

# Real World Examples of Innovative Data Practices: Two Part B Sites and a Clinical Site

# Creating Automated Reports for Ryan White Part B Programs for Ongoing Quarterly Assurance and Monitoring Program Outcomes

**Kristina Larson, MPH**

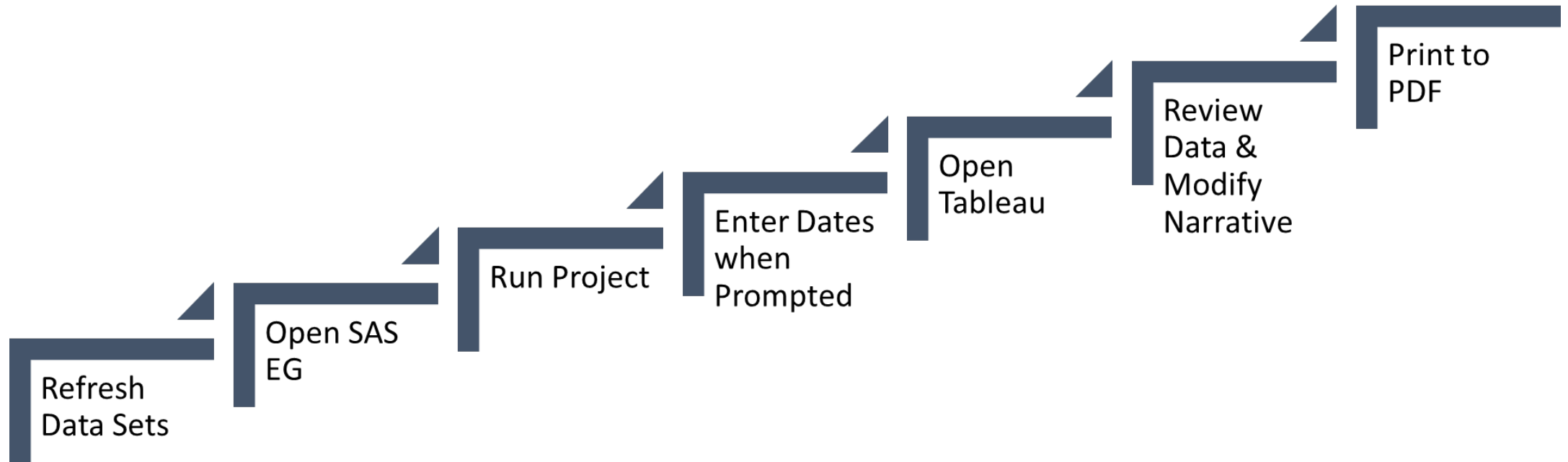
*Data Analyst/Louisiana Office of Public Health, STD/HIV Program*

# Outline

- Process flow
- Data sources/What's included
- SAS Enterprise Guide overview
- Tableau overview
- Running LA ADAP report
- Future activities



# Flow for Creating Reports



# Ryan White Services Fact Sheets

- ADAP
- Part B CBO Support Services
- Statewide and 9 public health regions
- Annual and quarterly

# Data Sources for CBO Fact Sheets



- Eligibility from CAREWare
- Demographics of PLWH from eHARS
- Services and details from CAREWare
- Reported labs from eHARS

# What's included in the CBO Fact Sheets?



- Client Characteristics
- Utilization
- Care Continuums
- Unmet Need

# Data Sources for ADAP Fact Sheets



- Eligibility from Pharmacy Benefits Manager (Ramsell)
- Drug claims from Pharmacy Benefits Manager (Ramsell)
- Health insurance cost shares from CAREWare
- Reported labs from eHARS



# What's included in the ADAP Fact Sheets?



- Overview
- Enrollment
- Utilization
- Care Continuums

# SAS Enterprise Guide

- User interface for SAS
- Able to point-and-click through common SAS procedures
- Manual SAS Programming can be utilized to complete more complex tasks
- Easy to modify simple tasks and reports
- Limits on what can be done through point-and-click

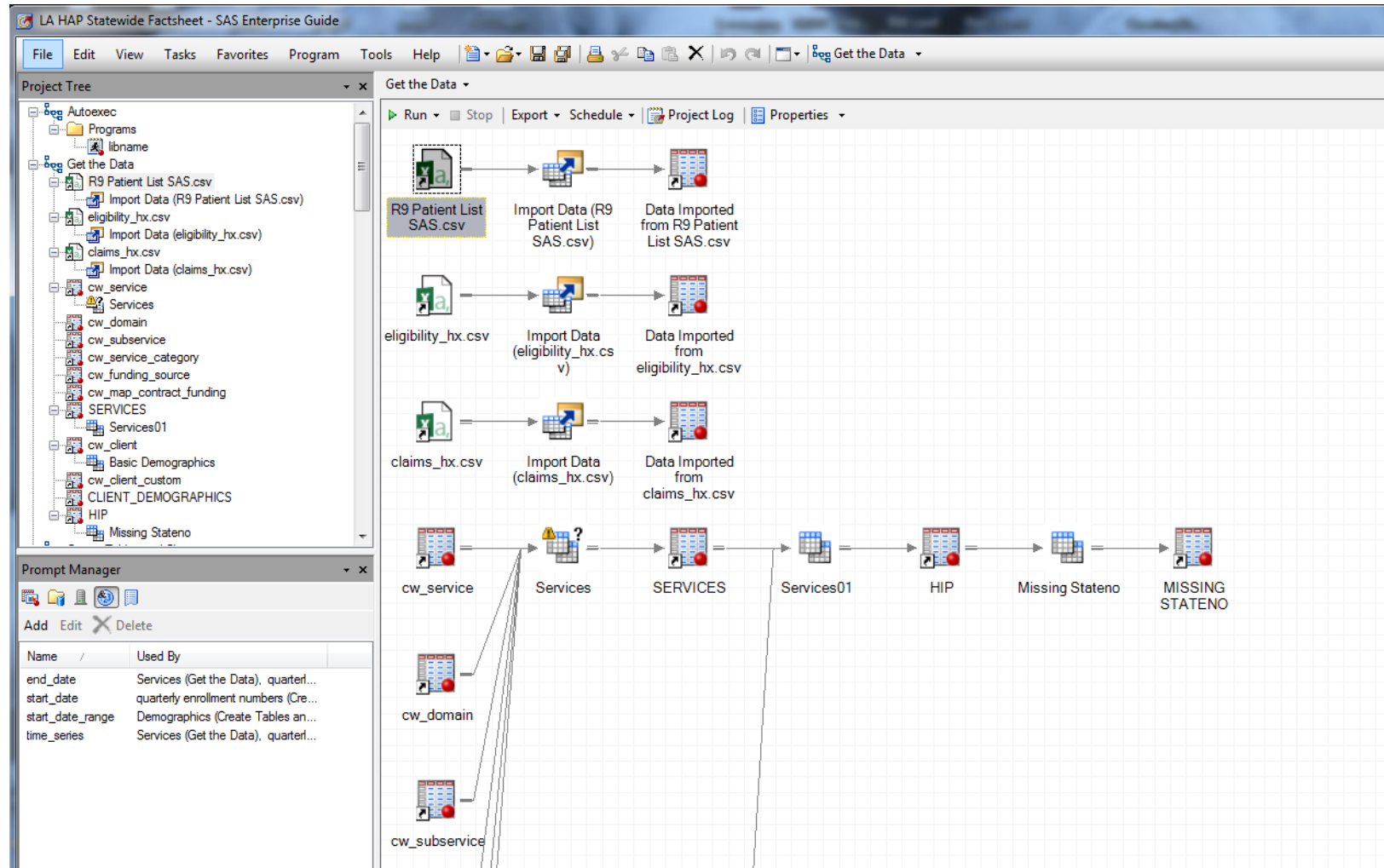


# Tableau

- Easy (somewhat) to create polished data visualizations
  - Mostly done through “drag and drop”
- Able to create interactive visualizations
- Connects to many data sources
- Expensive



# Process Flow for ADAP Factsheet



# Starting Project

The screenshot displays the SAS Enterprise Guide interface for a project titled "LA HAP Statewide Factsheet". The "Project Tree" on the left lists the project structure, including folders for "Autoexec", "Programs", and "Get the Data". Under "Get the Data", there are sub-folders for "R9 Patient List SAS.csv", "eligibility\_hx.csv", and "claims\_hx.csv", each containing an "Import Data" task. The main workspace shows a workflow diagram with four rows of tasks: 1) "R9 Patient List SAS.csv" (input) -> "Import Data (R9 Patient List SAS.csv)" -> "Data Imported from R9 Patient List SAS.csv"; 2) "eligibility\_hx.csv" (input) -> "Import Data (eligibility\_hx.csv)" -> "Data Imported from eligibility\_hx.csv"; 3) "claims\_hx.csv" (input) -> "Import Data (claims\_hx.csv)" -> "Data Imported from claims\_hx.csv"; 4) "cw\_service" (input) -> "Services" (with a warning icon) -> "SERVICES" -> "Services01". A red circle highlights the "Run" button in the top toolbar.

# Entering Prompts

Specify Values for Project Prompts

Show only required items (denoted by \*)

General [Reset group defaults](#)

\* Select last day of period  
March 31, 2018 (Example: October 08, 2018)

\* Enter start date for time series charts  
January 01, 2017 (Example: October 08, 2018)

\* Select start date for care and viral suppression definitions (typically 1 year prior to end of period)  
April 01, 2017 (Example: October 08, 2018)

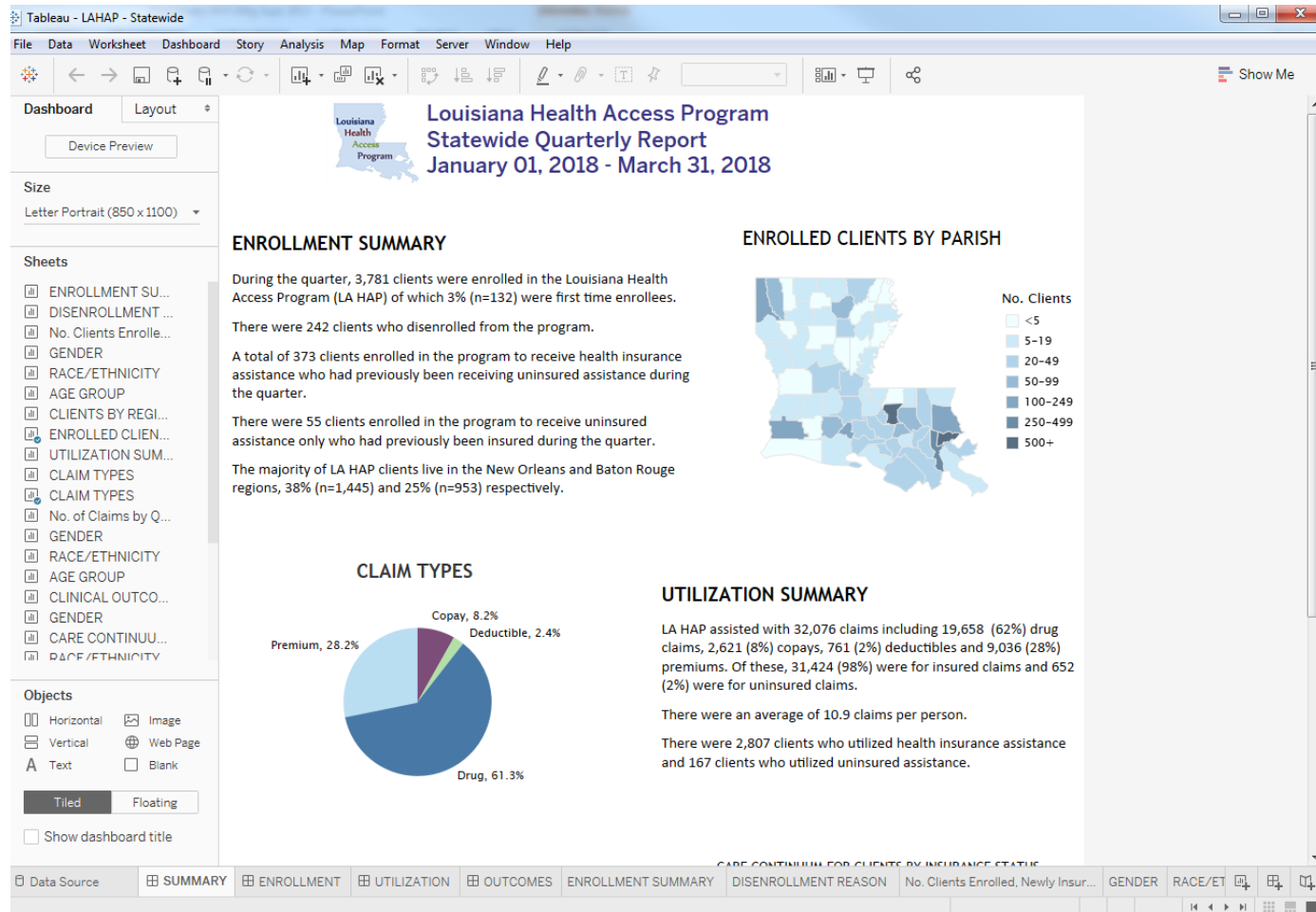
\* Select first day of period  
January 01, 2018 (Example: October 08, 2018)

Run Cancel

# What happens next?

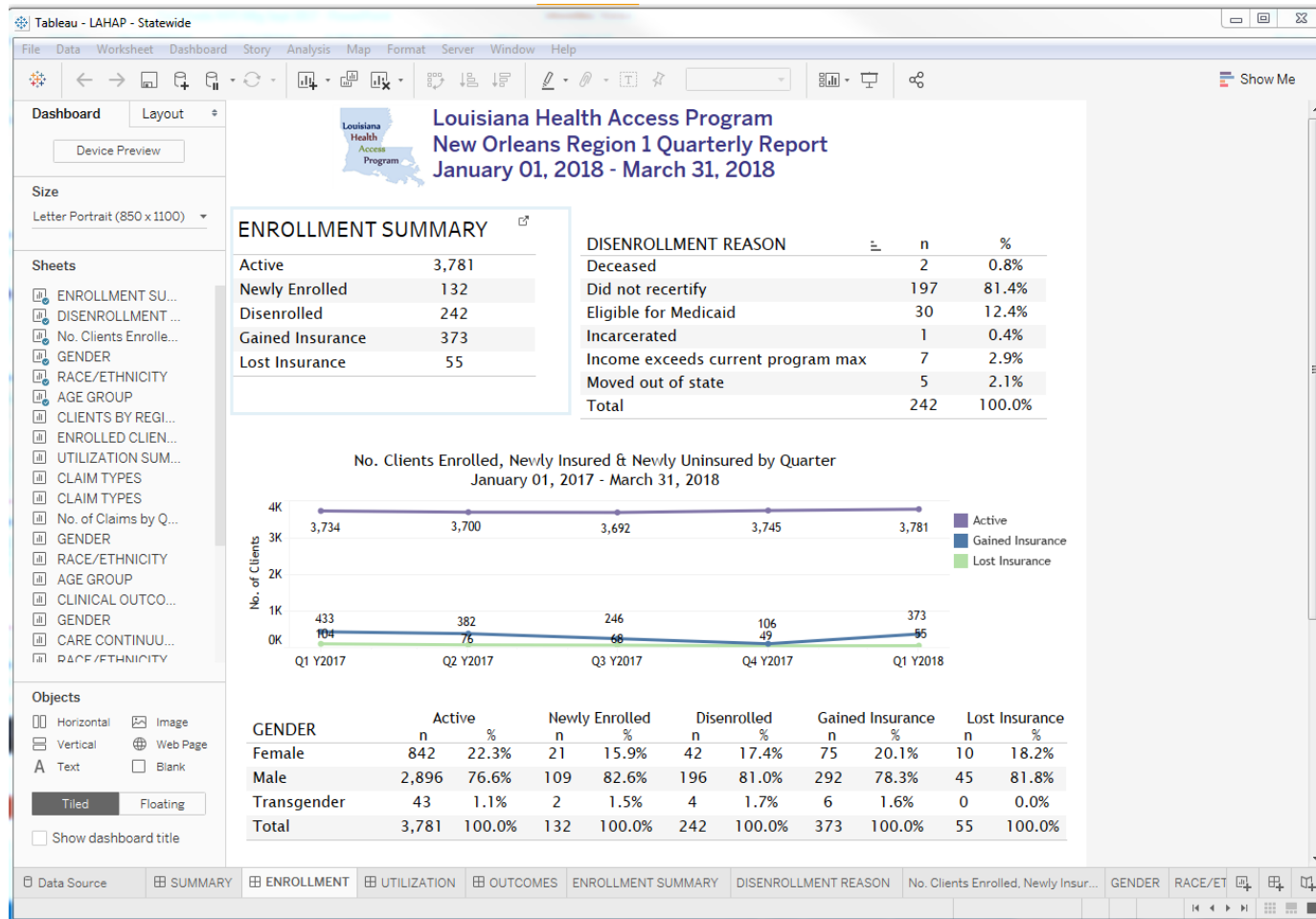
- SAS exports data sets into a secure network folder
- User opens Tableau
- Tableau points to newly created data sets and refreshes charts and graphs
- User reviews data and modifies narrative
- User prints to pdf and distributes

# Tableau Dashboard





# Tableau Dashboard



# Table in Tableau – Care Continuum

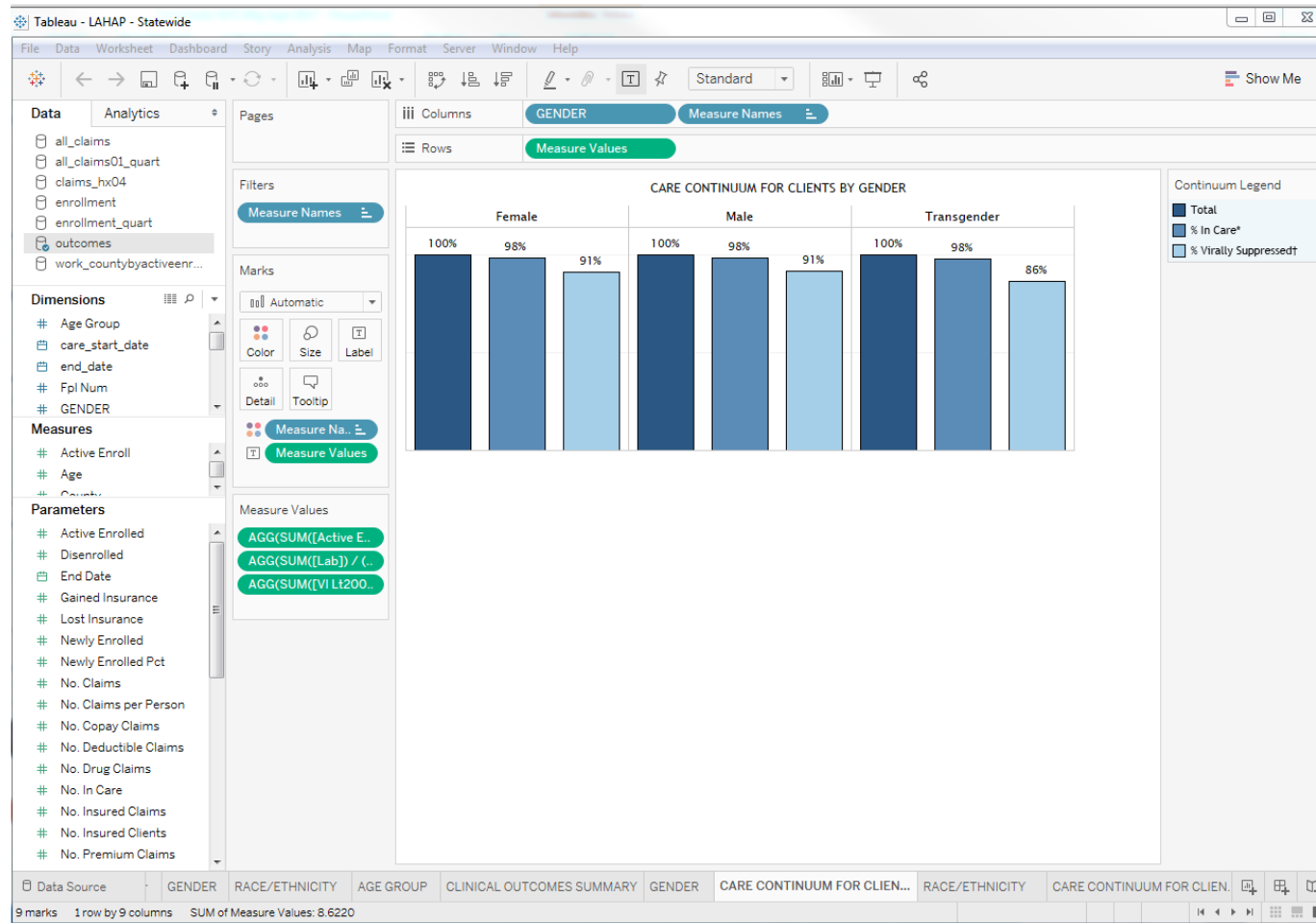
The screenshot shows the Tableau interface with a table of HIV care continuum data. The table is filtered by GENDER and displays the following data:

GENDER	Total	No. In Care*	% In Care*	No. Virally Suppressed†	% Virally Suppressed†
Female	842	826	98.1%	764	90.7%
Male	2,896	2,849	98.4%	2,643	91.3%
Transgender	43	42	97.7%	37	86.0%

The Tableau interface includes a sidebar with Data, Dimensions, Measures, and Parameters. The Columns shelf contains 'Measure Names' and the Rows shelf contains 'GENDER'. The Marks card is set to 'Automatic' and includes 'SUM(Active Enroll)', 'SUM(Lab)', 'AGG(SUM([Lab]) / (...))', 'SUM(VI Lt<200)', and 'AGG(SUM([VI Lt<200...))'. The status bar at the bottom indicates '15 marks 3 rows by 5 columns SUM of Measure Values: 10.948'.

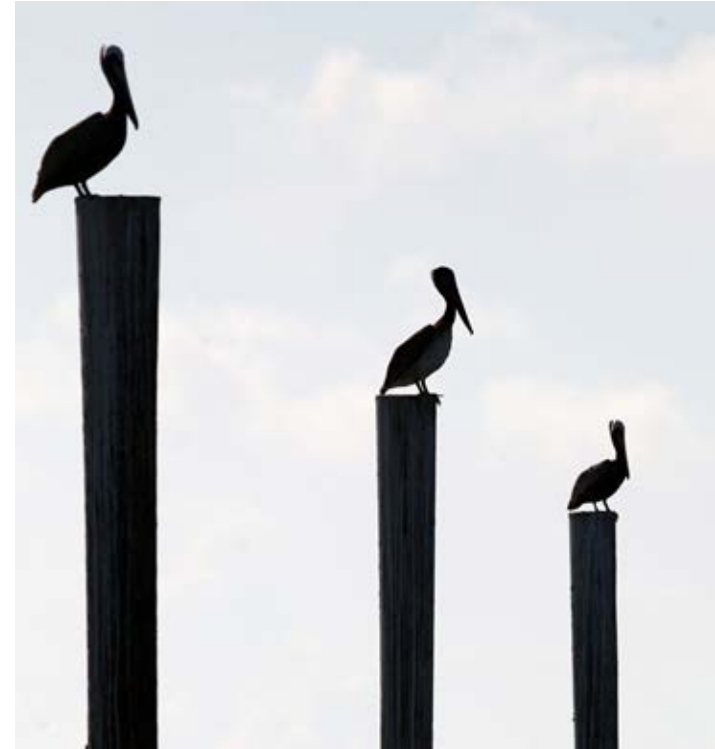
\*Clients defined as In Care had at least one CD4 or viral load reported between April 01, 2017 and March 31, 2018.  
 †Clients defined as Virally Suppressed had at least one viral load reported between April 01, 2017 and March 31, 2018 with the most recent result <200 copies/mL.

# Bar Chart in Tableau – Care Continuum



# Future Activities

- Continue to refine reports
- Use current reports as a template for interactive graphs/charts for public facing website



# Questions?

Kristina Larson

[kristina.larson@la.gov](mailto:kristina.larson@la.gov)

(504) 568-7474

# Utilizing Capacity Grant to Minimize Gaps in HIV Care Continuum

**Ron Calangi, Sr. Programmer Analyst**

**Jameela J. Yusuff MD MPH FACP, Medical Director**

*STAR Health Center*

*SUNY Downstate Medical Center, Brooklyn New York*

# Disclosures

Dr. Jameela J. Yusuff and Ron Calangi have no financial interest to disclose.

This continuing education activity is managed and accredited by AffinityCE/Professional Education Services Group in cooperation with HRSA and LRG. PESG, HRSA, LRG and all accrediting organization do not support or endorse any product or service mentioned in this activity.

PESG, HRSA, and LRG staff as well as planners and reviewers have no relevant financial or nonfinancial interest to disclose.

Commercial Support was not received for this activity.

# Learning Objectives

At the conclusion of this activity, the participant will be able to:

1. Gain insight into how to develop SRS reporting system
2. How to utilize reports created by the reporting system
3. How to engage staff to view and act on the reports



# STAR Health Center, Brooklyn New York

- Established in 1991, RW Part C funding
- PCMH Level 3, one-stop shop for all medical/behavioral health needs
- HIV primary care and prevention (PReP/PEP)
- HCV services including Fibroscan
- LGBTQ care (HRA), Hormone therapy
- Women's health—Colposcopy and Prenatal
- Integrated MH/SA counselors, trauma informed Care, Seeking Safety
- Medical CM, clinical pharmacist, outreach, CAG, social media, and nutrition services
- Opioid Prevention Program, AETC site, SBIRT trained staff

# Data Collection Challenges for HRSA-HAB Measures

- HRSA, multiple other grants (PHS/SAMHSA), PCMH Level 3, New York AIDS Institute Quality requirements, and Value Based plans
- Multiple entities who required data
- Time consuming—many indicators was a manual pull—particularly retention
- Provider specific results was tedious to complete
- Various systems to retrieve data from
- Limited support staff to assist with the collection
- EMR had canned reports but not relevant for our needs
- Staff didn't have access to data

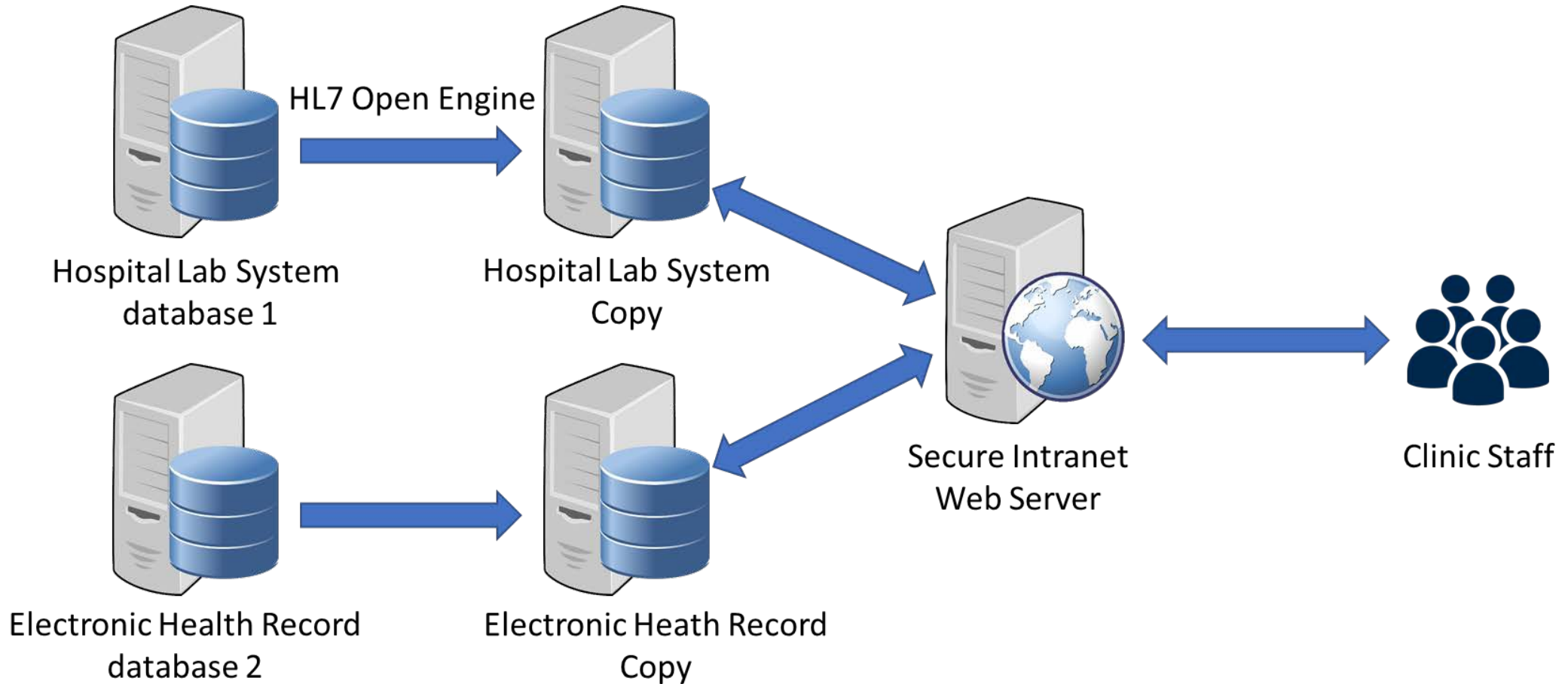
# Data Required

- Viral load suppression
- CD4 <200
- HgbA1c and lipid results
- Quantiferon results
- RPR results
- Retention 1 year, and 2 year
- Patients lost to follow up
- Nutrition surveys
- Psychosocial assessments
- Substance use screenings
- Tobacco screenings

# Key Reports Obtained by SRS

- Retention Report—both 1 year and 2 year
- Patients not seen in 6 months
- Survey results
  - Psychosocial/Substance use/Smoking/Nutrition
- Lab QA Report
  - By Provider
  - Visit Status
  - Wide array of lab results: CD4, VL, Quantiferon, RPR, Lipids,

# Data Conversion & Report Access



## OP Reports

- ❶ 0103 - Retention in Care Report: One Year
- ❶ 0104 - Retention in Care Report: Two Years (HRSA HAB Definition)
- ❶ 0105 - All Patients: Completed Visits
- ❶ 0106 - No Medical Visit For Six(6) Months
- ❶ 0113 - Active Patients: Health Maintenance Summaries
- ❶ 0122 - Active Patients: Last Medical Visit
- ❶ 0123 - All Patients: Last Medical Visit
- ❶ 0124 - BMI Report: Active Patients
- ❶ 0125 - Active Patients: All Prescriptions (Last Two Years)
- ❶ 0127 - Patients Without PatNo Or MRN

## Surveys

- ❶ 0108 - Domestic Violence Survey
- ❶ 0109 - PTSD Survey
- ❶ 0110 - MH Screening Survey
- ❶ 0111 - SHC Intake Survey
- ❶ 0115 - Substance Use Survey
- ❶ 0156 - Smoking Survey
- ❶ 0157 - Nutrition Survey

## Lab Reports

- ❶ 0155 - SHC Lab QA

# Select Various Formats to View Data

START DATE  View Report

1 of 2 ?

Total Number Of Active Patients Seen in 6 Months of Report Period	Patients Included Seen in Report Period	Percentage
10	786	75.07

- XML file with report data
- CSV (comma delimited)
- PDF
- MHTML (web archive)
- Excel
- TIFF file
- Word

# Opening Report Summary

START DATE 10/4/2017 12:00:00 AM

[View Report](#)

1 of 2 ?

Total Number Of Active Patients Seen in First 6 Months of Report Period	Total Number Of Active Patients Included Seen in Second 6 Months of Report Period	Percentage
1047	786	75.07



# Patients Sorted By PCP

START DATE

[View Report](#)

2 of 3 ?

PCP	Total Number Of Patients Per PCP	Total Number Of Patients Included Per PCP	Percentage
Annie Noel	17	15	88
Brandon Eilertson	33	23	70
Charles Mupamombe	3	2	67
Chi Doan Huynh	23	15	65
Cypress Hills Pharmacy	2	2	100
Daniela Tello	21	11	52
Diana Gutierrez	13	8	62
Haley Hoffner	19	16	84
Hector Ojeda-Martinez	206	136	66
Isha Bhatt	30	26	87
Jack DeHovitz	19	14	74
Jameela Yusuff	154	134	87
Jessica Yager	178	143	80
Karen Ha	1	0	0
Katharine Kuntz	4	1	25
Kelsie Pierre	5	4	80
Keron Matthew	36	24	67

# Spreadsheet example of Patients not seen

rpt103\_RetentionInCareReportOneYear - Excel

File Home Insert Page Layout Formulas Data Review View Acrobat Tell me what you want to do... Jameela Yusuff

ROW NO	PATNO	MRN	ARS	BIRTH	SEX	REGISTRATION DATE	PATIENT STATUS	AS OF DATE	PCP
1	1182319	1182319	A B	05/	M	03/14/2018	ACTIVE	03/14/2018	Liza Valdivia
2	1068005	1068005	A K	12/	M	09/30/2015	ACTIVE	09/30/2015	Hector Ojeda-Martinez
3	1172157	1172157	A L	02/	M	11/01/2017	ACTIVE	11/01/2017	Jessica Yager
4	1580	1081499	A DI	07/	F	12/02/2014	ACTIVE	12/02/2014	Hector Ojeda-Martinez
5	1171274	1171274	A A	02/	M	10/20/2017	ACTIVE	10/20/2017	Hector Ojeda-Martinez
6	397538	39-7538	A TI	11/	M	12/09/2015	ACTIVE	12/09/2015	Lorraine Sanassi
7	340748	34-0748	A LE	11/	M	08/05/2013	ACTIVE	08/05/2013	Jessica Yager
8	1165259	1165259	A B	12/	M	08/02/2017	ACTIVE	08/02/2017	Hector Ojeda-Martinez
9	943549	94-3549	A A	09/	M	03/07/2011	ACTIVE	07/28/2017	Keron Matthew
10	974	66-7326	B M	08/	F	11/08/2002	ACTIVE	11/08/2002	Liza Valdivia
11	787555	78-7555	B S	03/	F	09/29/2006	ACTIVE	09/29/2006	Lorraine Sanassi
12	1146352	1146352	B A	11/	F	12/13/2016	ACTIVE	12/13/2016	Jameela Yusuff
13	1154521	1154521	B JA	10/	M	03/24/2017	ACTIVE	03/24/2017	Hector Ojeda-Martinez
14	706978	70-6978	B JE	07/	M	04/25/2007	ACTIVE	04/25/2007	Hector Ojeda-Martinez
15	588182	58-8182	B N	10/	F	02/14/2018	ACTIVE	02/14/2018	Haley Hoffner
16	551	54-9359	B VI	02/	M	04/30/1998	ACTIVE	04/30/1998	Hector Ojeda-Martinez
17	1537	1021349	B W	11/	M	04/30/2013	ACTIVE	04/17/2017	Terry Marryshow
18	1164698	1164698	B G	01/	M	07/26/2017	ACTIVE	07/26/2017	Hector Ojeda-Martinez
19	1092599	1092599	B B	01/	M	05/19/2015	ACTIVE	05/19/2015	Daniela Tello
20	935665	93-5665	B C	05/	F	06/08/2016	ACTIVE	06/08/2016	Hector Ojeda-Martinez
21	952841	95-2841	B K	01/	M	07/24/2015	ACTIVE	04/13/2017	Hector Ojeda-Martinez
22	927186	92-7186	B J	03/	M	09/17/2010	ACTIVE		Jameela Yusuff
23	598	48-2269	B J	08/	F	01/08/1999	ACTIVE	01/08/1999	Hector Ojeda-Martinez
24	645	57-8467	B R	02/	M	08/02/1999	ACTIVE	08/02/1999	Liza Valdivia
25	1153245	1153245	B W	08/	M	03/08/2017	ACTIVE	03/08/2017	Hector Ojeda-Martinez
26	1087261	1087261	B M	08/	F	03/16/2015	TRANSFERRED	04/30/2018	Jessica Yager
27	1173254	1173254	B T	07/	F	12/05/2017	ACTIVE	12/05/2017	Jessica Yager
28	783502	78-3502	B Q	05/	M	08/11/2006	ACTIVE	08/11/2006	Jameela Yusuff
29	1180987		C S	04/	M	02/26/2018	INACTIVE	02/28/2018	Hector Ojeda-Martinez
30	574532	57-4532	C K	09/	F	10/28/2015	ACTIVE	10/28/2015	Liza Valdivia
31	835786	83-5786	C E	02/	F	06/24/2008	ACTIVE	06/24/2008	Jessica Yager
32	727	60-0877	C W	05/	M	04/09/2001	ACTIVE	04/09/2001	Daniela Tello
33	1019073	1019073	C L	12/	F	04/04/2017	ACTIVE	02/20/2018	Lorraine Sanassi
34	1167114	1167114	C J	08/	M	08/25/2017	ACTIVE	08/25/2017	Hector Ojeda-Martinez

Summary Patients per PCP Patients "Not Retained" Active Patients Visit Interval

# Report of Patients Not Seen in 6months

Report is sorted by patient  
Provider, date of last visit  
Given, and type of visit  
included

PAT NO	MRN	LAST NAME	FIRST NAME	BIRTH DATE	SEX	REGISTRATION DATE	LAST VISIT	NO OF DAYS	PCP	REASON
				04/10/1963	F	04/06/1998	04/04/2018	184	Jameela Yusuff	Routine HIV 7T
				07/20/1961	F	06/29/2000	02/28/2018	219	Jameela Yusuff	Intermediate
				09/02/1962	M	04/16/2001	02/05/2018	242	Jameela Yusuff	Routine HIV 7T
				09/20/1977	F	11/07/2007	03/13/2018	206	Jameela Yusuff	Walk-in
				08/15/1944	M	01/25/2011	03/05/2018	214	Jameela Yusuff	Routine HIV 7T
				02/02/1958	M	01/08/2018	01/08/2018	270	Jameela Yusuff	Initial Visit
				03/01/1966	F	05/24/2010	02/26/2018	221	Jameela Yusuff	Routine HIV 7T
				08/08/1975	F	04/04/2014	02/21/2018	226	Jameela Yusuff	Routine HIV 7T
				09/12/1984	M	02/02/2018	02/02/2018	245	Jameela Yusuff	Walk-in
				05/25/1976	M	08/11/2006	03/28/2018	191	Jameela Yusuff	Routine HIV 7T
				03/26/1983	M	09/17/2010	11/27/2017	312	Jameela Yusuff	Routine HIV 7T
				10/27/1958	F	08/19/1999	02/05/2018	242	Hector Ojeda-Martinez	Routine HIV 7T
				07/01/1969	F	04/05/1994	03/26/2018	193	Hector Ojeda-Martinez	Routine HIV 7T
				12/01/1969	M	01/16/1996	03/12/2018	207	Hector Ojeda-Martinez	Routine HIV 7T
				02/25/1956	M	04/30/1998	03/28/2018	191	Hector Ojeda-Martinez	Routine HIV 7T
				07/11/1961	F	12/03/1998	02/02/2018	245	Hector Ojeda-Martinez	Routine HIV 7T
				01/26/1969	F	10/31/2001	11/01/2017	338	Hector Ojeda-Martinez	Routine HIV 7T
				04/21/1983	M	02/26/2018	03/12/2018	207	Hector Ojeda-Martinez	Intermediate
				05/19/1984	F	06/30/2017	02/12/2018	235	Hector Ojeda-Martinez	Routine HIV 7T
				07/18/1969	M	07/10/2017	12/05/2017	304	Hector Ojeda-Martinez	Walk-in
				01/28/1992	M	01/17/2018	02/14/2018	233	Hector Ojeda-Martinez	Routine HIV 7T
				12/07/1995	M	08/02/2017	12/05/2017	304	Hector Ojeda-Martinez	Walk-in
				06/12/1988	M	09/15/2017	10/27/2017	343	Hector Ojeda-Martinez	Walk-in
				02/07/1997	M	12/11/2017	12/26/2017	283	Hector Ojeda-Martinez	Walk-in
				05/09/1982	M	01/18/2017	11/01/2017	338	Hector Ojeda-Martinez	Walk-in
				09/03/1985	M	02/21/2017	11/21/2017	318	Hector Ojeda-Martinez	Walk-in
				10/07/1996	M	03/24/2017	02/21/2018	226	Hector Ojeda-Martinez	Walk-in
				07/15/1977	M	05/08/2017	10/16/2017	354	Hector Ojeda-Martinez	Walk-in
				05/10/1991	M	05/21/2017	10/23/2017	247	Hector Ojeda-Martinez	Walk-in

# Example of Psychosocial Assessment

Start Date  End Date  [View Report](#)

Pat No (Leave blank to select all PTS)

1 of 3 ?

Q	QUESTION ID	QUESTION	ANSWER
Q01	1073	Do you feel safe with your partner or family member?	
Q02	1074	Does your partner or family member feel safe around you?	
Q03	1063	Does your partner or family member ever lose his/her temper, throw things or threaten to harm you?	
Q04	1064	Have you ever lost your temper, thrown things or threatened to harm your partner or family member?	
Q05	1065	Have you ever been hurt or injured as a result of an argument or fight with your partner or family member?	
Q06	1066	Have you ever had an argument or fight where you hurt or injured your partner or family member?	
Q07	1067	Have you ever felt controlled by your partner or family member so that you needed their permission to do what you wanted to do or to have access to money or access to the people you wanted to see?	
Q08	1068	Have you ever controlled your partner or family member so that they needed your permission to do what they wanted to do or to have access to money or access to the people they wanted to see?	
Q09	1069	Have you ever been forced to have sex or perform sexual acts with someone?	
Q10	1070	Have you ever forced someone to have sex or perform sexual acts?	
Q11	1071	Has your partner or family member ever threatened to tell others about your health status in order to get his/her way?	
Q12	1072	Have you ever threatened to tell others the health status of your partner or family member in order to get your way?	

# Example of Responses from Survey

Start Date  End Date  [View Report](#)

Pat No (Leave blank to select all PTS)

2 of 4 ?

BIRTH DATE	SEX	ADMIN DATE	Q01	Q02	Q03	Q04	Q05	Q06	Q07	Q08	Q09	Q10
05/19/1986	M	03/14/2018	Yes	Yes	No	No	No	No	No	No	No	No
01/16/1968	F	07/20/2018	No	No	No	No	No	No	No	No	No	No
11/30/1973	F	04/11/2018	Yes	Yes	No	No	No	No	No	No	No	No
07/26/1940	M	05/31/2018	Yes	Yes	No	No	No	No	No	No	No	No
11/21/1984	F	08/22/2018	Yes	Yes	No	No	No	No	No	No	No	No
09/13/1965	F	03/05/2018	Yes	Yes	No	No	No	No	No	No	No	No
02/15/1958	F	06/06/2018	Yes	Yes	No	No	No	No	No	No	No	No
02/09/1970	F	08/14/2018	Yes	Yes	No	No	No	No	No	No	No	No
05/01/1966	F	04/25/2018	Yes	Yes	No	No	No	No	No	No	No	No
11/27/1971	M	01/19/2018	Yes	Yes	No	No	No	No	No	No	No	No
05/15/1979	F	08/01/2018	Yes	Yes	No	No	No	No	No	No	No	No
06/29/1968	M	05/15/2018	Yes	Yes	No	Yes	Yes	Yes	No	No	No	No
07/15/1975	M	07/23/2018	Yes	Yes	No	No	No	No	No	No	No	No
08/08/1962	F	10/17/2017	Yes	Yes	No	No	No	No	No	No	No	No
08/12/1963	F	10/25/2017	No	No	No	No	No	No	No	No	No	No
12/12/1989	F	02/28/2018	No	Yes	Yes	No	Yes	No	No	No	No	No
08/31/1977	F	05/15/2018	Yes	Yes	No	No	No	No	No	No	No	No
02/01/1937	M	08/13/2018	Yes	Yes	No	No	No	No	No	No	No	No
12/12/1965	F	10/23/2017	Yes	Yes	No	No	No	No	No	No	No	No
05/02/1960	F	04/25/2018	Yes	Yes	No	No	No	No	No	No	No	No
04/22/1960	F	08/07/2018	Yes	Yes	No	No	No	No	No	No	No	No
07/04/1949	F	08/22/2018	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No
10/03/1989	M	11/15/2017	Yes	Yes	No	No	No	No	No	No	No	No
01/08/1993	M	02/05/2018	Yes	Yes	No	No	No	No	No	No	No	No

# Lab QA Report

## Includes

- Patient information
- Provider
- HIV VL, CD4
- HgbA1c
- Quantiferon result
- RPR
- Visit Kept/Not Kept

S	PROVIDER NAME	CD3 CD4 ABS	CD3 CD4 ABS DATE	HIV 1 RNA VIRAL LOAD	HIV 1 RNA VIRAL LOAD DATE	ARV	HEMOGLOBIN A1C	HEMOGLOBIN A1C DATE	QUANTIFERON RESULT	QUA
	Jessica Yager	661	9/7/2018 11:07:00 AM	<20	9/7/2018 11:07:00 AM	1	5.6	9/7/2018 11:07:00 AM	NEGATIVE	2/13
	Jessica Yager	999	7/27/2018 10:58:00 AM	<20	7/27/2018 10:58:00 AM	1			NEGATIVE	3/23
	Keron Matthew	650	7/13/2018 2:23:00 PM	<20	7/13/2018 2:23:00 PM	1				
	Hector Ojeda-Martinez	345	8/9/2018 2:46:00 PM	<20	3/8/2018 6:00:00 PM	1	5.0	8/9/2018 2:46:00 PM	NEGATIVE	8/9/
	Hector Ojeda-Martinez	494	8/31/2018 9:14:00 AM	<20	8/31/2018 9:14:00 AM	1	7.1	8/31/2018 9:14:00 AM	NEGATIVE	8/31
	Lorraine Sanassi	636	3/12/2018 10:35:00 AM	<20	3/12/2018 10:35:00 AM	1	4.8	3/12/2018 10:35:00		
	Terry Marryshow	787	8/28/2018 10:09:00 AM	<20	8/28/2018 10:09:00 AM	1	11.7	8/28/2018 10:09:00	NEGATIVE	3/28
	Hector Ojeda-Martinez	359	9/19/2018 3:16:00 PM	32	9/19/2018 3:16:00 PM	1	7.7	9/19/2018 3:16:00 PM	NEGATIVE	6/27
	Jessica Yager	251	7/18/2018 10:11:00 AM	4229	7/18/2018 10:11:00 AM	1	5.0	7/18/2018 10:11:00 AM	NEGATIVE	7/18
	Jessica Yager	744	9/14/2018 11:02:00 AM	<20	9/14/2018 11:02:00 AM	1	5.3	9/14/2018 11:02:00 AM	NEGATIVE	9/14
	Liza Valdivia	285	1/24/2018 10:16:00 AM	<20	1/24/2018 10:16:00 AM	1				
	Jack DeHovitz	708	9/4/2018 10:20:00 AM	<20	9/4/2018 10:20:00 AM	1	6.3	9/4/2018 10:20:00 AM	NEGATIVE	9/4/
	Diana Gutierrez	163	9/7/2018 12:16:00 PM	39072	9/7/2018 12:16:00 PM	1				
	Hector Ojeda-Martinez	701	8/28/2018 10:11:00 AM	28	8/28/2018 10:11:00 AM	1	5.5	8/28/2018 10:11:00 AM	NEGATIVE	6/18
	Liza Valdivia	692	9/10/2018 2:16:00 PM	<20	9/10/2018 2:16:00 PM	1	5.3	3/2/2018 1:09:00 PM	NEGATIVE	9/17
	Jameela Yusuff	1186	9/18/2018 10:23:00 AM	<20	9/18/2018 10:23:00 AM	1	6.3	9/18/2018 10:23:00	NEGATIVE	9/18
	Jessica Yager	975	8/10/2018 4:44:00 PM	<20	8/10/2018 4:44:00 PM	1	6.2	3/16/2018 3:36:00 PM		
	Liza Valdivia	103	8/9/2018 3:14:00 PM	50225	8/9/2018 3:14:00 PM	1	10.8	8/9/2018 3:14:00 PM	NEGATIVE	8/9/
	Hector Ojeda-Martinez	609	9/19/2018 10:19:00 AM	<20	9/19/2018 10:19:00 AM	1	5.6	9/19/2018 10:19:00	NEGATIVE	9/19
	Annie Noel	632	9/4/2018 2:24:00 PM	<20	9/4/2018 2:24:00 PM	1	5.5	9/4/2018 2:24:00 PM	Indeterminate	9/4/
	Sama Al-Bayati	430	8/22/2018 11:14:00 AM	<20	8/22/2018 11:14:00 AM	1	4.6	8/22/2018 11:14:00 AM	NEGATIVE	8/22
	Jameela Yusuff	137	7/30/2018 12:09:00 PM	68	7/30/2018 12:09:00 PM	1	4.6	7/30/2018 12:09:00	NEGATIVE	7/30
	Liza Valdivia	225	7/13/2018 8:42:00 AM	54062	8/6/2018 10:05:00 AM		5.9	7/13/2018 8:42:00 AM	NEGATIVE	7/13
	Jameela Yusuff	394	8/13/2018 11:14:00 AM	73	8/13/2018 11:14:00 AM	1	5.4	4/3/2018 10:27:00 AM	NEGATIVE	4/3/
	Hector Ojeda-Martinez	815	6/19/2018 4:03:00 PM	<20	6/19/2018 4:03:00 PM	1	4.9	6/19/2018 4:03:00 PM	NEGATIVE	6/19

# Who Uses this Reporting System?

- In-service given to the Quality leadership team and staff as a whole
- Quality team, as we track Hab Measures and other data for regulatory purposes
- Front desk/clerical team and medical case management tracks patients not seen in 6 months and retention rates
- Nutritionist tracks her numbers and survey results (food security questions)
- Behavioral Health team track psychosocial surveys and substance use surveys—in terms of numbers and responses
- Medical/Nursing team review smoking survey and Lab QA surveys to see provider specific data and other outcomes

# Limitations

- Pathology is not incorporated (Cervical pap needs to be viewed elsewhere)
- Lab QA report needs to be downloaded once a month
- All visits must be closed in order to be captured in the retention report
- IT resource still needed
- EHR downtime
- Manual update of EHR



# Conclusion

- HRSA's capacity grant provided resources to merge data from 2 systems in a system that is accessible and user friendly to all staff
- Optimized and simplified data collection for the clinic, particularly for HAB related measures
- Staff are empowered and can monitor their own productivity and track results of survey
- Less dependence on IT to produce reports for staff, which improves IT's productivity
- This reporting system configuration can be transferred into another EMR and yield the same results

# Obtaining CME/CE Credit

If you would like to receive continuing education credit for this activity, please visit:

<http://ryanwhite.cds.pesgce.com>

# Integration of Michigan's Ryan White Service Providers into one CAREWare System

**Carrie Kirkpatrick, MSW**

*Ryan White Quality Assurance Coordinator*

*Michigan Department of Health of Human Services*

# Outline

- Project background
- Process for merging CAREWare Datasets
- Importing from other data sources
- Benefits of an integrated system
- Challenges and lessons learned
- Next steps

# Background

Integration Goal: Streamline data collection and allow direct service providers to access comprehensive client care information



- State of Michigan Ryan White Program and Subrecipients
- (Part B & D)
- City of Detroit Ryan White Program and Subrecipients
- (Part A)
- Michigan Public Health Institute (Server Host)
- Direct Ryan White Recipients
- (Parts C & D)
- State of Michigan HIV Surveillance Team
- Pharmacy Benefits Manager and Dental Benefits Manager

# Process for Merging CAREWare Datasets

1. Establish Data and Privacy Agreements
2. Gather requirements on name of organization, user/agency permissions, data set size
3. Create a blank provider domain inside State of Michigan CAREWare database
4. Using the Provider Data Export Module (PDE), export the metadata from the external partner's CAREWare database
5. Using the Provider Data Import Module (PDI), import the metadata file into the blank provider domain created in step 3
6. Using the Provider Data Export Module (PDE), export all of the client level data that will be transferred
7. Using the Provider Data Import Module (PDI), import the client level data into the blank provider domain created in step 3
8. Map any fields that require mapping, and process records
9. Once records have been processed, run data checks to ensure data integrity



# Importing From Other Data Sources

- HIV Surveillance
  - HIV Viral Load Lab Results
  - CD4 Count Lab Results
  - Data to Care client lists
  - Medical Monitoring Project
- Pharmacy Benefits Manager
  - ADAP copay, coinsurance, and deductible payments
  - ADAP Premium payments
- Dental Benefits Manager
  - Oral health service
  - Oral health service payments

# Benefits of Integrated System

- Standardized data collection and client services
- Federal Reporting
- Reduction of sub-recipient data entry burden
- Inform statewide program planning with use of service delivery data
- Run and assess statewide outcome measures

# Standardized Data Collection and Client Services



- ✓ Although some slight differences exist between Ryan White Parts, most sub-recipients in Michigan record services and units according to the same standardized sub-unit definitions
- ✓ Subrecipients and recipients are able to view client services received from other Ryan White providers

# Federal Reporting

- ✓ Gathering of data for federal reports is easier to obtain from one centralized client information source
- ✓ Ability to assist directly funded recipients with completing RSRs and offering general technical assistance



# Reduction of Sub-recipient Data Entry Burden



Prior to importing Surveillance data, all sub-recipients manually entered clients' Viral Load and CD4 Count lab results into CAREWare

# Inform Statewide Program Planning with Use of Service Delivery Data

- Michigan Regional Group – all members (recipients) compared outcome data
- Part B/D Quality Management Committee – regular communication with Part A staff & Quality Steering Committee
- Monitor for gaps/needs in service delivery by region of state

# Run and Assess Statewide Outcome Measures

- By service category
- By funding

Service Category	CW Label	Measure	Numerator	Denominator
EIS Med CM Non Med CM Outpt./Ambulatory	1BEIS 1BMCM 1BNMCM 1BO/A	<u>HIV VIRAL LOAD SUPPRESSION</u> Percentage of patients, regardless of age, with a diagnosis of HIV with a viral load less than 200 copies/mL at last HIV viral load test during the measurement year	Number of patients in the denominator with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year	Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit or VL/CD4, and at least one Part B specified service [see CW Label] in the measurement year
EIS Med CM Outpt./Ambulatory	2BEIS 2BMCM 2BO/A	<u>PRESCRIPTION OF HIV ART</u> Percentage of patients, regardless of age, with a diagnosis of HIV prescribed antiretroviral therapy for the treatment of HIV infection during the measurement year	Number of patients from the denominator prescribed HIV antiretroviral therapy during the measurement year	Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit or VL/CD4, and at least one Part B specified service [see CW Label] in the measurement year

# Run and Assess Statewide Outcome Measures

MIRG VL ADR Poverty Level
Overall
Not Specified
101-200% FPL
201-300% FPL
301-400% FPL
401-500% FPL
Equal to or below FPL
Over 500% of FPL
(Blank)
Unknown/Unreported

MIRG VL AgeGroup
Overall
<2
02-12
13-24
25-44
45-64
>=65
MIRG VL Gender
Overall
Female
Male
Trans FtM
Trans MtF

MIRG VL Race/Ethnicity
Overall
Am. Indian/Alaska
Asian
Black or Af. Amer.
Hispanic
More than one
Not Specified
Other
Pacific Islander
White

To help identify disparities that may exist, and inform quality improvement approaches



# Challenges and Lessons Learned

- Impact of external systems' data process changes
- System bugs/glitches
- Matching clients between data systems



# Next Steps

- Continue data imports from external systems
- Address statewide HIV care service provision gaps
- Provide continued CAREWare user support
- Identify and address disparities, to inform QI projects

Population	Viral Load Suppression	Absolute Disparity	Odds Ratio	Impact
Age: 25-44	80.93% = 2623/3241	MAYBE	YES	(246)
HIV Risk Factor: Perinatal	75.21% = 91/121	YES	YES	(13)
Housing: Non-permanently Housed	66.67% = 2/3	YES	None	(1)
Housing: Temporary	75.42% = 178/236	YES	YES	(24)
Housing: Unstable	66.20% = 143/216	YES	YES	(43)
Race: African American	83.12% = 4310/5185	MAYBE	YES	(340)
Transgender	76.16% = 115/151	MAYBE	YES	(14)
Minority Men who have Sex with Men	81.80% = 2985/3649	MAYBE	None	(183)
African American or Latina Women	83.36% = 1503/1803	None	None	(37)
Youth (13-24)	73.50% = 391/532	YES	YES	(65)

# Questions?

Carrie Kirkpatrick, MSW

Ryan White Part D/MIDAP Quality Assurance Coordinator

[kirkpatrickc2@michigan.gov](mailto:kirkpatrickc2@michigan.gov)

Amber Staudacher, MPH, RPCV

Ryan White Part B Quality Management Coordinator

[staudachera@michigan.gov](mailto:staudachera@michigan.gov)

Cody Wilson

HIV Data Analyst

[wilsonc26@michigan.gov](mailto:wilsonc26@michigan.gov)