



VIRTUAL
**2020 NATIONAL
RYAN WHITE
CONFERENCE ON
HIV CARE & TREATMENT**

Avoiding the Data System Black Holes: Stakeholder-driven design to increase data integration and reduce administrative burden

Presented by:

Connecticut Department of Public Health

RDE Systems



Learning Objectives



- ✓ Through interactive use of mobile audience engagement tools, the session will help audience understand how to assess **readiness and capacity** to implement data systems upgrades.
- ✓ Understand benefits of **consolidating** health information technology across funding streams and building a strong **foundation for the future**.
- ✓ Presenters will provide guidance on **pitfalls and lessons learned** on how to avoid them to those regions interested in replication of major systems modernization.



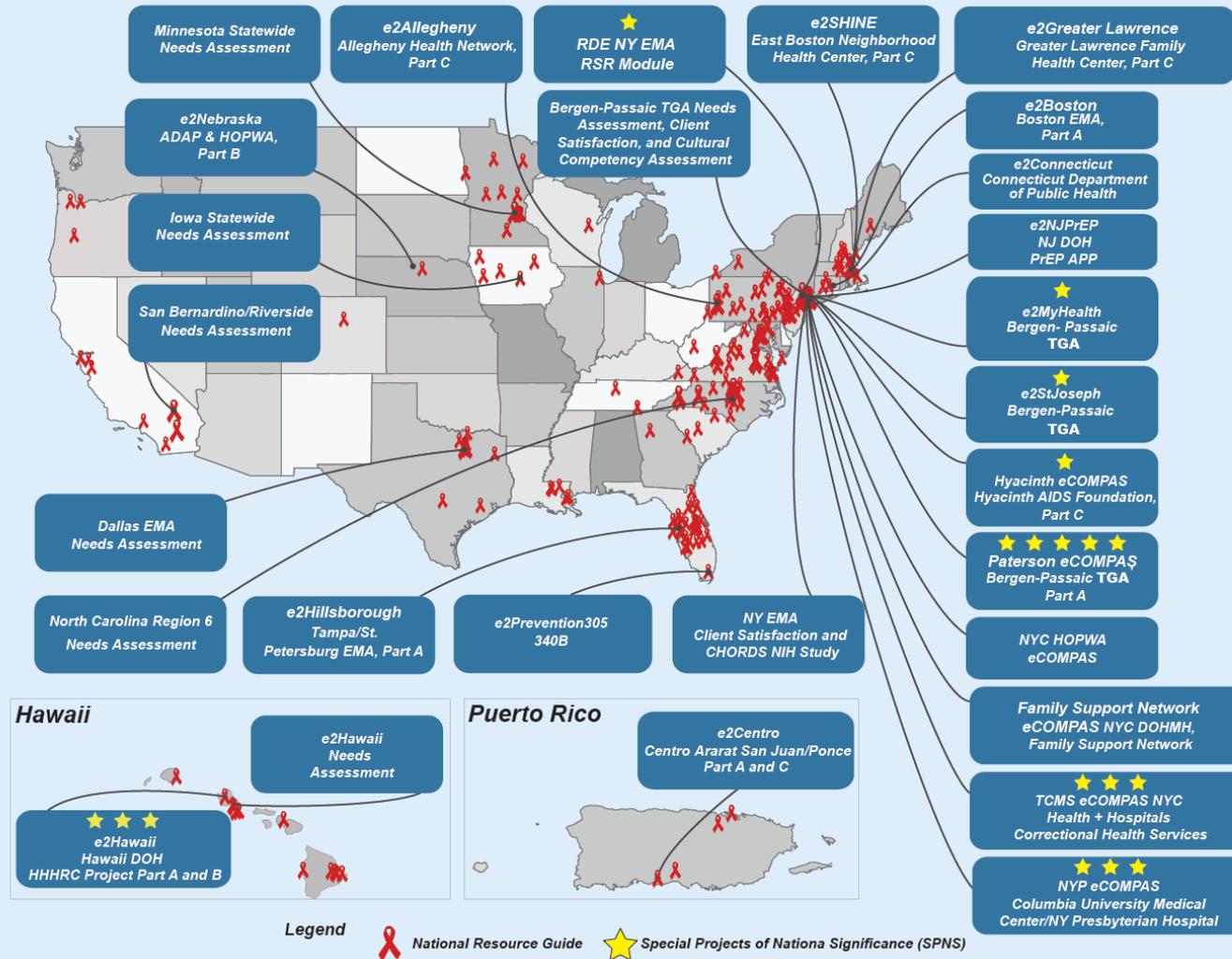
Welcome and Introductions

Synthesizing National Lessons Learned



Programs

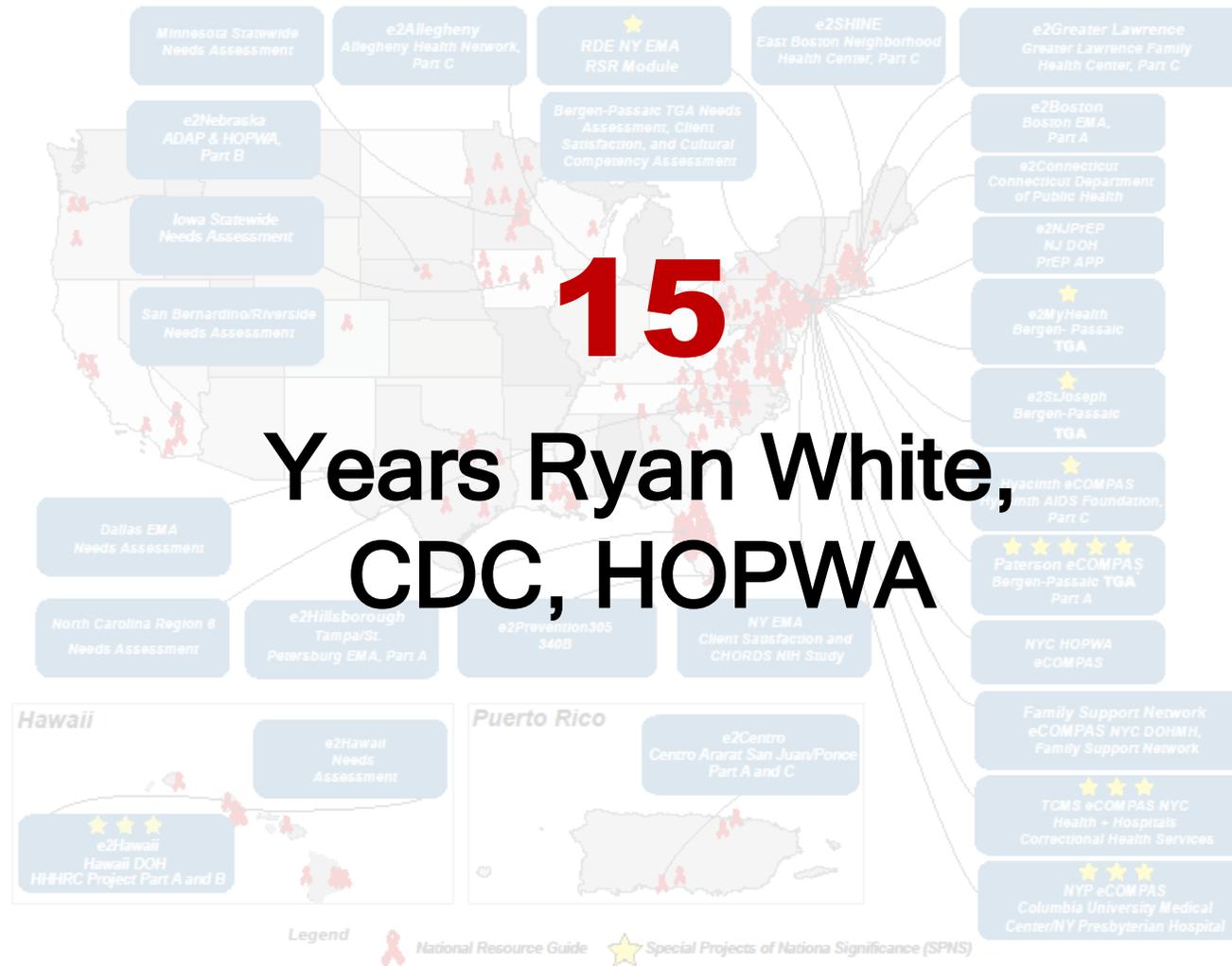
- ✓ CDC Prevention
- ✓ HRSA A,B,C,D
- ✓ HRSA ADAP
- ✓ HRSA SPNS
- ✓ HRSA AETC
- ✓ HUD HOPWA
- ✓ NIH
- ✓ ONC

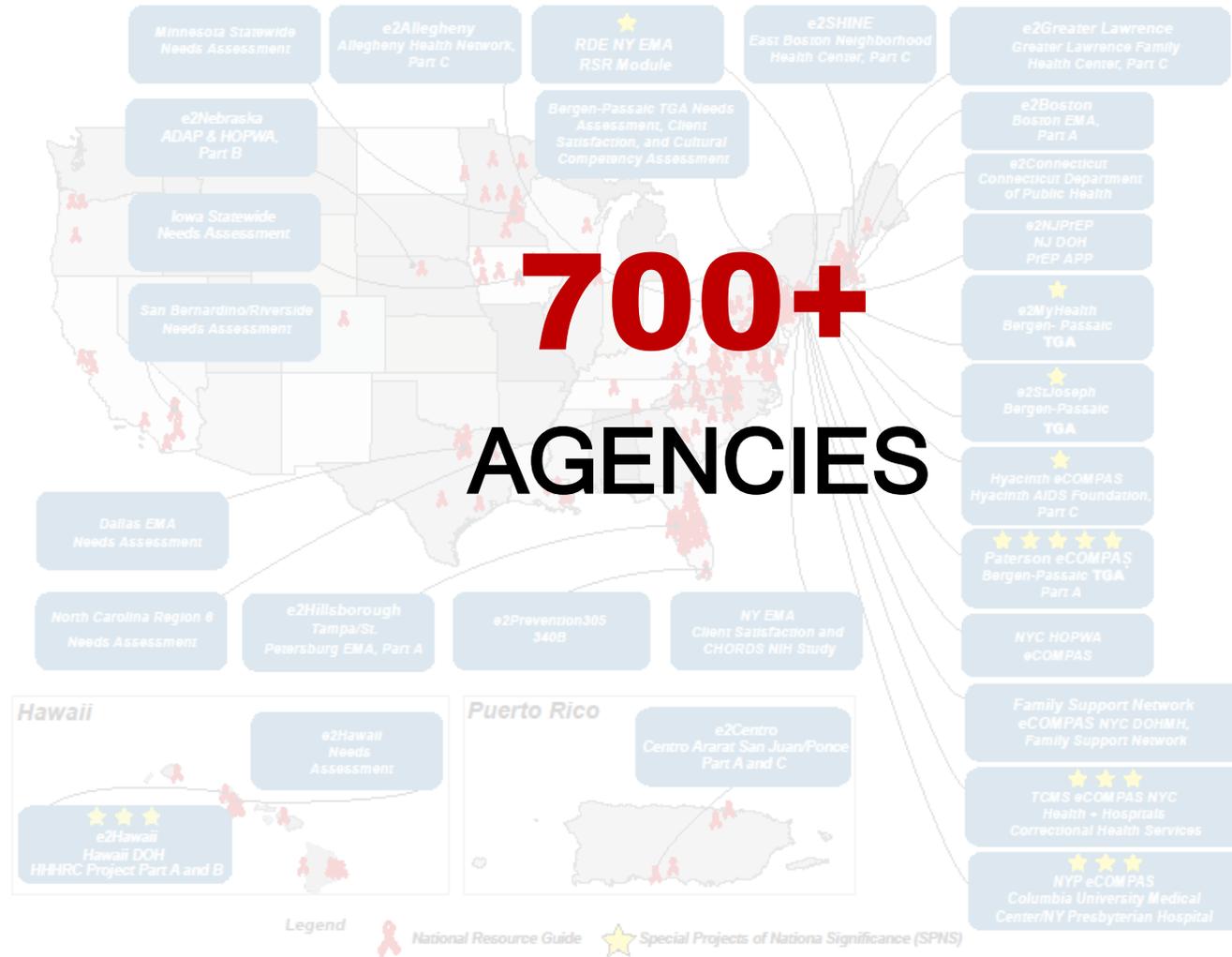


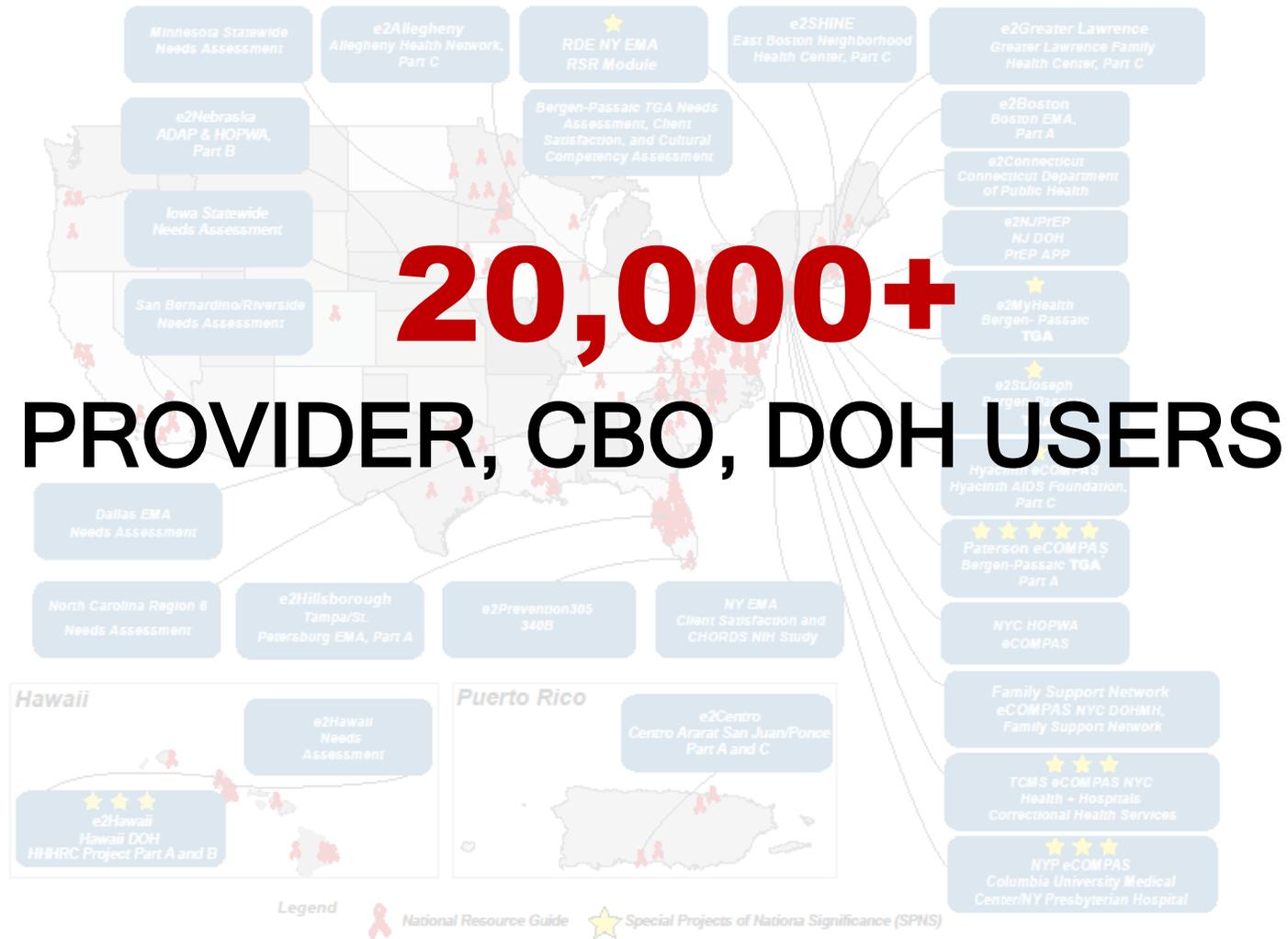
Users

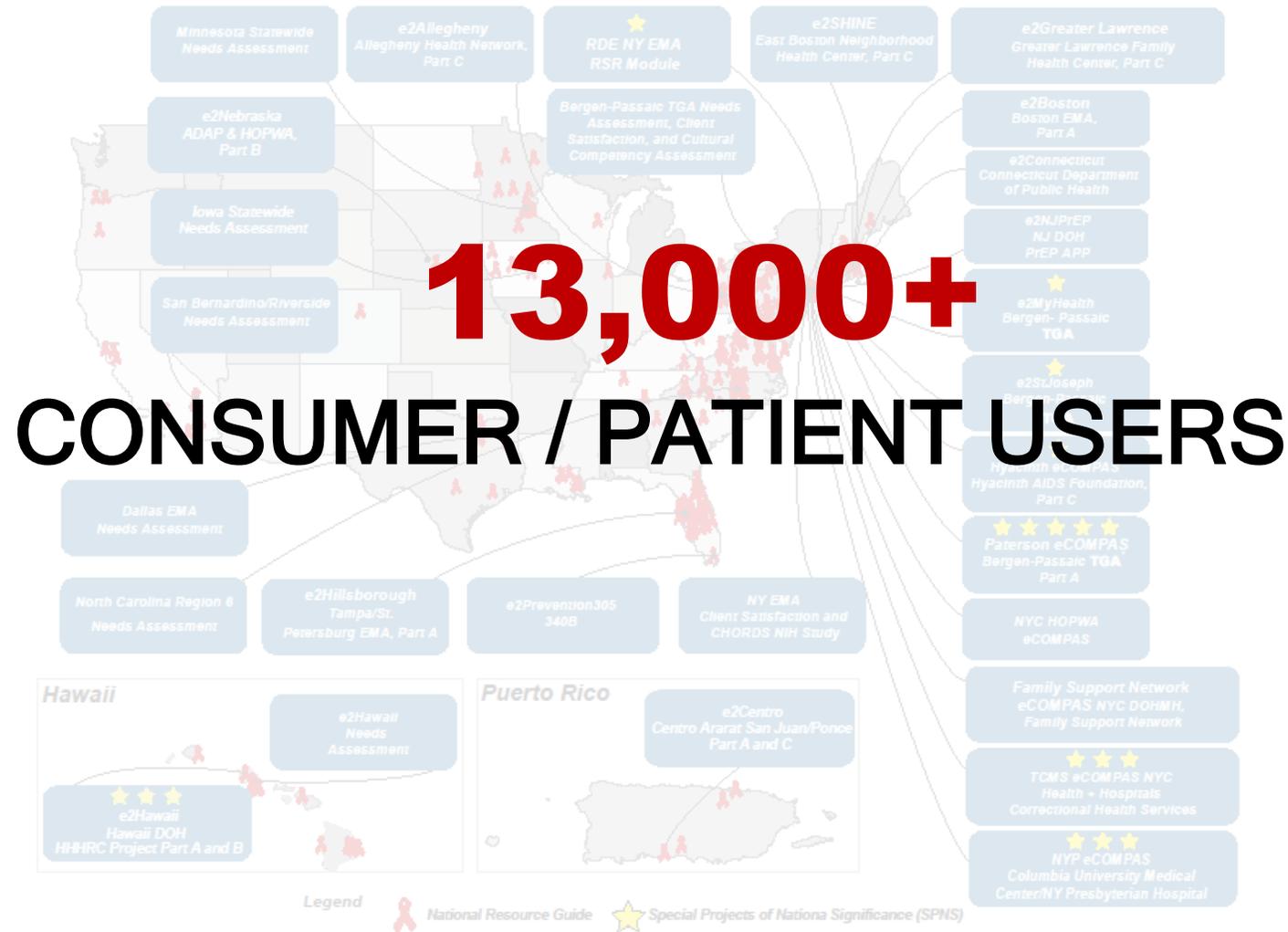
- ✓ Recipients
- ✓ Sub-Recipients
- ✓ Public Health
- ✓ Human Services
- ✓ Health Networks
- ✓ Hard Reduction
- ✓ Clinics
- ✓ CBOs
- ✓ Planning Commissions
- ✓ Clients & Patients

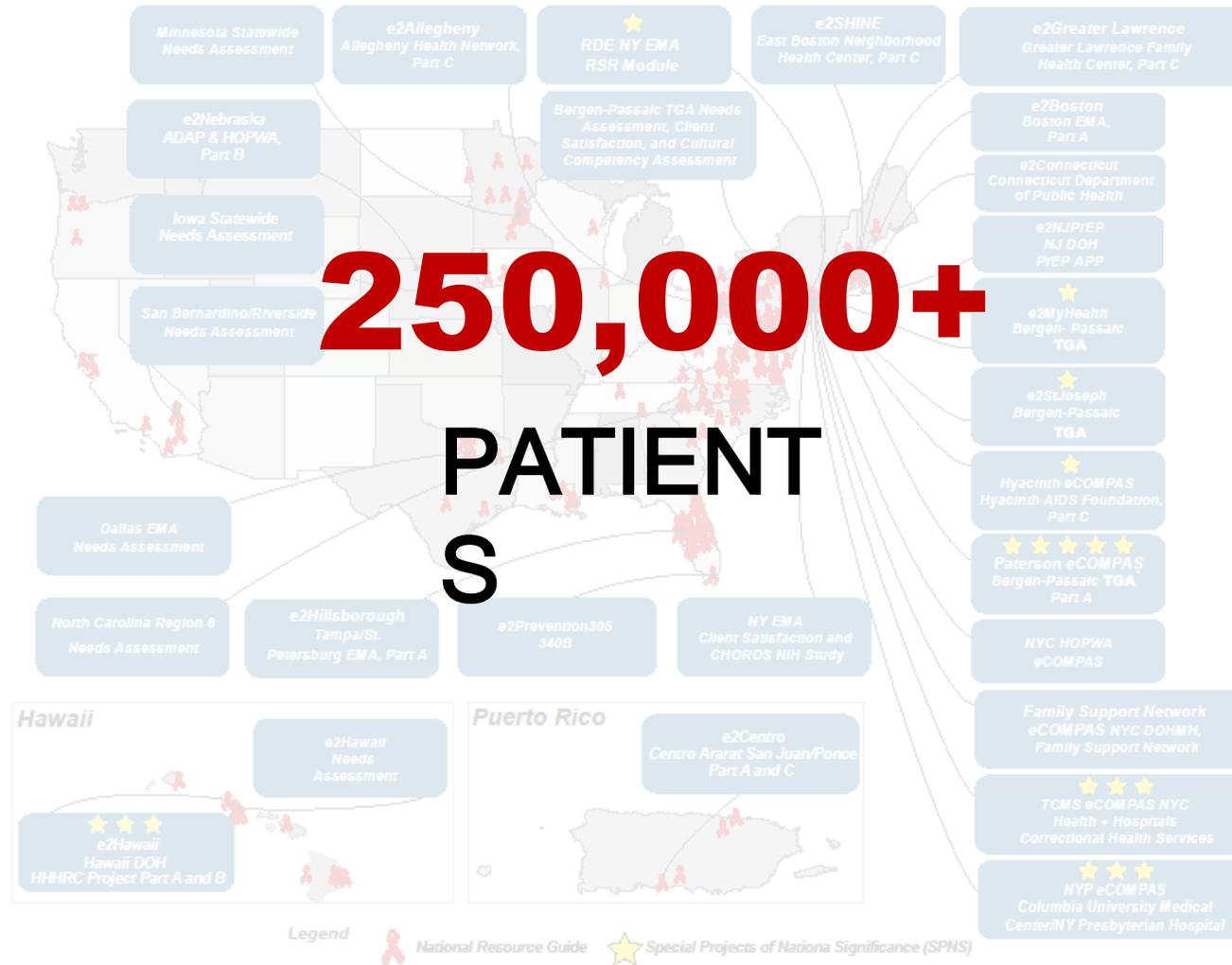










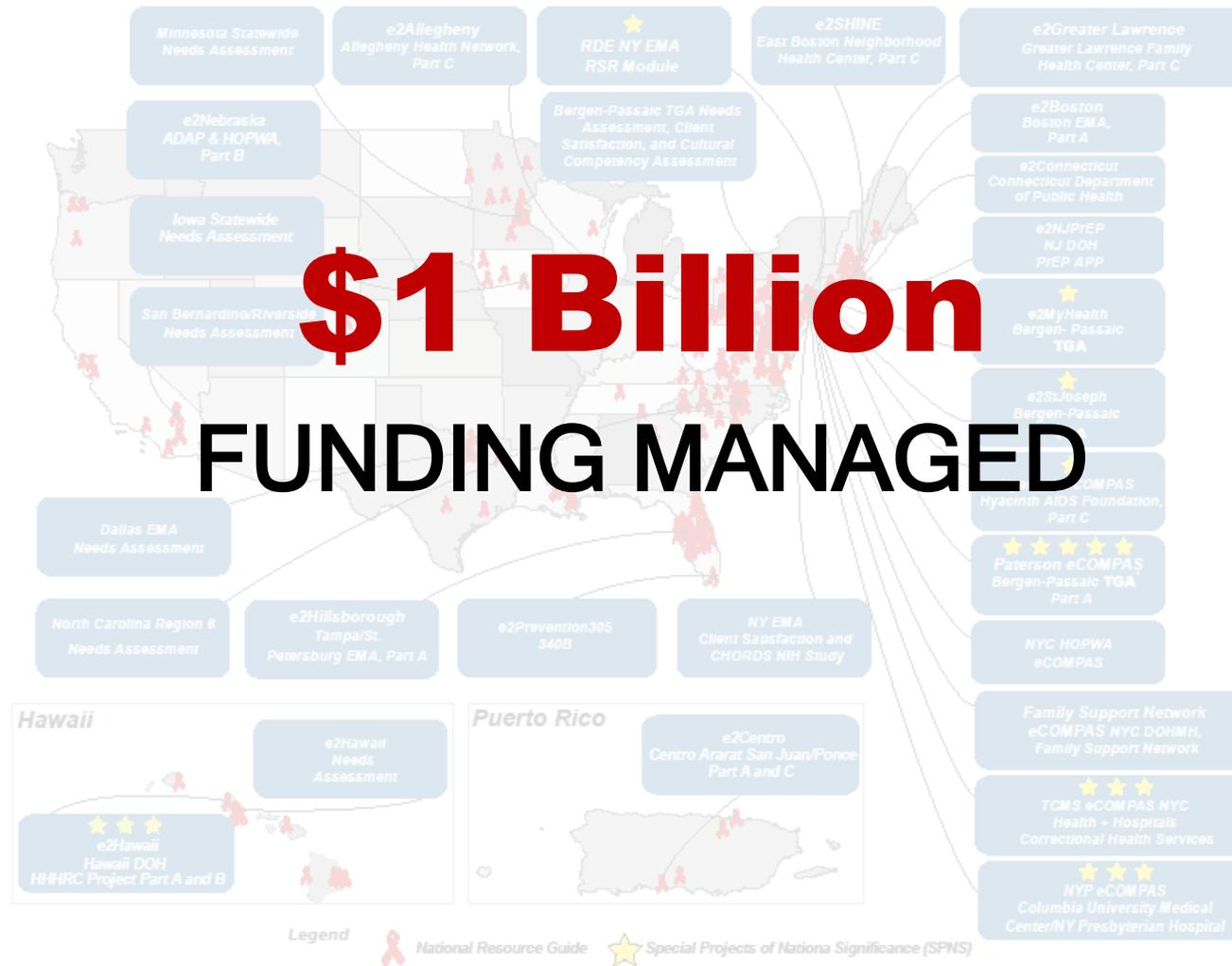


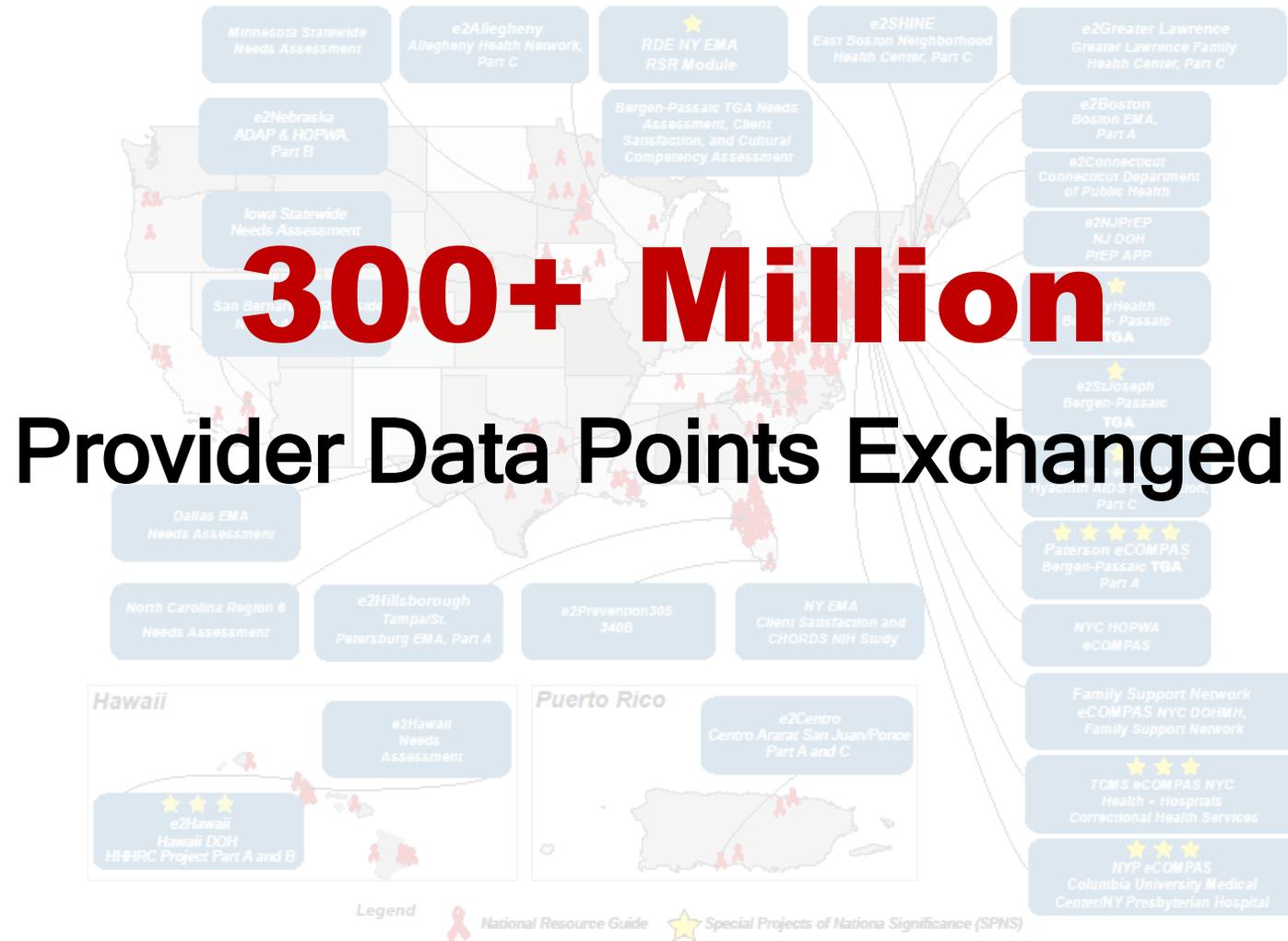
Security and Privacy are #1

AWS Assurance Programs

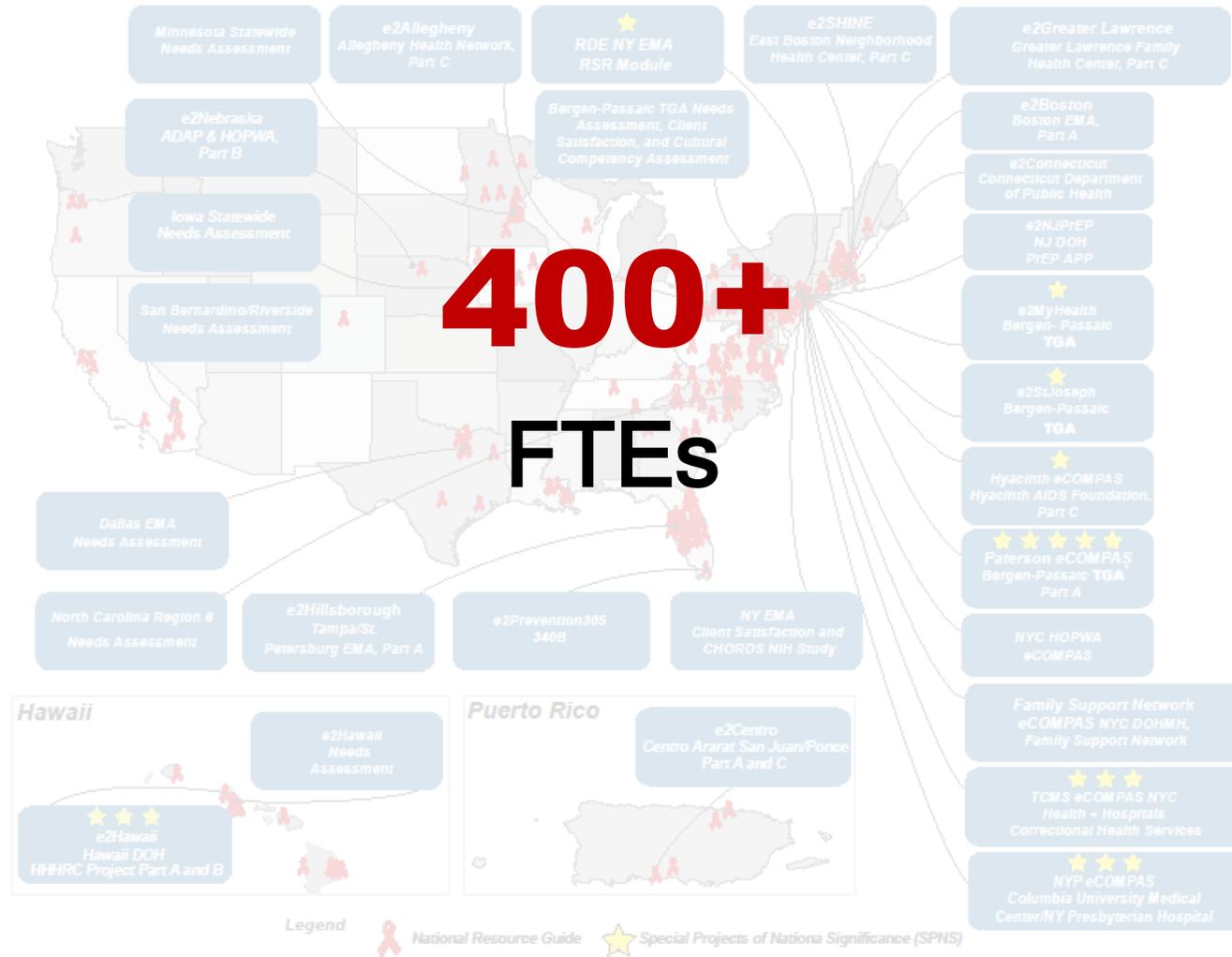


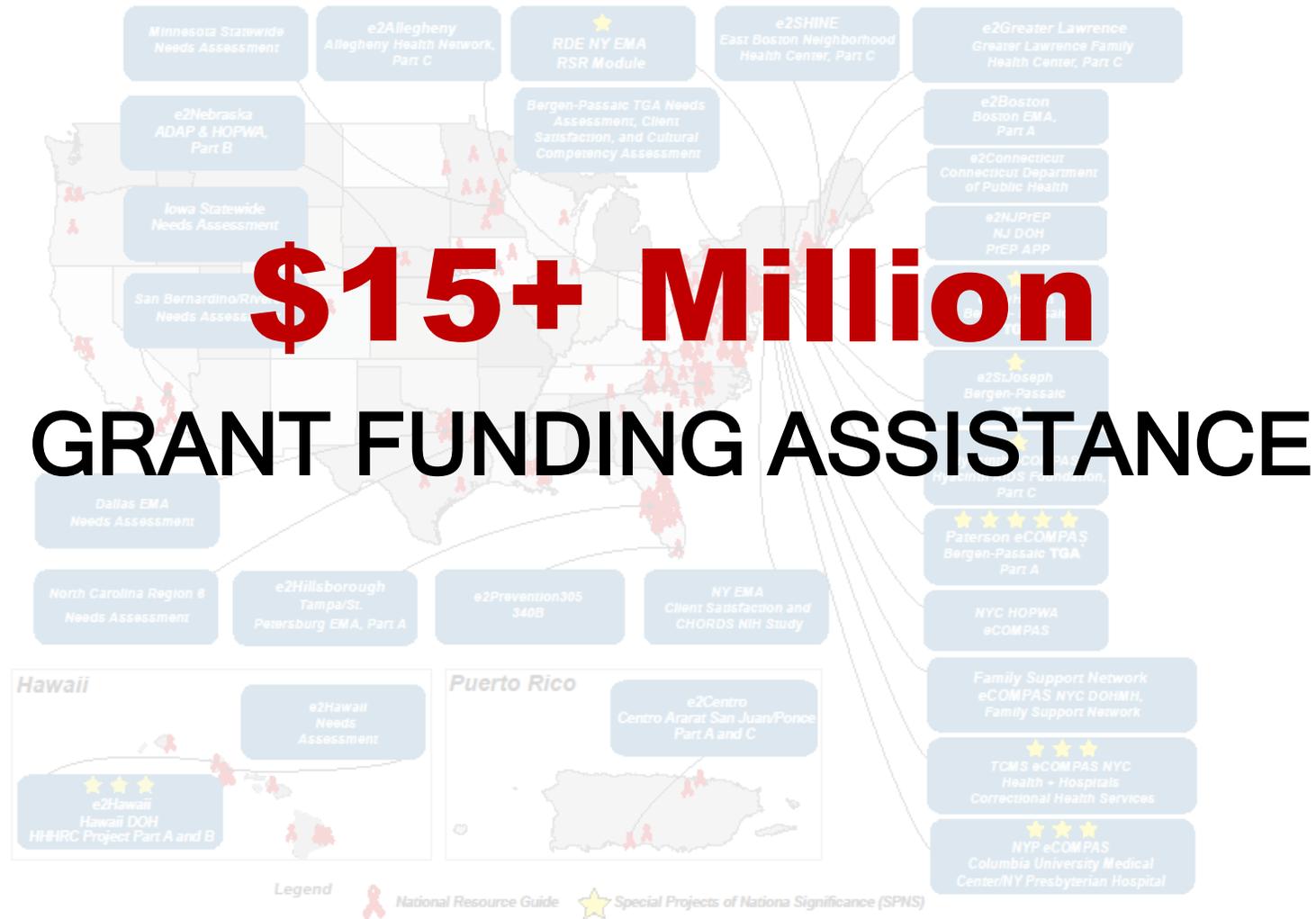
eCOMPAS
Advanced
Encryption













Evaluate Impact of HIT on Care

e Networks of Care

Capacity building grants*



HIT for ADAP

HIT for HIV Care Continuum

SMAIF HIEs for Care Engagement

SMAIF HIV Care & Housing Data Integration

Direct clinic IT investments:

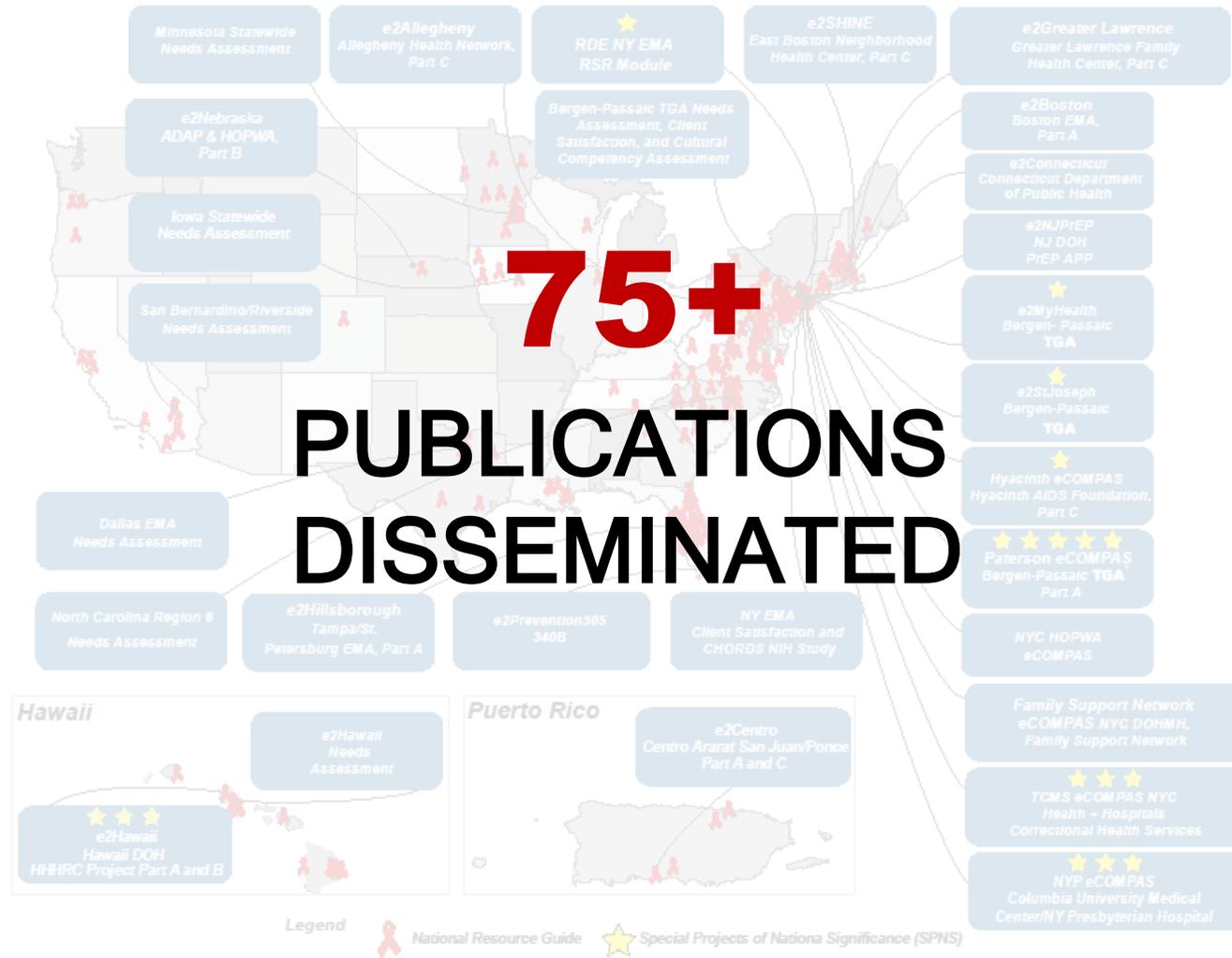
Medical Home for HIV+ Homeless

Practice Transformation HIV Primary Care

Evidence-Informed Interventions

Social Media HIV Care Continuum

19
SPNS
PROJECTS

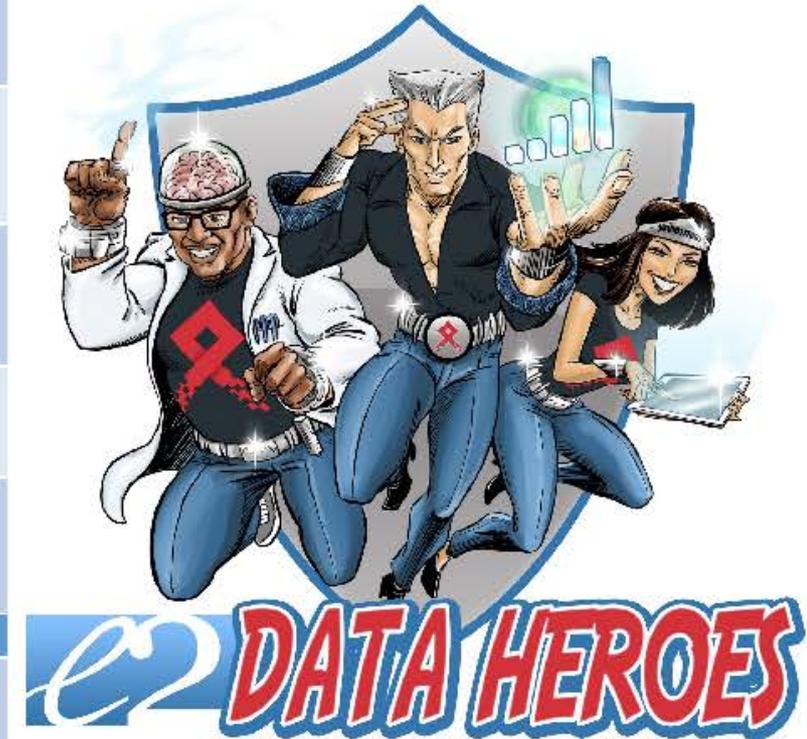




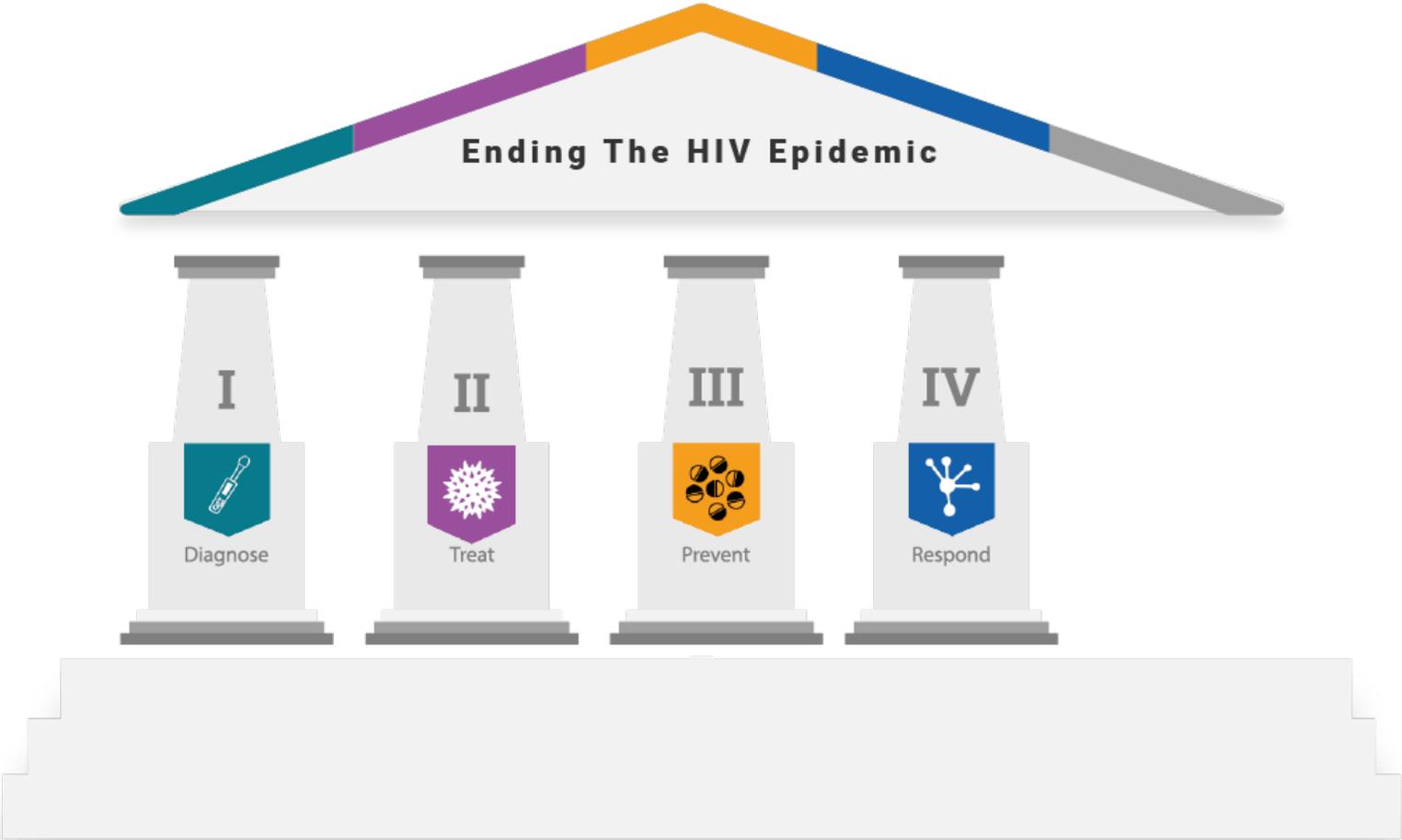
#	Title	Presenters/Panelists	Presenters	Date and Time
1	Housing, Employment, and Quality Improvement for Incarcerated Populations - Paterson, NJ, and Puerto Rico. (Session #16238)	Bergen-Passaic NJ TGA; Puerto Rico One Stop Career Center; RDE Systems	Millie Izquierdo; Carmen Cosme Pitre; Alison Jordan; Jesse Thomas	Wednesday, August 12 2:30pm - 4:00pm (Subject to change)
2	How to Share and Leverage Data: Learn from Three Diverse Clinics: Puerto Rico, Boston and Pennsylvania. (Session #16252)	Centro-Ararat, Puerto Rico; East Boston Neighborhood Health Center, Boston; Allegheny Health Network, Pennsylvania; RDE Systems	Marianela De La Cruz Fraticelli; Elisa Sosa; Jesse Thomas	Wednesday, August 12 2:30pm - 4:00pm (Subject to change)
3	Avoiding the Data System Black Holes: Stakeholder-driven design to increase data integration and reduce administrative burden. (Session #16205)	Connecticut Department of Public Health; RDE Systems	Mukhtar Mohamed; Michael Ostapoff; Daniel Hulton; Jesse Thomas	Thursday, August 13 2:30pm - 4:00pm (Subject to change)
4	Practice transformation, data analytics, and quality improvement: Addressing HIV/HCV and opioid use disorder in NYC. (Poster Presentation #15892)	Columbia Presbyterian University / New York Presbyterian; RDE Systems	Mila Gonzalez Devila; Susan Olender; Megan Urry; Kenneth Ruperto; Jesse Thomas	Thursday, August 13 4pm - 4:25pm (Subject to change)
5	Actuating Care in Iowa, Dallas, TX, and NJ Using Multilingual, Evidence-Based Needs Assessments. (Session #16211)	Dallas EMA; Bergen-Passaic NJ TGA; Iowa State AIDS Program; RDE Systems	Justin Henry; Millie Izquierdo; Katie Herting; Jesse Thomas	Friday, August 14 11:00am - 12:30pm (Subject to change)
6	Innovative Automation in data management, claims processing and electronic billing which saves time and costs! (Session #15910)	Tampa St. Petersburg EMA; RDE Systems	Lubrey Arnold; Onelia Pineda; Jesse Thomas	TBD

Worth Checking Out – Additional Presentations by Our Partners

	Incidence of Syphilis Among Persons With Recent HIV Diagnoses – Connecticut, 2016 (Poster Presentation #16205)	Connecticut Department of Public Health	Mukhtar Mohamed	Thursday, August 13 4pm - 4:25pm (Subject to change)
	Using Data Tools and Partnerships to Provide Innovative Disruption. (Session #16164)	Atlanta EMA Planning Council	Sandra Vincent	Thursday, August 13 4:30pm - 5:30pm (Subject to change)

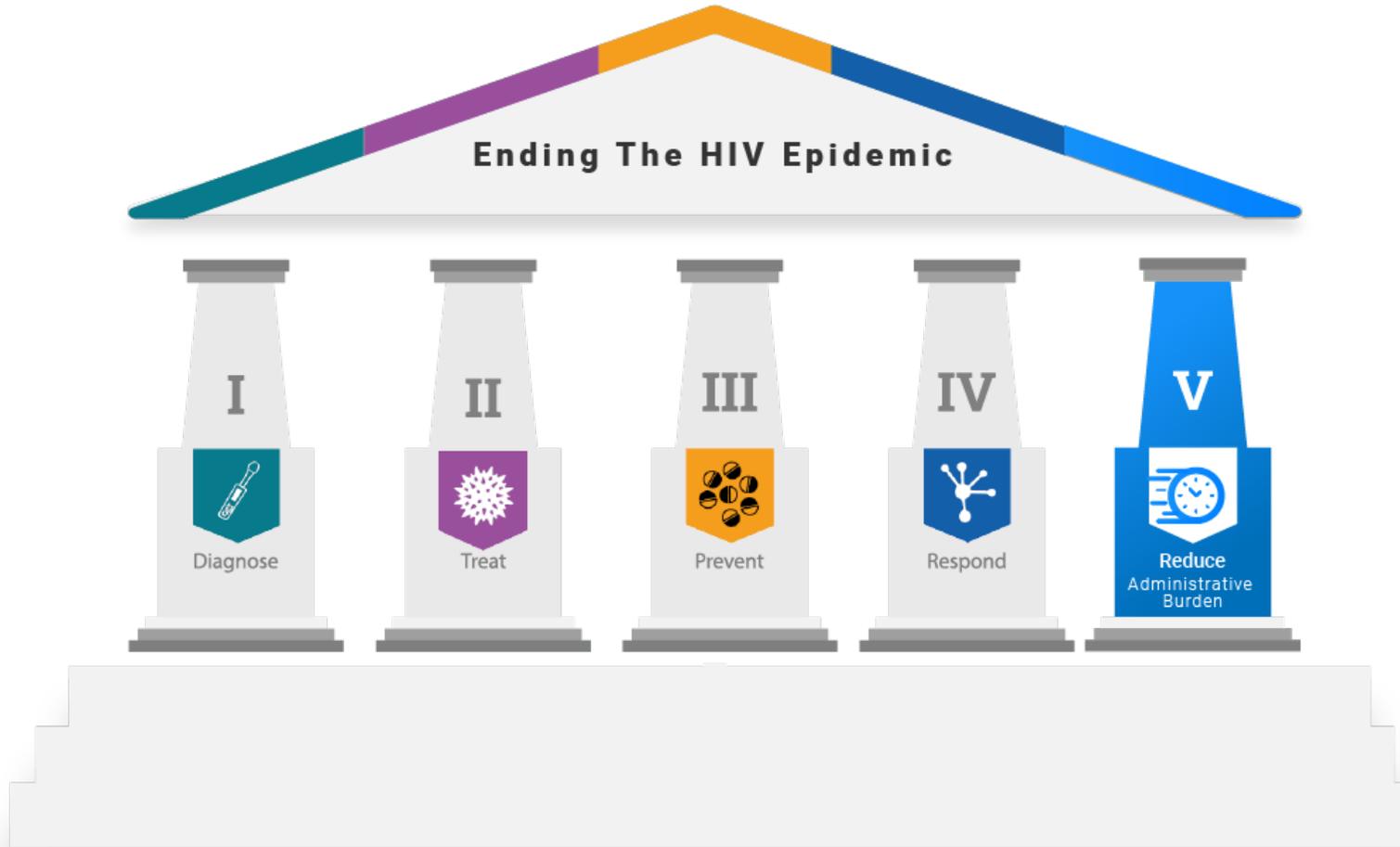


30 Years of Innovating Care, Optimizing Public Health, Ending the HIV Epidemic



Source: Four Pillars: [Ending the HIV Epidemic: A Plan for America](#), HIV.gov

30 Years of Innovating Care, Optimizing Public Health, Ending the HIV Epidemic



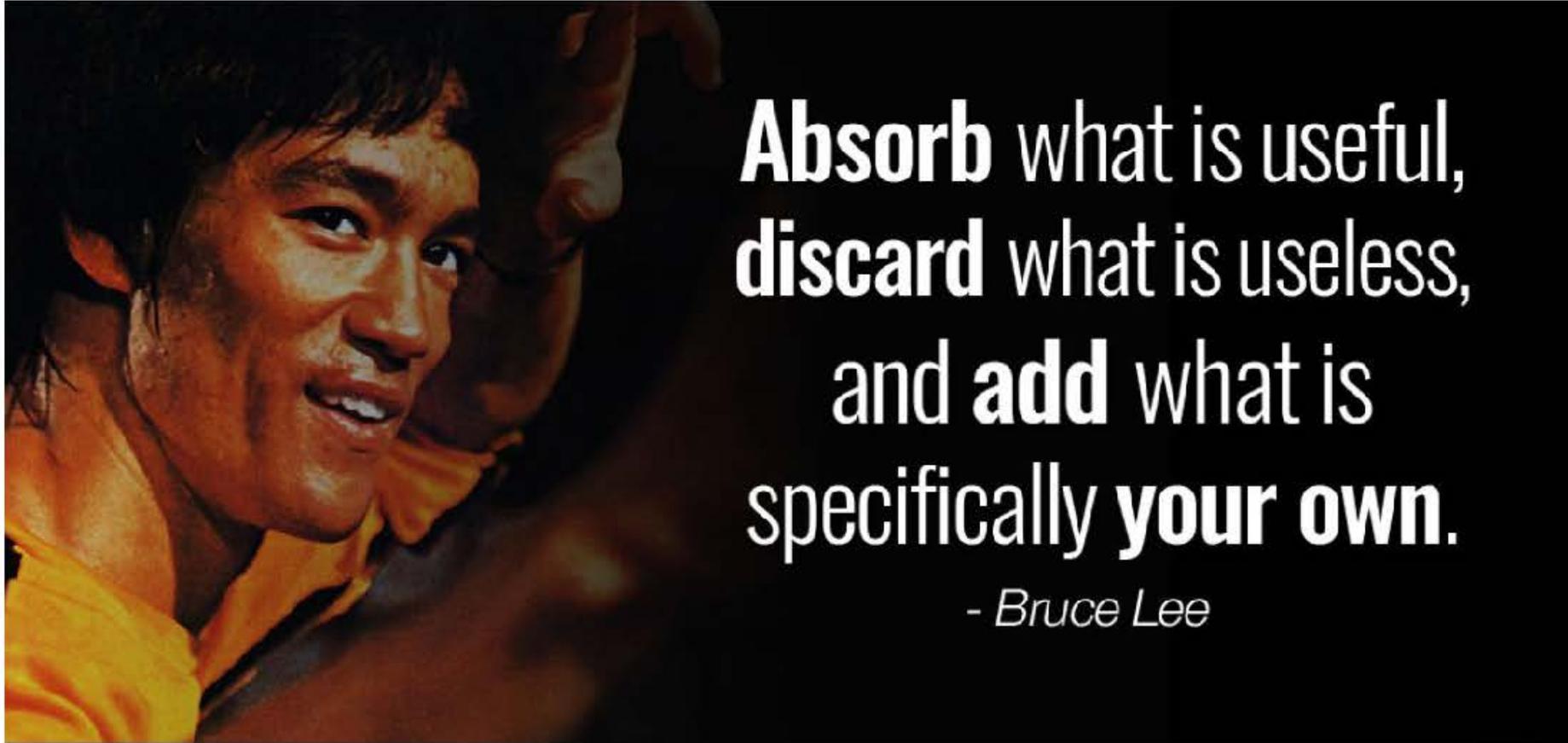
Reducing Administrative Burden

- Time is our finite resource
- Reduce staff stress, burnout, and turnover
- Burden → empowerment

Right Data & Right Tools

- Quality
- Actionable
- Useful + Usable

Source: Four Pillars: [Ending the HIV Epidemic: A Plan for America](#), HIV.gov



Absorb what is useful,
discard what is useless,
and **add** what is
specifically **your own.**

- *Bruce Lee*

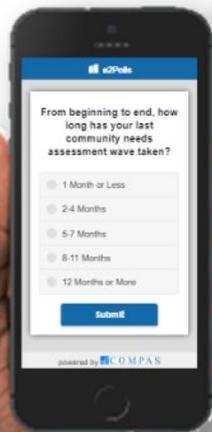
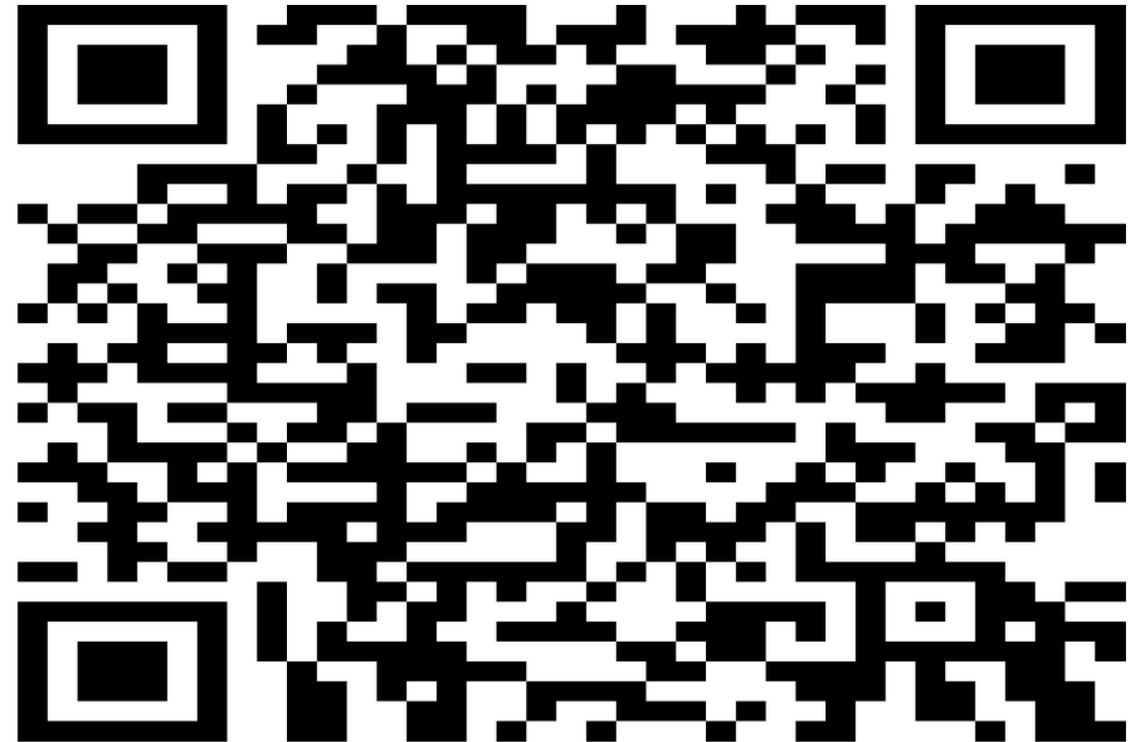
Interactive Poll

 e2Polls.com

Code: CT

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Interactive Poll

Acknowledgments

CT DPH

RDE Systems

CT Funders Group

Pilot Testers

All CT Part B Providers

Reference Model Partners –
The Tampa EMA + Allegheny
Health Network

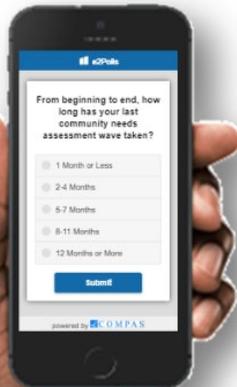
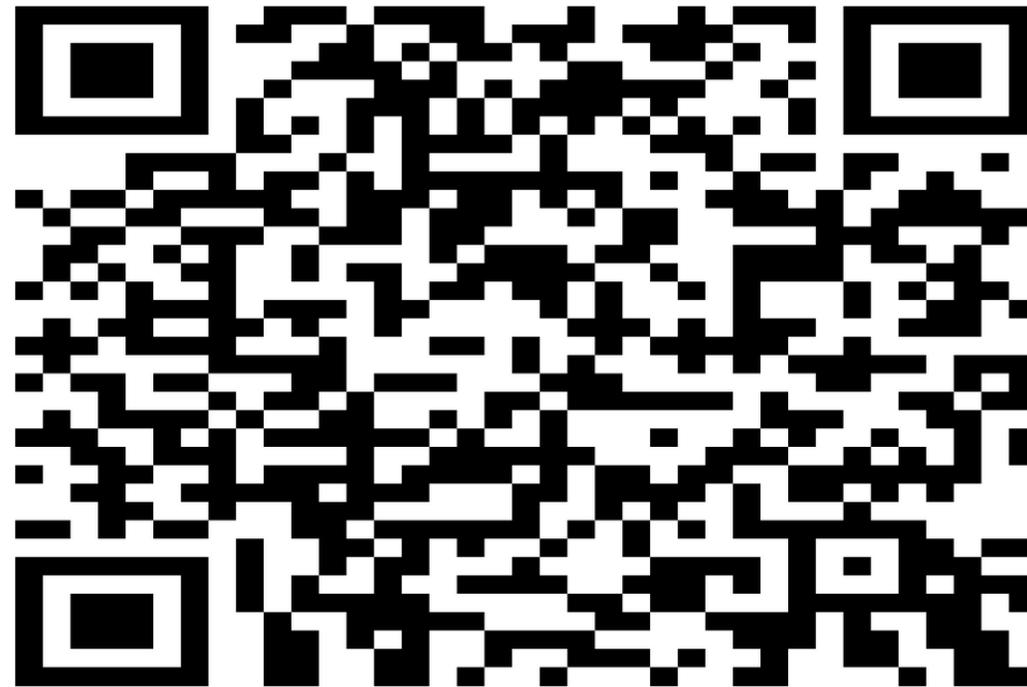
HRSA

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Quest to Find a Data System



- Why?
 - Compliance
- What Qualities and Priorities?
 - Use data to make a difference: performance measures
 - Establish online and electronic eligibility
 - Give service providers electronic client chart records
- How?
 - National Ryan White Conference 2018
 - Full stakeholder engagement from staff to all funders and providers state-wide

Mukhtar's Story



- Given a mission
 - Wanted a modern system
 - Looking for experienced partner
- Attended National Ryan White Conference 2018
 - *“Emerging Issues, Part A & B Resource Trends, and Using RWHAP Funds Efficiently by Saving Time and Money”*
 - *“How to Share and Leverage Data in Good Times and in Bad”*
- Evaluated three vendors
- Invited RDE eCOMPAS to State-wide Funders Group and Provider Community
- Unanimous decision: automation, visualization, user-friendliness

Mukhtar's Story



- RDE awarded contract with CT DPH with assistance from CT DPH IT for integrated Ryan White (e2CT) and Prevention System (e2CT-Prevention)
- Detailed, interactive, collaborative analysis and design sessions on vision and priorities
- Perspective as Epi + Surveillance: More complete picture of client & epidemic
 - Improve data integration across ADAP + Part B + Surveillance
 - Build foundation for Data-to-Care
- Use data to remove barriers to service utilization and improve retention and viral load suppression
- More easily identify and reduce health disparities using visualization

Dan's Story



- Looking for a system that was easier to use, more intuitive
 - Providers to need less TA and less help with their jobs
- Looking for reporting, quality measurement improvements, and visual
 - Visuals generated right in front of them provide powerful, actionable data
- Triannual Provider Reporting Compliance
 - Reduce challenges, data quality issues, and TA requests through better and much more tested system
 - Each year: 3 reports x all providers

Michael's Story



- Looking for Eligibility documentation and compliance
- Wanted a system that allows you to know, proactively, when eligibility and recertifications are due and which documents need updating
- Having a system which leads to more complete documentation for that process is extremely valuable

Mitch's Story



- Legal & regulatory compliance
- Consent forms
- Having a system which leads to more complete documentation for that process is extremely valuable
- Medications, Labs, and other medical information standardization

What is a Data System Black Hole, and how can you avoid it?



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- Data systems are often designed to collect information for compliance purposes, with little regard to **pulling actionable info back out**
- You can put a lot of info in, but it's hard to get it back out!
- CT DPH wanted to avoid this by using visual, well-designed tools to provide accurate, actionable information to improve client service and program quality



Project Goals and Mission Statement – Phase I



- RSR 2019 Ready System
- Secure data migration with no data loss
- Smooth launch without bumps
- Good working relationship and a platform to handle the future vision

Did we accomplish it?



- Successful Implementation
- Smooth Launch: “The launch has been butter”
- 609,000+ Data Points across 1,750+ Clients successfully Imported
- Visual HAB
- Visual Analytics
- One-Click RSR
- Complimentary and favorable feedback from training participants and users

Avoiding the Data System Black Holes: Stakeholder-Driven Design

10 Key Ingredients of Success



1. Platform
2. Team
3. IT Leadership & Support
4. Methodology
5. Reference Models
6. Thorough Stakeholder Engagement
7. Overcoming Challenges and Barriers
8. Creative / Innovative Thinking
9. New Platform Capabilities
10. Future Vision

1. Choice of Platform



- Redesign business processes away from the paper-heavy methods toward automated eligibility and building intelligence into the system.
- Secure, modern, web-based, user-friendly, highly stable, high-performance, turnkey, and low-overhead

What is ?



- eCOMPAS is a **system and approach** to managing data for **accountability and success**
- eCOMPAS is **web-based** – no need for installation or upgrades
- eCOMPAS is **user-friendly**
- eCOMPAS is **real-time & secure** – no need for upload / download
- eCOMPAS is **graphical**
- eCOMPAS is **customized**
- eCOMPAS is **flexible** – easily and quickly changeable based on frontline experience and creative ideas from the field

The eCOMPAS Process



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eCOMPAS
System

The eCOMPAS Process



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The eCOMPAS Process



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The eCOMPAS Process



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Top 10 eCOMPAS Guiding Principles



1. People are the most important component in success!
2. Success should be defined holistically by each stakeholder.
3. Everyone should be more empowered with better information.
4. More effective action requires better, more timely data.
5. Visual is better.

Top 10 eCOMPAS Guiding Principles



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6.  Think outside the box!
7. Ease of use is critical for success.
8. Time is better spent with clients than on paperwork!
9. Simple and clean is more powerful than complex and messy.
10. No one has all of the answers. But a great process, open to everyone, produces great results.



What's wrong with this picture?



What's wrong with this picture?

Focus on features that make a difference.

2. Team



Joint RDE-CT-DPH

- Seasoned team members
- Broad representation
- Subject matter expertise on both sides
- Aligned principles

CT DPH Team

- Laura Aponte – Health Program Supervisor
- Dan Hulton – Epidemiologist
- Steve McConaughy – Manager, Information Technology
- Mukhtar Mohamed – Epidemiologist
- Mitchell Namias – ADAP Coordinator
- Michael Ostapoff – CAREWare and Systems Expert

RDE Team

- Stakeholder Engagement
- Application Security
- System Performance
- User Experience
- Data Exchange
- Customer Support
- Data Science
- Federal Reporting

3. IT Leadership & Support

- “IT plays an essential role in both **supporting the Program vision**, and our approach has been to partner with Program leadership to best understand their needs, while ensuring that CT DPH has full control over their data.”
- “IT also has a role in helping support new and **more efficient business processes** through the smart use of technology and helping to address the sacred cows of paper-centered processes.”



Steve McConaughy
Information Technology Manager



4. Methodology



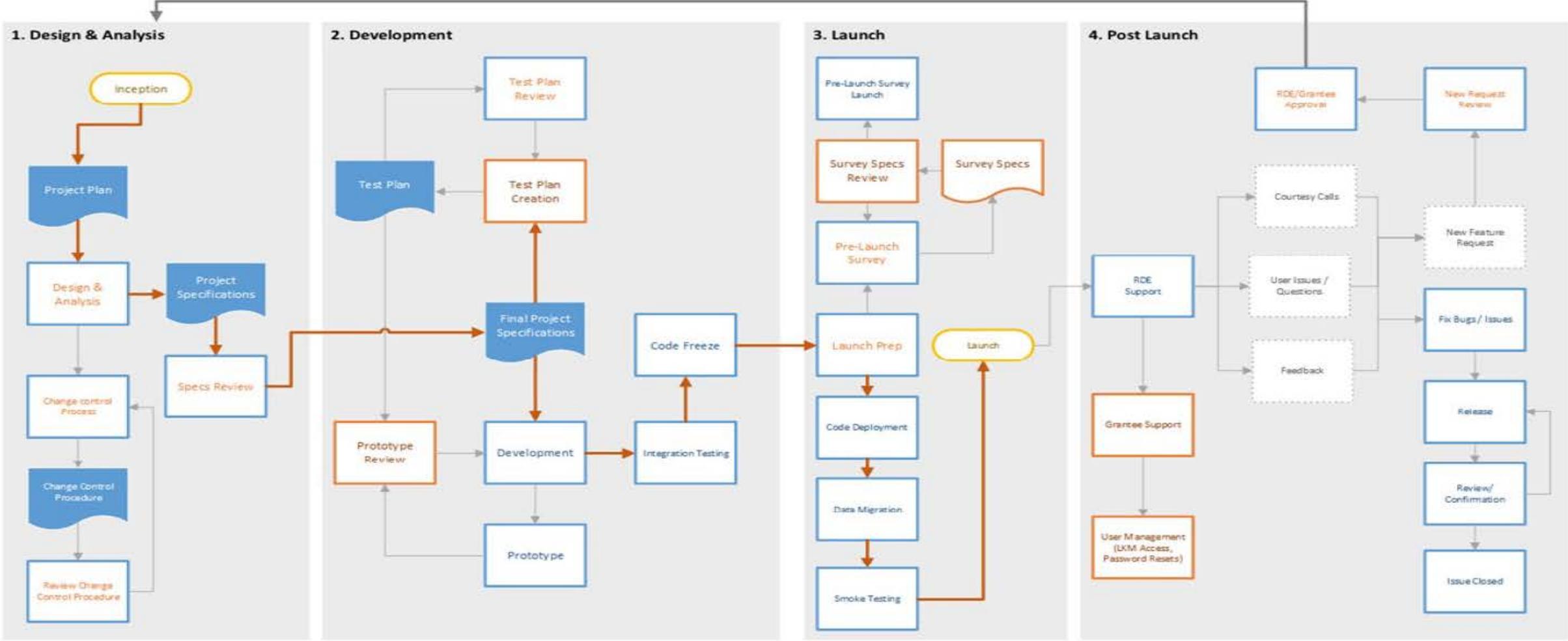
- 2 meetings each week to discuss progress.
- Kept CT DPH & RDE partners on the same page as the system evolved or challenges arose.
- Involvement of Joint Team on these calls fostered a positive working relationship and a foundation for the future vision as we continue working together beyond launch.

The e2Connecticut Strategy



- Phased Approach + **Partnership** Paradigm
- The Proven Platforms: eCOMPAS
- The **Reference Model** + National eCOMPAS Repository
- The eCOMPAS **National Network**
- The eCOMPAS Methodology: **Process Over Product**
- Nationally Renowned Support for All

eCOMPAS Standard Software Development Lifecycle



Legend

- RDE Task
- RDE + Grantee Task
- Grantee Task
- User Task/Input

5. Reference Models



- e2Hillsborough
- e2Allegheny
- Leverage existing capabilities
- Saving time
- Tailoring to unique needs and goals

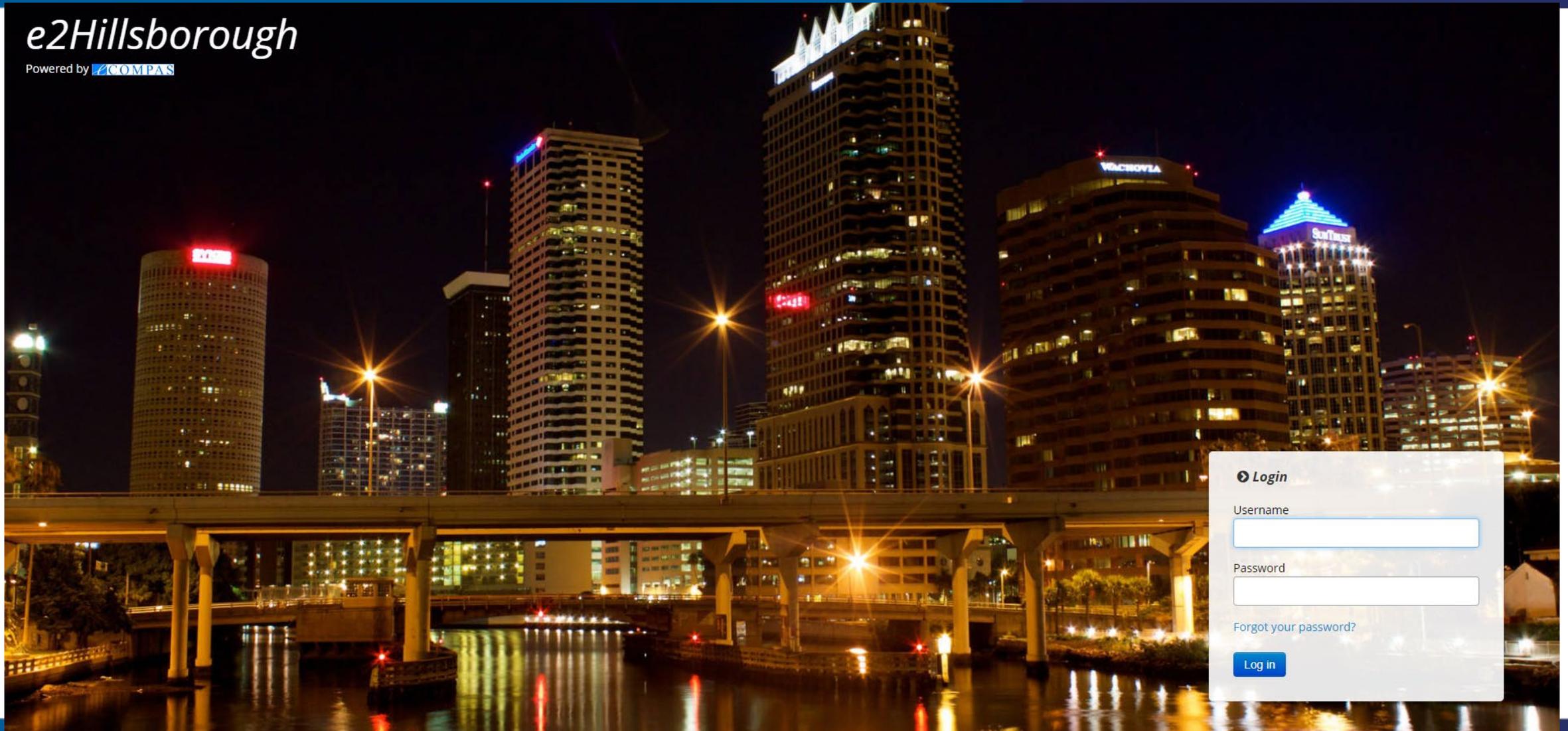
5. Reference Models



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e2Hillsborough

Powered by  COMPAS



 Login

Username

Password

[Forgot your password?](#)

5. Reference Models



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e2Allegheny

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Username

Password

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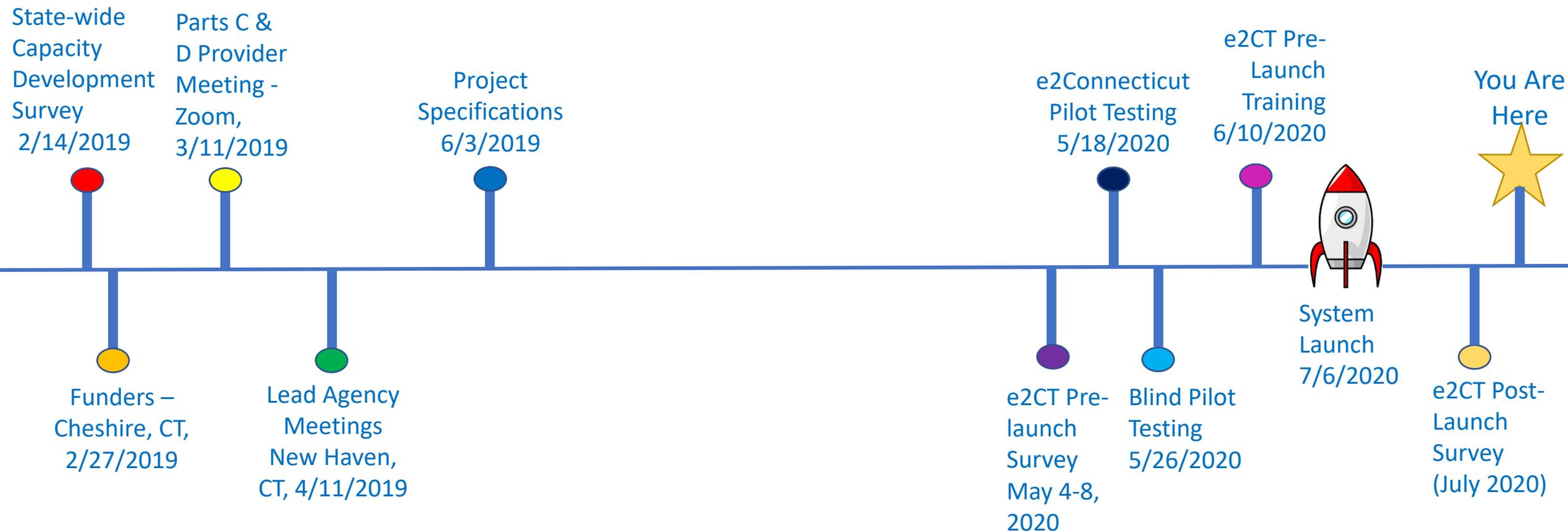
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6. Stakeholder Driven Design

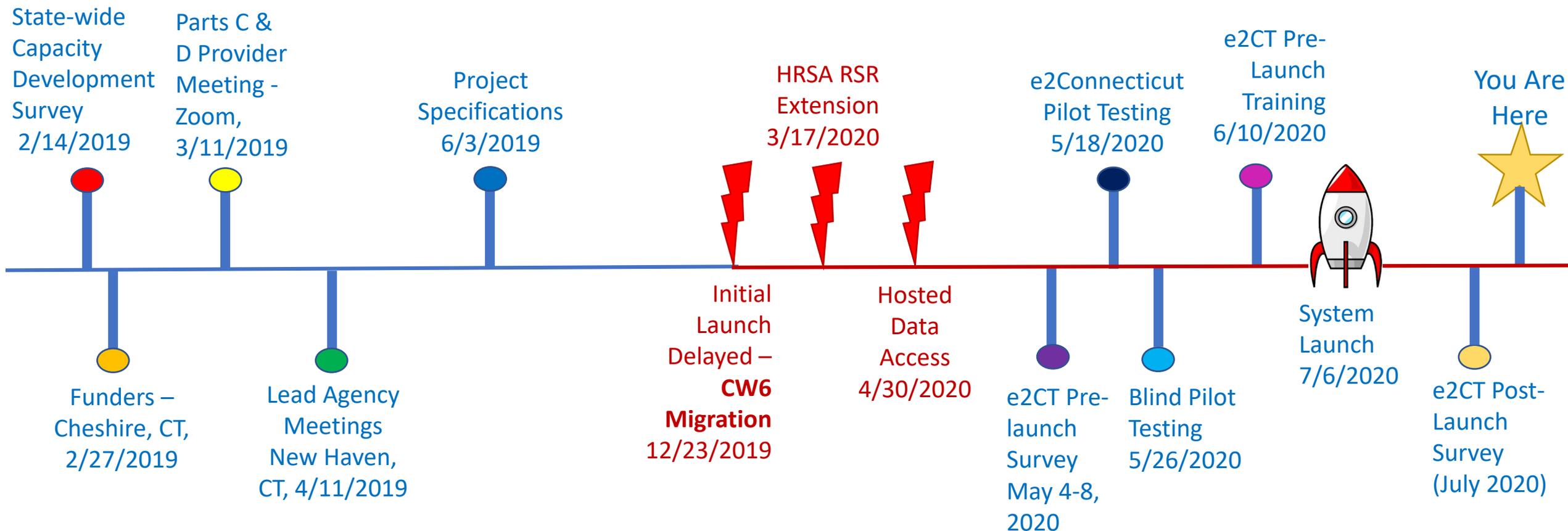


- Stakeholder Engagement and Analysis is essential for successful data system implementation, rollout, and sustainability
- Stakeholders represent diverse perspectives in terms of role, community served, and needs
- Good stakeholder engagement should attempt to reach as many representative users as possible
- CT-DPH undertook a mixed methods approach including:
 1. Real-time polling
 2. Interactive web-based presentations
 3. Asynchronous electronic surveys

e2Connecticut Community & Stakeholder Engagement Timeline



e2Connecticut Community & Stakeholder Engagement Timeline



Part 1: Real-Time Interactive Polls (Consolidated)

- A) Funders - Cheshire CT, February 27, 2019
- B) Parts C & D Provider Meeting - Zoom, March 11, 2019
- C) Lead Agency Meetings - New Haven, CT, April 11, 2019

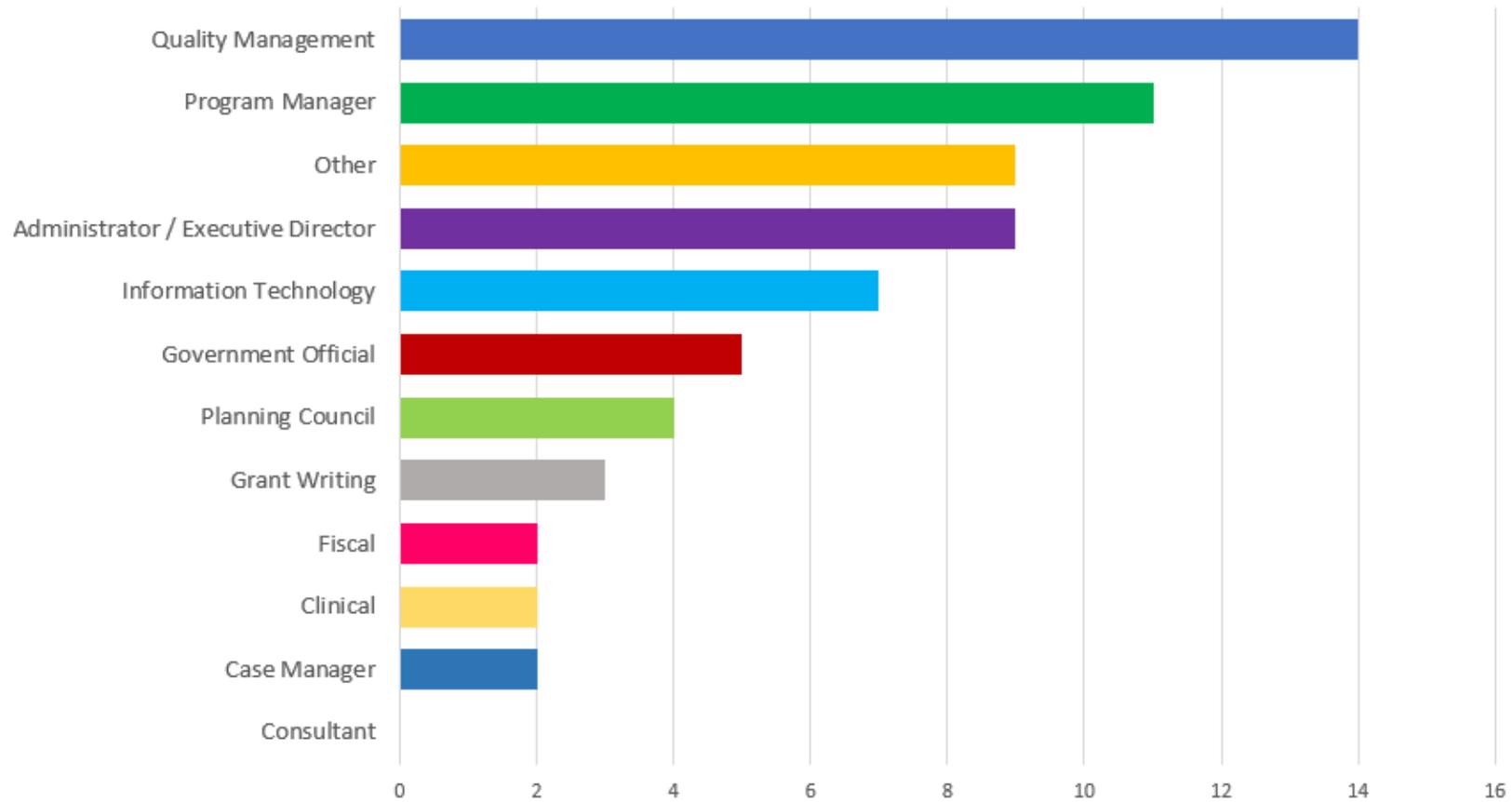
Results at a Glance



Context: Legacy Data System

- 39 participants
- Consisting mainly of: Quality Managers, Program Managers, Administrators/Executive directors
- Majority Part A & B
- Major barriers reported: Reporting, Downtime, and Interoperability

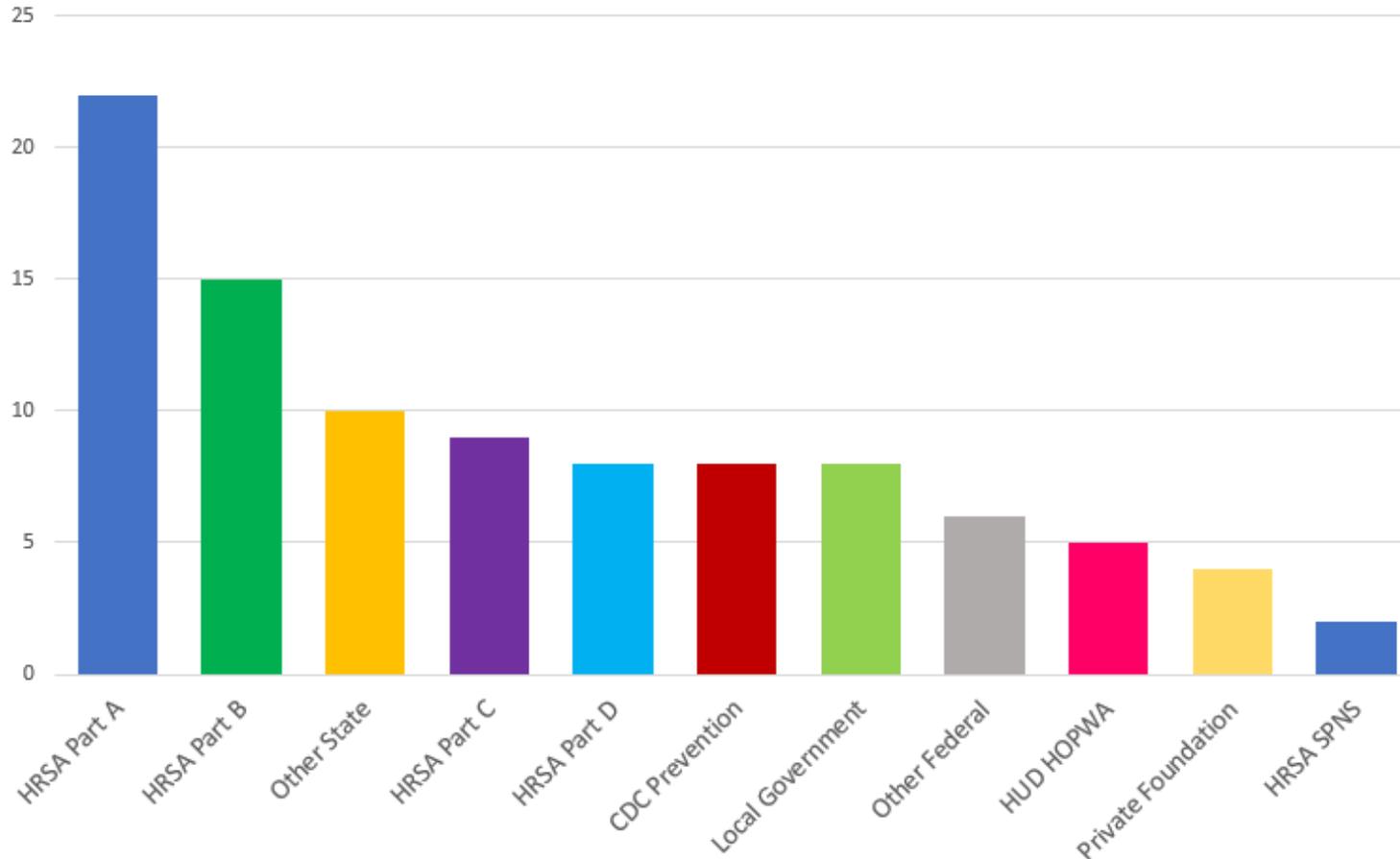
What is your current role?



Which funding sources must you report to?



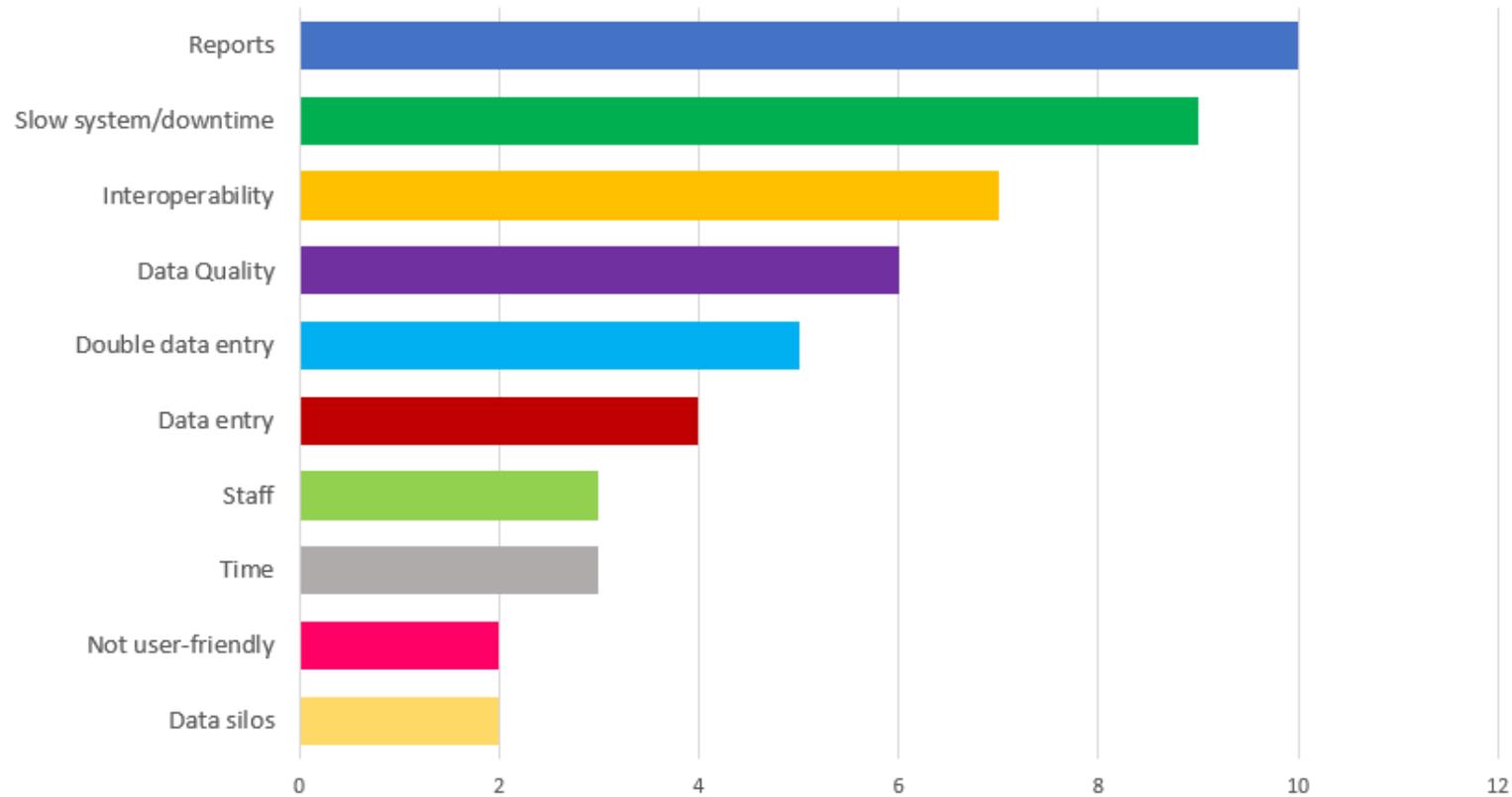
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What are your top headaches or challenges?



Context: Legacy Data System



Part 2: State-wide Capacity Development Survey

Electronic Survey
February 14, 2019

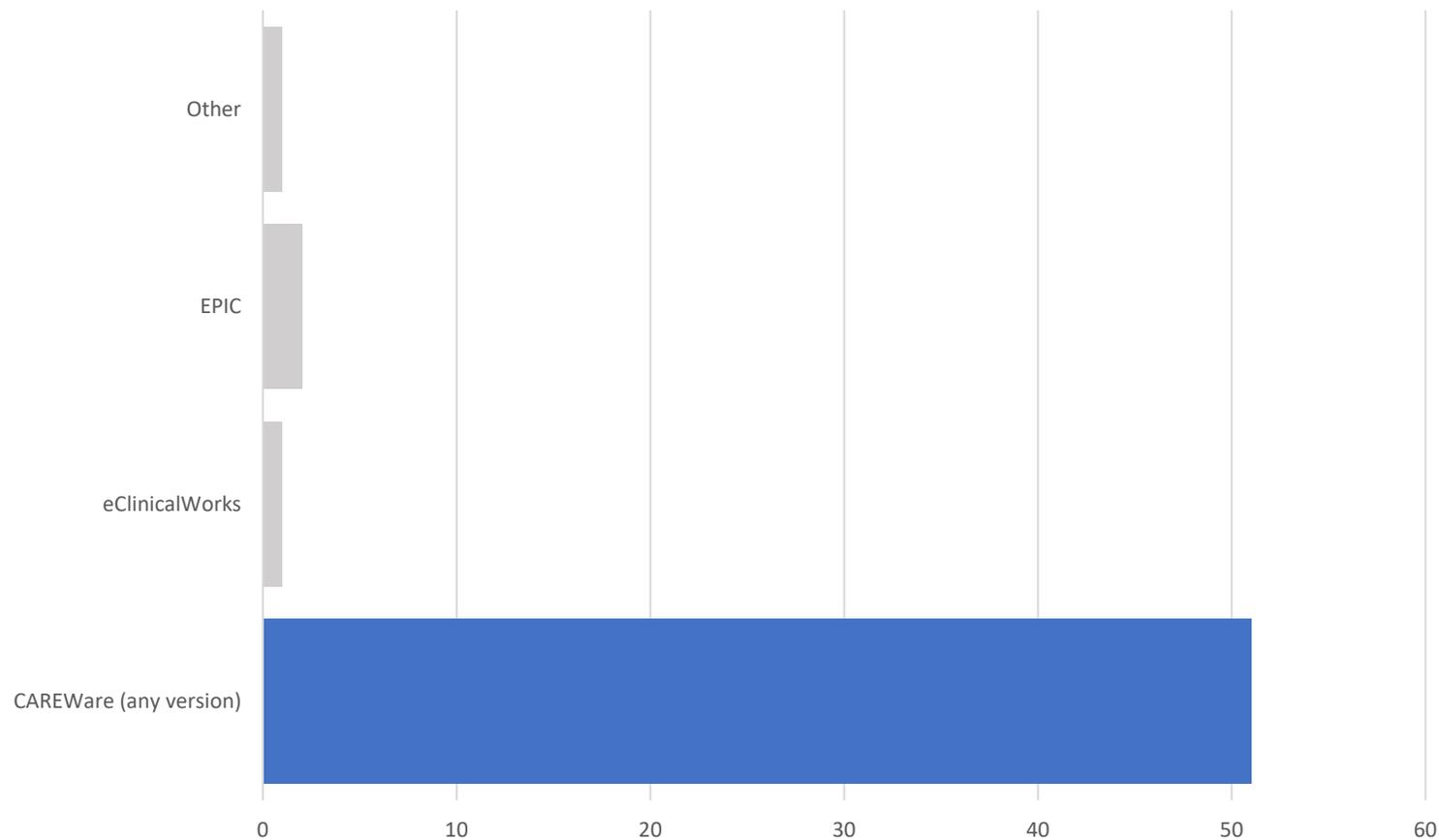
Results at a Glance



Context: Legacy Data System

- Sample Size: 62 Participants
- 36 Agencies represented
- 31 Questions
- Over 1,500 data points gathered and analyzed

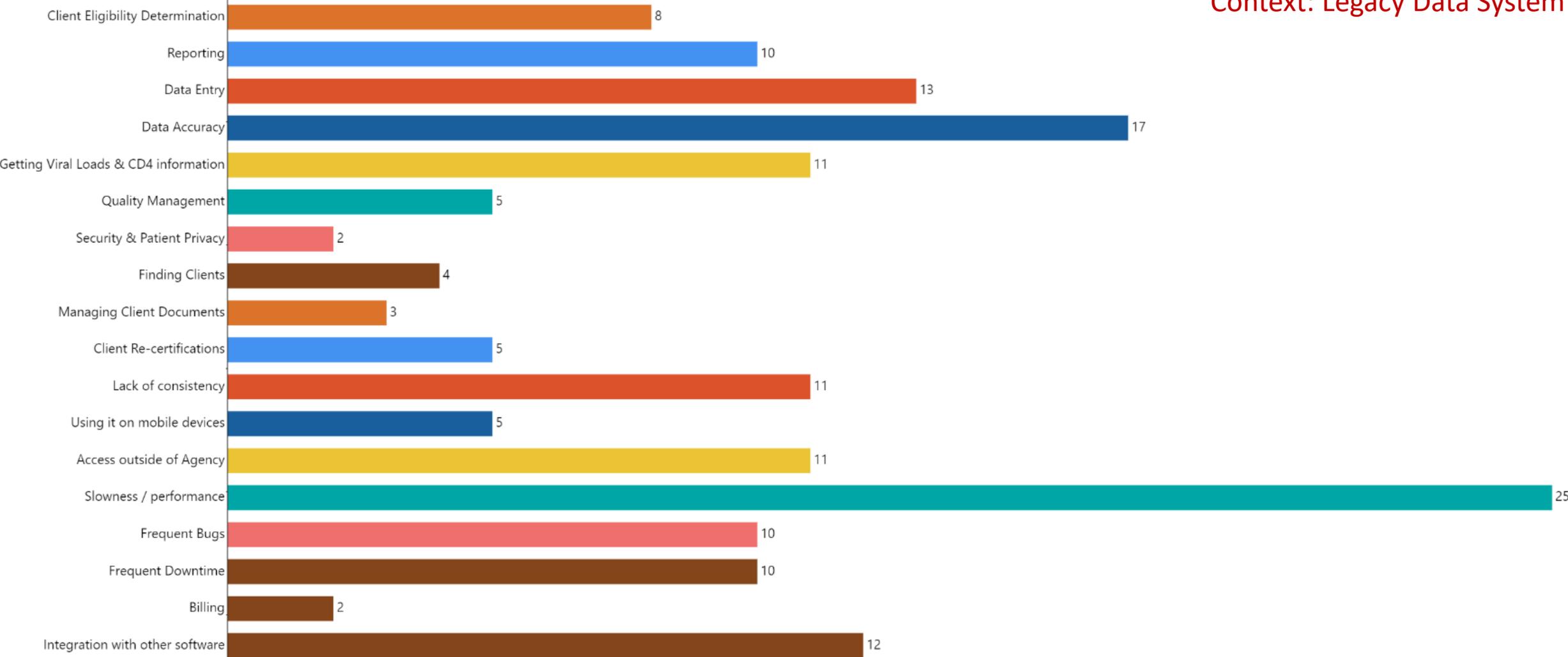
Which data system do you currently use?



What challenges, if any, do you currently have with your RW Data System?



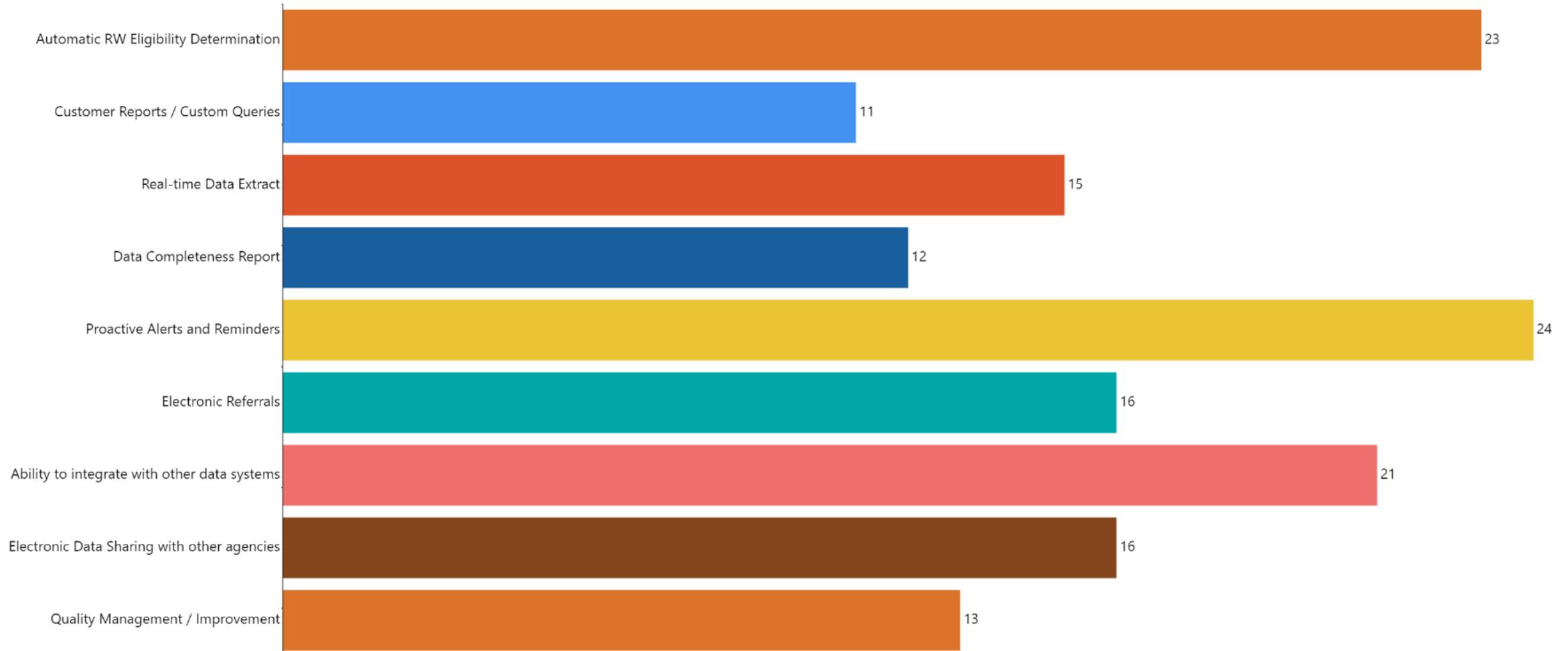
Context: Legacy Data System



If you had a magic wand, which of the following features would you wish to have in your RW Data System?



Context: Legacy Data System



Part 3: e2Connecticut Pre-Launch Survey

May 8, 2020

Results at a Glance



Context: Legacy Data System

- 33 of the 41 people asked to comment responded – Thank you Connecticut!
- Interoperability with other data systems, automated eligibility, and proactive alerts and reminders are the most-wanted features
- Legacy systems continuously prove to be inefficient
- Paperwork is the enemy of efficiency



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Legacy System Challenges Detailed Feedback from Respondents

May 8, 2020

Reported Challenges – *part 1*



Context: Legacy Data System

- “[Legacy System] is **EXTREMELY difficult** to navigate and I am unable to obtain the proper training in order to effectively and efficiently obtain and provide data.”
 - Associate Director, 4/29/2020
- “[Legacy Data System]- **Issues w/ the sharing** request, newest update on the system has **more steps to enter data, less efficient.**”
 - Medical Case Manager, 4/29/2020
- “The referral report has a **bug** and even [Vendor] hasn't been able to fix.”
 - Medical Case Manager, 4/29/2020

Reported Challenges – *part 2*



Context: Legacy Data System

- “It is often **difficult to input or retrieve information** as fields are often embedded in [Legacy Data System] in areas that are **not easily accessible**. [Legacy Data System] is **not a practical system**.”
 - Program Supervisor, 4/30/2020
- “**Less efficiency** in data entry for mandated categories (having to type long strings of words to access important categories, while other categories non-reportable on front screens).”
 - Program Supervisor, 5/1/2020
- “**Lag** times to log on, **freezing** of screen, differences between our screens and screens in Part A office.”
 - Program Supervisor, 5/1/2020

Reported Challenges – *part 3*



Context: Legacy Data System

- “**Difficult to navigate**, slow, **freezes** up, cannot print necessary client information.”
 - Medical Case Manager, 4/30/2020
- “It keeps **freezing** or is **slow**. When it's time to report it gives you some information but it **won't populate or give you the information** for the clients in a group report.”
 - Medical Case Manager, 4/29/2020
- “System down.”
 - Program Supervisor, 5/1/2020

Reported Challenges – *part 4*



Context: Legacy Data System

- “**Slow** connections and **inability of running some reports.**”
 - Program Supervisor, 5/6/2020
- “Must know the service being provided because not every service pops up on drop down, **a lot of error messages.**”
 - Medical Case Manager, 5/5/2020
- “Program is **slow**; always **freezing** up.”
 - Medical Case Manager, 4/30/2020

Reported Challenges – *part 5*



Context: Legacy Data System

- “System is **slow** and is **not updated.**”
 - Medical Case Manager, 5/4/2020
- “Slow, **cannot get accurate report**, cannot print client information, **freezes up.**”
 - Medical Case Manager, 4/30/2020
- “Program **freezing up**, **slow** starting.”
 - Medical Case Manager, 4/30/2020

Reported Challenges – *part 6*



Context: Legacy Data System

- **“Errors/bugs.”**
 - Medical Case Manager, 5/4/2020
- “[Legacy Data System]- **Difficulties** with generating reports.”
 - Medical Case Manager, 4/29/2020
- “It **limits accurate reporting** in services, **not user-friendly.**”
 - Medical Case Manager, 5/4/2020

Reported Challenges – *part 7*



Context: Legacy Data System

- “Report generation is **not intuitive.**”
 - Program Supervisor, 4/30/2020
- “Drop down services have to be known. If I was new I would not know a single service.”
 - Medical Case Manager, 4/30/2020
- Generating **reports is a challenge.** Navigating the drop down menus is also a challenge.
 - Medical Case Manager, 4/29/2020

Reported Challenges – *part 8*



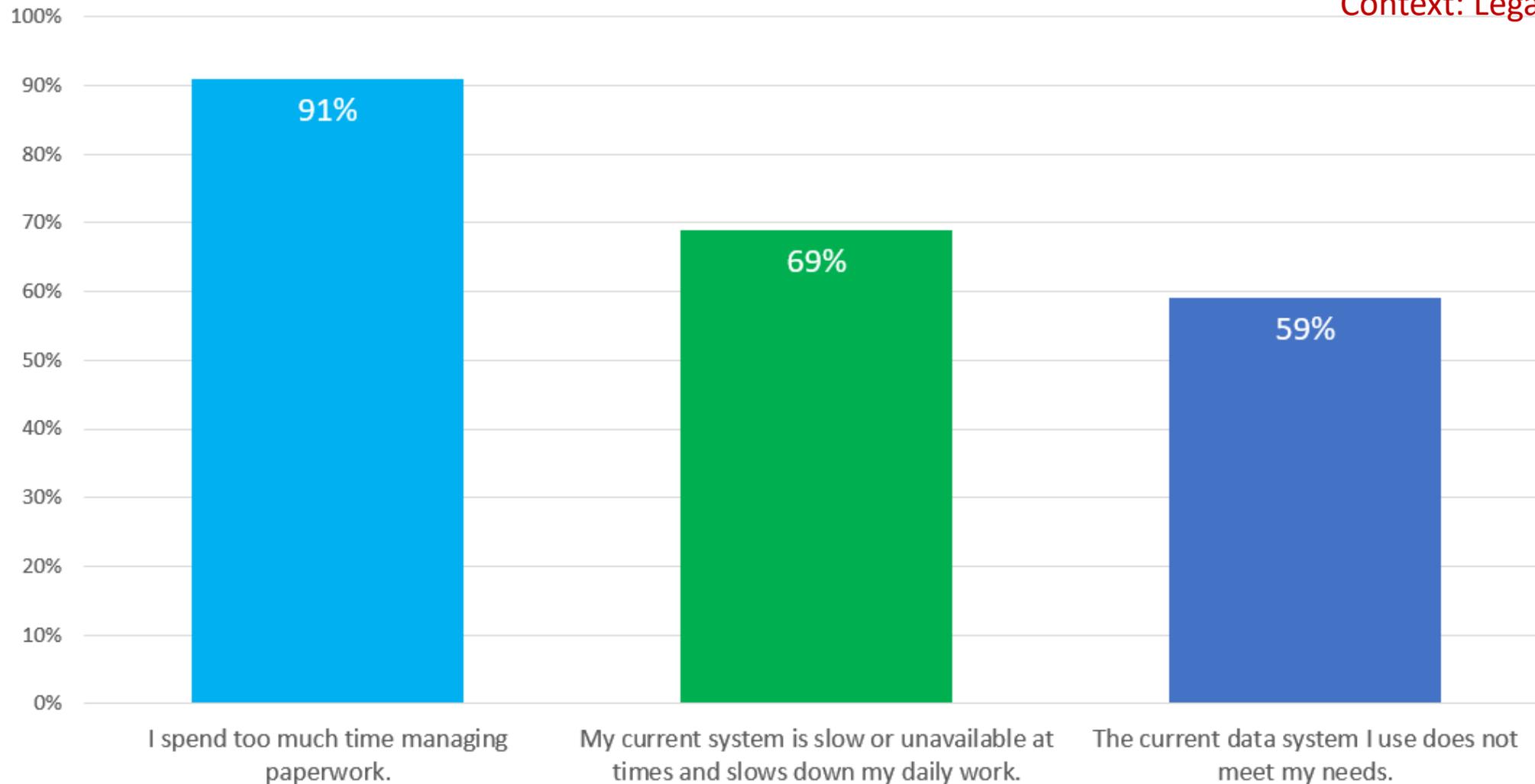
Context: Legacy Data System

- “**Slow** start up, **unable to pull useful reports.**”
 - Medical Case Manager, 4/30/2020
- “Updates in how systems are laid out to new formats are not useful unless you can acquire new information.”
 - Clinical Supervisor - Mental Health/Substance Use, 4/30/2020
- “Having to enter the same data service for multiple days and or for multiple clients is beyond **time consuming**. Being able to enter multiple services at one given time would most definitely be more efficient in my opinion.”
 - Data Entry, 5/5/2020

Negative Feelings about Time and Efficiency



Context: Legacy Data System

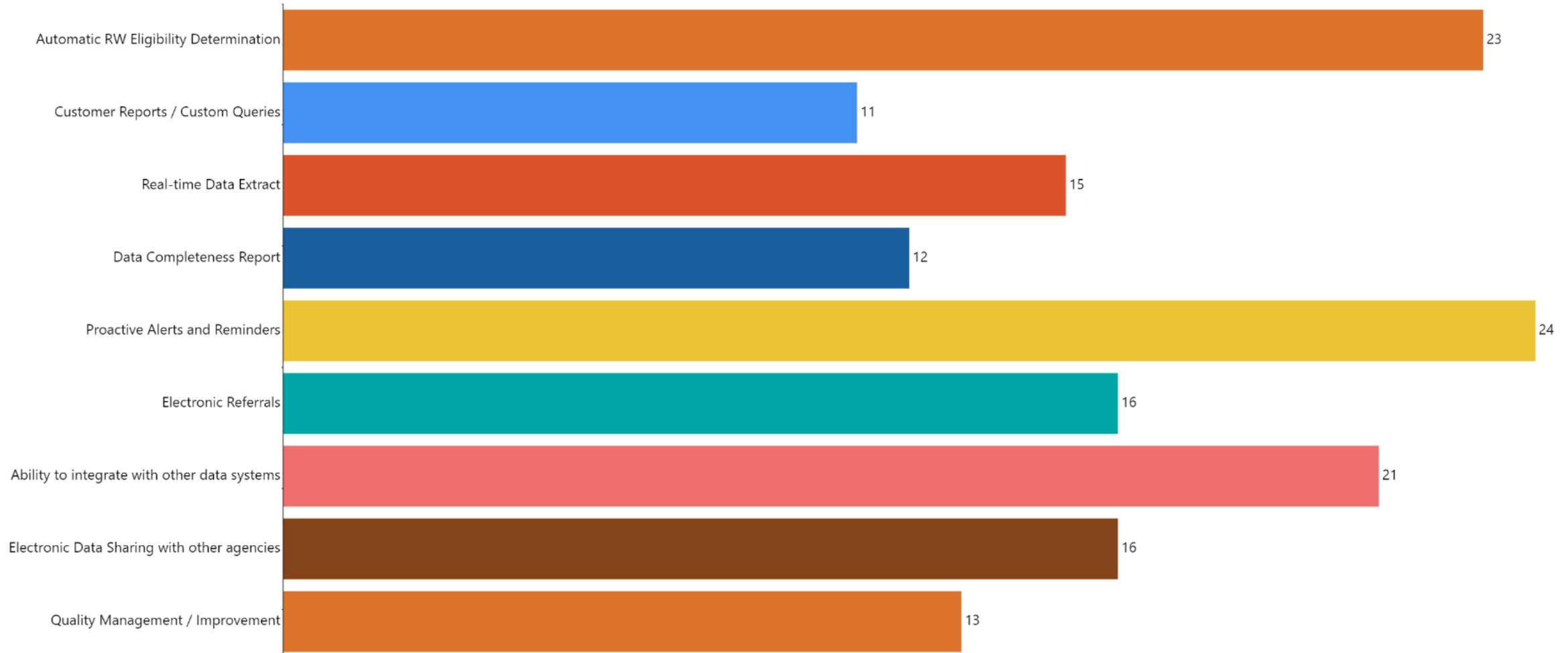


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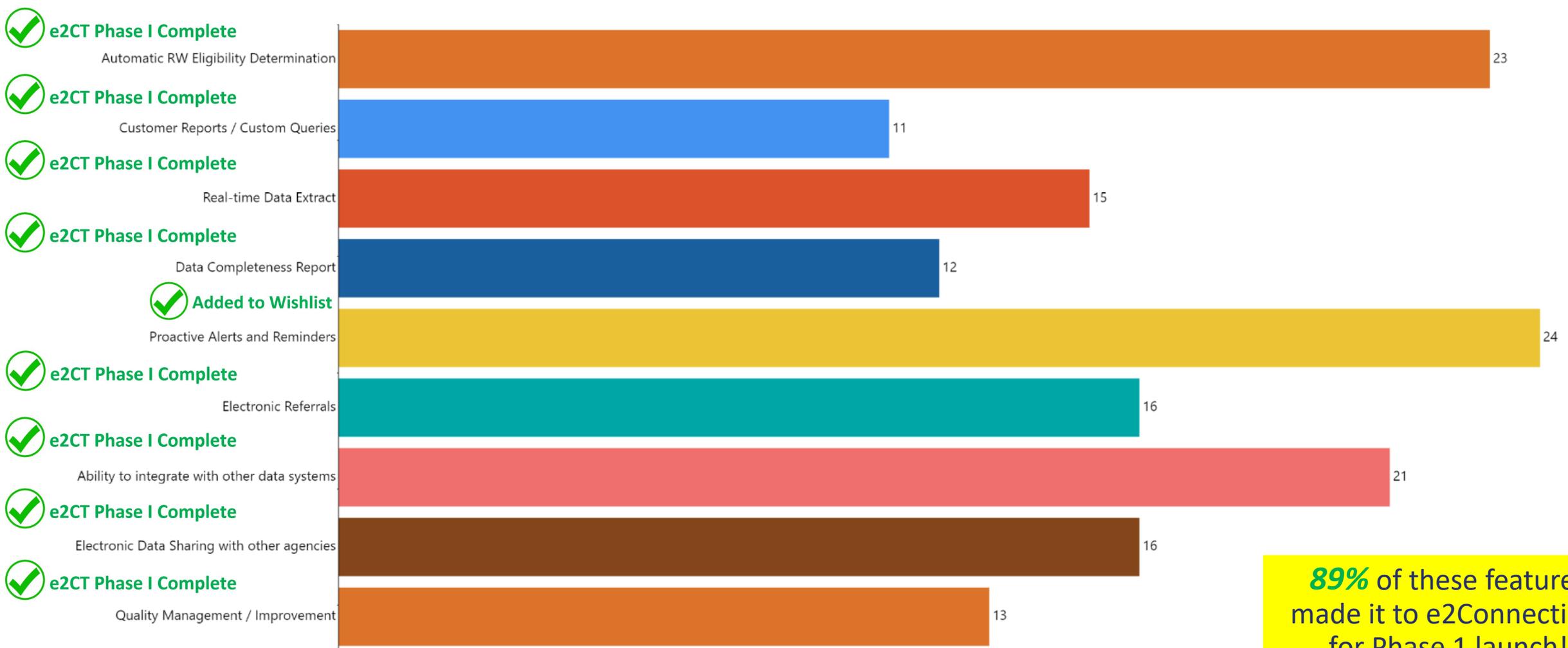
Context: Legacy Data System



If you had a magic wand, which of the following features would you wish to have in your RW Data System?



VIRTUAL
2020 NATIONAL
RYAN WHITE
CONFERENCE ON
HIV CARE & TREATMENT



89% of these features made it to e2Connecticut for Phase 1 launch!

Part 4: e2Connecticut Demo Testing

May 26, 2020

Blind Pilot Testing Feedback

May 26, 2020

Blind Pilot Testing - Results at a Glance



- Volunteers from **6 Provider Sites** + DPH reviewed e2Connecticut.
- **With minimal guidance**, the Testers were directed to perform tasks of varying complexity such as:
 1. Client Intake and Agency Consent
 2. Determining and addressing a Client's reasons for Ineligibility
 3. Entering income information, labs, medications, and services
 4. Completing a Client Referral
 5. Running the RSR, HAB performance Measures, and Client Services Count Reports
 6. Building a custom report in Visual Analytics
- **63% of their comments (n= 41) were “high-fives”** – compliments on the system and its functionality.
- There were 0 system errors and 1 issue reported and resolved within an hour.

Pilot Testing Feedback – part 1



Context: e2Connecticut

- “The demo has a very **refreshing** look to it.”
- “Very excited to fully use this program in coming times.”
- “Looking forward to going live. 😊”
- “**Thank you** for allowing me to participate e2Conecticut demo testing.”
- “I had no problems.”
- “Responsive.”

Pilot Testing Feedback – *part 2*



Context: e2Connecticut

- “Entering and adding client records was **easy** and having tabs on the pages **will save time** because you won’t have to toggle back and forth.”
- “Everything is there for collection and reporting of client data.”
- “I really like the left side menu bar where it alerts you if docs expired or if they are missing.”
- “I like that there are 2 places to add notes, and that both go into the same place (progress notes).”
- “Documents were **easy to upload**.”
- “The intake date is a great feature to add.”

Pilot Testing Feedback – *part 3*



Context: e2Connecticut

- “The audit and document tracker features **will save time** because they let you see all the data/uploads in that client record.”
- “I also like these changes/ improvements:
 - All the tabs
 - Eligibility - when client is ineligible the reason is there
 - Eligibility tool – now lets you know what type of income doc. is attached (W2, paystubs)
 - Log in page
 - History
 - Client duplicate feature
 - Deleted clients feature
 - My account feature”

Pilot Testing Feedback – *part 4*



Context: e2Connecticut

- “Overall I think this new system is **easy to navigate** and will **save time** and **provide data** to support and identify client needs and outcomes.”
- “Navigating the different tabs was **relatively easy** to do.”
- “Easy to navigate.”
- “Easy to navigate, entry list offering very good.”
- “Easy to navigate, good selection choices (on Medical tab).”
- “I have found that this system is **fairly easy to navigate**.”

Pilot Testing Feedback – *part 5*



Context: e2Connecticut

- “Overall I found after testing the system that it is **easy to navigate** and **user-friendly.**”
- “System is very easy to use, **intuitive.**”
- “The system is **user-friendly.**”
- “I like how **user-friendly** the demo was.”
- “The system is **user-friendly**, which is a plus to everyone especially those who aren't computer savvy.”
- “The system is **very user-friendly.**”

Part 5: e2Connecticut Launch Training

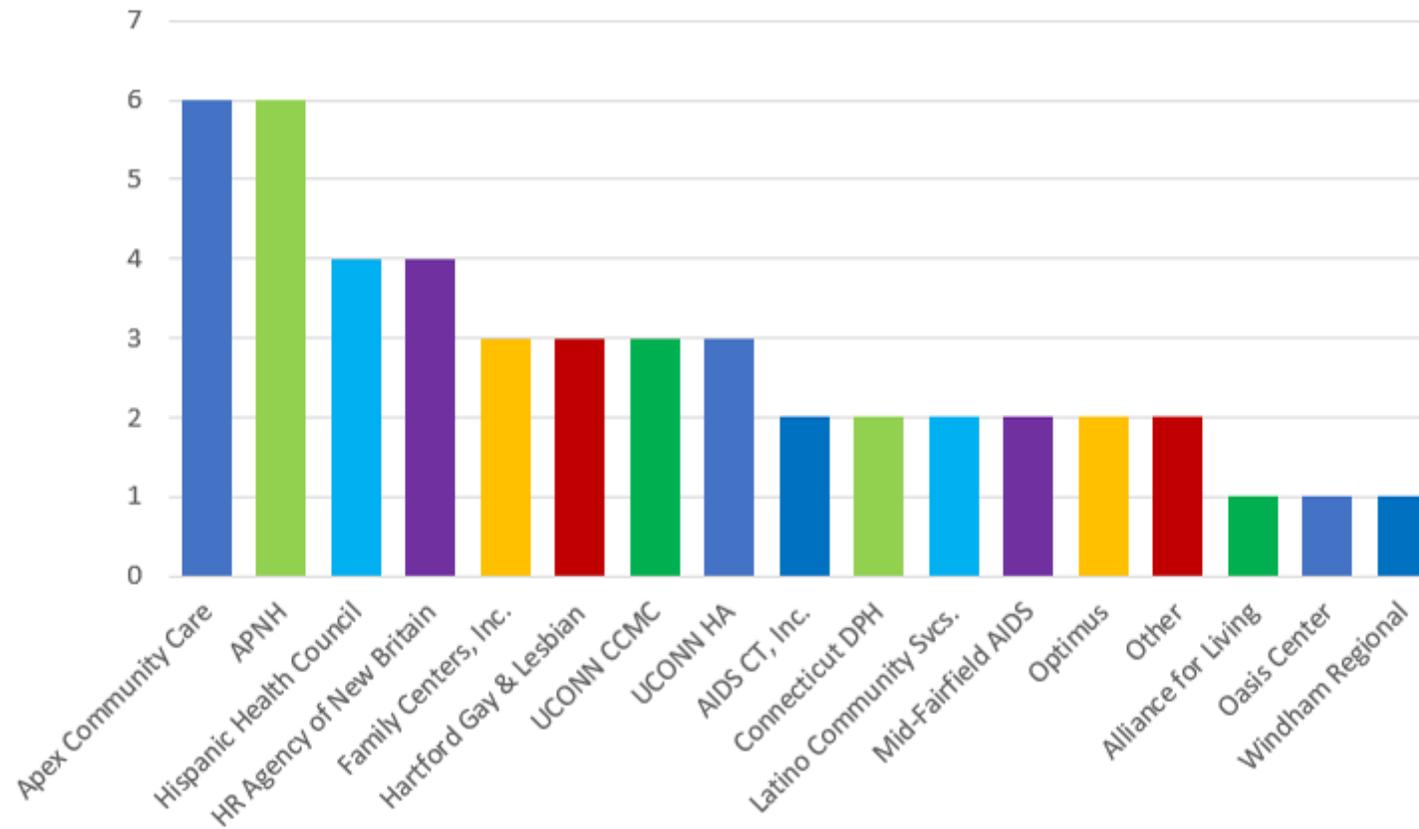
June 10, 2020

Results at a Glance



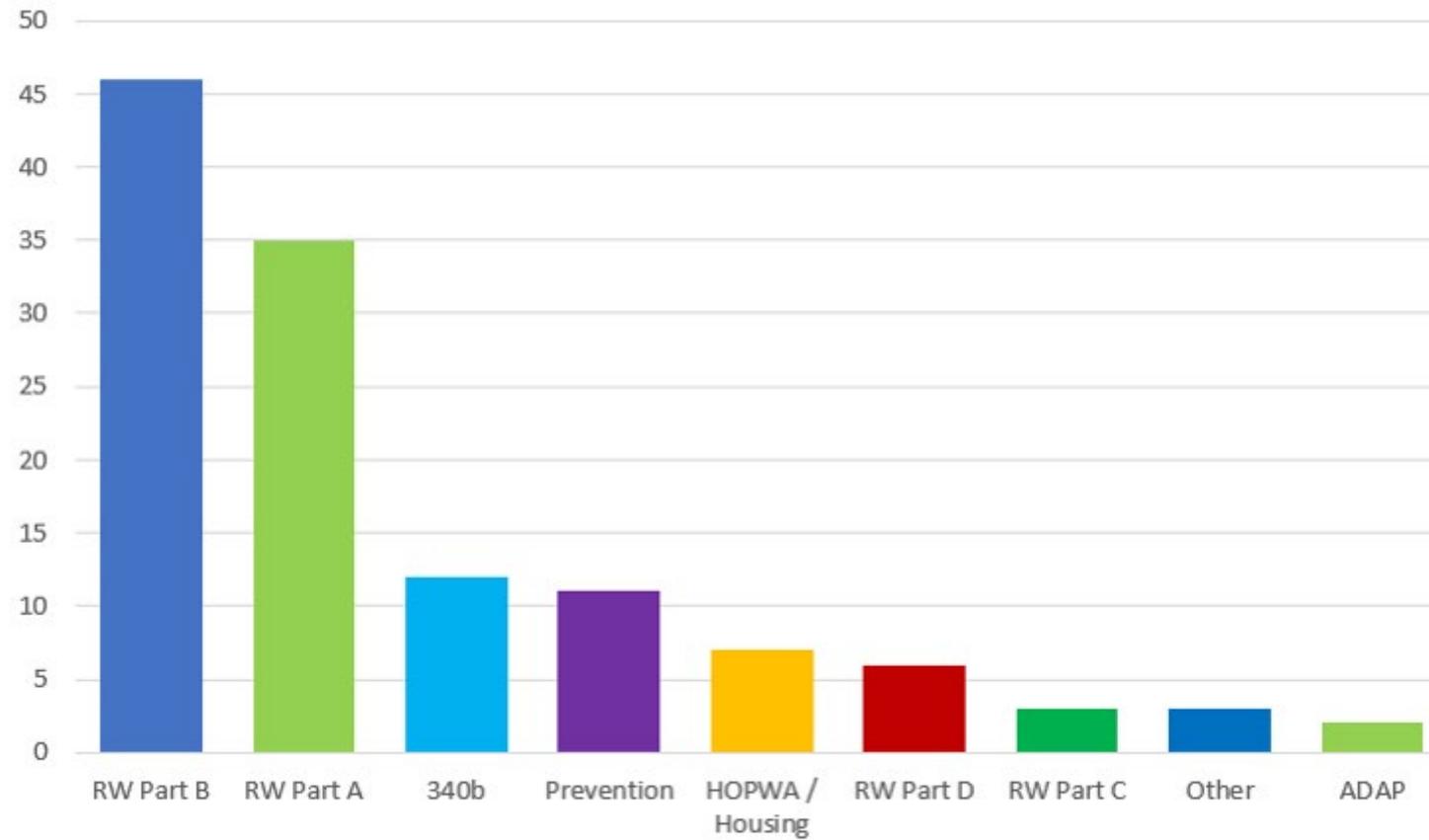
- Nearly 80 people from over 17 agencies attended the e2Connecticut Launch Training webinar.
- 70% of the attendees participated interactively, using e2Polls to ask questions and share their feedback.
- We received 635 answers to 16 questions.

Which agency are you from?



Source: e2Connecticut Launch Training, June 10, 2020

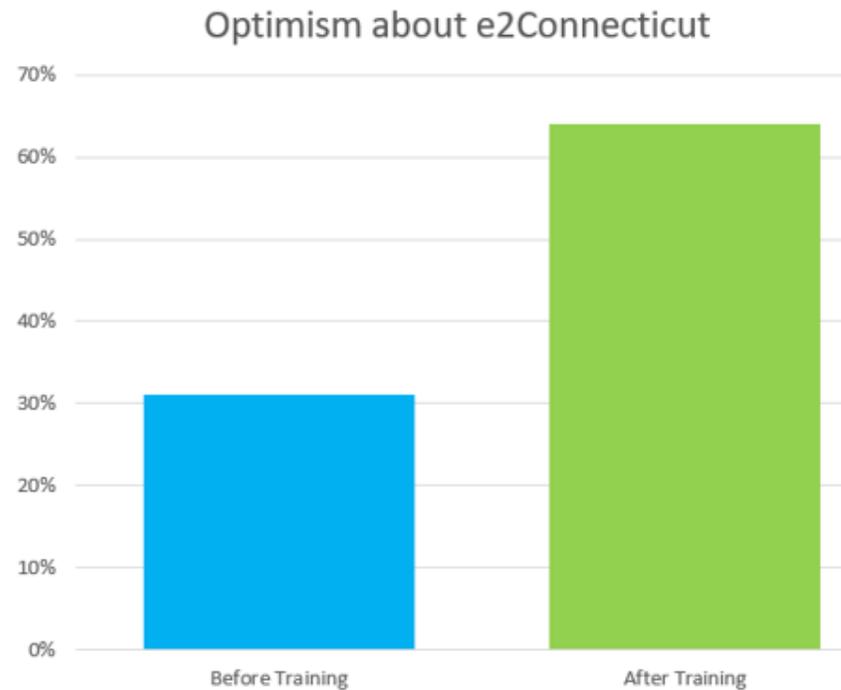
Funding Source



Source: e2Connecticut Launch Training, June 10, 2020



There was a 106% increase in optimism toward e2Connecticut after training.



Launch Training Feedback

June 10, 2020

Feedback



Context: e2Connecticut

- “It’s pretty much **self-explanatory.**”
- “It seems pretty **straightforward.**”
- “Congratulations.. those are **impressive satisfaction results.**”
- “It seems a lot **more user-friendly** with **better functionality.**”

Feedback – *part 2*



Context: e2Connecticut

- “**More user-friendly, time saving**, I really like the eligibility and ineligibility feature.”
- “It is **user-friendly**.”
- “Navigation friendly.”
- “User-friendly, more comprehensive, **more options to customize data**.”

Feedback – *part 3*



Context: e2Connecticut

- “I anticipate **the e2 data system will work well**. I will have more questions when I begin to use the program.”
- “I found the training **helpful** and **user-friendly**.”
- “We are all in this together.”
- “Our jobs are sometimes thankless but the work is worth doing.”

Feedback – *part 4*



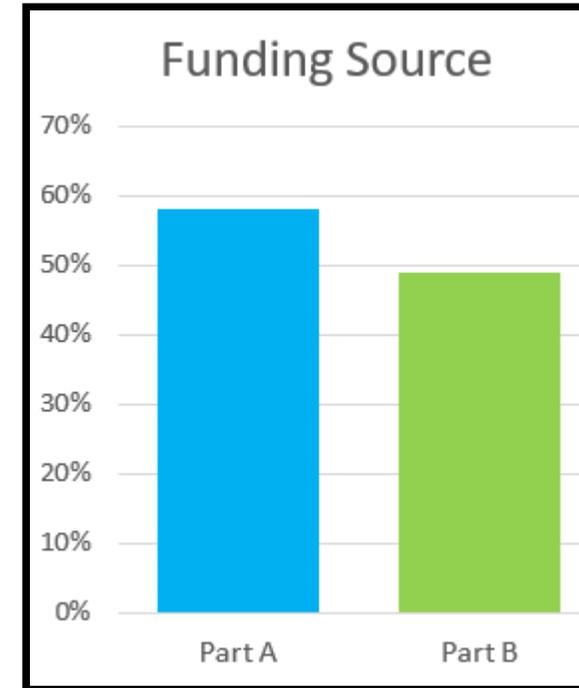
Context: e2Connecticut

- “**Good information!**”
- “Very easy and **fun to respond.**”
- “Congratulations, **very organized training.** Enjoyed the white board for questions and any comments.”

e2Connecticut Stakeholder Engagement



- 220 participants across 7 interactive stakeholder engagement events
- 109 Questions Asked
- 3,917 of Data Points
- Funding source
 - RW Part A (58%)
 - RW Part B (52%)



7. Overcoming Barriers



- **Data Hosting**

- Flexible timeline
- Pre-emptive measures
- Contingency plans
- “Whatever it takes” attitude

- **Team Building & Communication**

- Building channels
- Staying responsive
- Managing expectations

- **Sub-recipient Expectations**

- Playing devil’s advocate
- Phased approach
- Fresh perspective

7. Overcoming Barriers



Missing Features and Capabilities

- There were none!
- Testament to knowing Provider perspective & comprehensive Stakeholder Engagement

8. Creative & Innovative Thinking



- e-Signature and Intake Consent
 - Concerns about bringing clients in during COVID-19
 - Reduced paperwork, no more faxing between agencies!
 - Security & Privacy: eliminate fishing
 - Ensures need-to-know basis
 - Fully compliant with CT DPH regulations

E-Signature

The screenshot displays the e2Connecticut web application interface. A modal window titled "Electronic Signature" is open, showing a form for "Client Name" with the value "Joseph Smith". Below the name is a signature area containing a handwritten signature "Joseph. S.". The modal includes a "Type Signature" input field, a "Clear" link, and an "Adopt and Sign" button. The background form is partially visible, showing fields for "First Name", "Last Name", and "Date of Birth", along with a consent checkbox and radio buttons for "Upload Consent Document" and "Electronic Signature". A "Save" button is visible at the bottom of the form.

e2Connecticut

Main Reports Help Christopher Campos 10:52

Intake Information

Client Intake Information

Client successfully created! In order to

First Name

Last Name

Date of Birth

I agree to the Consent to Collect, Share and Use Personal Information agreement.

Please select consent method:

Upload Consent Document

Electronic Signature

Click to add e-Signature

Authorized e-Signature

By clicking "Save", I certify that I have received a valid consent from this client and am legally authorized to view their Medical Record.

Save Cancel

Feedback

Intake Consent



e2Connecticut Main Reports Help Jean-Felix Lanoue 16 : 58

Intake Information

Client Intake Information

You do not currently have access to this client record. In order to gain access, please obtain a consent letter from the client and upload it below.

First Name	Rita
Last Name	Jones
Date of Birth	05/01/1996

I agree to the [Consent to Collect, Share and Use Personal Information](#) agreement.

Please select consent method:

Upload Consent Document Upload Document

Electronic Signature Upload

By clicking "Save", I certify that I have received a valid consent from this client and am legally authorized to view their Medical Record.

Save Cancel

Feedback

Increased security to ensure consent is uploaded before access to data is granted

9. New Platform Capabilities



1. Automated Eligibility determination and recertification saves time and reduce errors
2. Electronic Consent Signature to reduce paperwork
3. Data Sharing ensures PHI is on a need-to-know basis and prevents fishing for info
4. Referrals Management to facilitate linkage to care
5. Visual Reporting provides actionable data in a powerful and user-friendly format
6. Electronic User Agreement and Audit Logs for increased accountability
7. Hosting on AWS Govcloud FedRAMP-Certified Servers
 - Improved reliability and up-time
 - Top-level security
8. New security layer with Zero Knowledge Encryption (LKM)
 - RDE does not see client identifiers

9. New Platform Capabilities



- Improvements were made to existing features:
 - More flexible client search
 - Improved speed compared to legacy system
- Controls to improve Data Quality
 - Client DOB can't be in the future
 - No letters are allowed in date fields, no numbers in names
 - Automated eligibility compliance and data quality

The screenshot displays the e2Connecticut web application interface. The top navigation bar includes 'Main', 'Reports', 'Help', and user information 'Jean-Felix Lanoue'. The main content area is divided into several sections:

- Intake Information:** A sidebar on the left lists client details: Name (Smith, John), Gender (Male), DOB (01/01/2000), E2ID (LFH10020), UCI (JHSI0101001B), and Eligibility (Ineligible). Below this is a 'Progress Notes' section with a pencil icon and a plus sign.
- Client Intake Information:** A main form area with a warning: 'THIS IS AN RDE DEMO SITE. DO NOT INCLUDE ANY PERSONAL HEALTH INFORMATION IN THIS SITE. USE ONLY DUMMY DATA.' The form contains fields for: First Name (John), Middle Initial, Last Name (Smith), Date of Birth (01/01/2000), Sex at Birth (Male), Current Gender (Male), Intake Date (12/09/2019), Agency ID, Client UCI (JHSI0101001B), CAREWare URN, Part B MAP Sites HU (Meriden), Part B Sites UCHC (Please Select), and E2ID (LFH10020). A 'Save Changes' button is at the bottom right.
- Document Tracker:** A section with a warning: 'Please use your computer's antivirus software to scan documents prior to uploading or opening a downloaded file.' It includes a '+ New Entry' button, a search field, and a table of documents.

Form Type	Document Type	Signage / Effective Date	Document	Action
Agency Consent / Release of Info	(Not Applicable)	07/08/2020		View Edit Delete

Showing 1 to 1 of 1 entries

Feedback

Automated Eligibility Determination



- Quickly view client's eligibility status and any reasons for ineligibility
- Know exactly where to go to update documents and other information to make clients eligible
- See when changes were made that affected eligibility, and who made the changes

Name	Smith, John
Gender	Male
DOB	01/01/2000
E2ID	LFH10020
UCI	JHSI0101001B
Eligibility	Ineligible
	History
	Audit Report

 Progress Notes 0

Automated Eligibility Determination



- Quickly view client's eligibility status and any reasons for ineligibility
- Know exactly where to go to update documents and other information to make clients eligible
- See when changes were made that affected eligibility, and who made the changes

Name	Doe, Jane
Gender	Female
DOB	04/17/1990
E2ID	NRU56948
UCI	JNDE0417902U
Eligibility	Ineligible
	History
	Audit Report
	Chart

Reasons for Ineligibility:

- Required Field: State is Missing.
- Required Field: HIV AIDS Status is Missing.
- Client is missing Income and Federal Poverty Level data.
- No Residency Verification Document.
- No HIV Verification Document.
- No Identity Proof Document.
- No Currently Valid Income Verification Document.



Progress Notes



End-to-end Referrals



➤ Incoming Referrals

Referred By	Service Category	Subservice	Referral Date	Status/Outcome Date	Status
ABCD HealthCare	Medical Case Management	MCM_Care Plan, Update	06/25/2020		Deliver a Service Lost to Follow up Cancel
ABCD HealthCare	Medical Case Management	MCM_Case Closed	06/25/2020		Accept Reject
ABCD HealthCare	Medical Case Management	MCM_Care Plan, Initial	06/25/2020	06/25/20	Completed
ABCD HealthCare	Medical Case Management	MCM_Care Plan, Update	06/25/2020	06/25/20	Canceled
ABCD HealthCare	Medical Case Management	MCM_Adherence Support Face to Face	06/25/2020	06/25/20	Rejected
ABCD HealthCare	Medical Case Management	MCM_Care Plan, Update	06/25/2020	06/25/20	Lost to Follow up

Showing 1 to 6 of 6 entries

Before-After: Compliance



- State now has full access to its own Part B data
- Complete data system, each provider has the complete picture of their clients' services and medical
- e2Connecticut supports CT DPH in performing its due diligence with the Ryan White Program clearly and fully
- e2Connecticut can generate random sample very easily for routine program monitoring now that data is available with more efficient physical site visits

Before-After: Reportability

- Visual Analytics: slice & dice data visually
- Visual HAB Reporting: spot disparities visually
- One-click Drilldown RSR
- Graphically filter by eligible and active clients

Age Cross Tab (Race by Gender by AgeGroup)

Data Scope: Kevin's Clinic
Report Start Date: 01/01/2016
Report End Date: 12/31/2016

< 2

Race:	Total:	Col. %:	Female:	Male:	Transgender FM:	Transgender MF:
Not Specified	1	100.0	0	1 (100.0%)	0	0
Total:	1	100.0	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)

Number of Records : 2
(Count is unduplicated across providers)

13 - 24

Race:	Total:	Col. %:	Female:	Male:	Transgender FM:	Transgender MF:
Asian	1	50.0	1 (100.0%)	0	0	0
More than one race	1	50.0	0	1 (100.0%)	0	0
Total:	2	100.0	1 (50.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)

Number of Records : 3
(Count is unduplicated across providers)

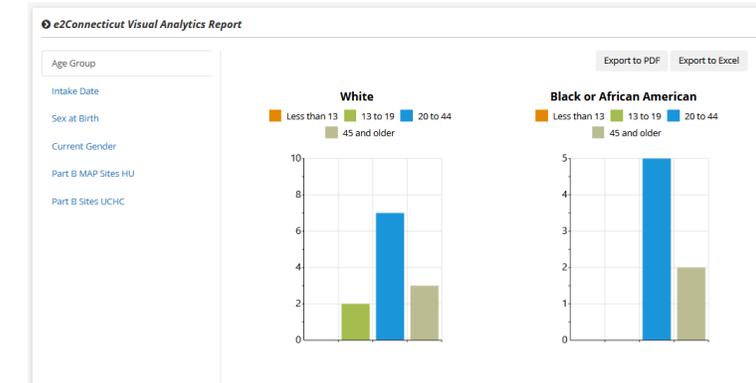


Table 1: Age Group

	White	Black or African American	Asian	Native Hawaiian/Pacific Islander	American Indian/Alaskan Native	More than one selected	Unreported / NA	Total	%
Less than 13	0	0	0	0	0	1	2	3	4.5%
13 to 19	2	0	0	0	0	0	2	4	6.1%
20 to 44	7	5	1	1	2	2	29	47	71.2%
45 and older	3	2	0	0	0	3	4	12	18.2%
Total	12	7	1	1	2	6	37	66	100%

Clients Drilldown

ClientCode	First Name	Last Name	
KEH10016	One	On	View
SPV10037	Bob	McBoberbob	View

Before-After: Privacy



- Access to client-data is much more secure in e2CT
 - Users can no longer “fish” for clients; they have to know their full name and demographics PLUS Consent on file
- Once consent is obtained, much more open for tracking Client Continuum of Care.
- Client Personal Identifiers are fully encrypted and better protected. Access is strictly limited to program staff

Before-After: Accessibility + Performance



- World Class Web-Hosting Infrastructure for Reliability and Security.
99.99% average up-time
- No more software installation required for staff users (VPN)
- No more prolonged downtimes for system updates

Before-After: Security



- FedRAMP.gov Certified AWS GovCloud Hosting
- Local Key Module – Zero Knowledge Encryption
- Experienced 18+ Years Web Architecture Vendor
- Automated Security Scans
- On-screen Audit Trail on all data elements for accountability

Before-After: Support & TA



- All inquiries are processed through a centralized interface, so users always knows who to contact and DPH is always looped in on program questions
- Tech Support available by phone from 9am to 6pm EST.
- Staff is more confident and willing to use the system
- Reported Issues are tracked and addressed accurately (by the proper entity)
- Reduced Training Needs
- Flexibility and Responsiveness

IT Partnership + Sustainability



- “I have had a long career working with many vendors, and no one has partnered with CT DPH like RDE has.”
- “RDE has worked so closely with us, they have almost become an extension of the CT DPH IT department.”
- “I am pleased to report that RDE has saved us from hiring two IT developers on our staff.”

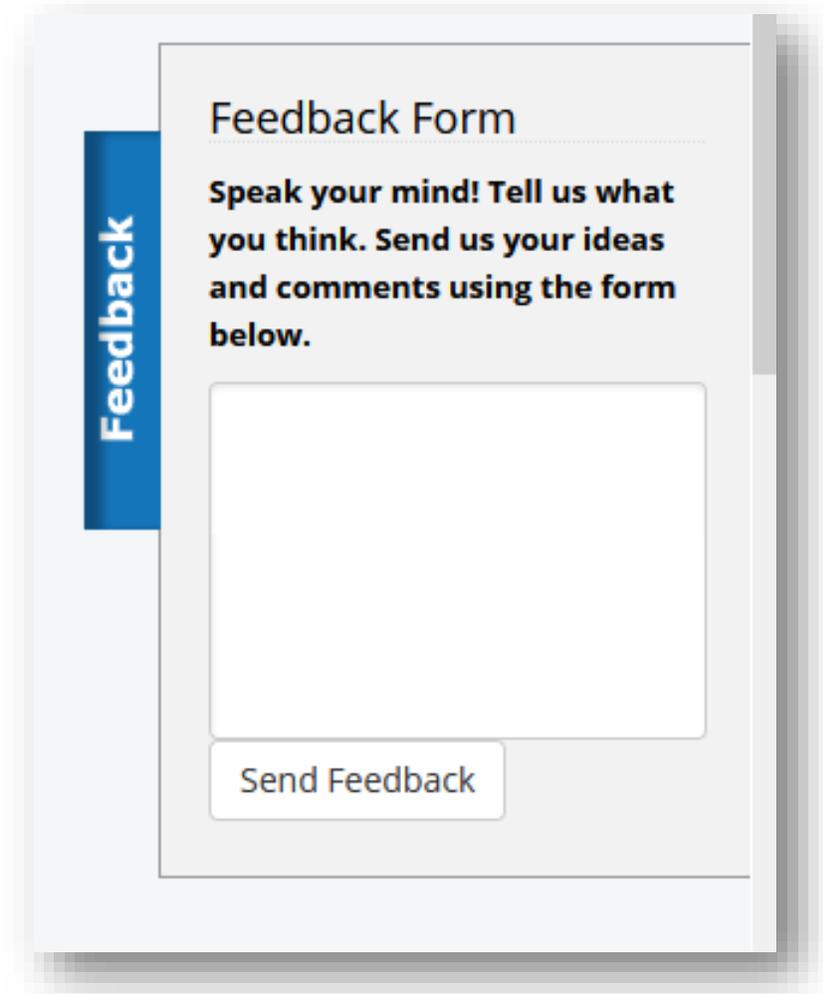


Steve McConaughy
Information Technology Manager



10. e2Connecticut – Future Vision

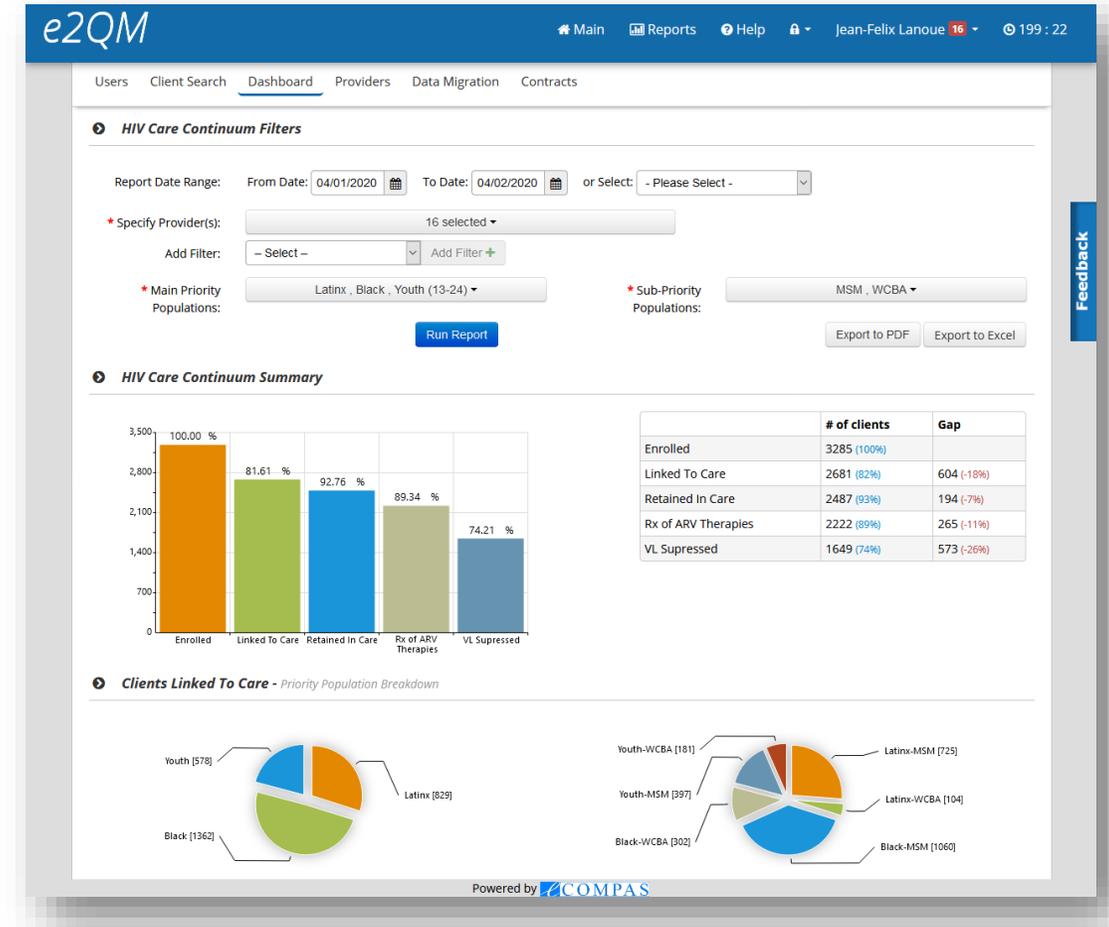
- Alerts and Reminders
- Real-time Dashboards
 - Care Continuum
- More Reports
- We Want Your Feedback!



The graphic shows a feedback form interface. On the left, a vertical blue bar contains the word "Feedback" in white. To the right, the form is titled "Feedback Form" and includes the text: "Speak your mind! Tell us what you think. Send us your ideas and comments using the form below." Below this text is a large, empty white rectangular box for input. At the bottom right of the form is a button labeled "Send Feedback".

Future Vision – Care Continuum Dashboard

- View a real-time Care Continuum, broken down by special populations, in a single glance.
- Drilldown to clients falling into the gaps between each step of the Care Continuum.
- Use powerful e2 Visual Analytics to sort, filter, and view your data in an intuitive graphical format.

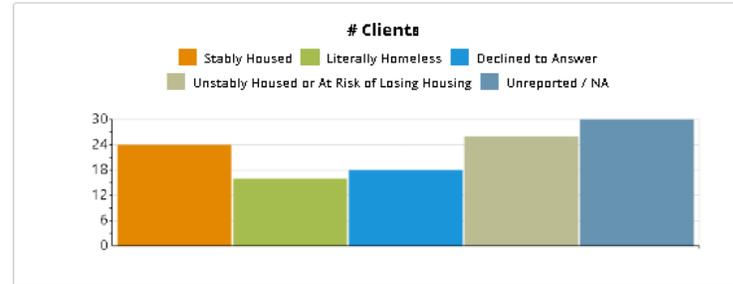


Real-time Geospatial Analysis

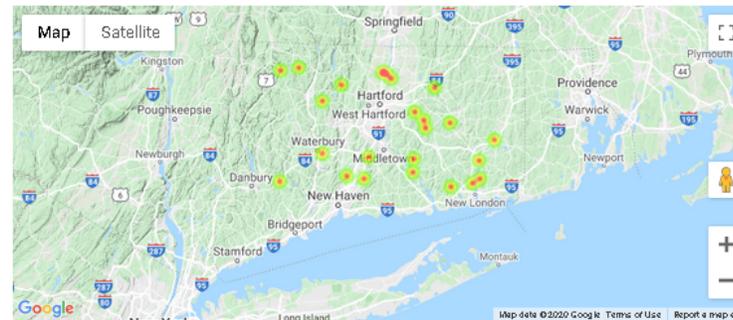
Hotspot Tracker Report

- Country of Birth
- Employment
- Ethnicity
- Gender Identity
- Hear About Us
- HIV Vulnerabilities
- Housing Status**
- Medical Insurance
- Preferred Pronoun
- Primary Language
- Primary Language - Read
- Race
- Secondary Language
- Secondary Language - Read
- Sex at Birth
- Sexual Orientation
- State/Territory of Residence

Export to PDF Export to Excel



- Stably Housed**
- Literally Homeless
- Declined to Answer
- Unstably Housed or At Risk of Losing Housing
- Unreported / NA



Housing Status Map	# Clients	%
Stably Housed	24	21.1%
Literally Homeless	16	14%
Declined to Answer	18	15.8%
Unstably Housed or At Risk of Losing Housing	26	22.8%
Unreported / NA	30	26.3%
Total	114	100%

Feedback

External Referrals Portal



- Check eligibility and submit referrals online
- Send secure messages and upload documents
- View progress and application status

Dashboard My Application Secure Document Upload Resources

Secure Messaging

Use this form to communicate directly with us for any question you have about the online application process.

[+ New Message](#)

10 records per page Search:

Type	Subject	Date	Action
No data available in table			

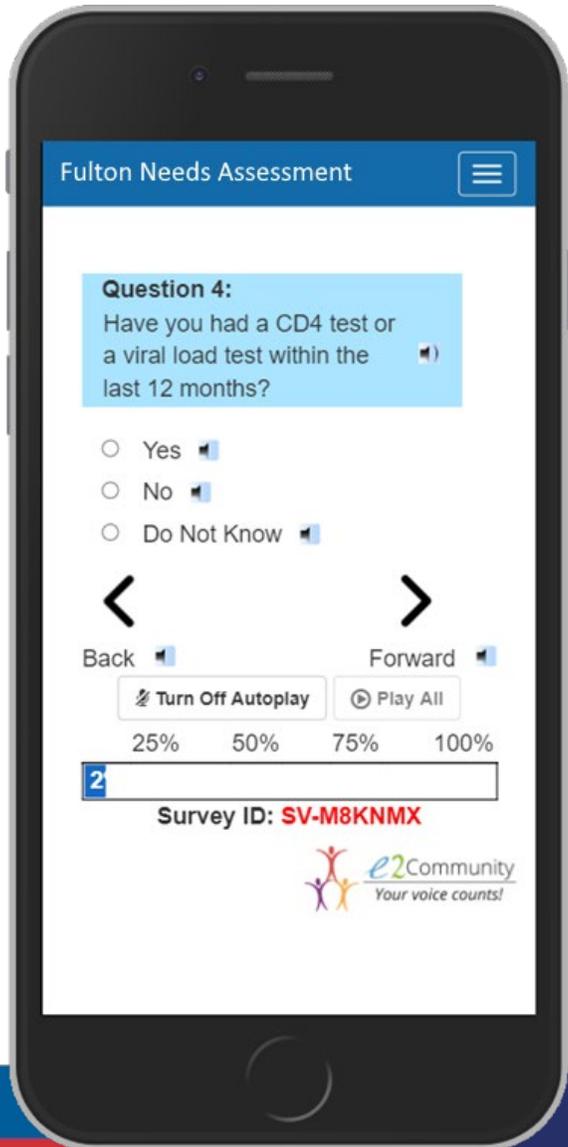
Showing 0 to 0 of 0 entries ← Previous Next →

Questions or comments? Medication Eligibility Hotline 1-555-555-5555

Application Status

Applicant and Contact Information	0%
Demographics	0%
Income	0%
Medical Provider Information	0%
Insurance Information	0%

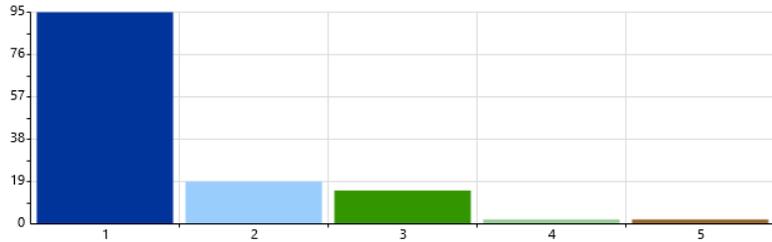
Future Vision – e2Community Needs Assessment



- Mobile-accessible, multi-lingual digital needs assessment.
- Audio playback for low-literacy population needs.

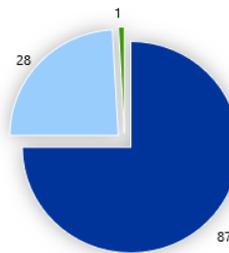
Future Vision – e2Community Needs Assessment

5 How did you most likely get HIV? (Check all that apply)



Answer	Count	Percentage
1. Sex with men	95	81.90%
2. Sex with women	19	16.38%
3. Sharing needles or works	15	12.93%
4. Blood products or transfusion	2	1.72%
5. I was born with HIV	2	1.72%
Total:	116	

6 Which best describes your sex assigned at birth? (Select one best answer)



Answer	Count	Percentage
1. I was born male	87	75.00%
2. I was born female	28	24.14%
3. I was born intersexed	1	0.86%
Total:	116	

- Visual analytics report display response data in graphical chart & graph format.
- Filterable and dissectible in-system for insightful analysis.

Future Vision – e2MyHealth Client Satisfaction



General Labs Services Satisfaction Survey

Satisfaction Survey

1.) Please tell us how satisfied you were with the staff during your service visit.



2.) Would you like to leave a compliment for a staff member?

Submit

Likert-scale question follow-up triggered by a positive response from respondent.

Is it Worth it?



- Investment

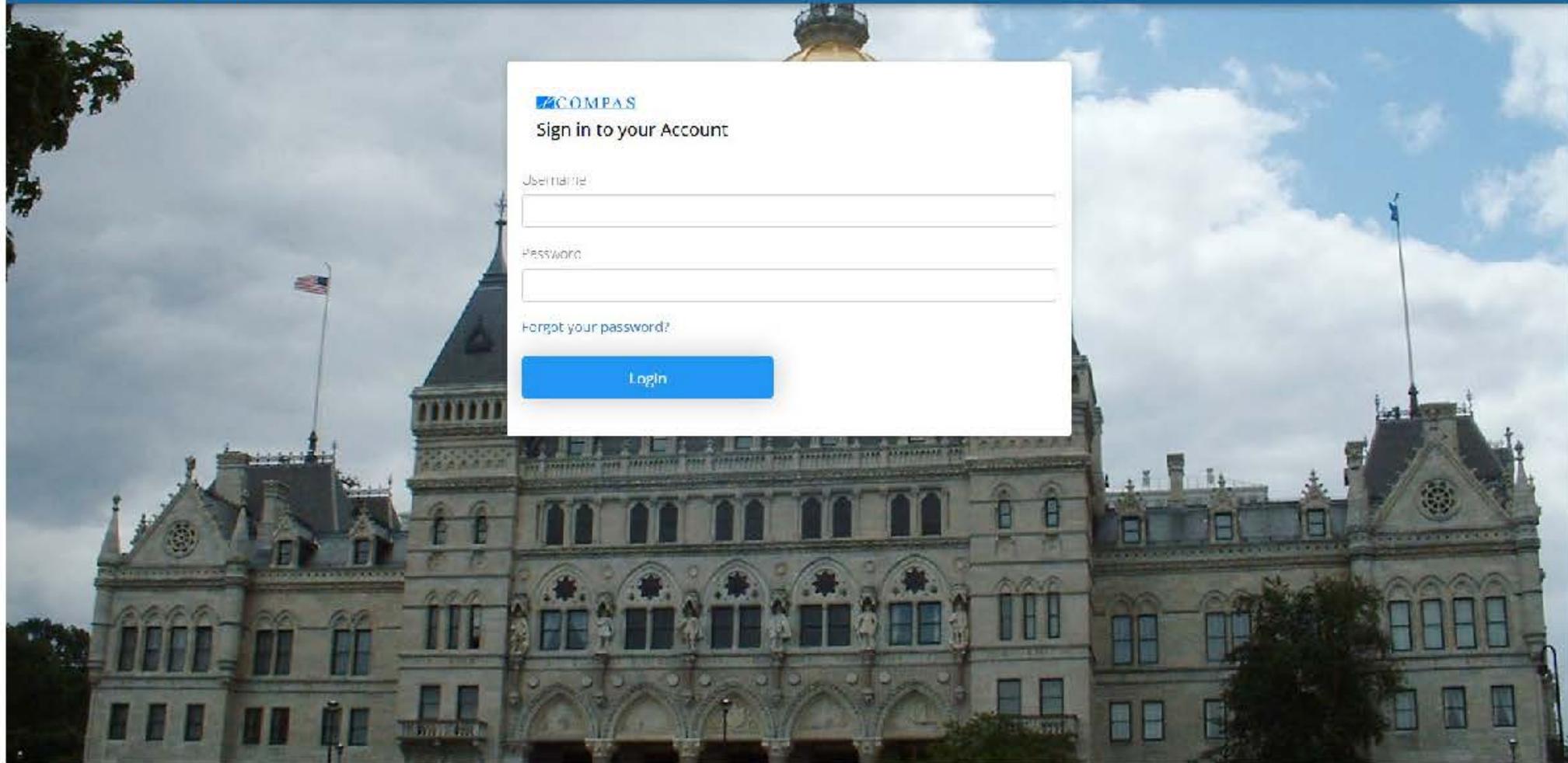
- Time
 - Finding the right vendor
 - Weekly meetings
 - Allow for a comprehensive development process
- Acceptance of realistic goals

- Benefits

- Strong foundation for the future
- People-oriented, Process over Product collaboration
- Quantifiable long-term time savings
- Stakeholder buy-in and appreciation
- Confidence in data completeness and quality



e2Connecticut



Sign in to your Account

Username

Password

[Forgot your password?](#)

Login

What's the Alternative?



- “We turned over the keys to the kingdom and now **we're paying for it.**”
- “It is often **difficult to input or retrieve information**...fields are often embedded in [Legacy Data System] in areas that are **not easily accessible.**”
- “[Legacy Data System] is **not a practical system.**”
- “The main drawback in [Legacy Data System] is that most grantees have **issues with the ease of reporting and duplicate data entry.**”

Mukhtar's Closing



“The training was a **great success** and we've come a long way and I think we have an **excellent product**. It was an **excellent choice** picking you guys. The **sub-recipients really like it**. At the end of the day it is all about the clients and **better tools & the reduction of administrative burden that eCOMPAS provides is invaluable.**”



VIRTUAL
2020 NATIONAL
RYAN WHITE
CONFERENCE ON
HIV CARE & TREATMENT

Closing Thoughts

How can we accomplish ambitious goals?



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How can we accomplish ambitious goals?



AL
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ON
ENT

One bite at a time.

Thank you for your time!



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Daniel Hulton
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Free and innovative resources to end the epidemic

www.RDE.org/Red