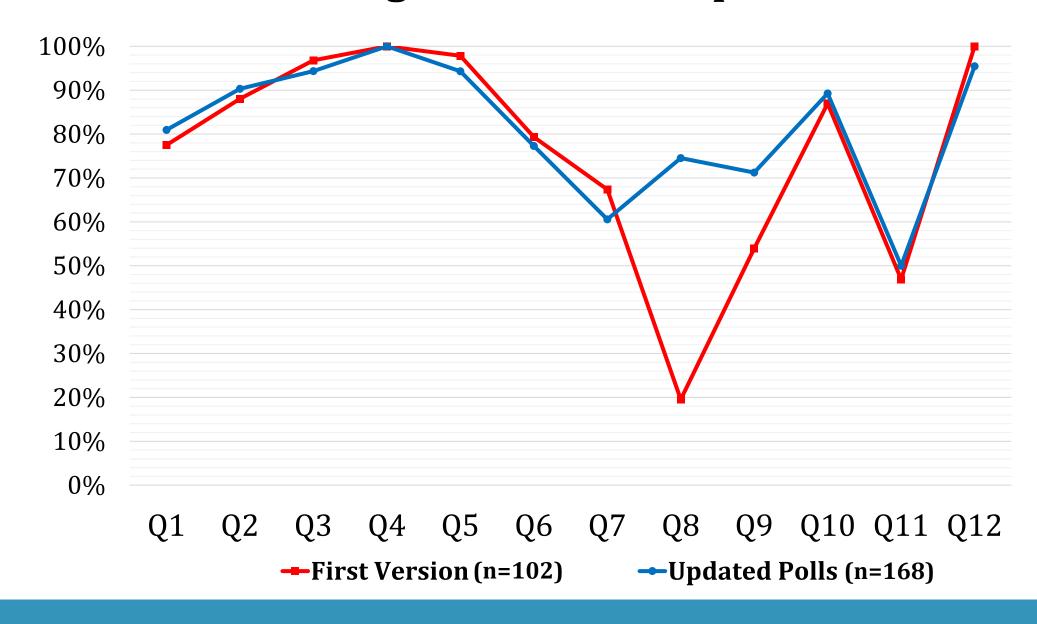
Topic: Resources

12. The resources available to assist NJIIS users in troubleshooting data include:

Percentage of Correct Responses



Percentage of Correct Responses

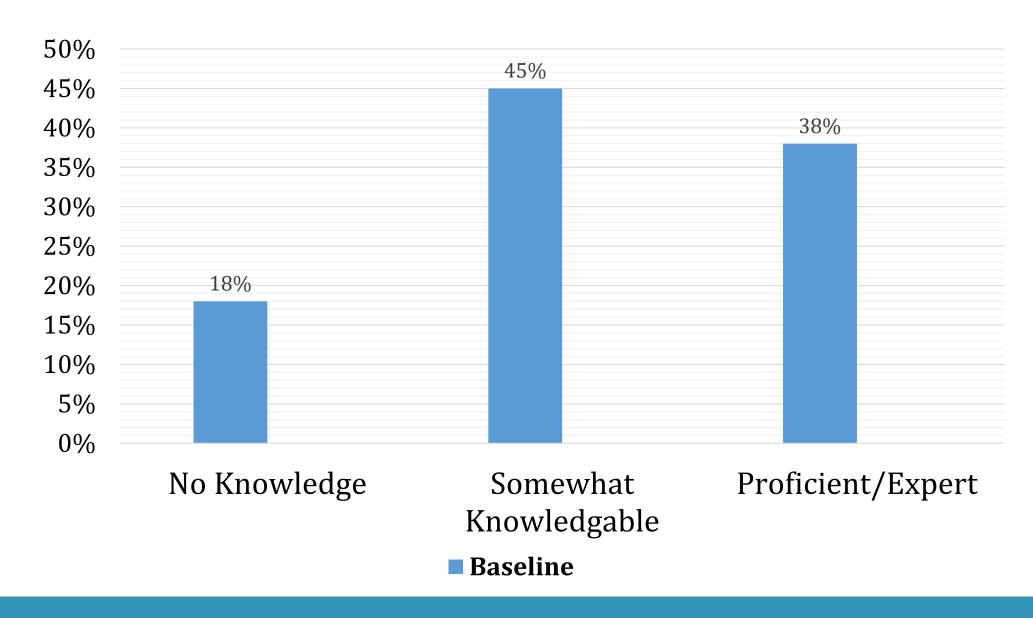


Evaluation of the Interface Webinar Training

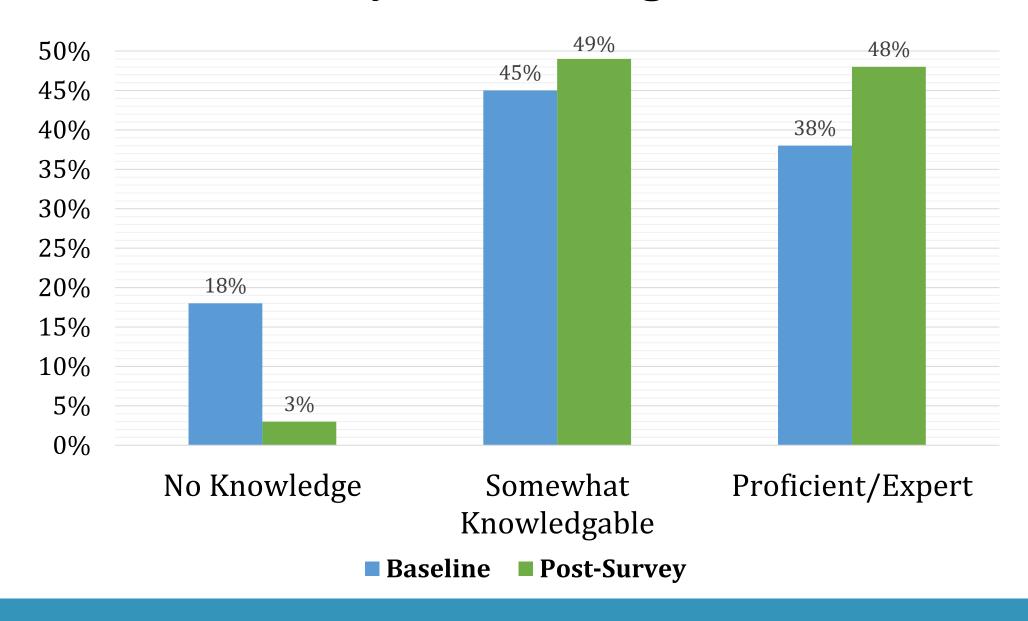
Pre-/Post-Survey

- Self-Assessment Tool
- Consists of rating your knowledge/understanding
 - 1. No Knowledge
 - 2. Somewhat Knowledgeable
 - 3. Proficient
 - 4. Expert
- n = 222

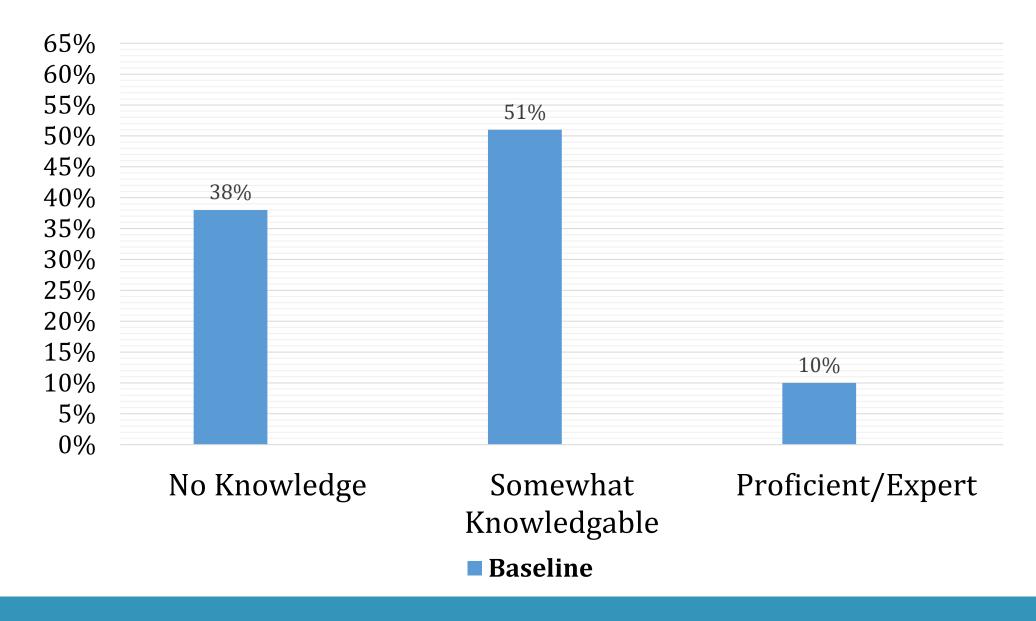
Q1. Rate your knowledge of NJIIS



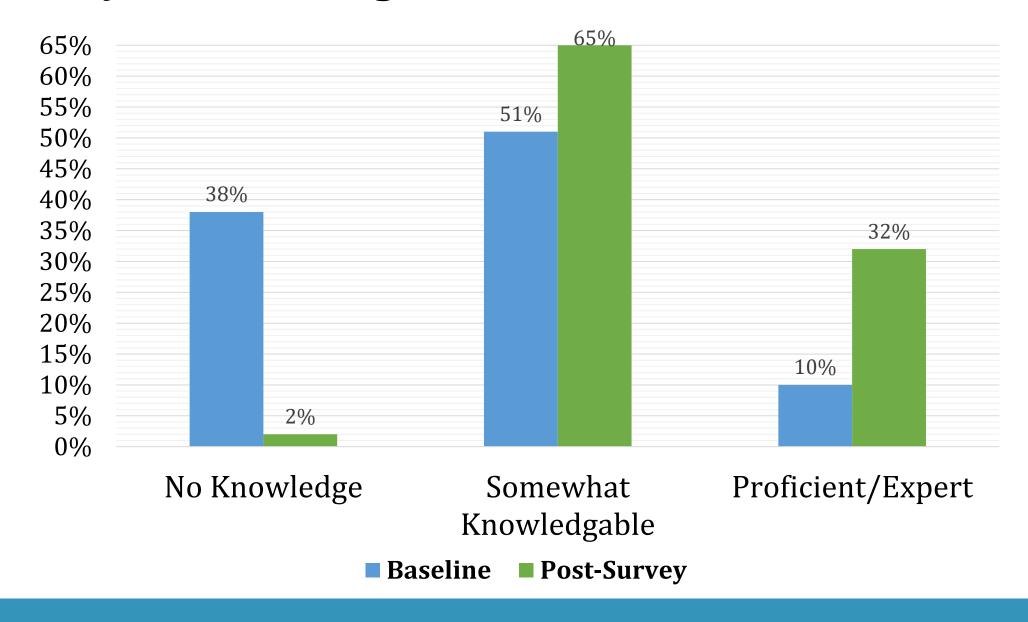
Q1. Rate your knowledge of NJIIS



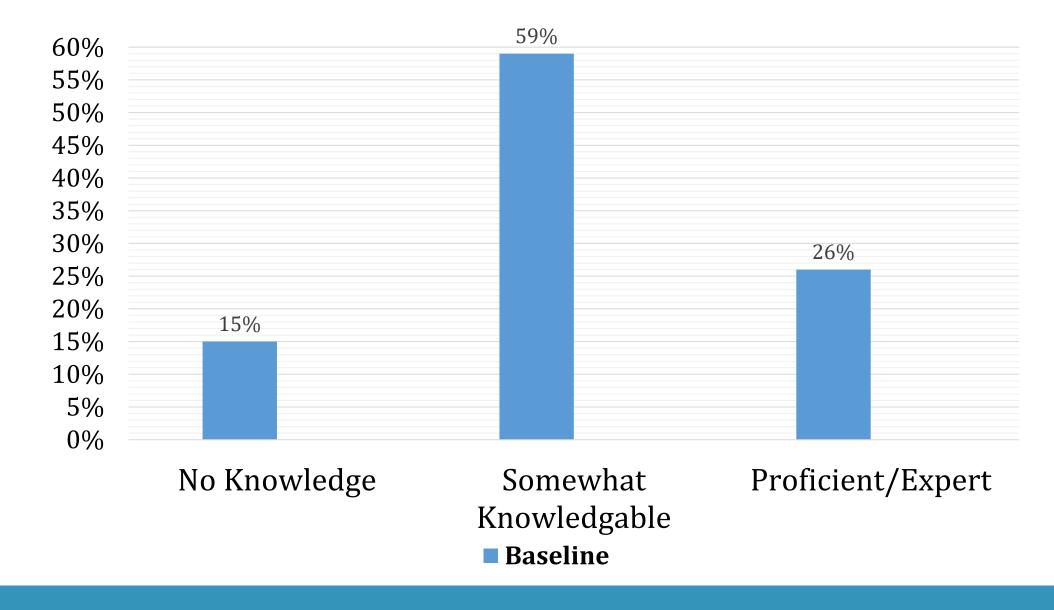
Q2: Rate your knowledge of how data is interfaced with NJIIS



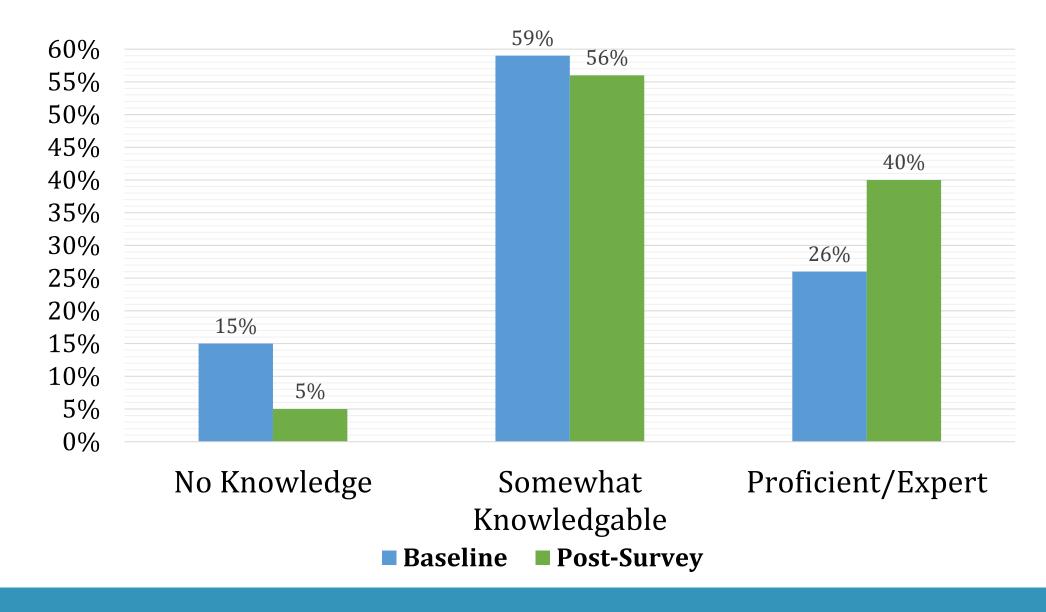
Q2: Rate your knowledge of how data is interfaced with NJIIS



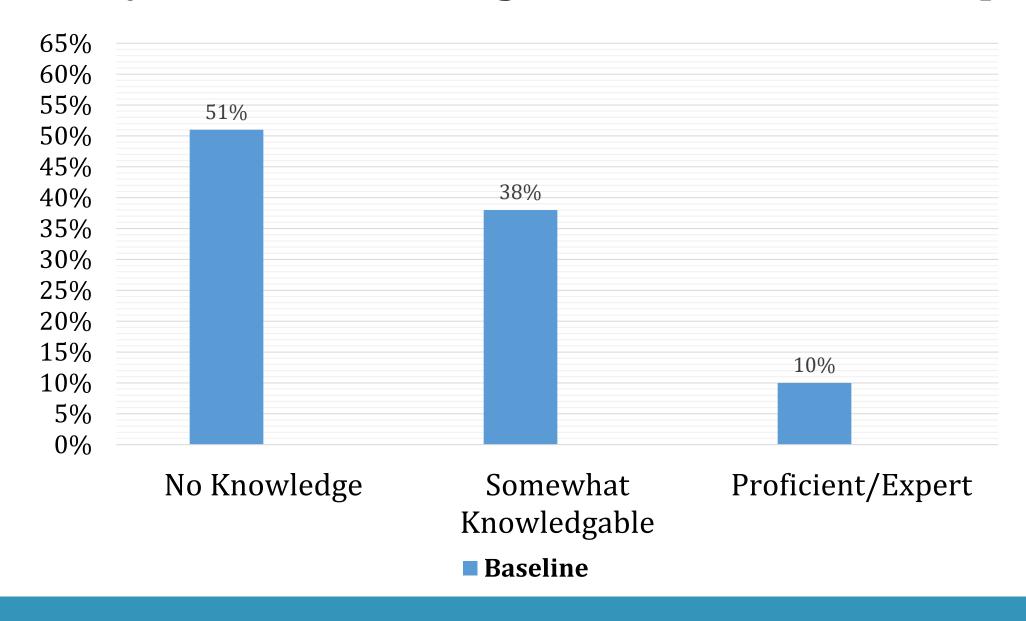
Q3: Rate your understanding of Excel Spreadsheet Basics



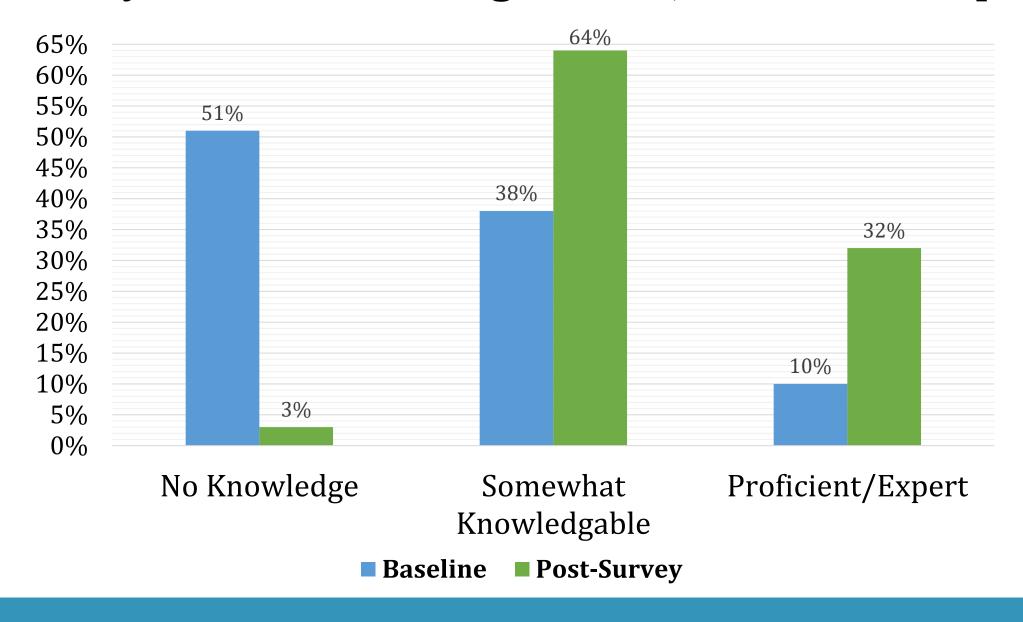
Q3: Rate your understanding of Excel Spreadsheet Basics



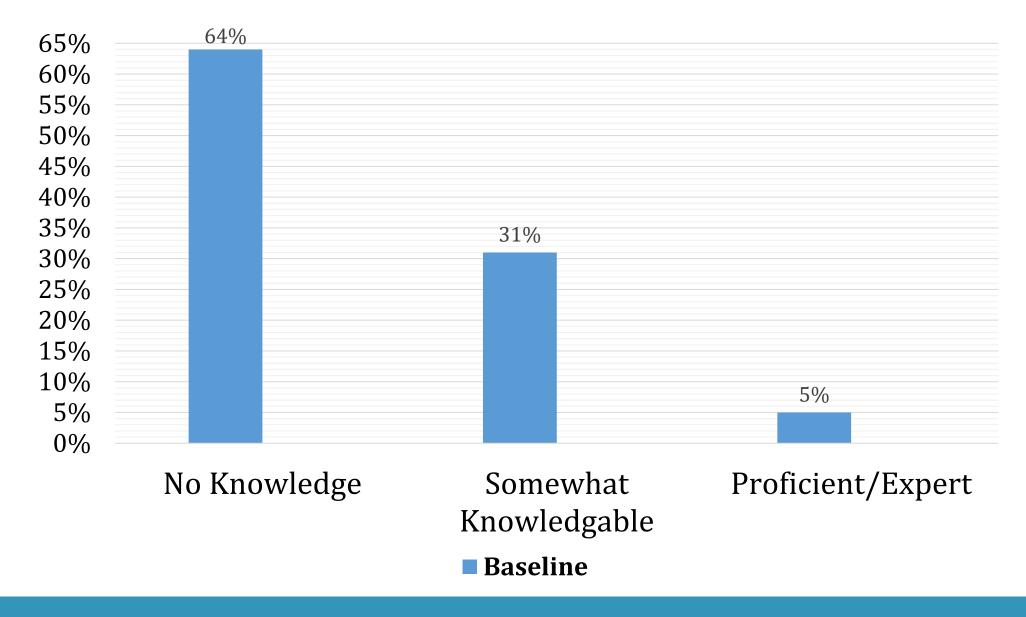
Q4: Rate your understanding of the NJIIS interface reports



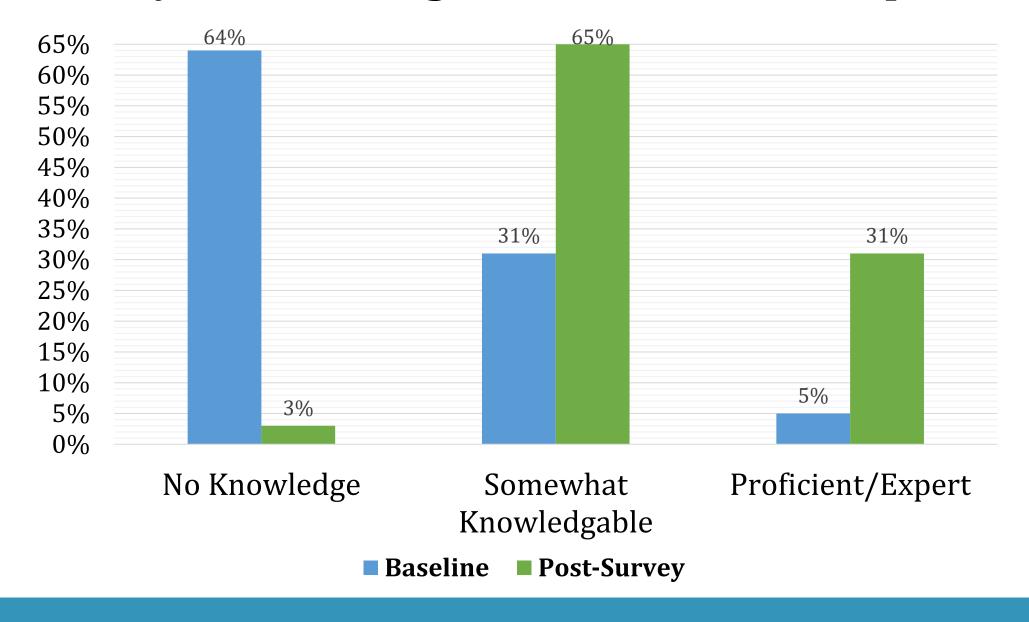
Q4: Rate your understanding of the NJIIS interface reports



Q5: Rate your knowledge of NJIIS Interface Help Guides



Q5: Rate your knowledge of NJIIS Interface Help Guides



LESSONS LEARNED

GoToWebinar

Online platform for delivering webinars

Pros

- Easy Setup
 - Poll questions
 - Pre-survey
 - Post survey
- Rich Features
 - Invite co-organizers/panelist to participate
 - Attendance reports are automatically generated
 - Generates a webinar link for repeat viewing

Cons

- Cannot edit audio or visuals
 - Purchasing a recording/editing software (Camtasia) greatly reduced development time
- Playing live videos is still in Beta



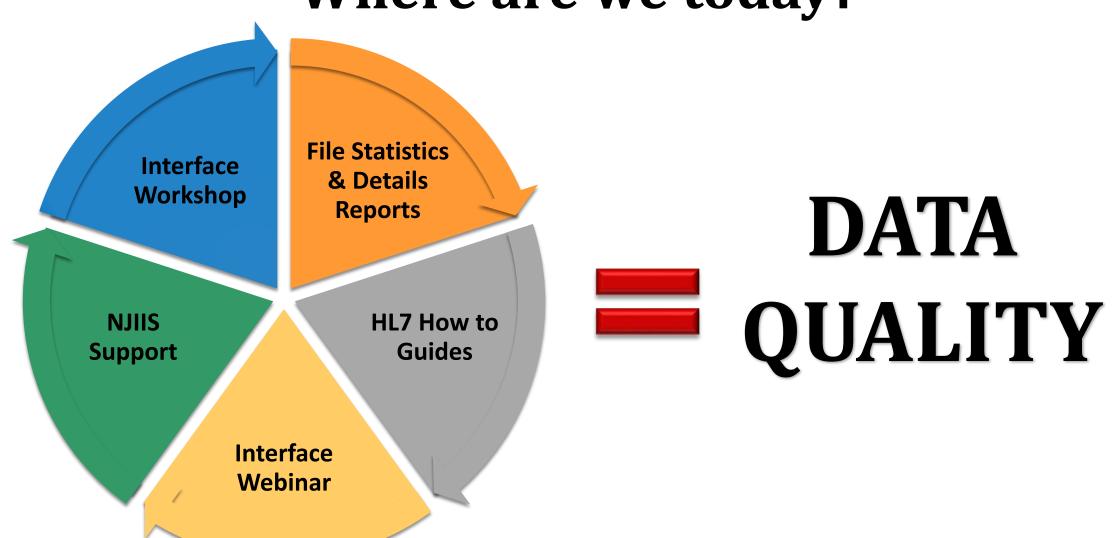
Effective Marketing Plan

- Pre-Interfacing Sites
 - Users directed to the webinar in the Getting Started document
- Sites in the Testing Phase
 - Automated emails sent reminding users to take the interface webinar
- Pre-Production Sites
 - On the pre-production call:

"Please ensure that at least one employee from your practice registers to take the NJIIS Interface Webinar. This individual will be responsible for reviewing the interface-related reports on a routine basis to troubleshoot any issues that may arise in immunization data submission."

- Sites in Production
 - Interface workshops cannot be attended until completion of webinar training

Where are we today?



THANK YOU!



