



Safety Net Analytics Program - Los Angeles (SNAP-LA)

Learning Session #5:
Module 4: Increasing Data Literacy
A Case Study in Self-Service Analytics

June 22, 2017

SNAP-LA Program Portal

<https://snap-la.com/>

Safety Net Analytics Program, SNAP-LA

Supported by a generous grant from Cedars-Sinai, SNAP-LA will provide training, resources, and coaching to help health centers build the skills and tools to forge data into useful information and turn knowledge into meaningful action.

[Home](#) [Program Details](#) [Templates/Reports](#) [Resources](#) [Contact](#)

Welcome to the SNAP-LA Portal!

Posted on December 9, 2016



Greetings!

Welcome to the program portal — your one-stop shop for information related to CCI's SNAP-LA Program.

- On the **Program Details** page, you will find information about the key dates and activities for future in-person and web-based events.
- On the **Templates/Reports** page, you will find report and other templates needed to completed homework assignments and grant deliverables.
- On the **Resources** page, you will find presentations and handouts from in-person and web-based events and resources created by program participants.
- On the **Contact** page, you will contact information for staff, coaches, and program participants.



Webinar Reminders

1. Everyone is **UNMUTED**.
 - Press *6 to **mute** and *7 **unmute** yourself
2. To listen to the audio for this webinar, please call 303.248.0285, access code: 5617817.
3. Remember to chat in questions!
4. Webinar is being recorded and will be posted and sent out via email



Voices on the Webinar



Megan O'Brien,
Value-Based Care Program Manager,
Center for Care Innovations
mobrien@careinnovations.org



SA Kushinka,
Program Director
Center for Care Innovations
sa@careinnovations.org



Jerry Lassa,
Principal, Datamatt3rs
jerry.lassa@datamatt3rs.com



Angela Liu,
Program Coordinator,
Center for Care Innovations,
angela@careinnovations.org



Bhumil Shah,
Associate Director of IT
Contra Costa Health Services

Recap from May 12 Knowledge Building Session

Mike Hirst and Melanie Binion,
Southcentral Foundation

“Going beyond IT and build a data services department that supports all stakeholders”



Boris Kalikstein,
Pivotal Moment Consulting

“Ways to turn data into information that engages and supports all staff in doing the best possible work for the patients you serve”

Other Highlights

**Jerry Lassa,
Data Matt3rs**



Dashboard & Analytics Clinic

Improve your visual display
and analysis of data

Project Updates & Ask An Expert



Roadmap RoundTable



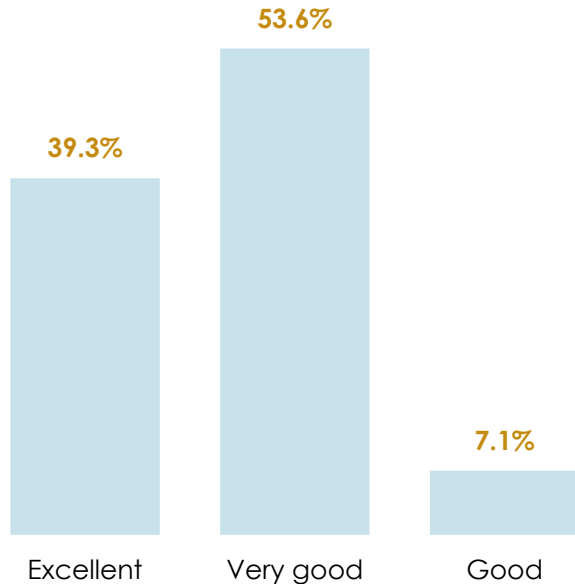
Cartoon Contest

Big Winner:
South Central

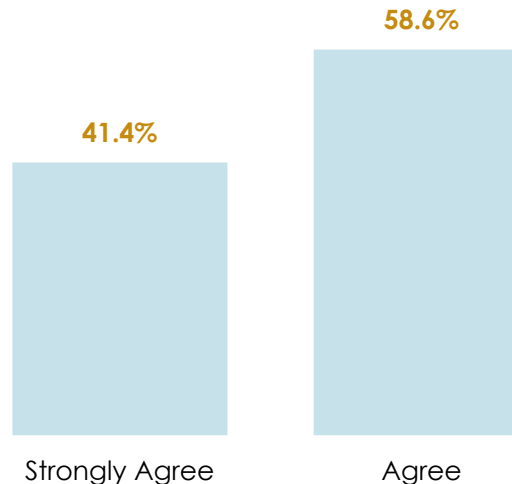


Evaluation Feedback

The convening overall was:
(n=28)



I will be able to apply
something I learned today
to our organization's data
analytics efforts: (n=29)



Learned at session:

- Creating dashboards, particularly with better data visualization and more actionable data
- Turning data into usable information
- i2i – running reports and mapping to ensure data quality
- Making a stronger business case for a data services department
- Involving clinical leadership in data-related decisions
- Control charts and understanding statistical significance

Agenda

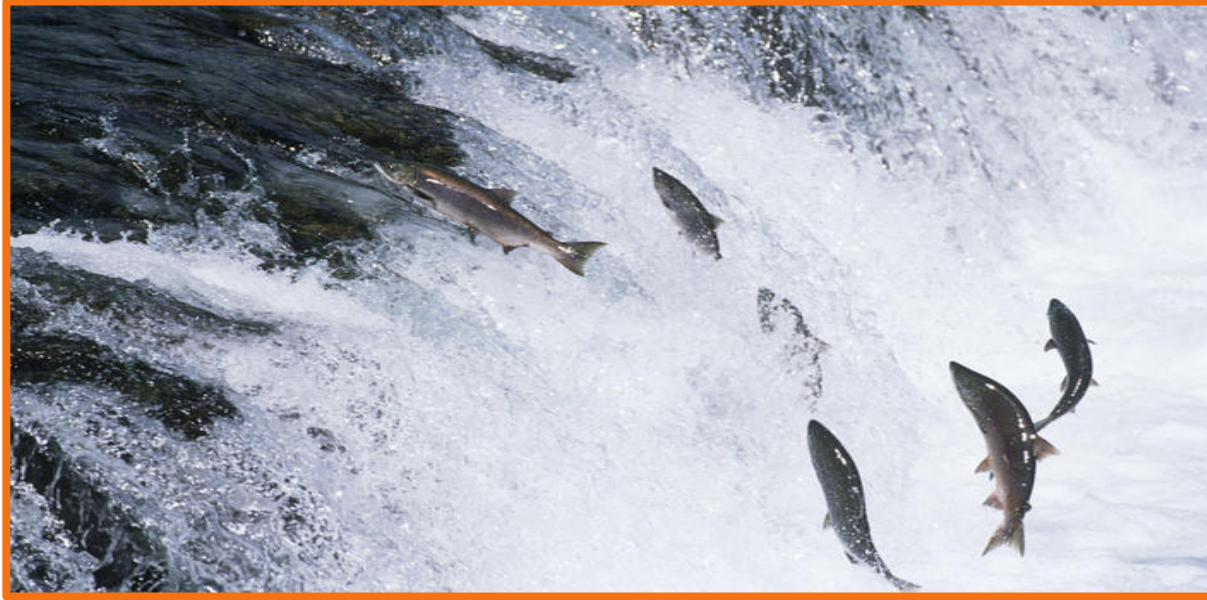
1. Welcome & Brief Announcements
2. What is Self-Service Analytics?
3. Self-Service Analytics at Your Health Center
 - Where is your organization on the pathway to self-service analytics?
 - What are your next steps?
4. “A Case Study in Self-Service Analytics: Bhumil Shah from Contra Costa County”
5. Q&A
6. Upcoming Events & Reminders

**Where is your
organization on the
pathway to self-
service analytics?**

**What are your
next steps?**

Team Experiences







scfhc 





**LOS
ANGELES
LGBT
CENTER**



EISNER HEALTH





achievable



CCI
CENTER FOR CARE
INNOVATIONS



SA Kushinka
Program Director
Center for Care Innovations

SNAP Content Overview

MODULE	TIMEFRAME
Module 1: Building a Roadmap for Healthcare Analytics	12/16 – 01/17
Module 2: Managing Data as a Strategic Asset	02/17 – 04/17
Module 3: Improving Data Quality and Leveraging Data Tools	04/17 – 06/17
Module 4: Increasing Data Literacy	06/17 – 09/17
 Analytics Field Project	

SNAP Content Overview

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  Analytics Field Project	

Data Literacy

TERMS

- ▶ What is Data Governance?
- ▶ What is Data Stewardship?
- ▶ What is Data Literacy?
- ▶ What is a Data Model?
- ▶ What is Data Density and Data Liquidity?
- ▶ What is Controlled (or Structured) Clinical Vocabulary?
- ▶ What is Risk Stratification?
- ▶ What is Capitation?
- ▶ What is Cost Benefit Analysis?



DATA LITERACY

The ability to collect, understand, interpret, and use data in a coherent, critical and strategic way

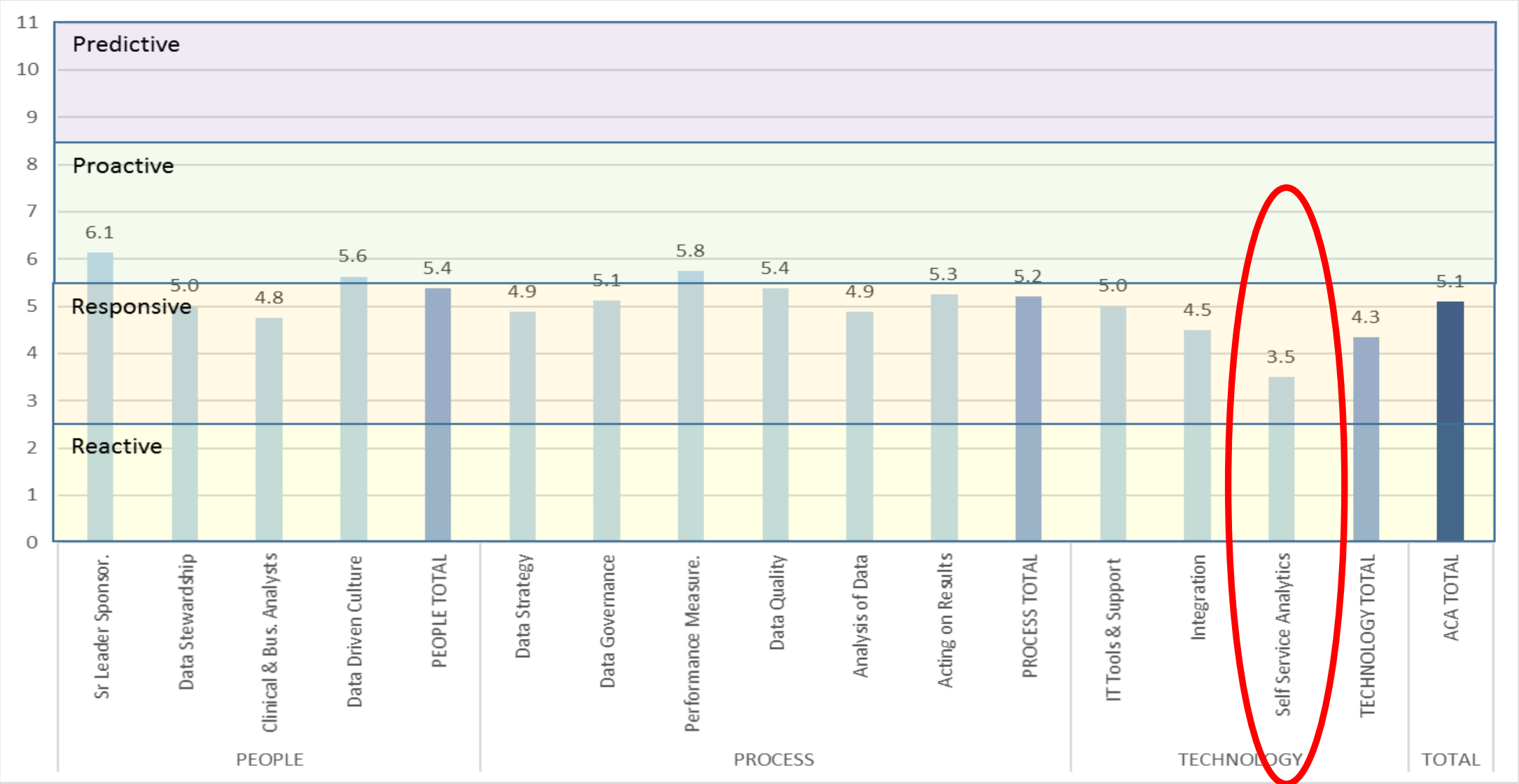
Self Service Analytics

Analytics Capability Assessment

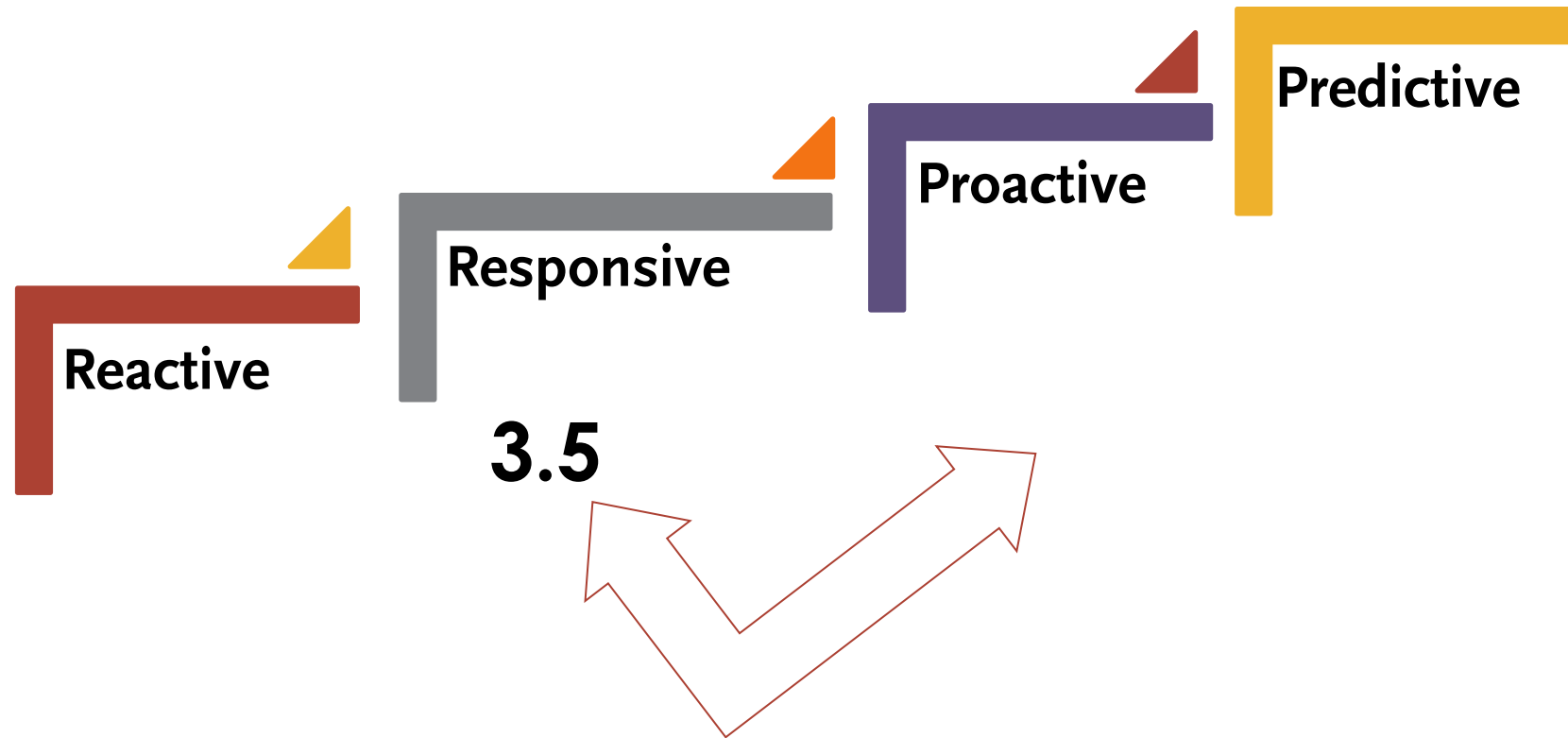
[illegible]

Analytics Capability Assessment (ACA)

January 2017 Baseline - 8 Center Factor Averages

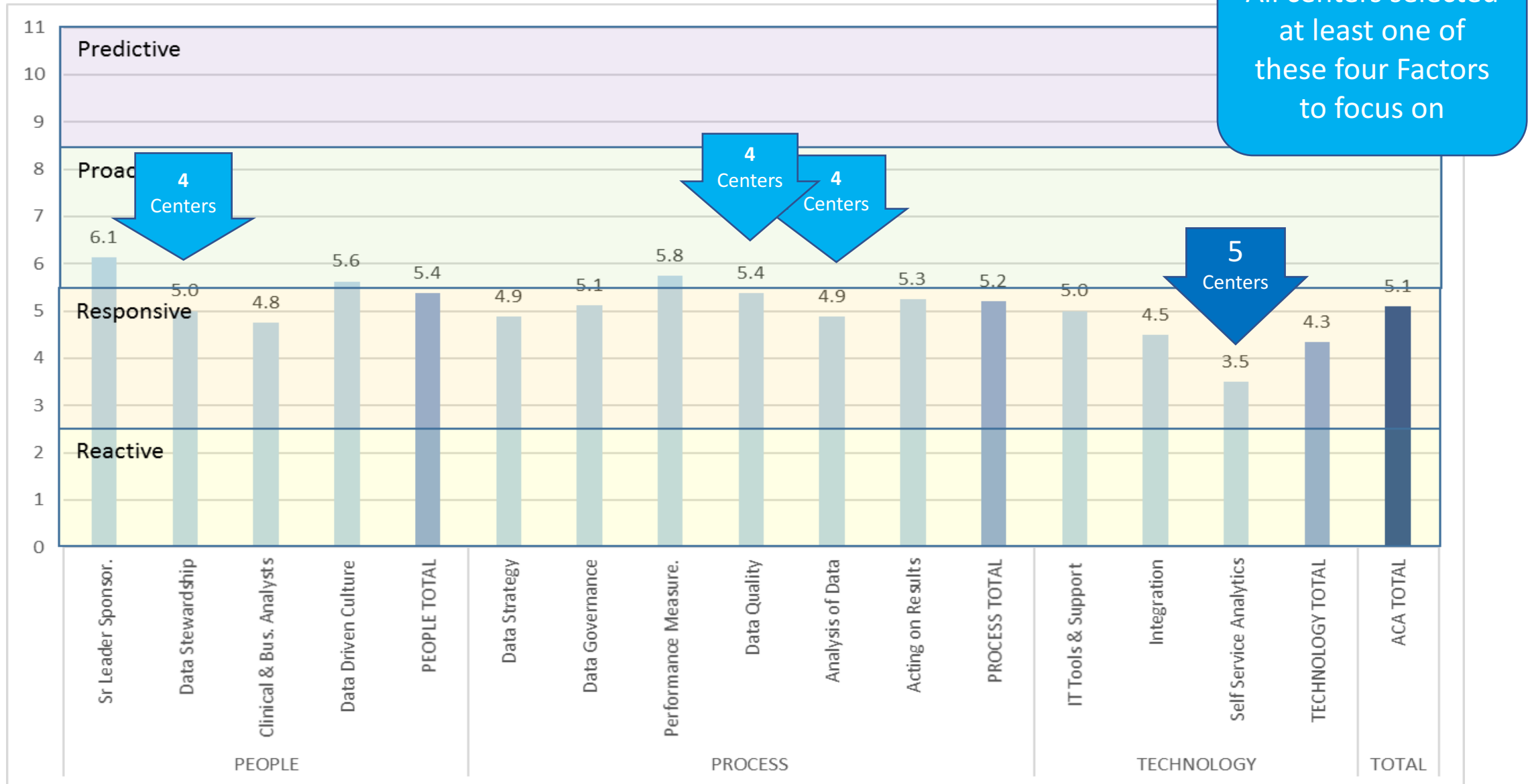


Opportunity for Growth



Analytics Capability Assessment (ACA)

Top 4 Factors of Focus





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Bhumil Shah
Associate Director of IT
Contra Costa County Health Services

Contra Costa Health Services

BI Journey

using Epic EMR, Qlik and Microsoft Technology

Bhumil Shah
bhumil.shah@hsd.cccounty.us
Director, Business Intelligence
June 2017



Goal

- * Get to **know Contra Costa Health Services**
- * Hear about our **BI Maturity** Journey
- * Learn about our Data Lifecycle – **Acquire, Analyze, Share, Retire**
- * Learn about our **Decision Support Tools**

About Us



- * **County owned** Integrated Healthcare Safety Net System including Hospital & Clinics, Health Plan, Public Health, Behavioral Health, EMS
- * **166 Bed Hospital, 10 Ambulatory clinics,** 5 Detention Health Centers
- * **100K+** unique patients annually
- * 50K+ annual Emergency Room Visits
- * 10K+ annual Inpatient admissions
- * 500K+ annual Outpatient Visits

CCHS BI Team

People:

- * 25+ BI Experts
- * Build 1200+ reports, dashboards
- * Strong MS SQL skills

Process:

- * Agile - Scrum
- * Standard Work – Report Request, Data Validation, Traceability

CCHSBI Team

Technology:

- * Microsoft BI Stack – SQL Server, SSRS, SSIS, SharePoint
- * Qlik Sense
- * Crystal Reports, BOE



Data Distribution

WELCOME, BHUMIL SHAH

Search documents

SEARCH

Advanced Search ▼

Clinical Resources

Sites ▼

Documents

Forms

Policies

Reports

People

News ▼

Teams

IT Service Desk



My Profile ▼



My Favorites ▼



My Applications ▼



My Teams ▼



My Mail



My Contacts (1) ▼



Where Do You Volunteer?

Many of you give countless hours of your personal time volunteering. What charitable organizations do you support? Let us know in the comments section.

[VIEW FULL STORY](#)



News Around CCHS

NOV 24, 2015

Donate to the Food Bank as Part of the Annual "Food Fight"

[▶ READ MORE](#)

NOV 13, 2015

Flu Clinics for County Employees Every Friday

[▶ READ MORE](#)

CCHS Calendar

[▶ VIEW CALENDAR](#)

Dec 9 - 8:30 AM

[DOC/Logistics Section Meeting](#)

Dec 9 - 9:00 AM

[Disaster Service Worker \(DSW\) Training](#)

Dec 9 - 9:00 AM

[DOC/Finance/Admin Section Meeting](#)

Dec 9 - 10:00 AM

[EMT New Member Orientation](#)

Recommended

[2015 Holiday Schedule](#)

[Care Coordinators Contact Info](#)

[CCHS Calendar](#)

[CCHS Emergency Plan](#)

[CCHS Org Chart \(June 2015\)](#)

[Contra Costa Regional Health](#)

[Foundation](#)

[CCRMC & HC Standard Work](#)

[Library](#)

[CCRMC Primary Care Provider](#)

[Teams](#)

[ccLink Info / Training Links](#)

[ccLink Training Request Form](#)

[County All Staff Messages](#)

[County GIS Map](#)

[County Intranet](#)

[Director's Report](#)

[Director's Report Archive](#)

[ePay](#)

[e-Training Center](#)

[ICD-10 Codes](#)

[iSITE Quick Start Guide](#)

[Mobile Apps for CCHS](#)

...

Reports

- ☒ My Reports
☐ All Reports
[How to request access](#)

Find by Name

FIND

[Start over](#)

CCHS DASHBOARD

REQUEST NEW REPORT

[Send email for access or assistance](#)[Configure new report](#)

Organize Your Search

Sort By My Most Viewed ▾

Narrow Your Search

Report Category

[Clinical \(417\)](#)[Financial \(203\)](#)[CCHP \(202\)](#)[Quality \(166\)](#)[Operations \(139\)](#)[Regulatory \(49\)](#)[Patient Safety Licensing Survey \(10\)](#)[Technical \(8\)](#)

▼ [Member Eligibility Summary \(TAP2325\)](#)

TAP2325 Member Eligibility Summary

▼ [Cadence Monthly Reports](#)

Appointment and demographic information from the Cadence application

▼ [CCHP PayorPlan Crosswalk \(TAP2538\)](#)

CCHP PayorPlan Crosswalk

▼ [Member Eligibility Detail \(TAP2327\)](#)

CCHP eligibility data with detailed Member and Plan information. One row represents one member. NOTE: If you need to export more than 65,000 members to Excel, data is split across multiple Excel sheets.

▼ [Cadence Weekly Reports](#)

Weekly appointment and demographic information from the Cadence application

▼ [ED Stats \(ASA2358\)](#)

For selected time range shows all Ed Encounters and Key Events related to the encounter

▼ [OP Visit Report for Finance \(RES2300\)](#)

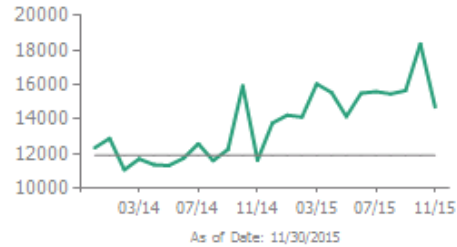
This report provides information for CLINIC visits as well as ER visits, sorting by Department, is based on FINANCE requirements.

▼ [Med-Surg Readmission Rate \(INP2429\)](#)

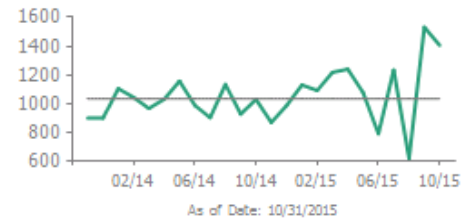
Shows admissions over a time period, and analyzes how many of those admissions are readmits

Data Distribution

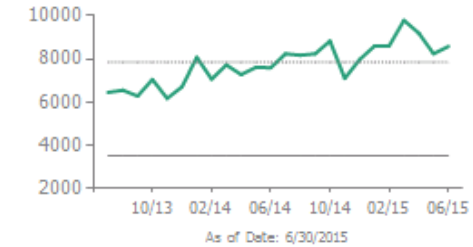
Cat 1 #01 Primary Care Capacity



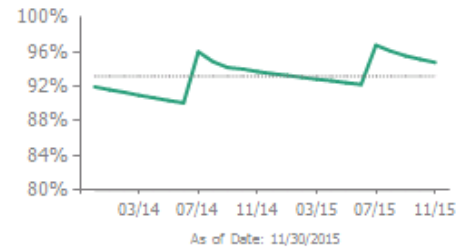
Cat 1 #02 Increase Training of Primary Care Workforce



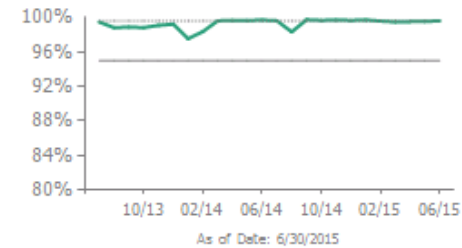
Cat 1 #03 Interpretation Services



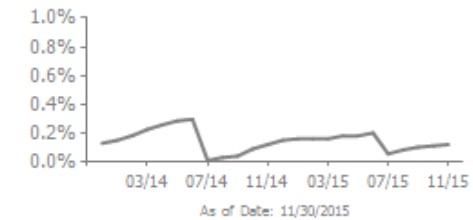
Cat 1 #04 REAL Count



Cat 2 #05 Expand Medical Home



Cat 3 #06 Diabetes short term complications

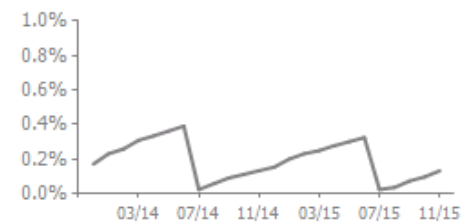


[More Information...](#)

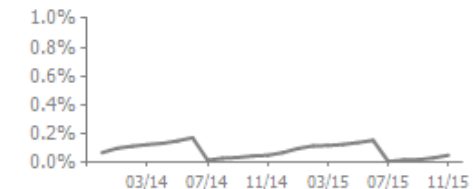
Cat 3 #07 Uncontrolled Diabetes



Cat 3 #08 Congestive Heart Failure



Cat 3 #09 Chronic Obstructive Pulmonary Disease



Data for Panel Management

↓ is good



Data Month: Jan-2017

Denominator: Patients aged 18-75 as of the reporting date who have been seen twice for diabetes, been hospitalized for diabetes, or have received diabetes medication in the past 12 months. Patients with no diabetes diagnosis excluded if they have polycystic ovaries, gestational diabetes, or steroid-induced diabetes.

Numerator: Patients with no HbA1C on file in the last 12 months, or with a last HbA1C > 9.0.

Please click on a project name to only display patients who qualify for the project in the subsequent sheets.

Project Name	Owner	Specification Document	Target	Target (# of Patients)	CCHS Percent	# of Patients Needed to Reach Target	25th percentile	90th percentile
1.1: Integration of Behavioral Health and Primary Care	Karin Stryker, Nooshin Abtahi	Click Here	31.17	2,453	30.08	Target Exceeded By 86	49.89	29.68

Data Dictionary

Column Name	Description	Data Sources	Additional Details	Additional Details Link
Number of Insulin Dispenses	Number of medication orders for diabetes meds	Medication Orders	HEDIS Medication list: CDC-A	http://Starreport/ReportServer/Pages/ReportViewer.aspx?%2fMIS%2fGrouper+Dictionary&GroupID=CDC-A&ExtraText=Hedis+Medication+list+f
Diabetes OP visits	Number of outpatient visits for diabetes care	Procedure code from hospital billing transactions, UB revenue code from hospital billing transactions	CPT and UB Revenue Codes for Adult Outpatient Visits	http://Starreport/ReportServer/Pages/ReportViewer.aspx?%2fMIS%2fGrouper+Dictionary&GroupID=HEDIS_Adult_Outpatient&ExtraText=Hedi
Diabetes Observation Visits	Number observation visits for diabetes care	Procedure code from hospital billing transactions	CPT Codes for Observation	http://Starreport/ReportServer/Pages/ReportViewer.aspx?%2fMIS%2fGrouper+Dictionary&GroupID=HEDIS_Adult_Observation&ExtraText=Hedi

Patient Detail

Health Center ▾	Provider ▾	Gender ▾	Race ▾	Ethnicity ▾	Language ▾	Insurance ▾	Age Group ▾
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Numerator: 2,367, Denominator: 7,870

<input type="checkbox"/>	MR N	Age	Clinic	Provider	Meets Num	Gender	Race	Ethnicity	Insurance	Number of Ins	Diabetes OP V	Diabetes Obs	Diabetes ED V	Diabetes Rout	Diabetes Inpa	Diagnosed with	Gestational or	HBA 1C Miss	HBA 1C Score	HBA 1C Score	Last HBA 1C S	Last HBA 1C S
<input type="checkbox"/>		72	Pittsburg	ROMITO, L EAH SCHW EID	Y	M	White/Caucasian	European	FFS Medicare	-	2	0	0	0	0	N	N	Y	N	N	5.6	8/21/2014
<input type="checkbox"/>		59	West County	STROMBERG, LYNETTE L	Y	F	Declined/Unknown	Hispanic/Latino	CCHP Medi-Cal	-	4	0	0	0	0	N	N	Y	N	N	6.1	4/30/2015
<input type="checkbox"/>		74	Brentwood	GUJJULA, PRASHANTHI	Y	M	Asian	Asian Indian	CCHP Medi-Cal	1	2	0	0	0	0	N	N	N	Y	N	10.8	6/21/2016
<input type="checkbox"/>		61	West County	WARNE, THOMAS R	Y	M	Declined/Unknown	Guatemalan	CCHP Medi-Cal	4	9	0	1	0	0	N	N	N	Y	N	9.2	10/3/2016
<input type="checkbox"/>		54	Pittsburg	CHANDRACHOOD, SWAPNAJA	Y	F	Asian	Filipino	CCHP Medi-Cal	-	5	0	0	0	0	N	N	Y	N	N	6.6	11/23/20...
<input type="checkbox"/>		43	West County	TELL, STASIA	Y	F	Asian	Filipino	CCHP Commercial	6	3	0	0	0	0	N	Y	N	Y	N	9.8	6/30/2016
<input type="checkbox"/>		72	Brentwood	FRANCIS, DEIDRA	Y	M	Declined/Unknown	Hispanic/Latino	CCHP Medi-Cal	-	3	0	0	0	0	N	N	Y	N	N	7.6	12/12/20...
<input type="checkbox"/>		40	Antioch	ZUNIGA, ZORAYA	Y	F	More Than One Race	African American	CCHP Medi-Cal	-	9	0	0	0	0	N	N	N	Y	N	10.5	9/9/2016
<input type="checkbox"/>		42	West County	MCILROY II, RICHARD HARRY	Y	F	Declined/Unknown	Salvadoran	CCHP Medi-Cal	-	4	0	0	0	0	N	Y	N	Y	N	10.2	10/27/20...
<input type="checkbox"/>		60	Pittsburg	WONDOLOWSKI, LAUREN M	Y	M	Declined/Unknown	Mexican	FFS Medi-Cal	-	6	0	0	0	0	N	N	N	Y	N	11.5	1/30/2017
<input type="checkbox"/>		67	Pittsburg	CHANDRACHOOD, SWAPNAJA	Y	F	Asian	Korean	FFS Medicare	2	7	0	0	0	0	N	N	N	Y	N	10.7	1/3/2017
<input type="checkbox"/>		62	Pittsburg	RICHMOND, MARCIE	Y	F	Black/African American	African	CCHP Medi-Cal	-	3	0	0	0	0	N	N	N	Y	N	9.9	9/1/2016
<input type="checkbox"/>		39	Pittsburg	SFTIFF, K	Y	M	Other Race	Arab	CCHP Medi	1	1	0	0	0	0	N	N	N	Y	N	10.4	9/23/2016

Health Center

Provider

Gender

Race

Ethnicity

Language

Insurance

Age Group

Select one of the following dimensi...

Health Center

Provider

Gender

Race

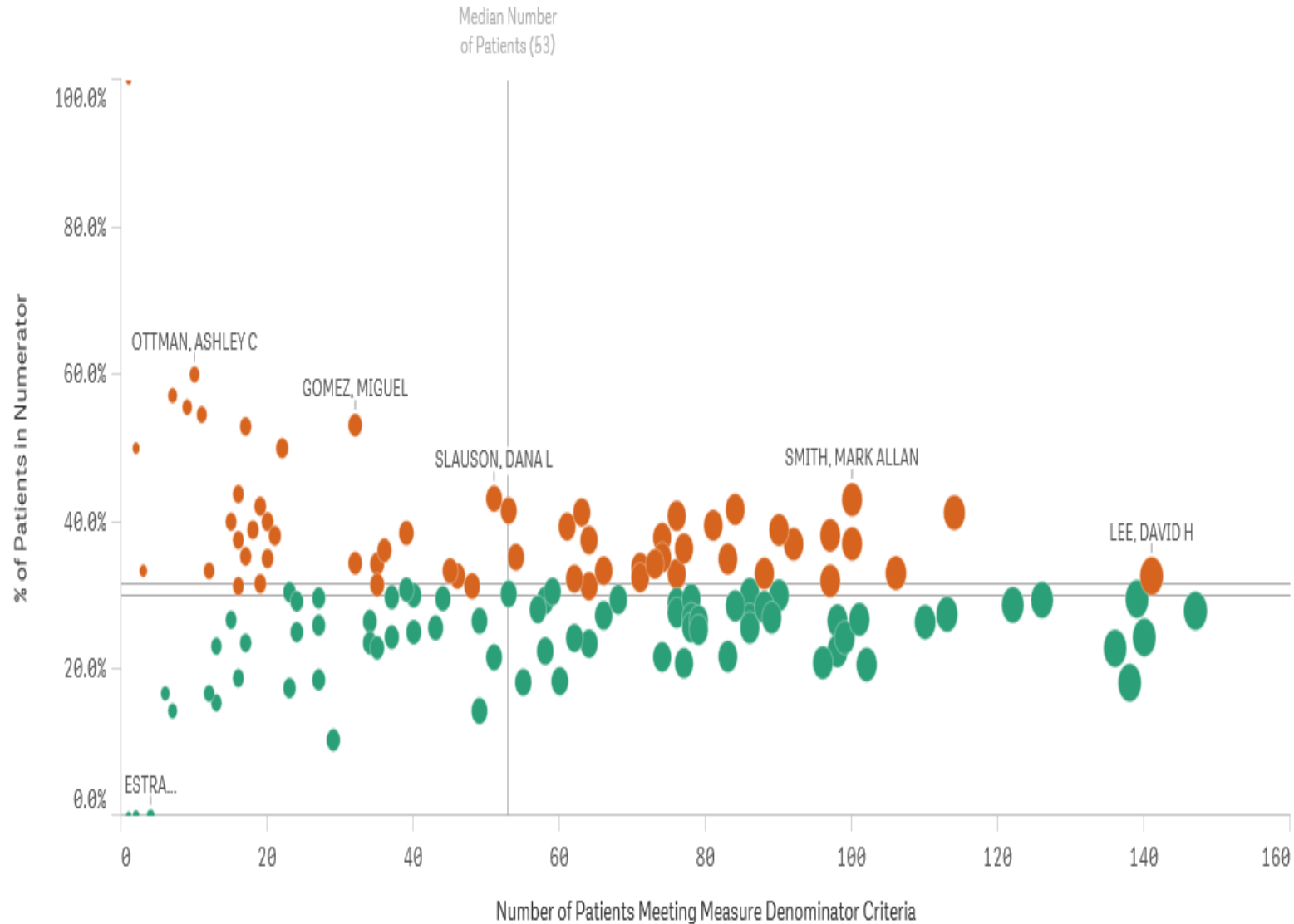
Ethnicity

Language

Insurance

Age Group

↓ is good



Auto Scale Y-Axis



Health Center

Provider

Gender

Race

Ethnicity

Language

Insurance

Age Group

Select one of the following dimensions

Health Center

Provider

Gender

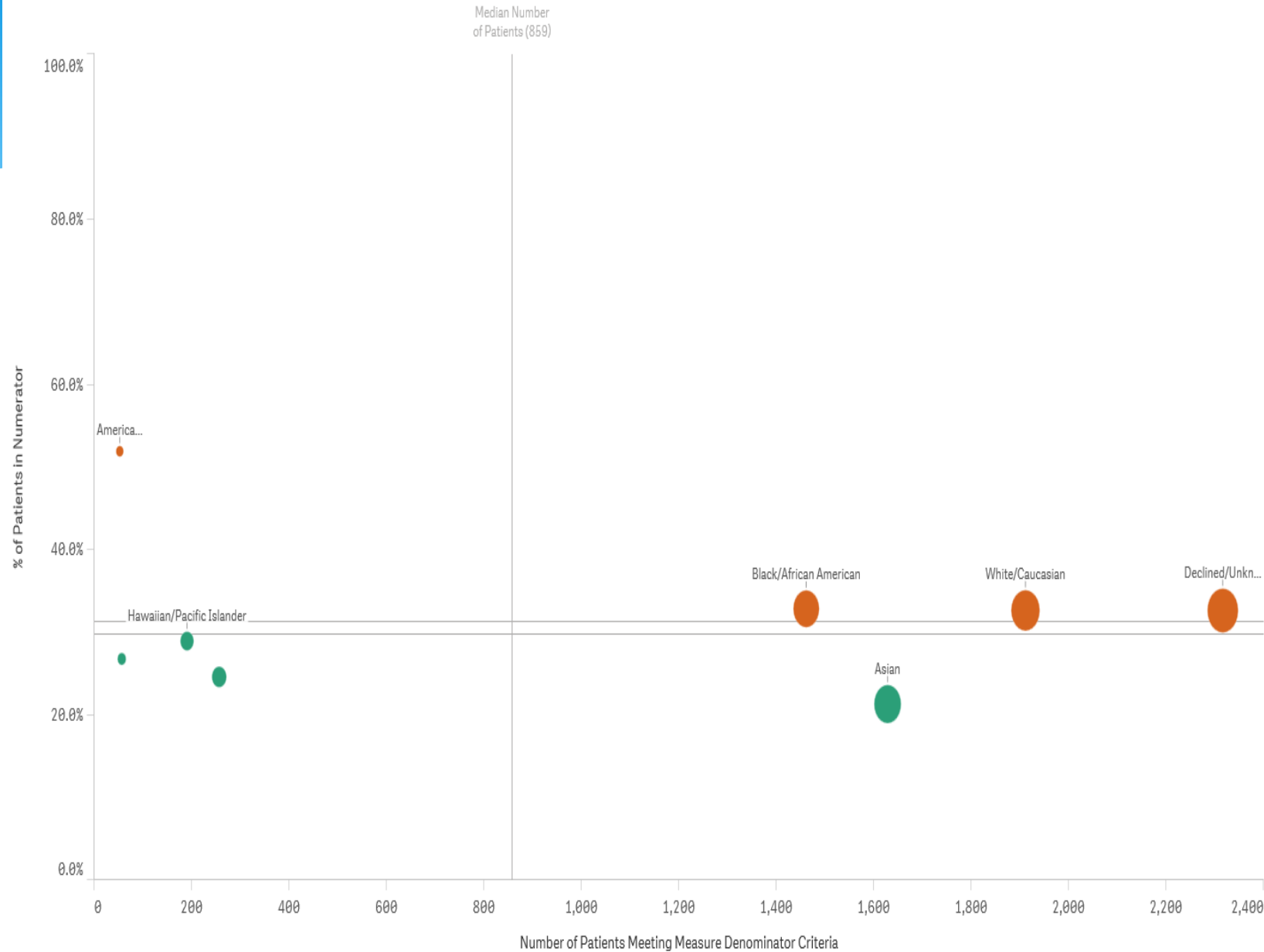
Race

Ethnicity

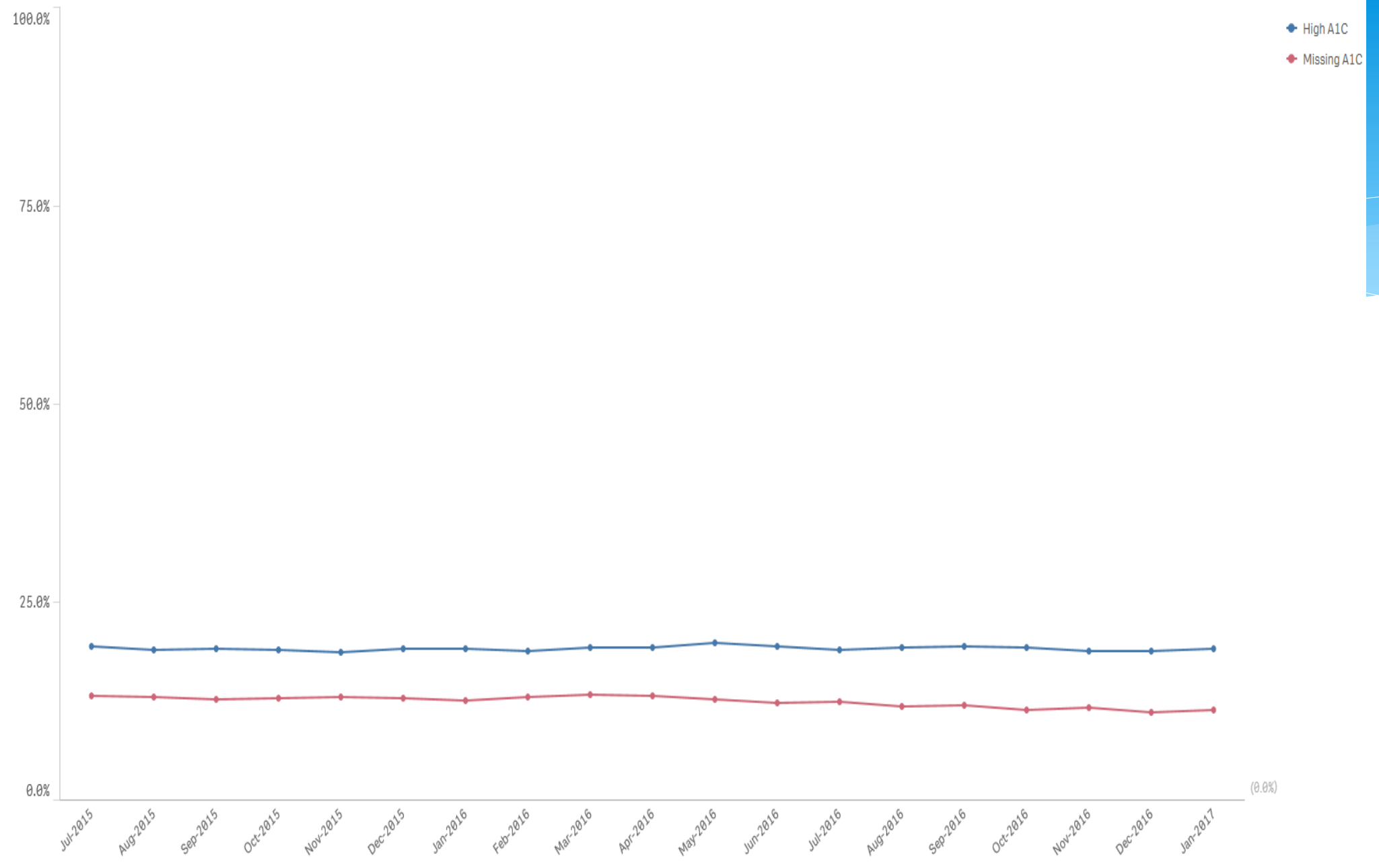
Language

Insurance

Age Group



% of Patients in Denominator with High A1C vs. Missing A1C



(0.0%)

Q & A



Additional Q&A



SA Kushinka,
Program Director
Center for Care Innovations
sa@careinnovations.org



Bhumil Shah,
Associate Director of IT
Contra Costa Health Services



Jerry Lassa,
Principal, Datamatt3rs
jerry.lassa@datamatt3rs.com

What's Next?

Two-part online training leveraging i2i Systems to improve data quality

- **Thursday June 29 from 12:00 – 1:00 pm**
 - *Part 1: Creating and Updating a Data Dictionary*
- **Thursday June 13 from 12:00 – 1:00 pm**
 - *Part 2: Enlisting Data Stewards to Ensure Accurate, Complete Data*



Upcoming Webinars

- **Thursday, July 27 from 12-1pm: *Design Thinking for Data Visualization***
 - Andrew Frueh, Director of User Experience from [Health Catalyst](#)
 - Why visualization is important, commonly accepted presentation rules, how to identify weaknesses in existing visualizations, and critical steps for effective chart creation
- **Thursday, August 10 from 2-3pm: *Tableau in Action***
 - Dr. Jason Cunningham and Dana Valley from West County Health Centers
 - How WCHC staff has put data visualization into action with Tableau



Reminder: Consulting Support Available

SNAP-LA Consultation Support

Data Governance

Data Stewardship

Data Quality

Reporting

Dashboards,
Control Charts
Funnel Charts

Analytics Tools

Jerry Lassa,
Data Matt3rs



Boris Kalikstein,
Pivotal Moment Consulting



Data Culture Change
Management

Building an Org. Data
Strategy

Report/Dashboard
Design

Data Warehouse
Design

Data for Pop Health

Basic Statistics

Program Reminders

- ❑ **August 24 Webinar:** Topic suggestions? Deeper dive into something we've already done or new content like patient segmentation/risk stratification empanelment data analysis, Excel pivot tables, etc.
- ❑ **Consulting Support:** Are there consultants you'd like to work with besides Jerry or Boris? Shoot us a email or call, we're happy to discuss your needs.
- ❑ **September 18th Session:** Reminder your colleagues to save the date! EventBrite will be sent in August.



Thank You!



For questions, please contact:

SA Kushinka

Program Director

SA@careinnovations.org

Megan O'Brien

Value-Based Care Program Manager

mobrien@careinnovations.org

Angela Liu

Program Coordinator

angela@careinnovations.org