



# Use of a Biannual Customer Service Survey to Improve IIS

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# Outline

- Tennessee Immunization Information System (TennIIS)
- Customer Service Survey
- Results
- Impact
- Lessons Learned



# TennIS Background

# TennIIS



Statewide immunization information system (IIS) that helps health care providers and schools ensure Tennessee residents of all ages are properly immunized. TennIIS also serves as the online Vaccine Ordering Management System (VOMS) for Vaccines for Children (VFC) providers

# TennIIS Background

- IIS team staff of 15
- 55+ Million Vaccinations and 6.3+ Million Patients
- 2,100 organizations and 4,400 facilities
  - 567 organizations are electronic trading partners
  - about 650 VFC facilities
- About 18K users

# TennIIS – the abbreviated migration story

## Tennessee Web Immunization System (TWIS)

Hosted by Business  
Computer Systems (BCS)

1994-2014

### Migrated:

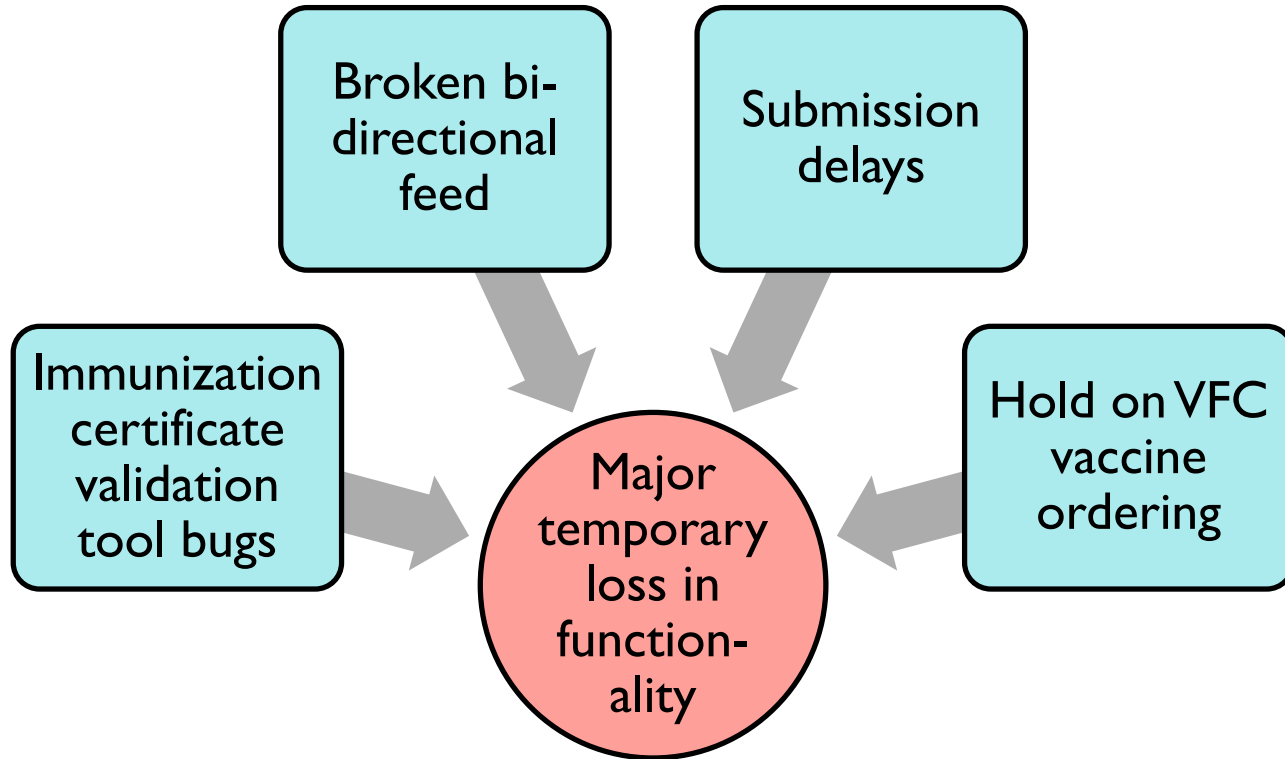
- Organizations
- Facilities
- Patients
- Vaccinations
- Inventory
- Users

## Tennessee Immunization Information System (TennIIS)

Hosted by Scientific  
Technologies  
Corporation (STC)

2014 - Present

# TennIIS – migration frustrations

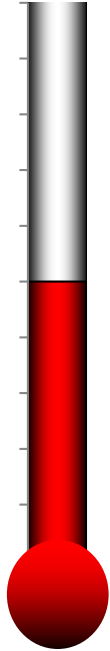




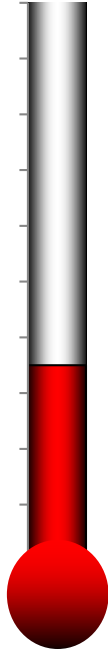
# Customer Service Satisfaction Survey



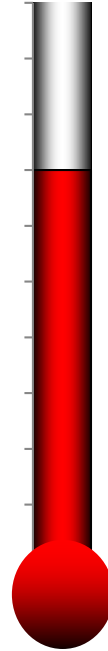
# Taking our users' temperature



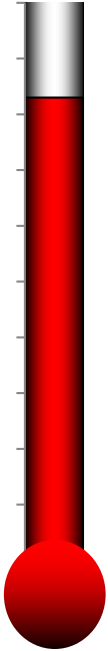
Who was using  
TennIIS?



How were users  
using TennIIS?



Strengths/areas for  
improvement?



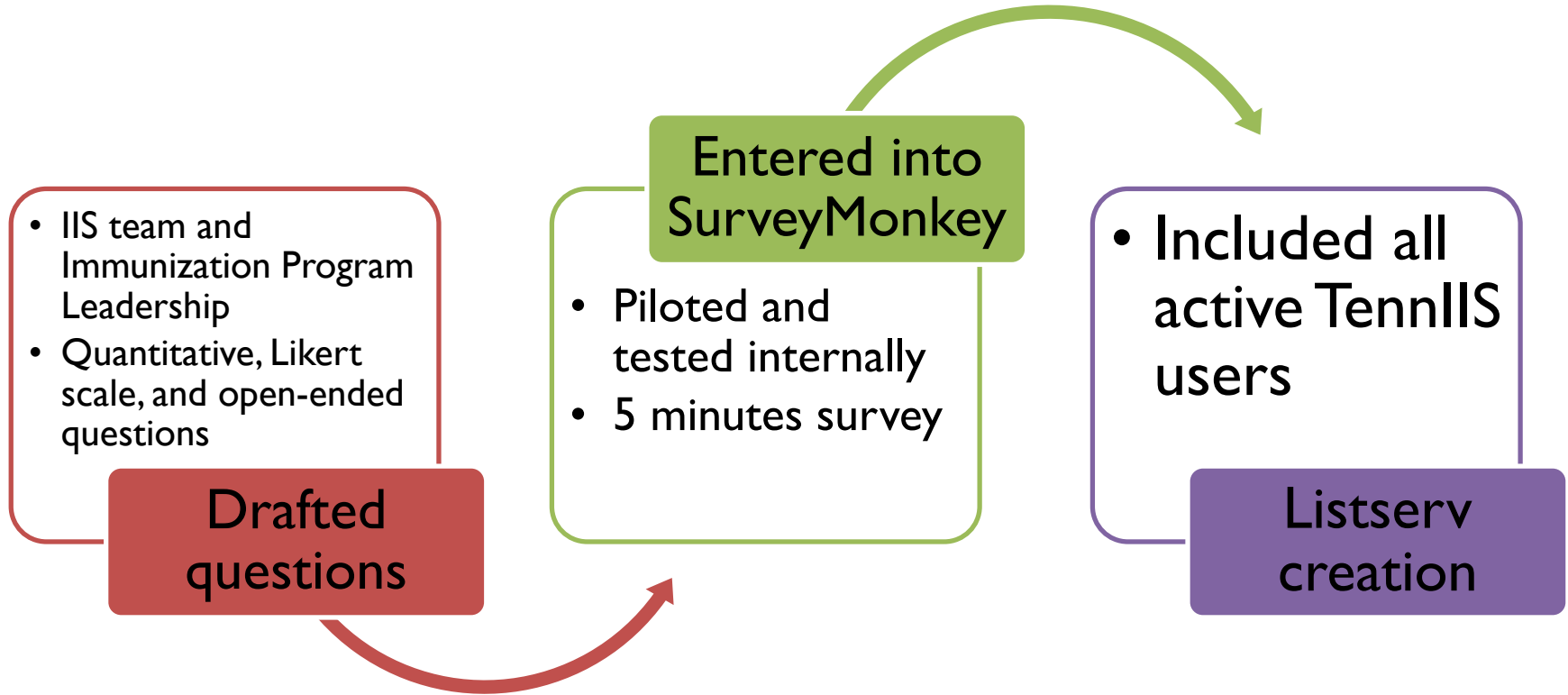
How was TWIS →  
TennIIS migration?

# Solution - Survey

- Access to Department of Health Survey Monkey account
  - Easy to set up and manage online surveys
  - Anonymous way to provide feedback
- Access to TN State ListServ service



# Survey Development



# Survey Distribution



# March 2015: Focus on transition

User Information: user roles, how TennIIS is used

Transition from TWIS to TennIIS

Customer Service: resources utilized and experience

Training: preferred training methods

Knowledge level of TennIIS System

TennIIS Functionalities: best and least liked

Overall experience using TennIIS – open ended question

# October 2015: Expanded survey

User Information: user roles, how TennIS is used, how often

~~Transition from TWIS to TennIS~~

User Experience: satisfaction with TennIS functionalities, feature to add, overall experience

Customer Service: resources utilized, experience, and satisfaction scale

Communications: usefulness of various resources

Training: preferred training methods

Knowledge level of TennIS System

~~TennIS Functionalities: best and least liked~~

Overall experience using TennIS – open ended question

# March 2016: added “in the last 6 months”

User Information: user roles, facility role, how TennIIS is used, how often

Data Entry: are vaccinations entered into TennIIS, and how

User Experience: satisfaction with TennIIS functionalities, feature to add, overall experience

Customer Service: resources utilized, experience, and satisfaction scale

Communications: usefulness of various resources

Training: resources used

Knowledge level of TennIIS System

Feature would like to learn about

Overall experience using TennIIS – open ended question

# September 2016: added special topics section

User Information: user roles, facility role, how TennIIS is used, how often

Data Entry: are vaccinations entered into TennIIS, and how

User Experience: satisfaction with TennIIS features, **processes**, feature to add, overall experience

Customer Service: resources utilized, experience, and satisfaction scale

Communications: usefulness of various resources

Training: resources used

Knowledge level of TennIIS System

Feature would like to learn about

Overall experience using TennIIS – open ended question

Special topic – coverage rate report: knowledge, user, interested in training?





# Survey Results

# Survey evaluation

- Quantitative and qualitative data collected
  - Graphs and tables for quantitative
  - Qualitative analysis using NVivo for first survey
    - Subsequent ones manual reading/counting terms and assessing intent by positive/negative/improvement

L	M	N	O
POSITIVE	NEGATIVE	IMPROVEMENTS	BLANKS
70	10	17	766

- Now evaluating trends over time

# First Survey

Sent to over 11 thousand emails, received 561 responses

- Interface Issues
  - Patient Tracking and Billing Management Information System (PTBMIS)
  - Private EHRs
- Double Data Entry
- TennIIS Not Ready
- TennIIS Not User Friendly
- VOMS - Vaccine inventory not accurate

Smooth Transition	OK Transition	Rough Transition
21%	58%	21%

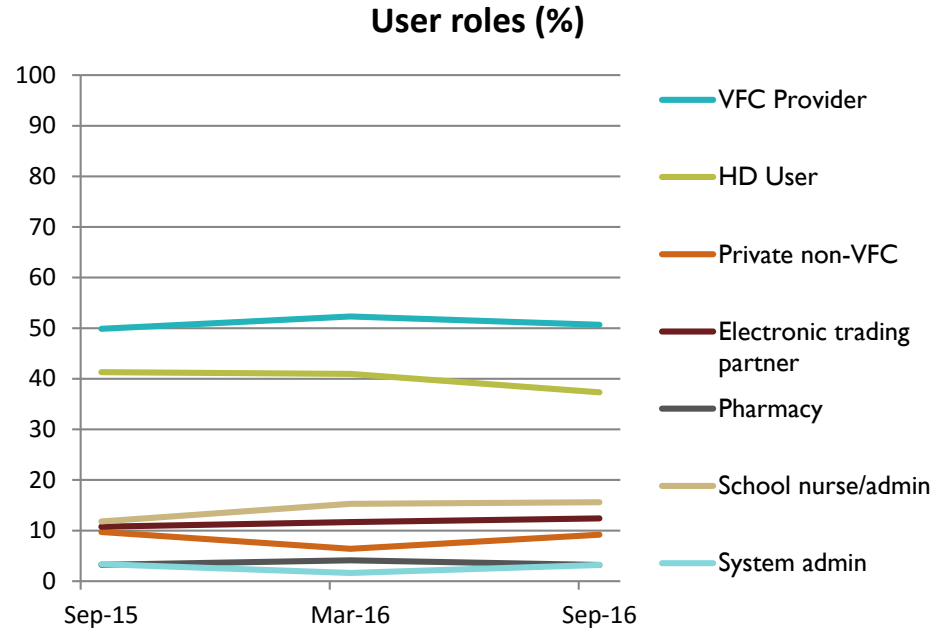
“I was prepared but TennIIS was not.”

# Trends: survey 2 – 4: User TennIS Role

September 2015 864 responses

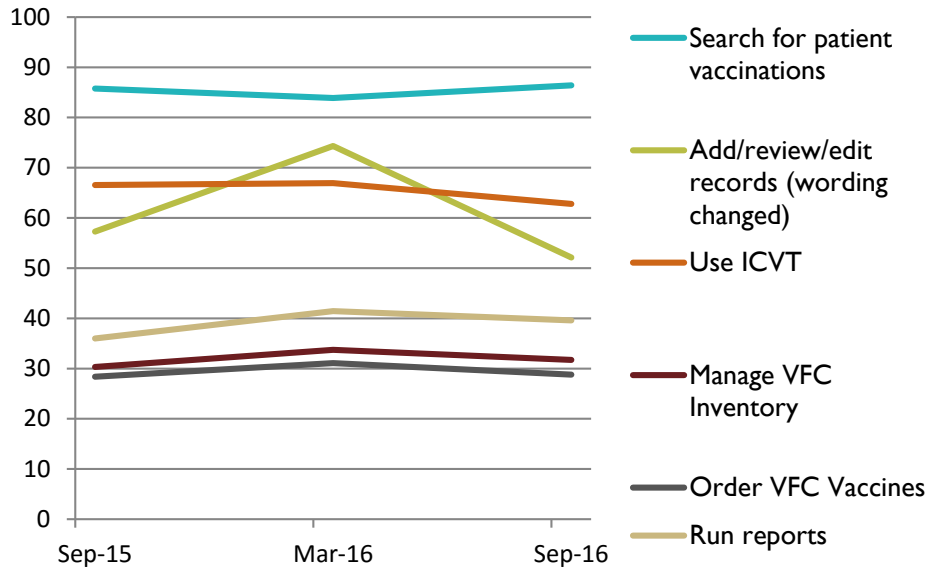
March 2016 608 responses

September 2016 750 responses

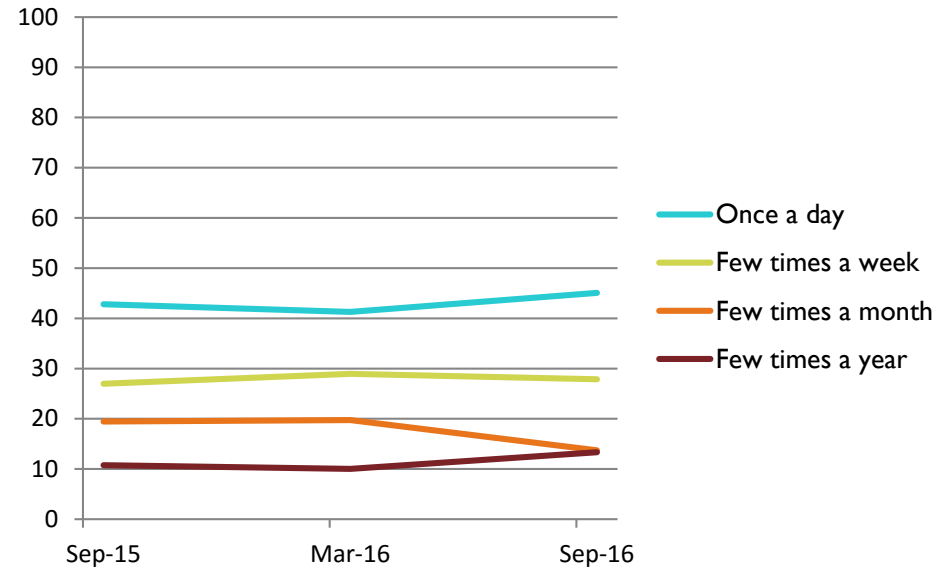


# Trends: survey 2 – 4: TennIIS Use

## How users currently use TennIIS (%)

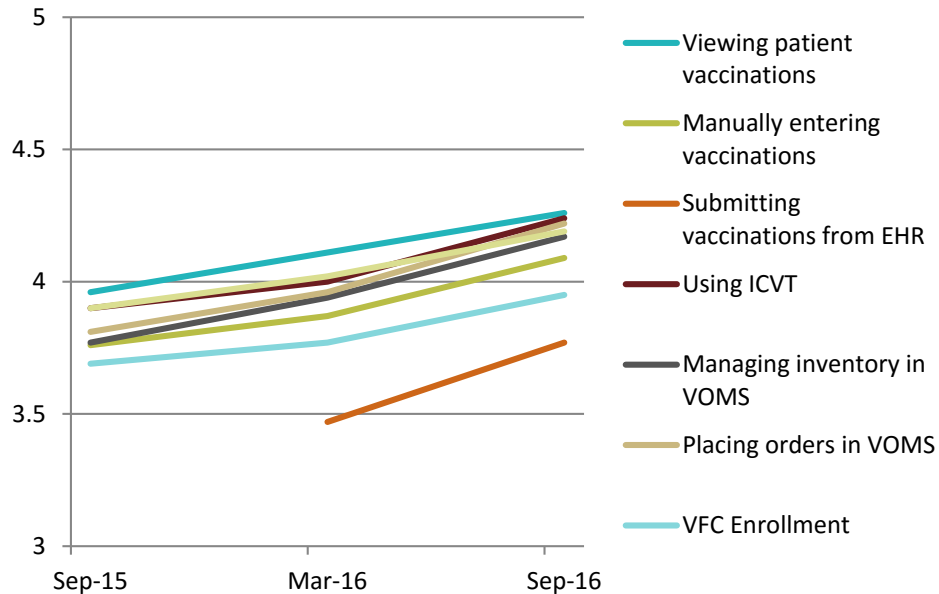


## How often users use TennIIS (%)

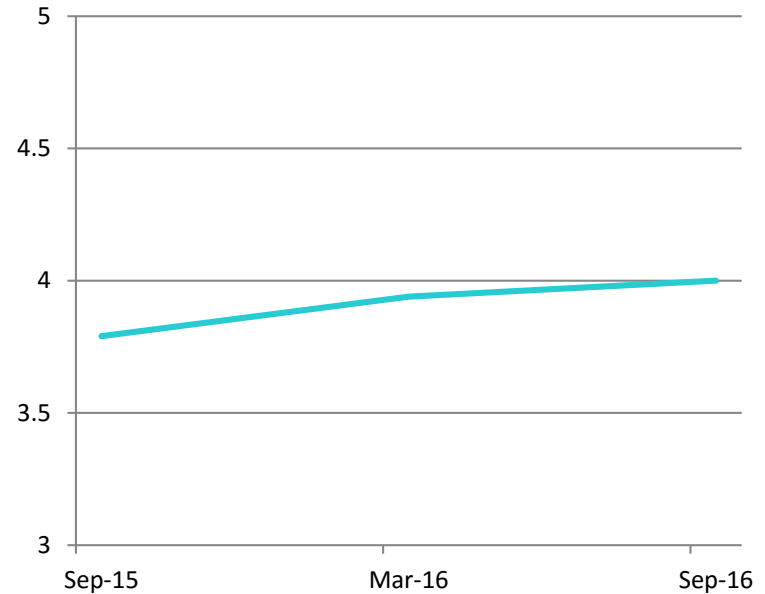


# Trends: survey 2 - 4

Satisfaction with TennIIS Functionalities  
(1 = least satisfied, 5 = most satisfied)

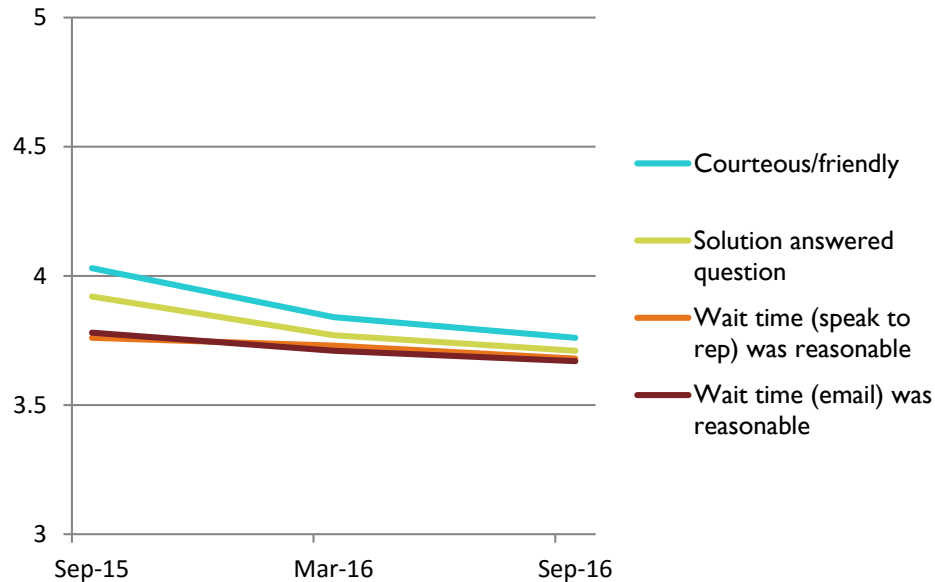


Overall experience using TennIIS  
(1 = least satisfied, 5 = most satisfied)

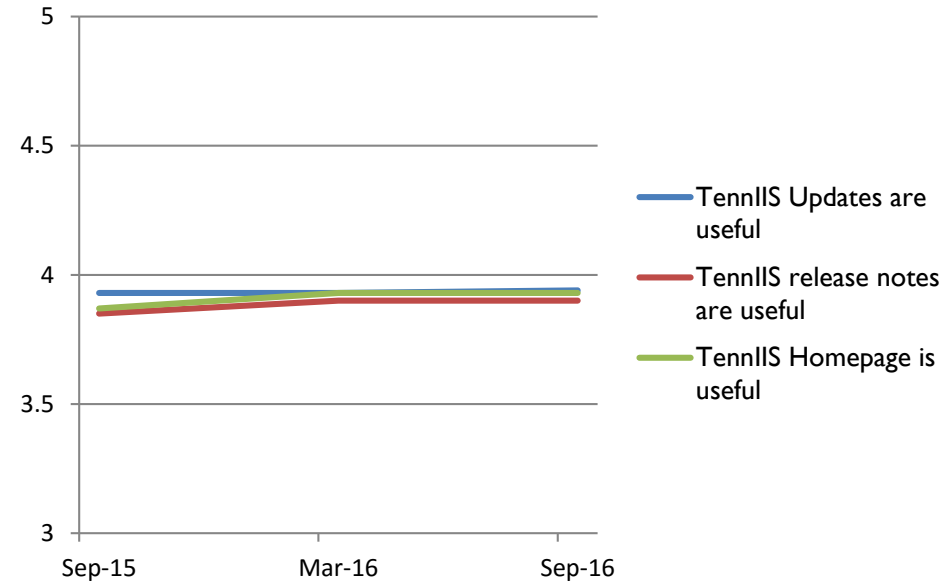


# Trends: survey 2 - 4

Satisfaction with TennIIS Customer Service  
(1 = strongly disagree, 5 = strongly agree)



TennIIS Communication Methods  
(1 = strongly disagree, 5 = strongly agree)





Survey Impact



# Immunization Program

- Staff member recognition
- Learn about trouble areas for providers
- Suggestions for new functionality
- Learn how users are using the system and resources
- Helps focus IIS team work area based on user needs
- Celebrate improvement over time!

# Users

## We Hear You: Our Continued Priorities

1. ICVT – all issues top development priority
2. PTBMIS/TennIIS Interface
  1. Delays – researching causes and solutions
  2. Search Functionality – April/May 2015
3. VOMS – August Release will have updated VOMS; looking for Subject Matter Experts!
4. In-Person Training – TennIIS.Training@tn.gov for training requests
5. Data Quality – on-going, contact us
  1. Vaccine Inventory
  2. Organizations and Facilities
6. TennIIS Team comes to you!



## Highlights



Apr 10<sup>th</sup>, 2015  
Volume 1  
Issue 22

### Message from TN Immunization Team

#### Attention All TennIIS Users: TennIIS Customer Service Survey

Thank you very much for participating in the first TennIIS Customer Service Survey, we received 561 responses! We learned that 58% of the respondents thought the transition from TWIS to TennIIS was OK, 21% thought the transition was tough, and 20% thought it was smooth. We also learned that in-person training sessions are preferred to webinars or other material so we will offer more sessions in the coming months. We are still analyzing the detailed feedback you provided and will use it to prioritize our work for the rest of 2015.

#### Attention All TennIIS Users: Social Security Numbers in TennIIS

Patient social security numbers in TennIIS have been masked to only show the last four digits. This is a security measure to protect personal information. You can still confirm the patient's identity by searching for the full social security number through the Advance Search option. You can also enter the full social security number when creating a new patient record.

#### Vaccine for Children Program (VFC) Participants:

##### VFC Re-Enrollment:

Thank you for your patience. The VFC Program is working extended hours with additional staff to review and approve your agreements as quickly as possible.

#### Upcoming April Trainings TennIIS

VOMS	04/10	11 AM
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# Stakeholders

- Survey results shared with central office and regional leadership
  - At Central Office, results help garner more resources to solve interface issues

**Q4. Please detail what was most or least helpful in the transition to TennIIS**  
Health Department Respondents

RespondentID	Please detail what was most or least helpful in the transition to TennIIS
3844478306	I was prepared for TennIIS but I am not sure TennIIS was ready for us to start using. We are having major problems of getting our shots to roll over from PTBMIS into TennIIS. Sometimes it take logging into TennIIS four or five times before the shots show up.
3844479847	too much lag time between uploading immunizations and them transferring to TennIIS. ICVT IMMUNIZATION VERIFICATION TOOL NOT WORKING
3844483456	Transferring the immun from PTBMIS to TennIIS
3844485836	Not transferring vaccines from PTBMIS to TennIIS
3844486014	program did not and still does not work properly, can not transition from PTBMIS software to Tenniss correctly and vice-versa. Also, tenniss does not load all shots that we history load so we usually have to history load them again when we get to tenniss.
3844487627	They system was not ready to be used. I also don't like the answers to this question that are available. I was only unprepared because the system was not ready to be used.
3844488553	I was trained in this. I do not like this system. The shots do not transfer over a lot of the time and sometimes the patients will not transfer over to the system. It also takes too long.
3844494051	Least helpful was the lag time between loading the immunizations into our program (after administration) and the immunizations appearing on the TENNIS certificate.
3844502964	It doesn't work properly

- Presented to Commissioner of Health as example of improving customer service

# Vendor

- Helped illuminate how users interact with customer service and the challenges they faced
- Survey results led to improved reporting on Help Desk responsiveness
- Knowing how responses helped STC prioritize staff training and creating customized email templates



# Lessons Learned

# Lessons Learned

- Standardize questions for easy trend tracking
- Be exhaustive in your options for survey questions
- Share results with stakeholders and users
- Make surveys recurring
- If migrating a to new system or functionality, use survey as a baseline
- Excellent way to prioritize IIS teams projects

# Conclusion

- Even with low participation, this survey has been a great cost-effective way to get users feedback on our IIS.
- It has helped the IIS team and our vendor understand our customers concerns and improved our responsiveness.
- A recurring survey has been a great way to track our progress as we continue to improve our IIS functionalities and processes.

# Acknowledgments

- To the IIS team!
- Sammy Chao for helping with the slide deck graphics



# Thank You!



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