Social Determinants of Health: Data Strategy and Population Health

Gabriela Gonzalez, Program Manager - CHCANYS

November 20th, 2019

This is a NYS Health Center Controlled Network (NYS-HCCN) Activity
A HRSA-Funded Project of the Community Health Care Association of New York State

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COMMUNITY HEALTH CENTER FQHC QUALITY

Housekeeping

- Phones have been muted to prevent background noise
- Use the chat box to type questions during the webinar
- This webinar is being recorded and will soon be available for download
- A webinar evaluation survey will be shared with participants

NYS-HCCN SDH Assistance

- Office hours will be available on:
  - Tuesday, Nov. 26th: 1 – 2 pm, click here to register.
  - Monday, Dec. 2nd: 10 – 11 am, click here to register
- Upcoming Learning collaborative & Individual T/TA sessions in 2020
  - ➢Complete the webinar evaluation survey if you are interested
- For questions please contact ggonzalez@chcanys.org

HCCN Grant Number: H2QCS30278

Center for Primary Care Informatics (CPCI) DRVS Azara Presentation

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COMMUNITY HEALTH CENTER FQHC QUALITY

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Making Your Data Work for You

Social Determinants of Health: Leveraging CPCI Tools to Drive Patient Care

November 20, 2019

Emily Holzman
Senior Client Success Specialist

Annual User Conference

azara healthcare

MARCH 30 - APRIL 1, 2020 ✿ BOSTON, MA

Call for Abstracts – Deadline October 31

Registration Opens – November 4

Hotel Registration – Open Now

azarahealthcare.com/annual-conference-2020

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Today's Topics

1. Social Determinants of Heath - Context
2. Collecting and Storing SDOH Data
3. Reporting and Analyzing SDOH Data
4. What's Next?

SDOH Defined

Social determinants of health are the structural determinants and conditions in which people are born, grow, live, work and age.

ACCESS TO HEALTH CARE

SOCIAL SUPPORT NETWORKS

EDUCATION

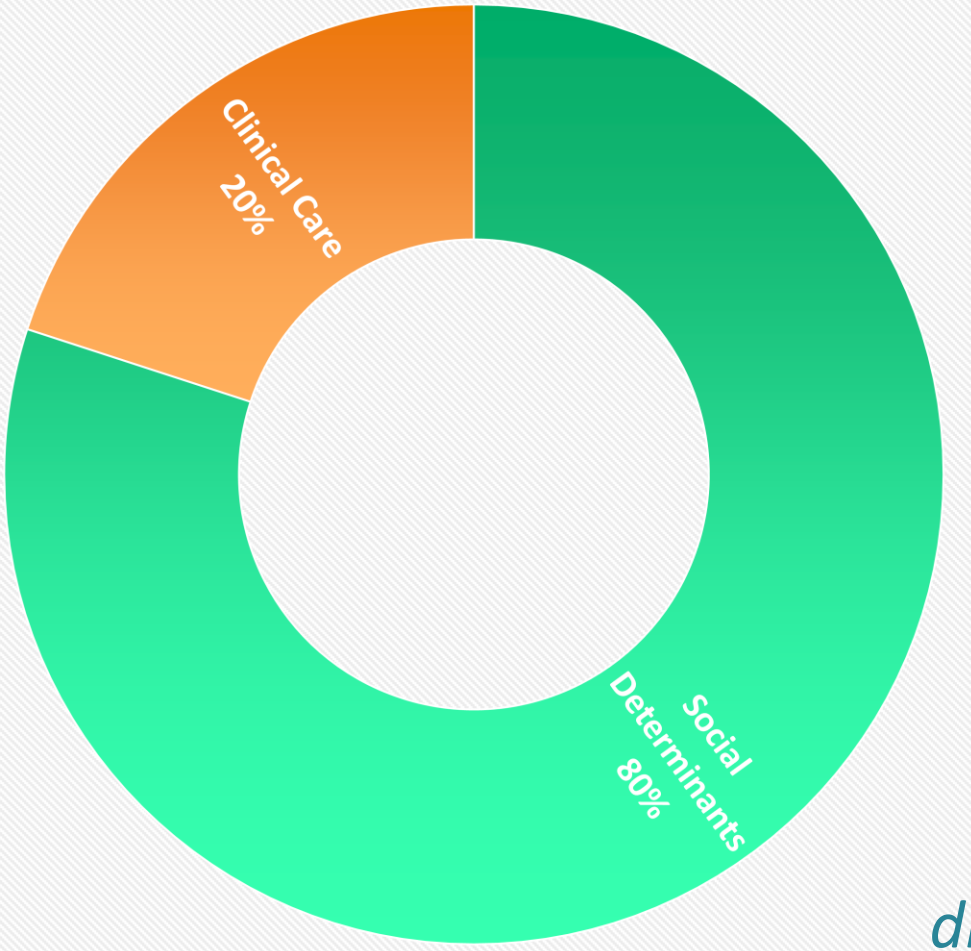
PHYSICAL ENVIRONMENT

EMPLOYMENT

SOCIOECONOMIC STATUS

Kaiser Family Foundation: http://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/

Ability to Impact – Beyond Clinical Care



Social Determinants
Clinical Care

We must provide much more than clinical care to make a difference in our patients' health.

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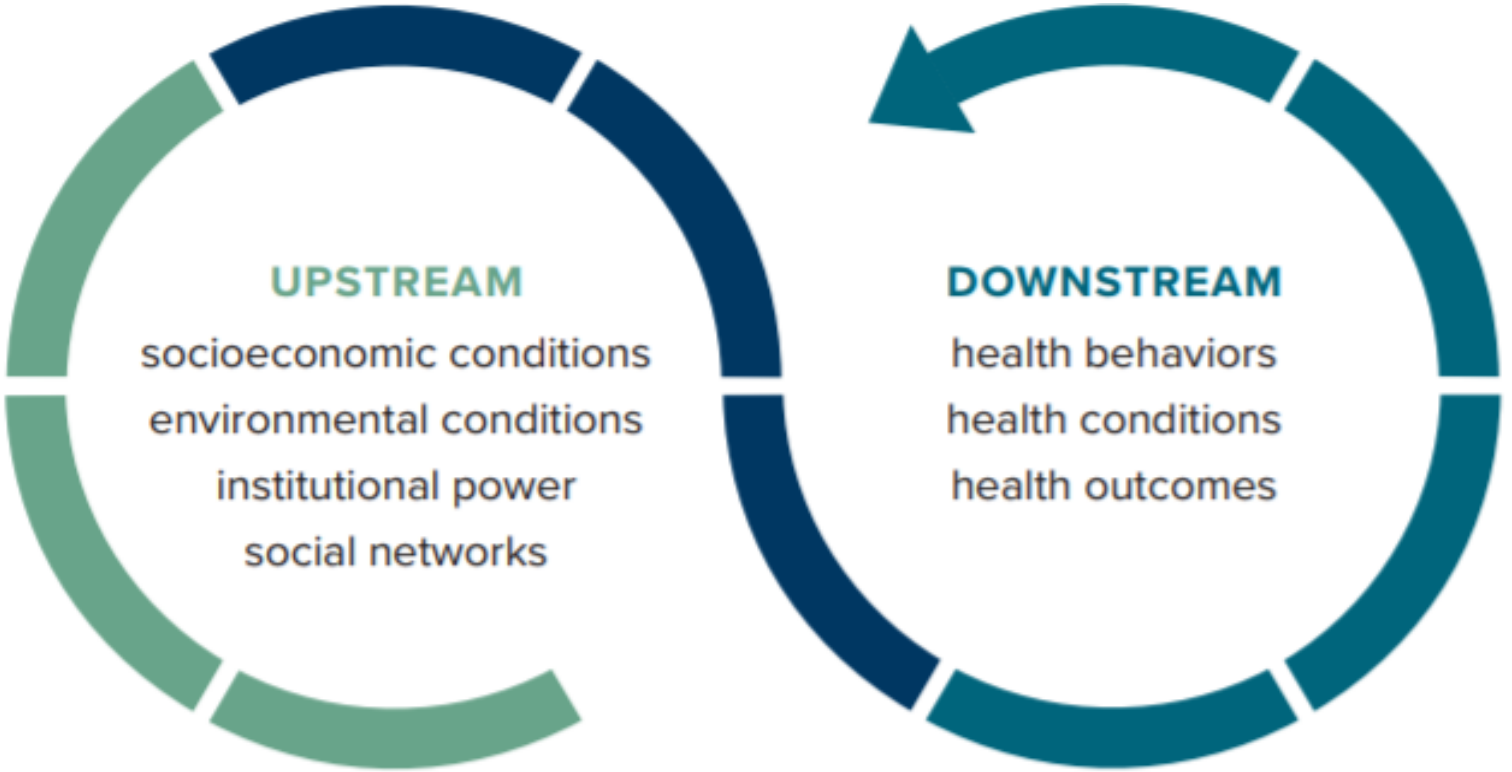
To be successful in a Value Based Care environment we need to do things differently.

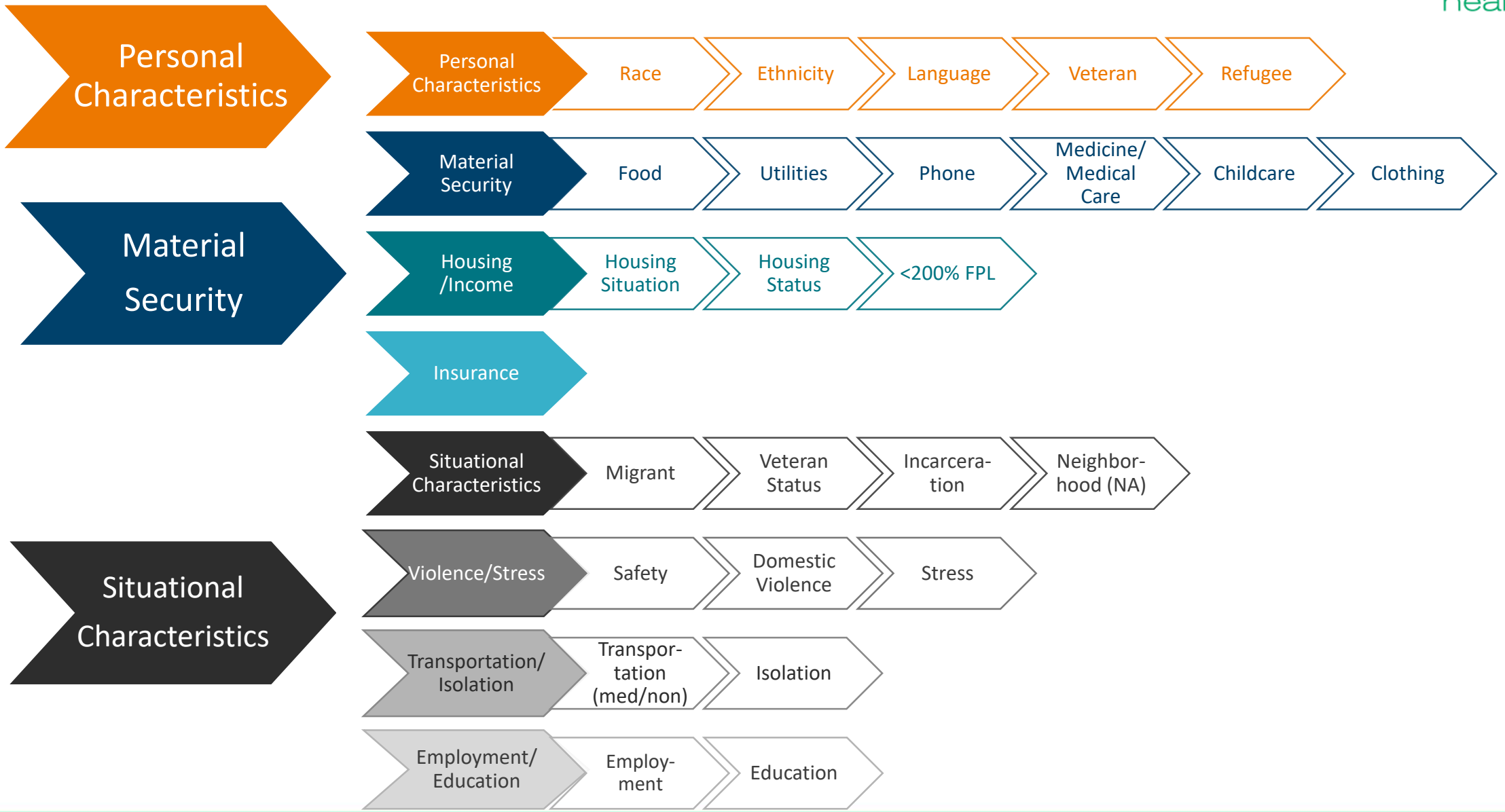


http://www.nachc.org/wp-content/uploads/2019/04/NACHC_PRAPARE_Chpt1.pdf

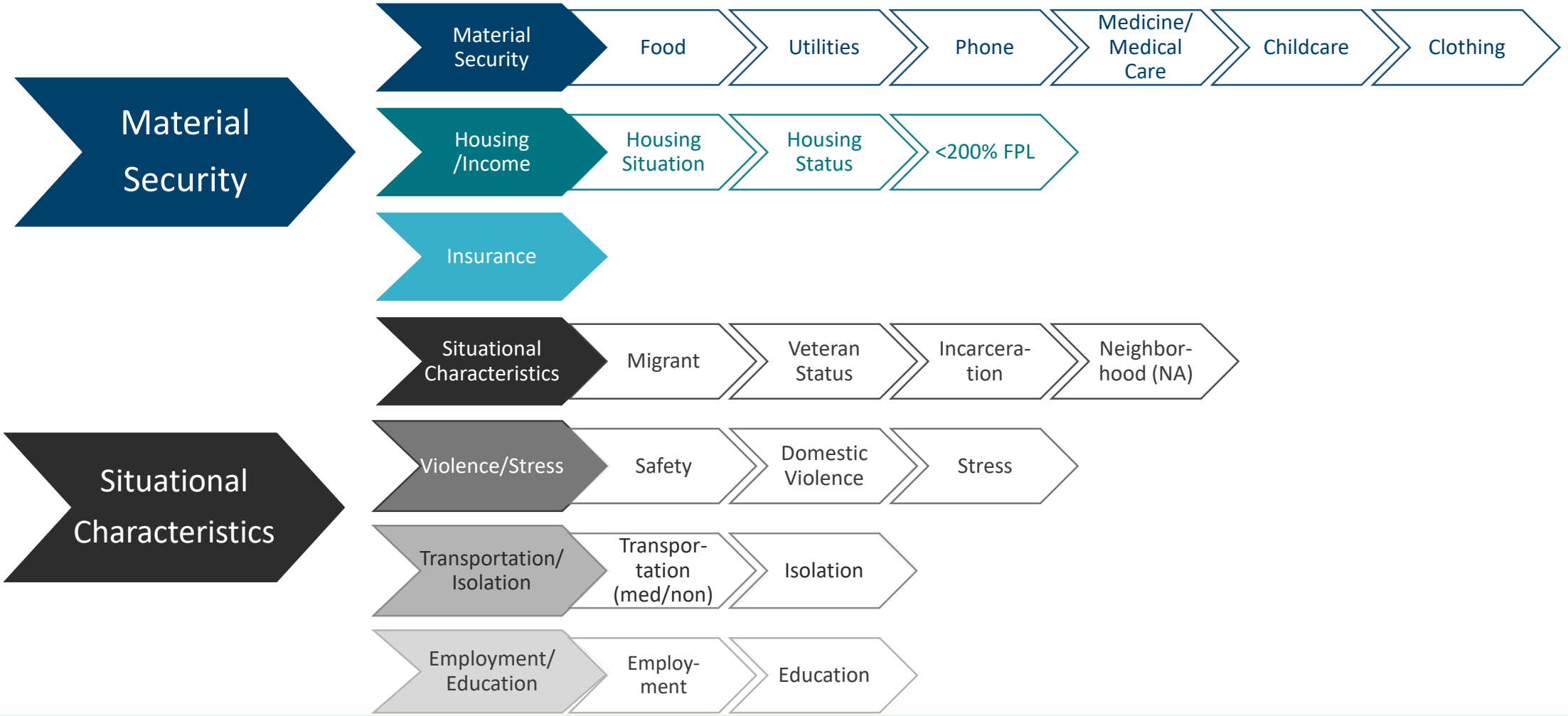
Changing Expectations

- Define and document the increased complexity of patients.
- Better target clinical care, integrated/enabling services and community partnerships to drive care transformation.
- Advocate for change in the community and national level.
- Enable centers to demonstrate the value they bring to patients, communities, and payers.

PRAPARE Elements

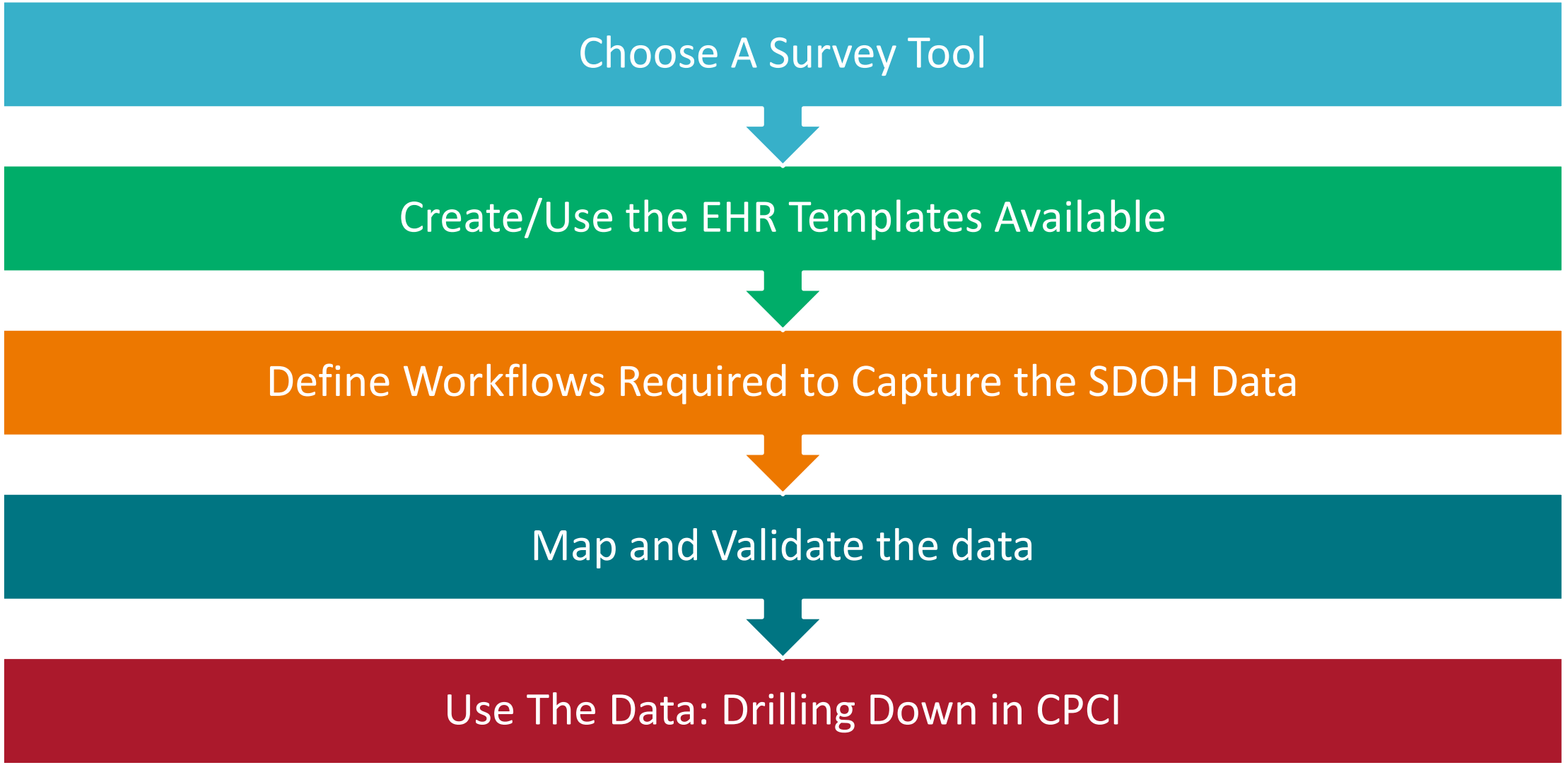


Impactable Elements



Collecting and Storing SDOH Data in CPCI

SDOH Start to Finish



CPCI SDOH Tool Crosswalk

Source Questionnaires								Updated May 2019		
Source questions are based on EPIC and PRAPARE										
PRAPARE	Healthify	Allscripts - MyCare	THRIVE	AHCM (CCMCN)	AHC (in EPIC)	EPIC OCHIN	Ref #	Source Question	Source Response	Positive Response
X		X		X		X	1	How hard is it for you to pay for the very basics like food? **PRAPARE** In the past year, have you or any family members you live with been unable to get any of the following when it was really needed? **FOOD**	Yes No	Yes
X		X	X	X		X	1	How hard is it for you to pay for the very basics like Utilities? **PRAPARE** In the past year, have you or any family members you live with been unable to get any of the following when it was really needed? **Utilities** **THRIVE** -Do you have trouble paying your heating or electricity bill?	Yes No Declined	Yes
X						X	1	How hard is it for you to pay for the very basics like Transportation?	Yes No	Yes

Validating SDOH Data in CPCI

- Involve clinical staff in validation effort.
- Make sure you have sufficient data.
  - Document survey information on several test patients
  - 30+ patients with data collected (or equivalent)
  - Pilot or test data
- Leverage the list of patients that have had SDOH documented.
- Confirm positive SDOH factors are correctly reflected in the SDOH Registry.
  - Columns contain the appropriate response.
  - SDOH tally is accurate based on the patient's total number of triggers.
- Track the patients who have completed the forms for easy validation.
- Confirm SDOH factors associated with UDS data are correctly applied to the patient's SDOH tally.
  - Homelessness Status, Federal Poverty Level, Insurance, etc.
- Track and validate the SDOH data as use of the workflow grows.
  - Will allow you to ensure proper documentation of the questionnaire and maintain data hygiene.

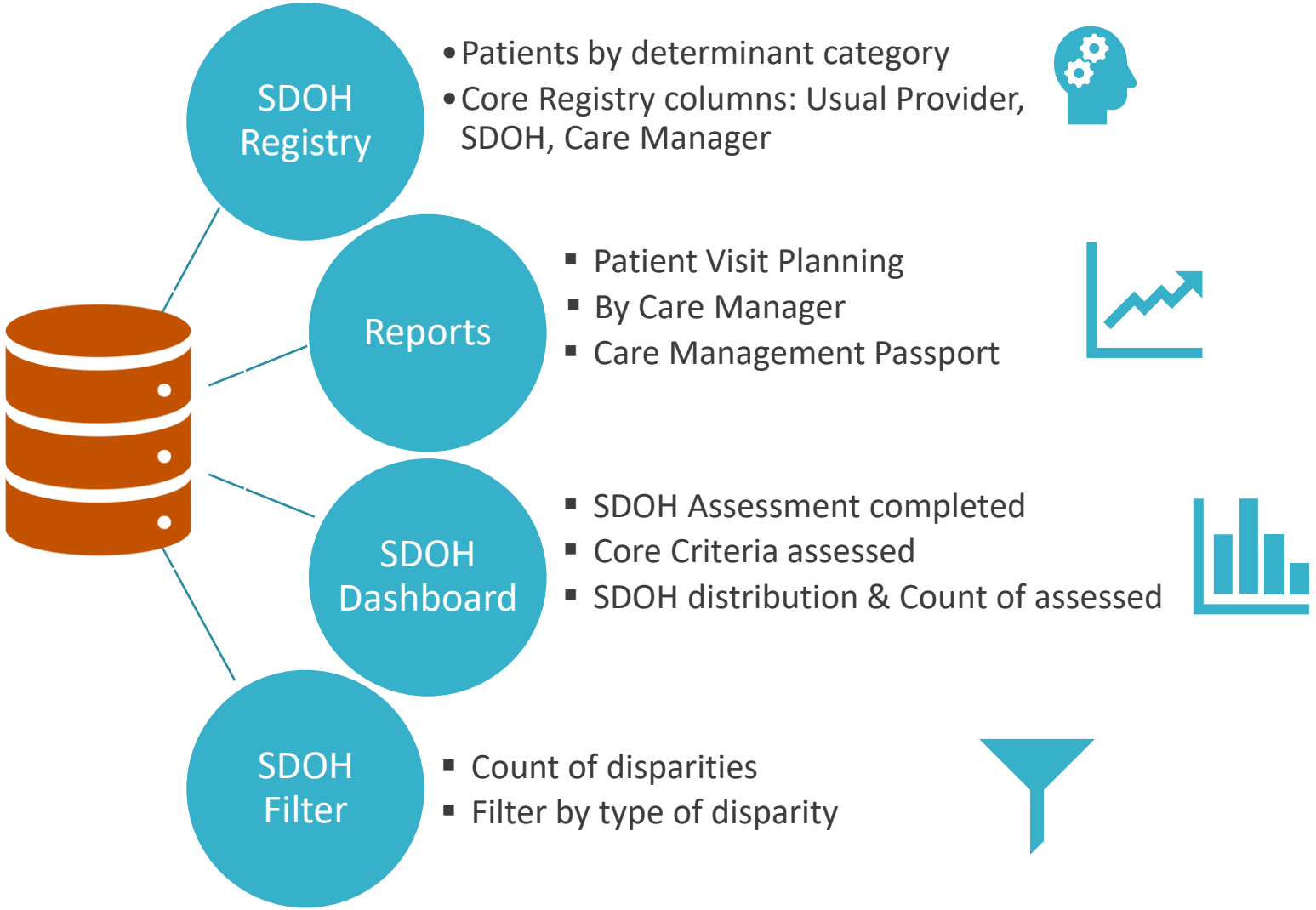
Reporting and Analyzing SDOH Data in CPCI

Poll Question

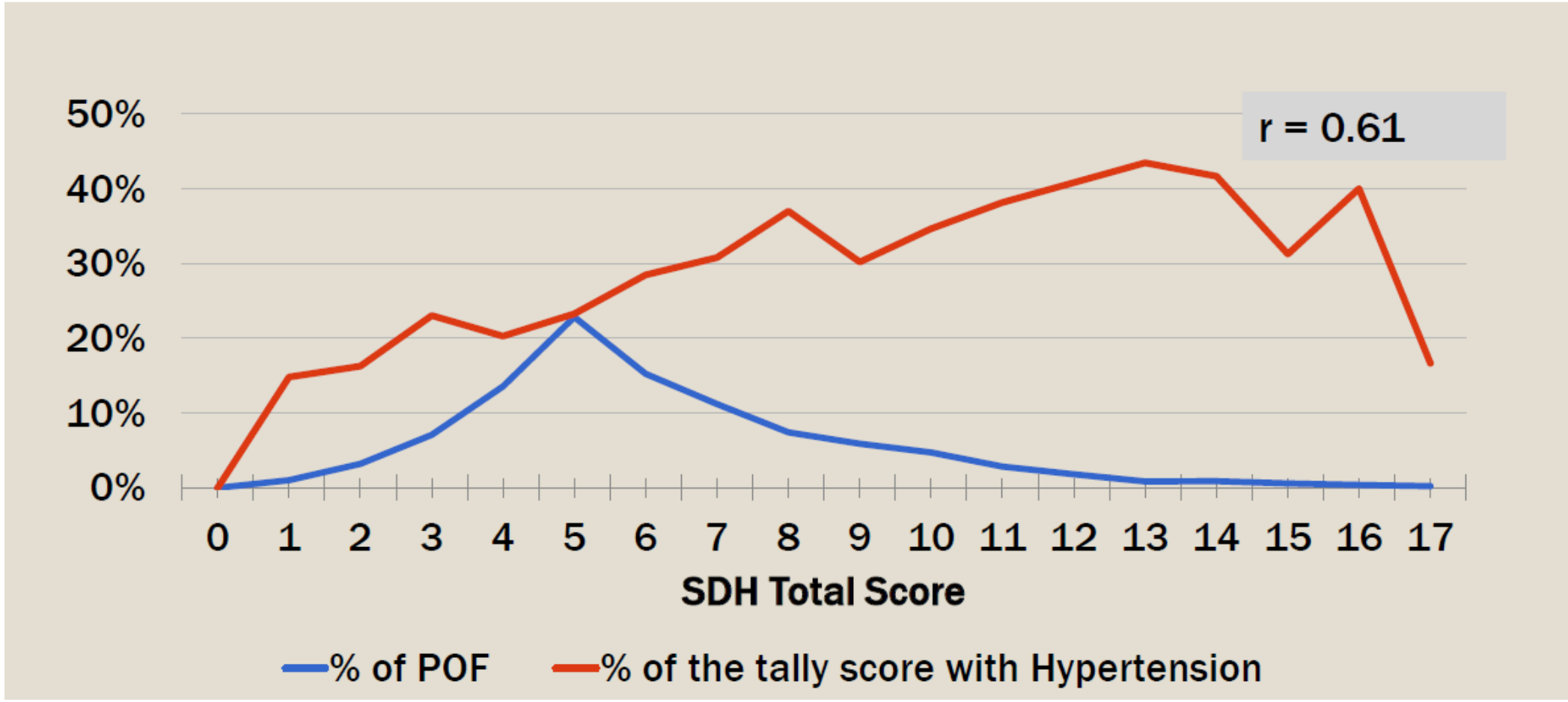
What tools have you used to view SDOH data in CPCI? Please select all that apply

1. Dashboards
2. Scorecards
3. Registries
4. Patient Visit Planning Report and Care Management Passport
5. All the above
6. None of the above – I have SDOH data mapped, but have not viewed or used it in CPCI yet
7. I do not have SDOH data in CPCI yet for my center

SDOH Information In CPCI



Positive Correlation Between the Number of Social Determinants and Hypertension



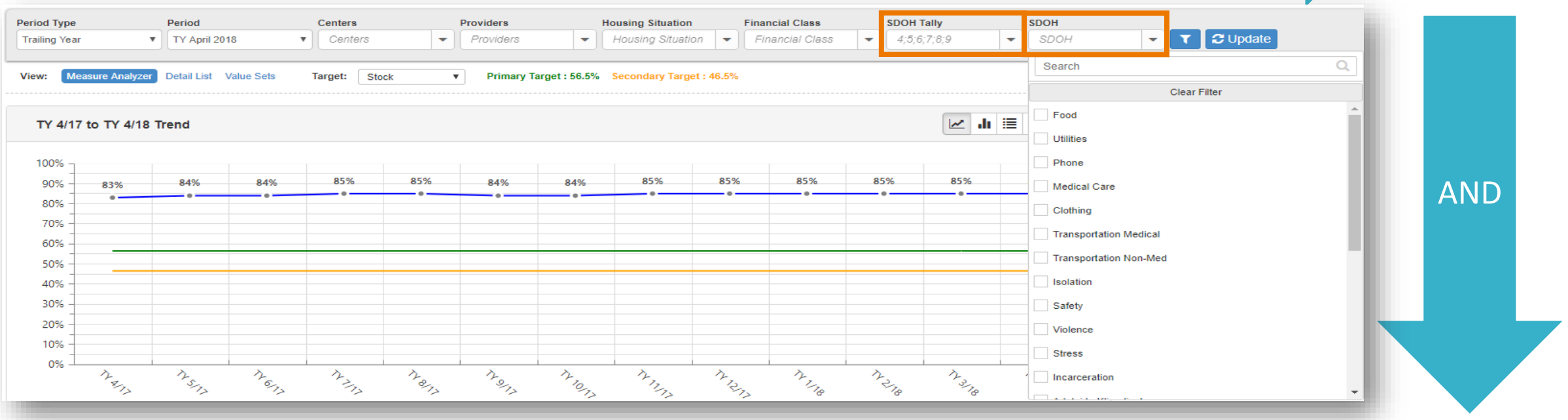
POF = Population of Focus

With permission from AAPCHO, May 2019

Social Determinants of Health (SDOH) in CPCI

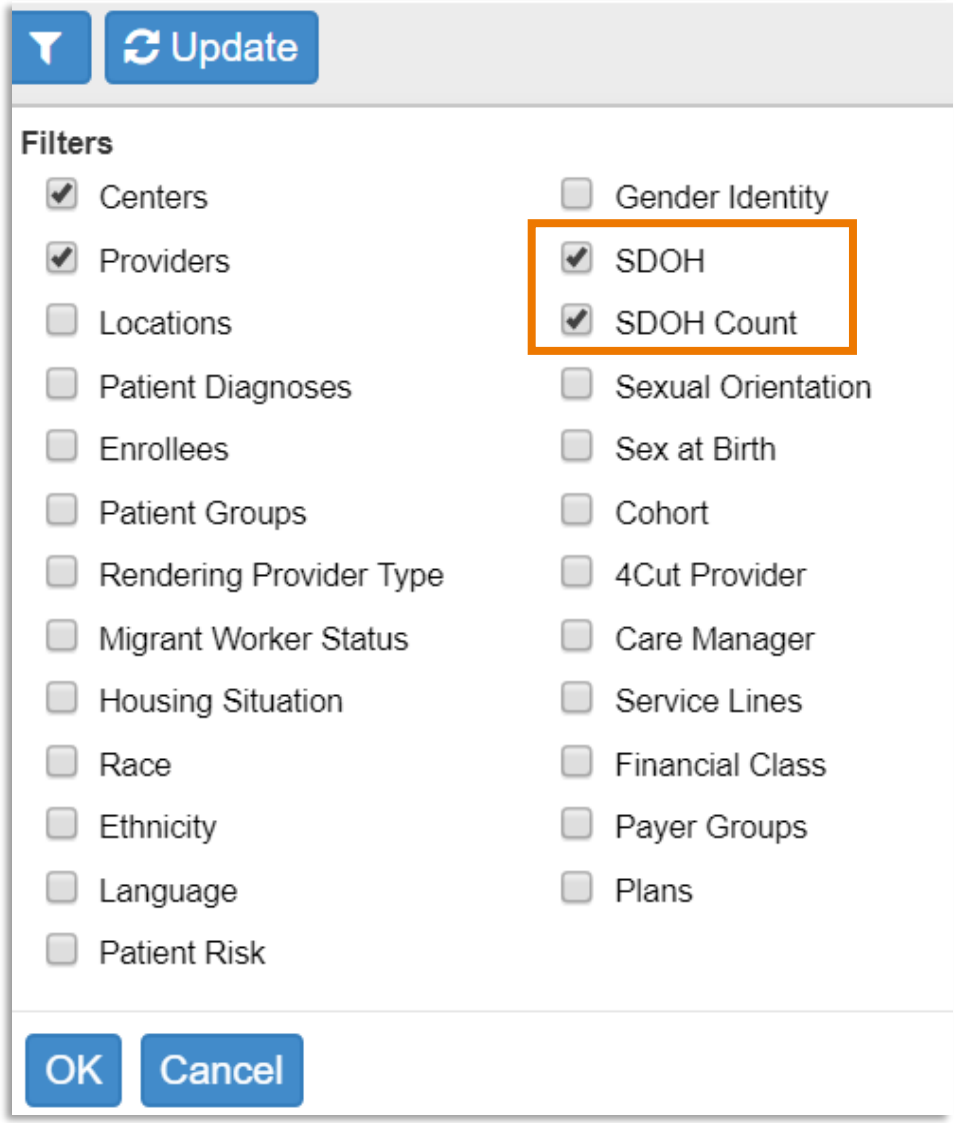
- SDOH Filter
  - A list of available SDOH triggers.
  - Filter works as an "AND" statement. For example, if two triggers are chosen, the patient must have *both* triggers.
- SDOH Tally Filter
  - A numerical filter displaying the count of active SDOH triggers for patients.
  - Both available on all the PVP, CMP and all measures and reports via the "Additional Filters" icon.
  - Reflect SDOH triggers active *during* the selected measurement period for the given report/measure.

SDOH Filter Functionality

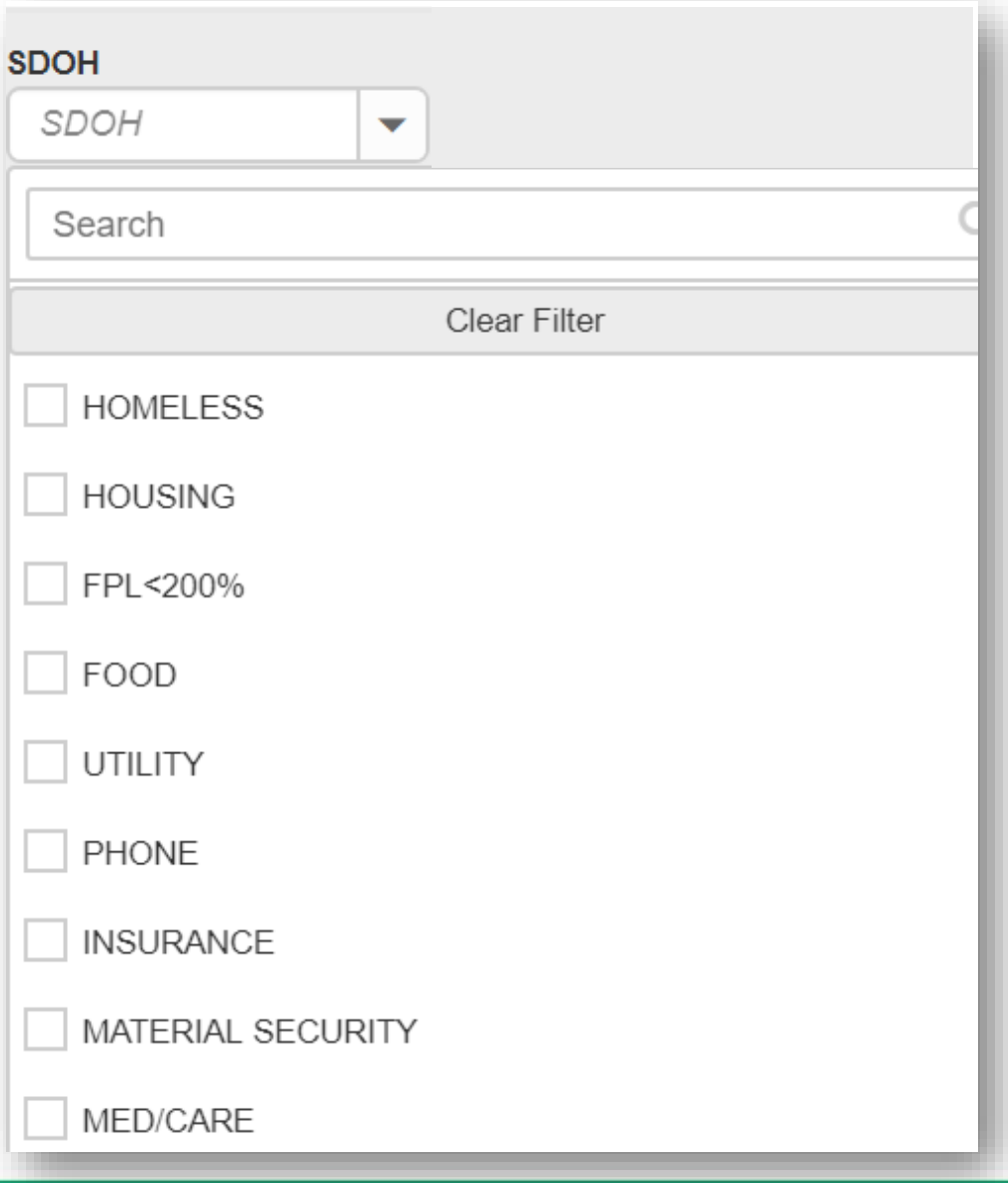


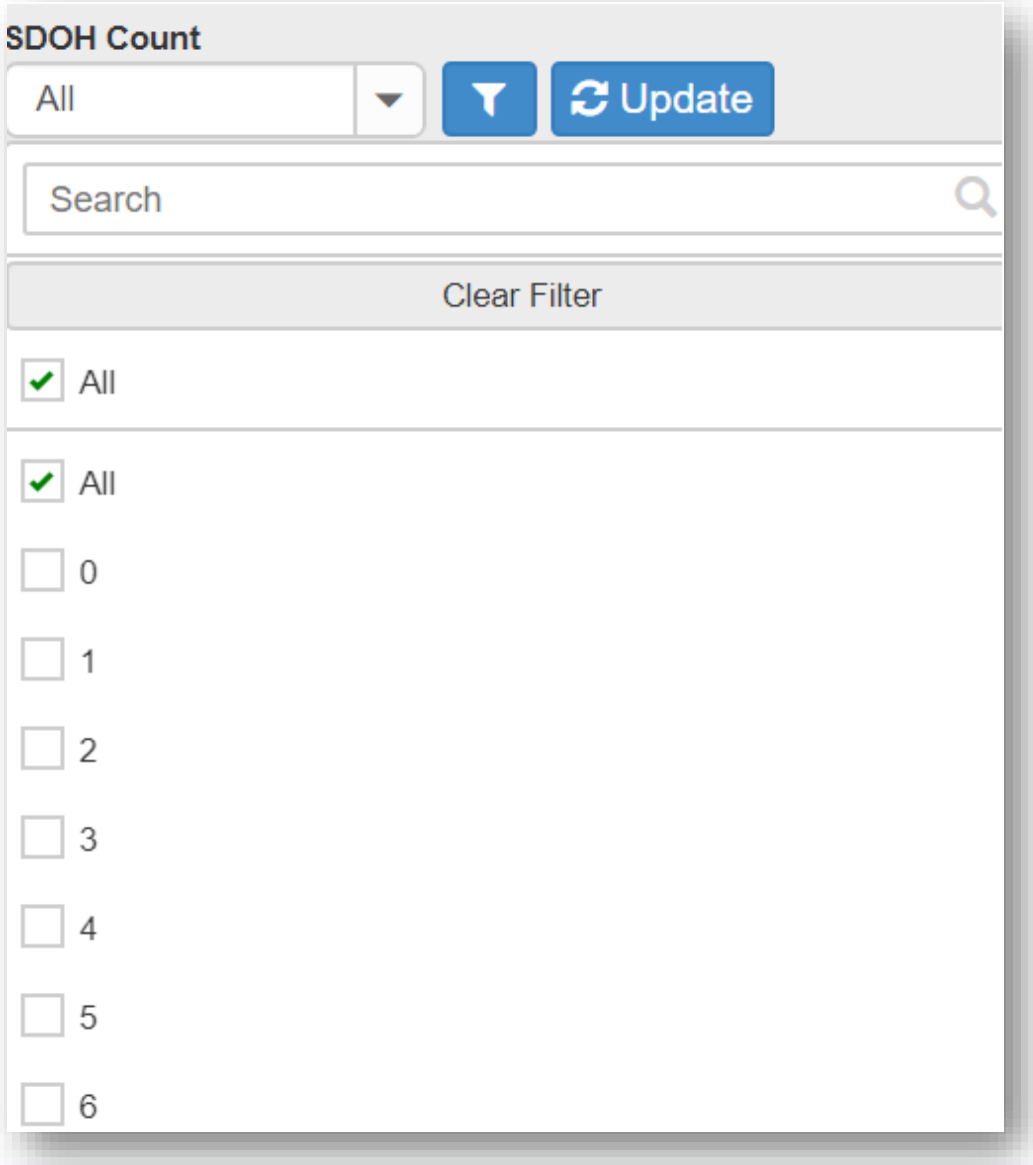
- Ability to filter by SDOH criteria and SDOH Count
- Patient must meet all filter criteria across page-level filters
  - Period **AND** Housing Situation **AND** Financial Class, etc.
- Patient must meet all filter criteria within the SDOH filter
  - Food **AND** Utilities **AND** Phone, etc.
- Patient must meet one of the filter selections within the SDOH Tally filter
  - SDOH Tally of 4 **OR** 5 **OR** 6, etc.

Accessing the SDOH Filters

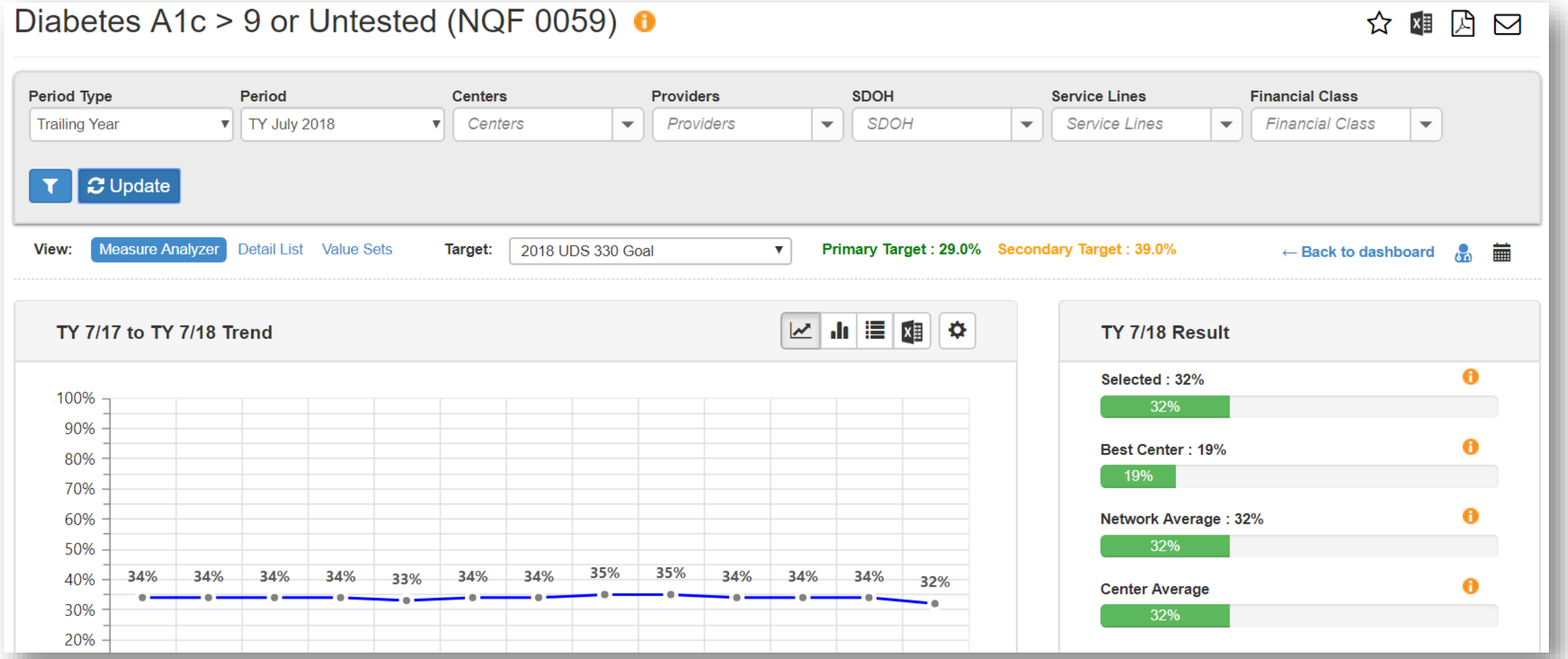


SDOH Filters

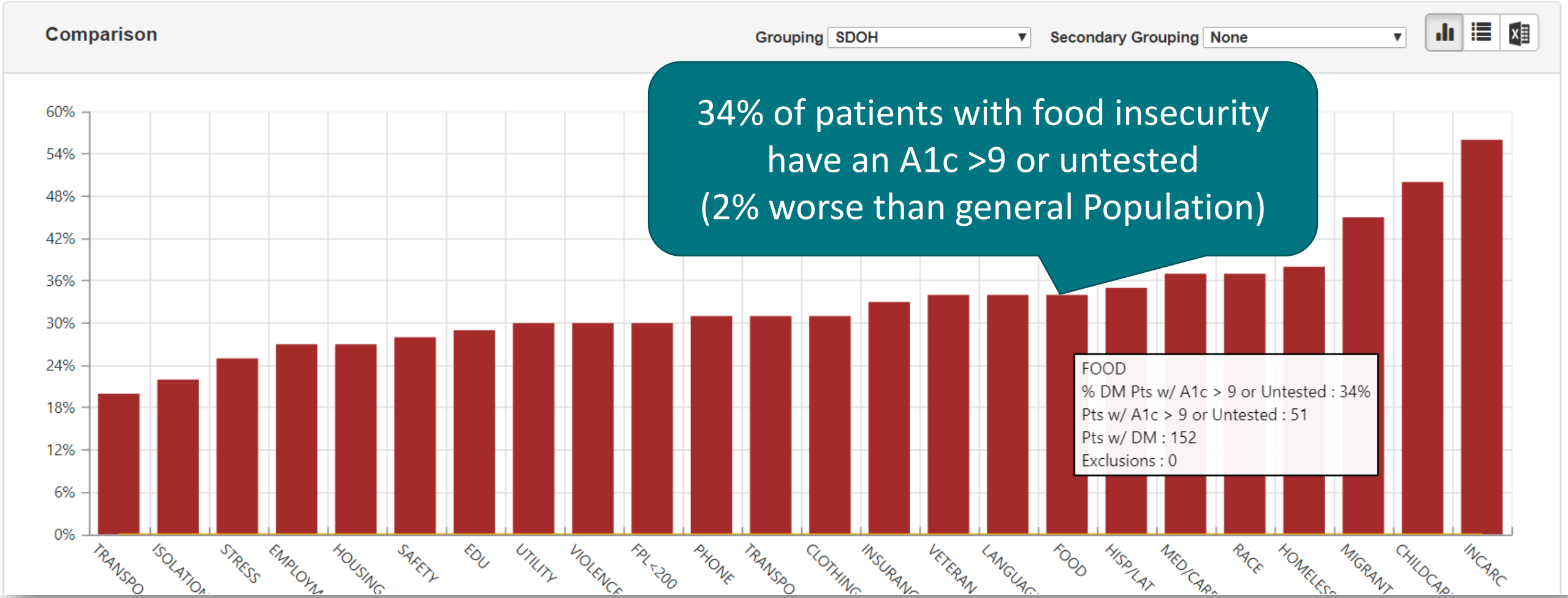




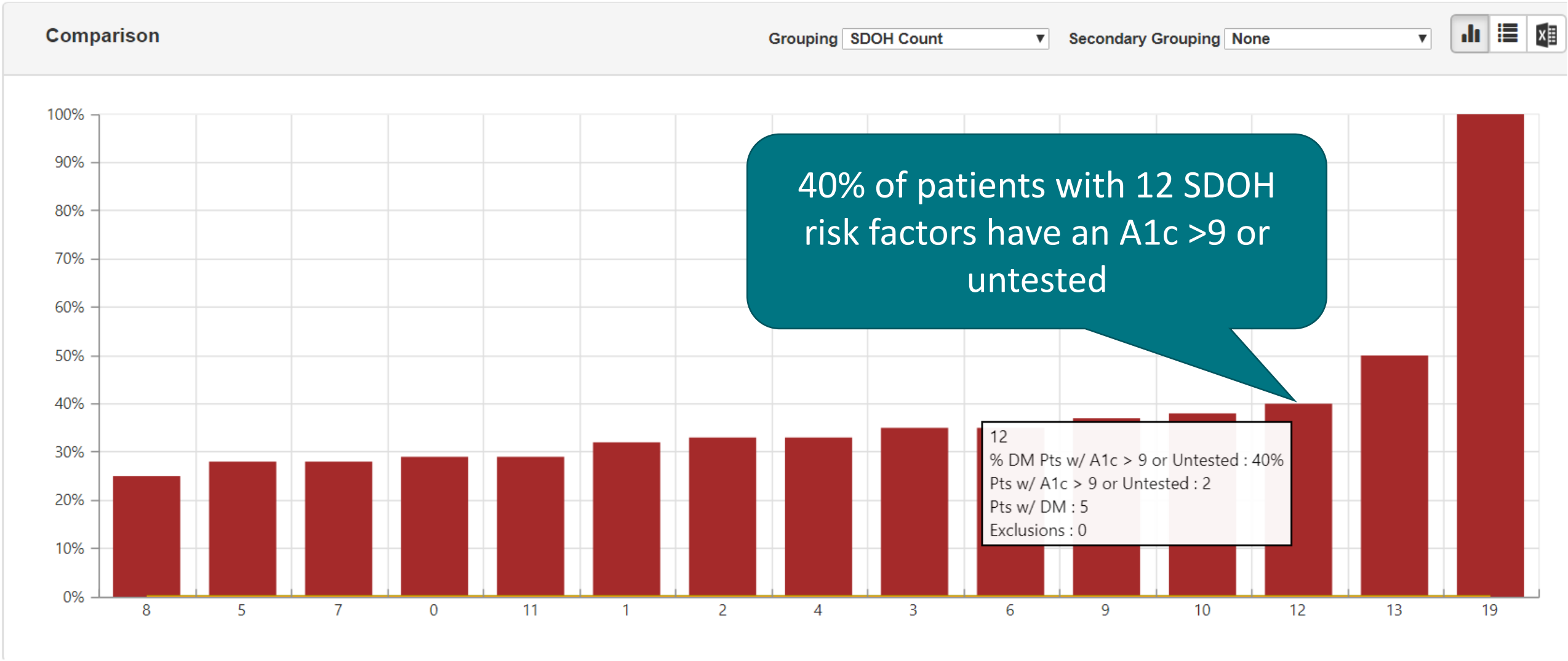
A1c >9 or Untested = 32%



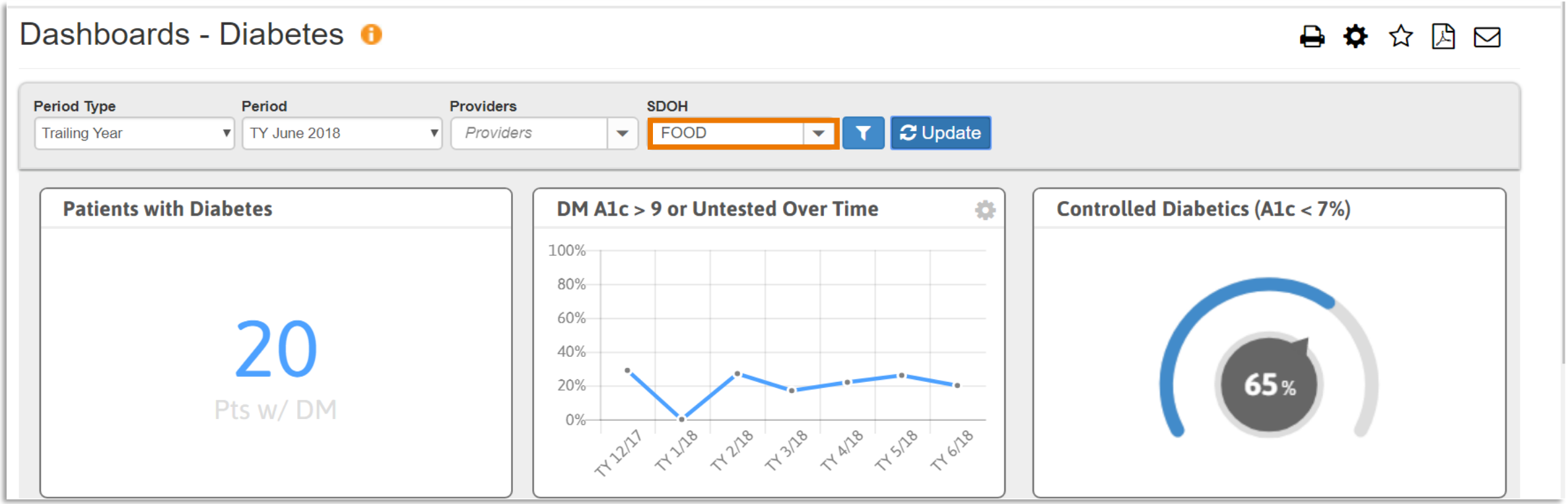
Diabetes >9 or Untested by SDOH Risk



DM >9 or Untested by # SDOH Risks

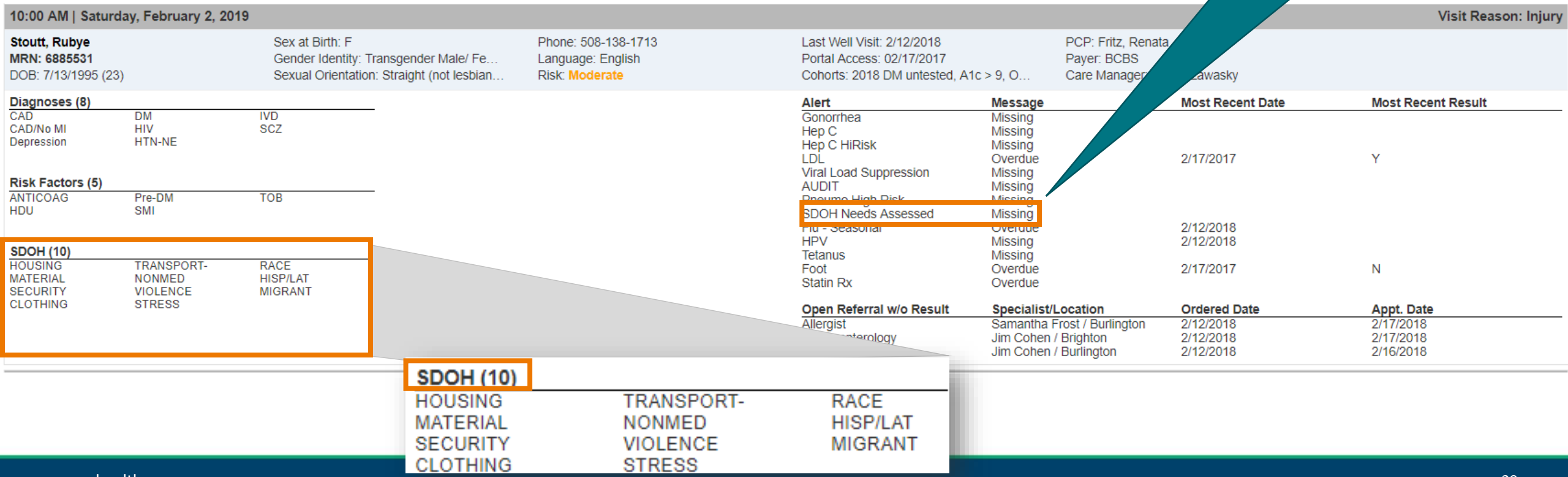


DM Dashboard with SDOH Filter



Pre-Visit Planning (PVP)

- SDOH section on the PVP.
- (10) Indicates number of SDOH risks.
- Configurable alert – default is assessment in 1 yr
- Required UDS SDOH items will show if entered in registration/demographics.
- SDOH must be turned on in Admin.



SDOH (10)
HOUSING
MATERIAL
SECURITY
CLOTHING
TRANSPORT-
NONMED
VIOLENCE
STRESS
RACE
HISP/LAT
MIGRANT

Care Management Passport

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Care Management Passport

Find New Patient

Reichmann, Neil	Sex at Birth: M	Phone: 617-765-2559	Last Phys: 1/2/2018	PCP: Cote, David
MRN: 2262171	Gender Identity: Choose not to disclose	Language: English	Portal Access: 01/02/2018	Payer: Aetna
DOB: 3/18/1960 (58 years)	Sexual Orientation: Something else	Risk: **High**		Care Manager: Narcisa Perrette

Assessments, Last 10 of 18

Code	Description	Last Assessed	# Assessed TY
296.24	Major depressive affective disorder, single episode, severe, specified as with psychotic behavior	4/16/18	1
152.0	MALIGNANT NEOPLASM OF DUODENUM	4/16/18	1
303.02	ACUTE ALCOHOLIC INTOXICATION IN ALCOHOLISM, EPISODIC	4/16/18	3
153.2	Malignant neoplasm of descending colon	4/16/18	1
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	4/16/18	2
307.80	PSYCHOGENIC PAIN, SITE UNSPECIFIED	4/16/18	1
G89.12	ACUTE POST-THORACOTOMY PAIN	4/16/18	2
A15.0	TUBERCULOSIS OF LUNG	4/16/18	3
424148004	Substance use cessation surveillance (regime/thera	4/16/18	1
K02.53	DENTAL CARIES ON PIT AND FISSURE SURFACE PENETRATING INTO PULP	4/16/18	1

Problems, Last 10 of 22

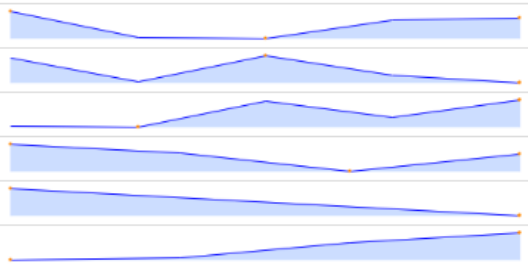
Code	Description	Most Recent
308110009	Direct fundoscopy following mydriatic (procedure)	4/16/18
424148004	Substance use cessation surveillance (regime/thera	4/16/18
G47.411	NARCOLEPSY WITH CATAPLEXY	4/16/18
G89.12	ACUTE POST-THORACOTOMY PAIN	4/16/18
296.24	Major depressive affective disorder, single episode, severe, specified as with psychotic behavior	4/16/18
I21.3	ST ELEVATION (STEMI) MYOCARDIAL INFARCTION OF UNSPECIFIED SITE	4/16/18
401.9	Unspecified essential hypertension	4/16/18
I63.139	CEREBRAL INFARCTION DUE TO EMBOLISM OF UNSPECIFIED CAROTID ARTERY	4/16/18
V65.3	DIETARY SURVEILLANCE AND COUNSELING	4/16/18
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	4/16/18

Encounters, Last 5 of 7

Date	Provider	Type	Reason
1/2/18	Ryan, Frank	Medical	Needs Update
7/7/17	House, Gregory	Medical	Needs Update
6/8/17	House, Gregory	Medical	Needs Update
5/4/17	House, Gregory	Medical	Needs Update
3/2/17	Jones, James	Medical	Needs Update

The Numbers

BMI	1/2/18	**24** lb/m2
Systolic	1/2/18	**101** mmHg
Diastolic	1/2/18	**94** mmHg
LDL	1/2/18	**122** mg/dL
A1c	2/11/17	**10.4%**
PHQ-9	6/8/17	**11**



Appointments, 1

Date	Provider	Type	Reason
4/28/18	Cote, David	Sick Visit	

Social Determinants of Health, 10

HOMELESS	HOUSING	FPL<200%
UTILITY	CLOTHING	STRESS
EMPLOYMENT	EDU	RACE
MIGRANT		

Alerts, 5

Alert	Message	Most Recent Date	Most Recent Result
Pap Anal	Missing		
A1c	Overdue	2/11/17	10.4
Gonorrhea	Missing		
AUDIT	Missing		
Prenatal	Missing		

Allergies, 0

Start	Description	Reaction	Severity
No active allergies			

Open Referrals w/o Result, 4

SDOH Registry

Registries - Social Determinants of Health (SDOH)

Start Date: 11/04/2019 | End Date: 11/11/2019 | Centers | Providers | Period Tense | Update

View: Registry | Value Sets

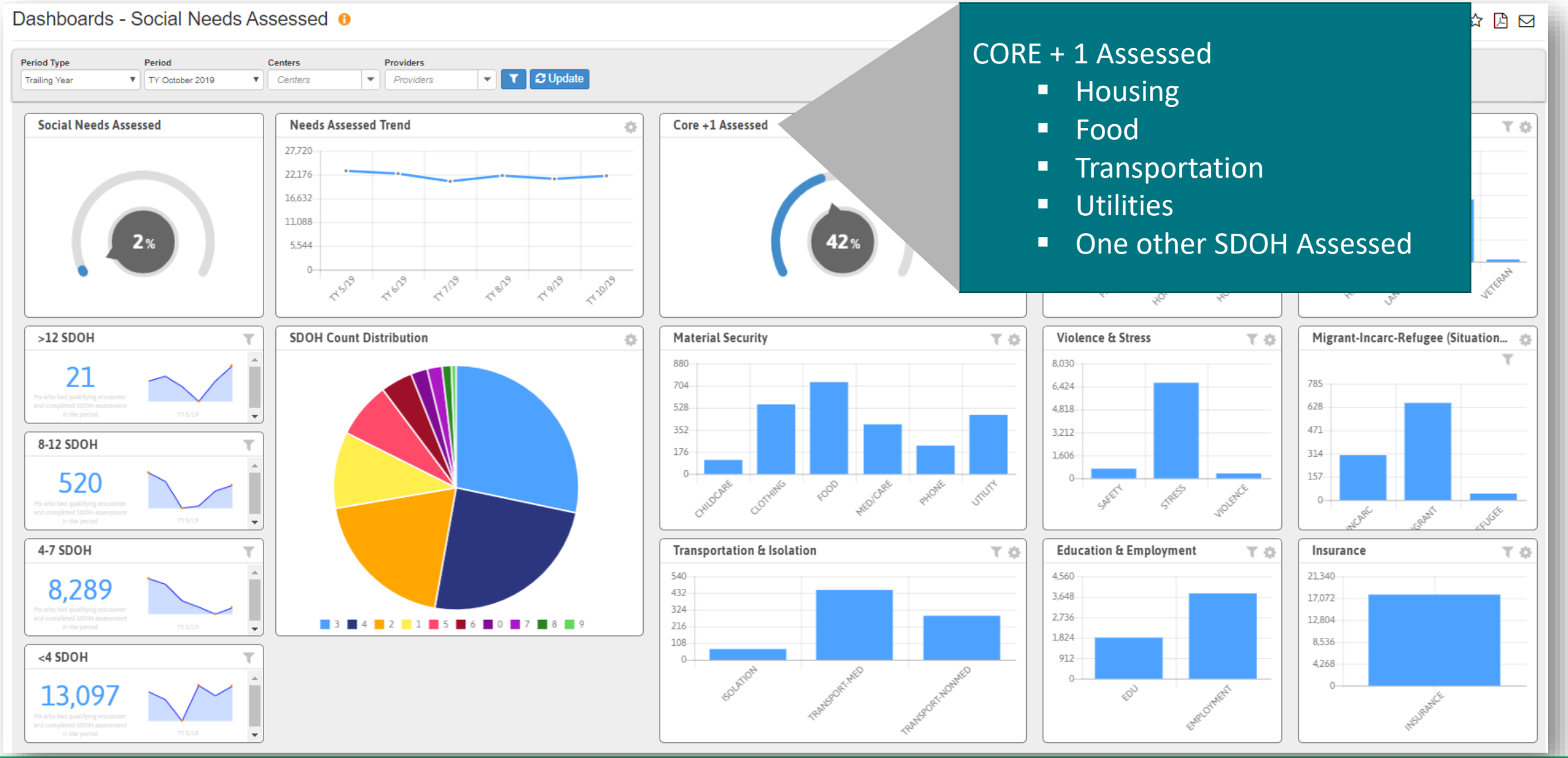
Center Name	Name	Social Needs Assessment Date	Social Needs Assessment Completed By	Age	Gender Identity	SDOH Triggers	SDOH Tally	Housing Situation	Housing Status
		11/8/2019	04/03/2019	39	Female	FOOD INSURANCE STRESS RACE	4	I have housing	N
		11/8/2019	01/24/2019	34	Other	RACE	1	NULL	
		11/7/2019	11/08/2019	69	Male	INSURANCE EMPLOYMENT	2	I have housing	N
		11/7/2019	11/08/2019	45	Other	STRESS	1	I have housing	N
		11/7/2019	11/08/2019	60	Female	FPL<200%	1	I have housing	N

- Questionnaire Completed Date – Used by CHC to indicate an assessment of social needs has been done
- SDOH Tally
- SDOH Triggers - also on PVP & Care Management Passport, includes raw EHR responses

SDOH Triggers and Tally

SDOH Tally	SDOH Triggers
10	HOMELESS HOUSING FPL<200% PHONE MED/CARE ISOLATION SAFETY STRESS EMPLOYMENT EDU
9	FPL<200% FOOD UTILITY MED/CARE CLOTHING ISOLATION STRESS EMPLOYMENT EDU
8	HOUSING FPL<200% UTILITY PHONE STRESS EMPLOYMENT EDU INCARC
7	FPL<200% PHONE ISOLATION STRESS EMPLOYMENT EDU INCARC

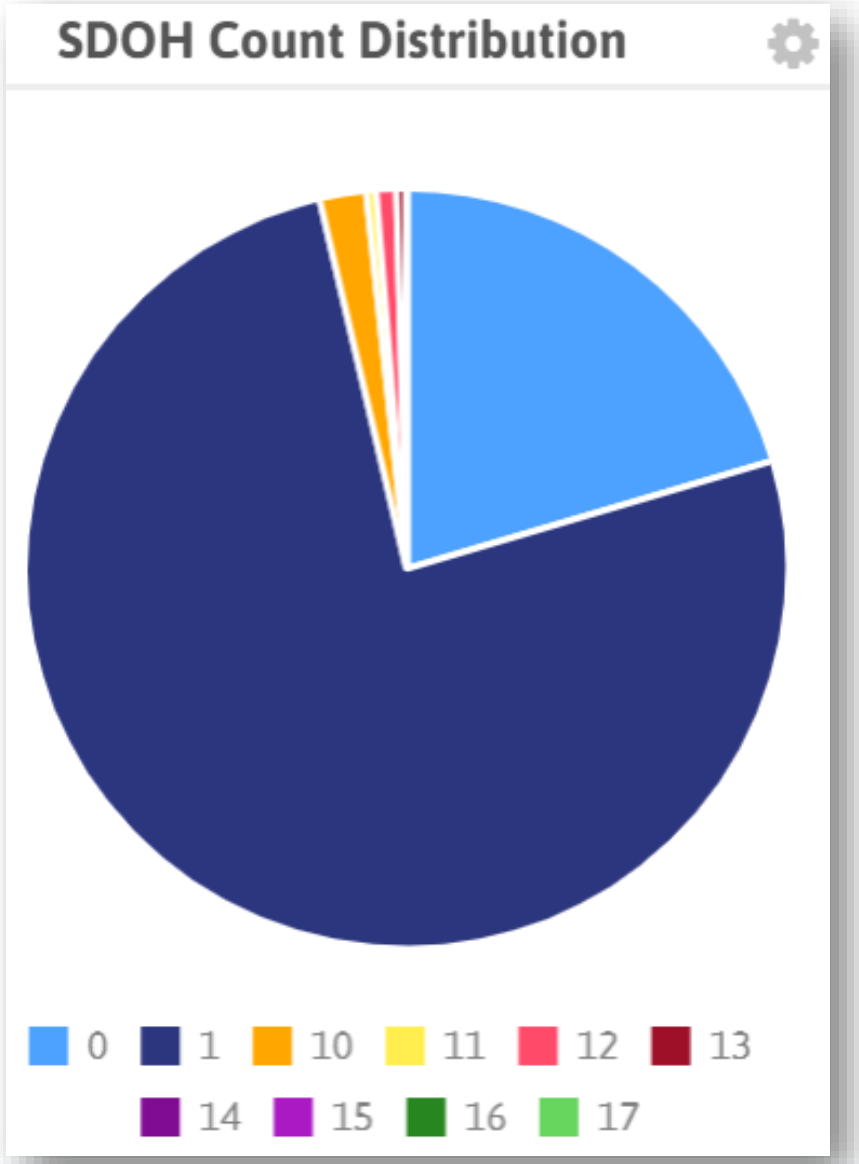
CHCANYS Social Needs Assessed Dashboard



CORE + 1 Assessed

- Housing
- Food
- Transportation
- Utilities
- One other SDOH Assessed

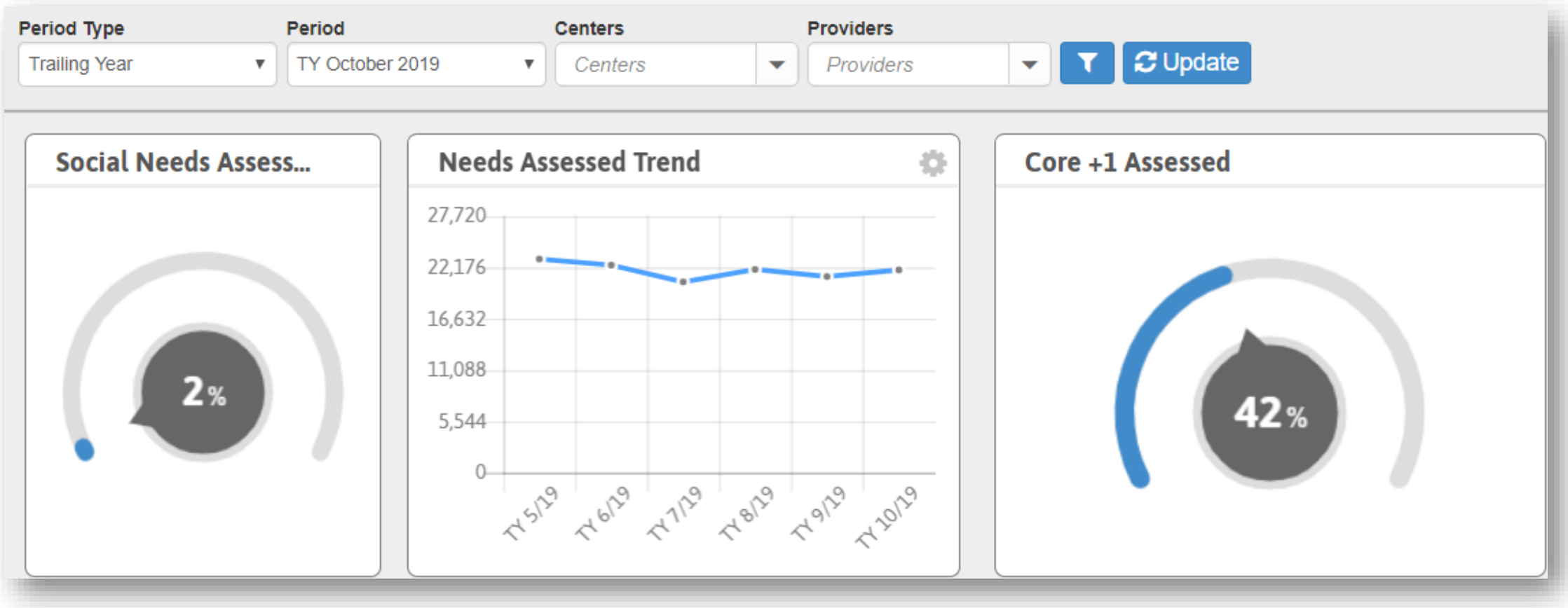
Social Needs Assessed | Distribution and Count



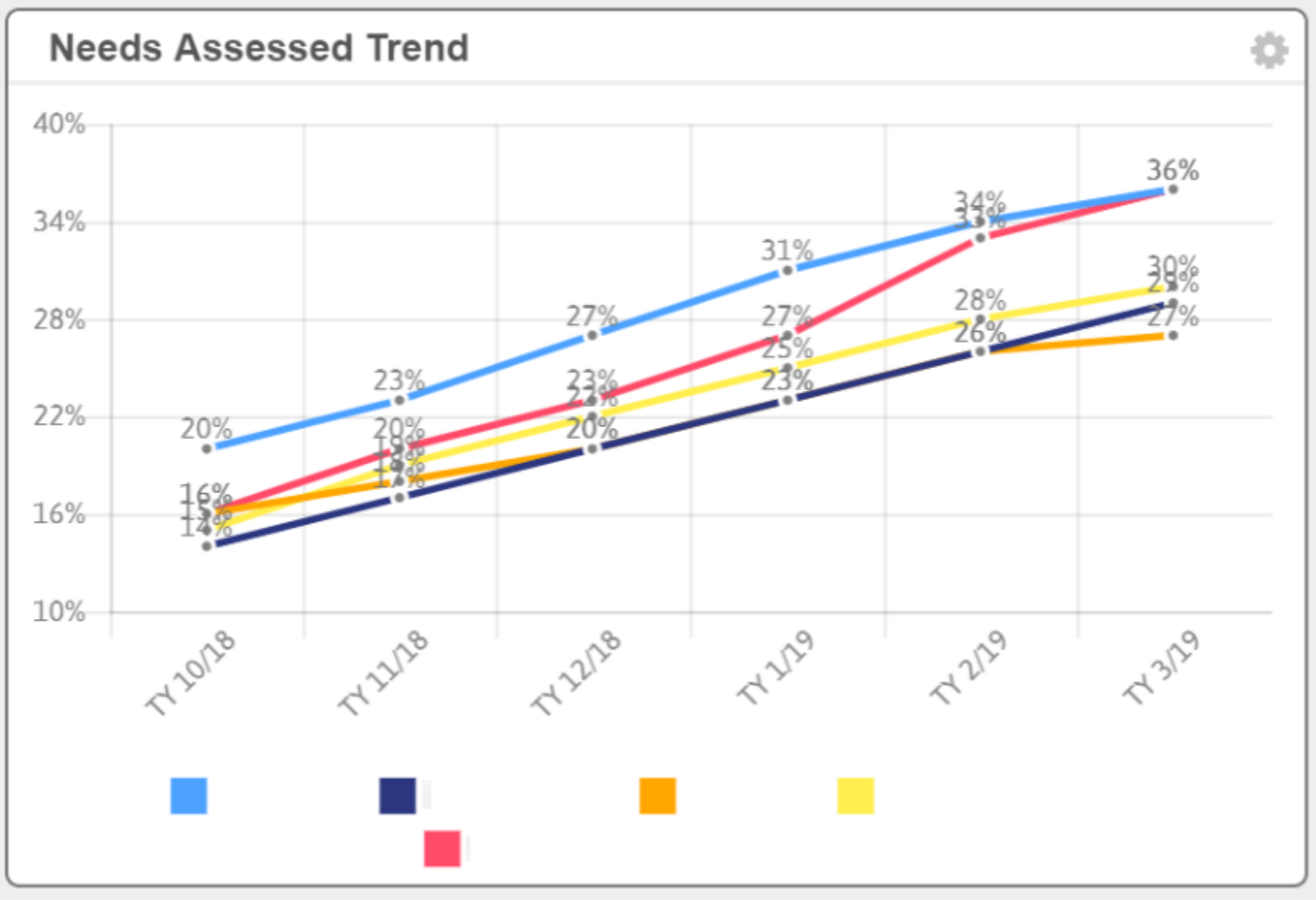
>12 SDOH	8-12 SDOH	4-7 SDOH	<3 SDOH
3	80	942	1,914
Pts w/ Food, Housing, Transportation, Utility +	Pts w/ Food, Housing, Transportation, Utility +	Pts w/ Food, Housing, Transportation, Utility +	Pts w/ Food, Housing, Transportation, Utility +

Social Needs Assessed | Screening – Trend and Core Criteria

- Evaluate assessments done and completeness of assessment



Trendline by Location



Social Needs Assessed | Criteria by Domain

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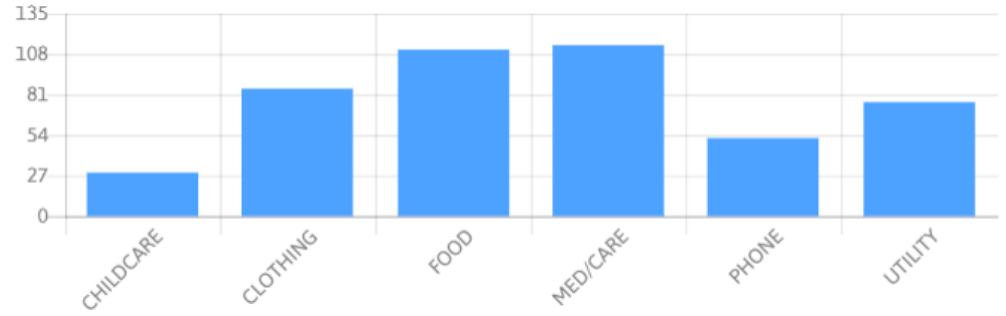
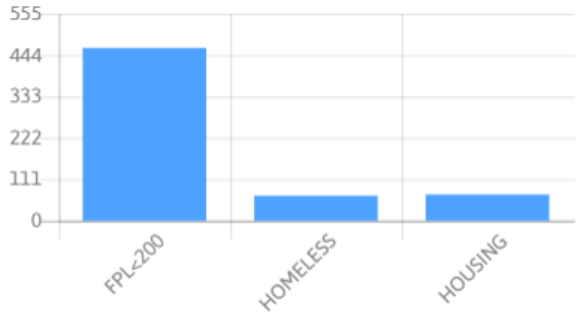
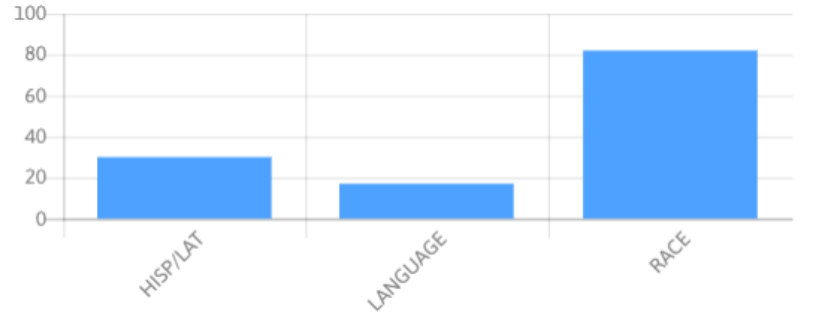
Material Security



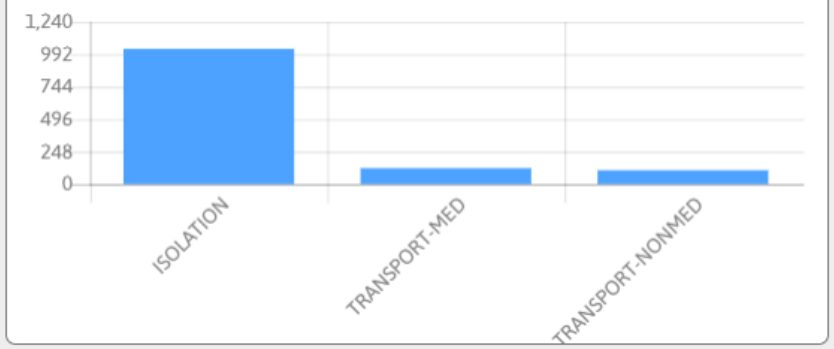
Housing & Income



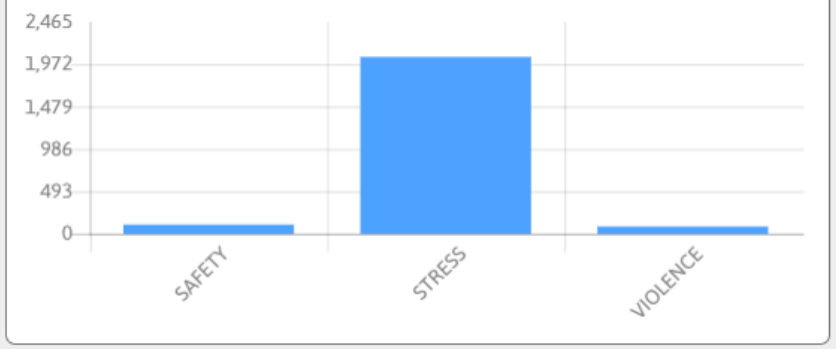
Personal Characteristics



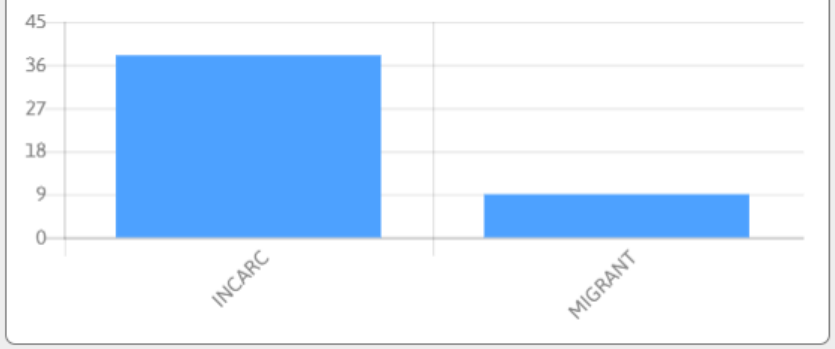
Transportation & Isolation



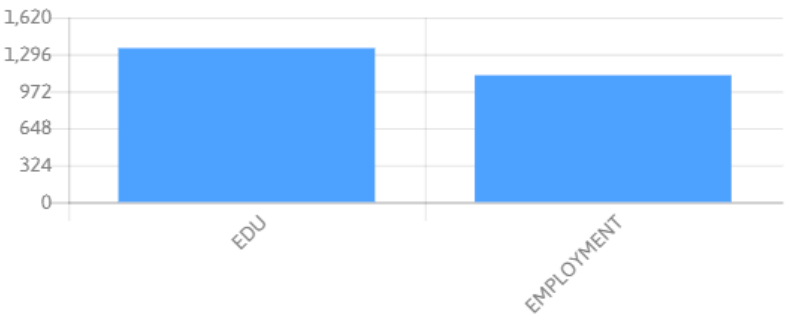
Violence & Stress



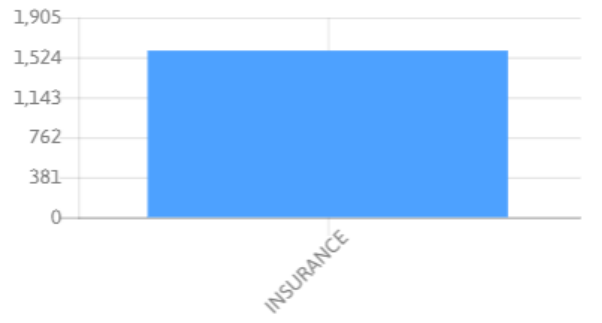
Migrant-Incarcerated (Situational)



Education & Employment



Insurance



Using SDOH Data to Evaluate Results

Poll Question

Please provide information regarding your process for managing internal and external patient referrals. Are you tracking referrals to internal resources or external community-based organizations in structured EHR fields? Select all that apply

- Yes, my organization is documenting internal and external referrals in structured EHR fields.
- Yes, my organization is documenting internal and external referrals using free text in non-structured EHR fields.
- No, my organization does not make external referrals to community-based organizations to address patients' social needs.
- My organization is currently planning external referrals to community-based organizations focused on patients' social needs.

46 centers across CHCANYS have the Referrals Module in CPCI

Enabling Services

- How are you tracking and managing referrals for social determinants?
- What external resource tracking tools are you using or thinking about using?

THRIVE
- Boston Medical Center

NACHC Food Insecurity Toolkit

Cohorts

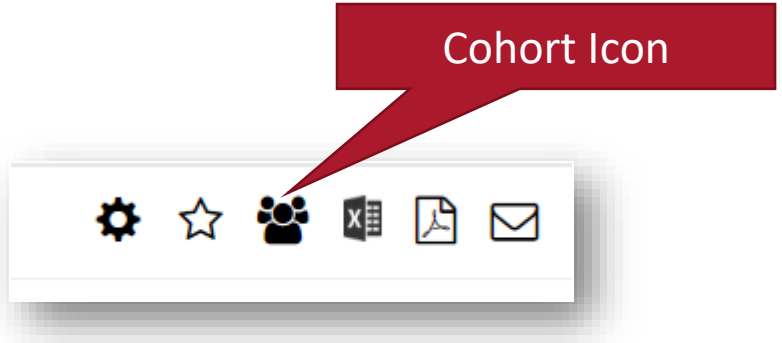
- A group of people who share a common characteristic or experience within a defined period.
- In DRVS - a cohort is a group of patients, that have a record in DRVS, that are linked together for the purpose of comparison and tracking performance.
- Once one is created and enabled, the cohort is available for filtering on any report.

Patient Cohorts

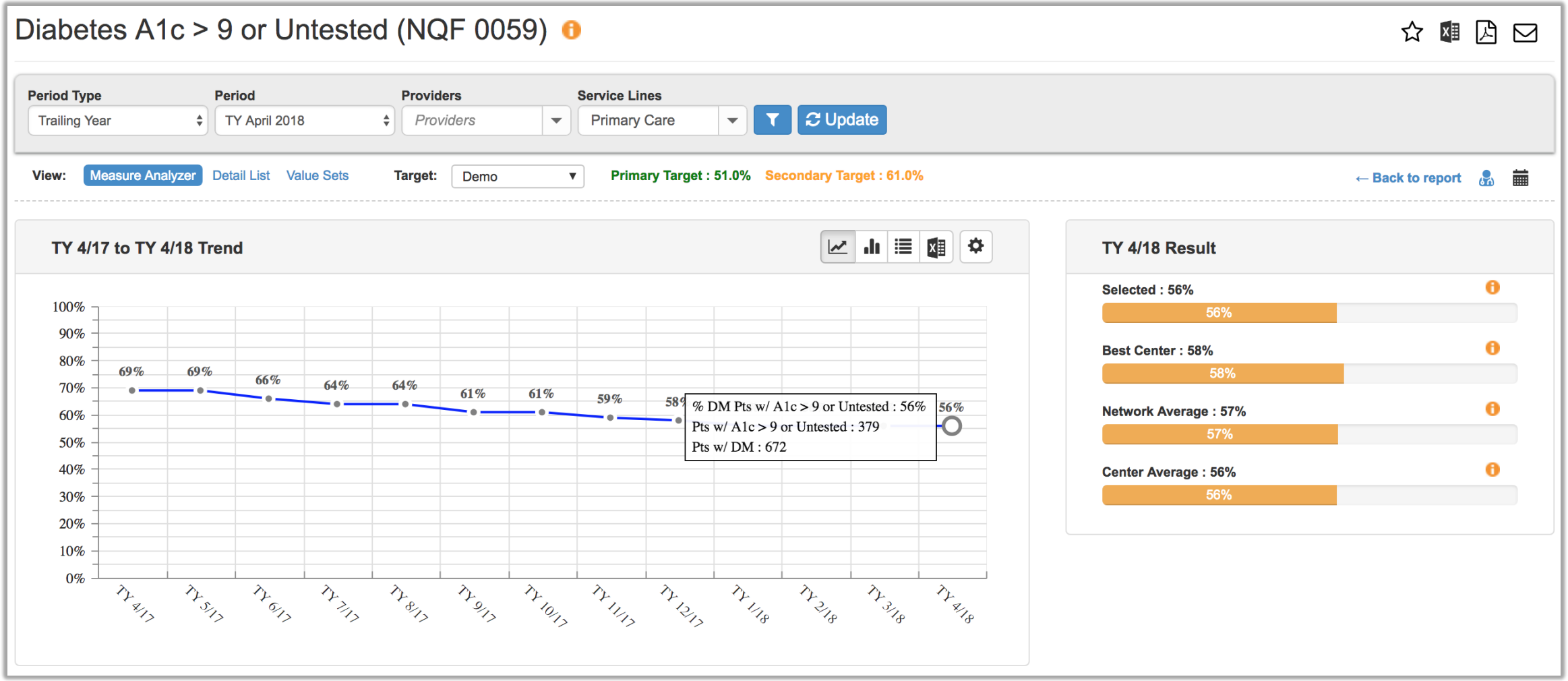
- Cohort types:
  - Dynamic cohort that expands/contracts over time
  - Static cohort of a population at a specific time

- Ways to create a cohort of patients
  1. Manual
     - Use a list of MRNs from a clinical registry or the details behind a clinical measure
     - Type in a List of MRNs
     - Import list of MRNs from a spreadsheet
  2. Dynamic
     - Create a dynamic Cohort based on data criteria in EHR

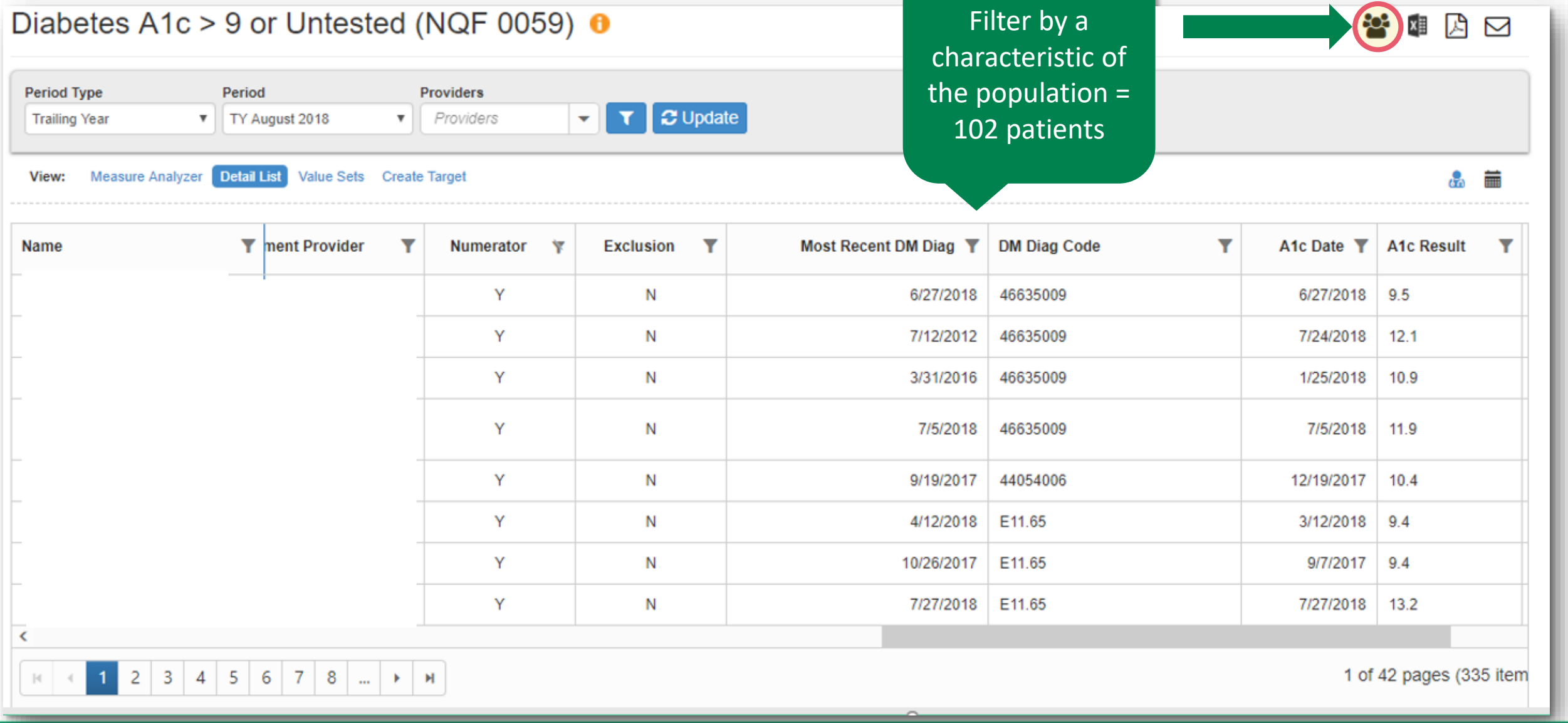
- Consider using as filters:
  - in measure performance analysis
  - with a Scorecard
  - on a Dashboard
  - with visit planning tools



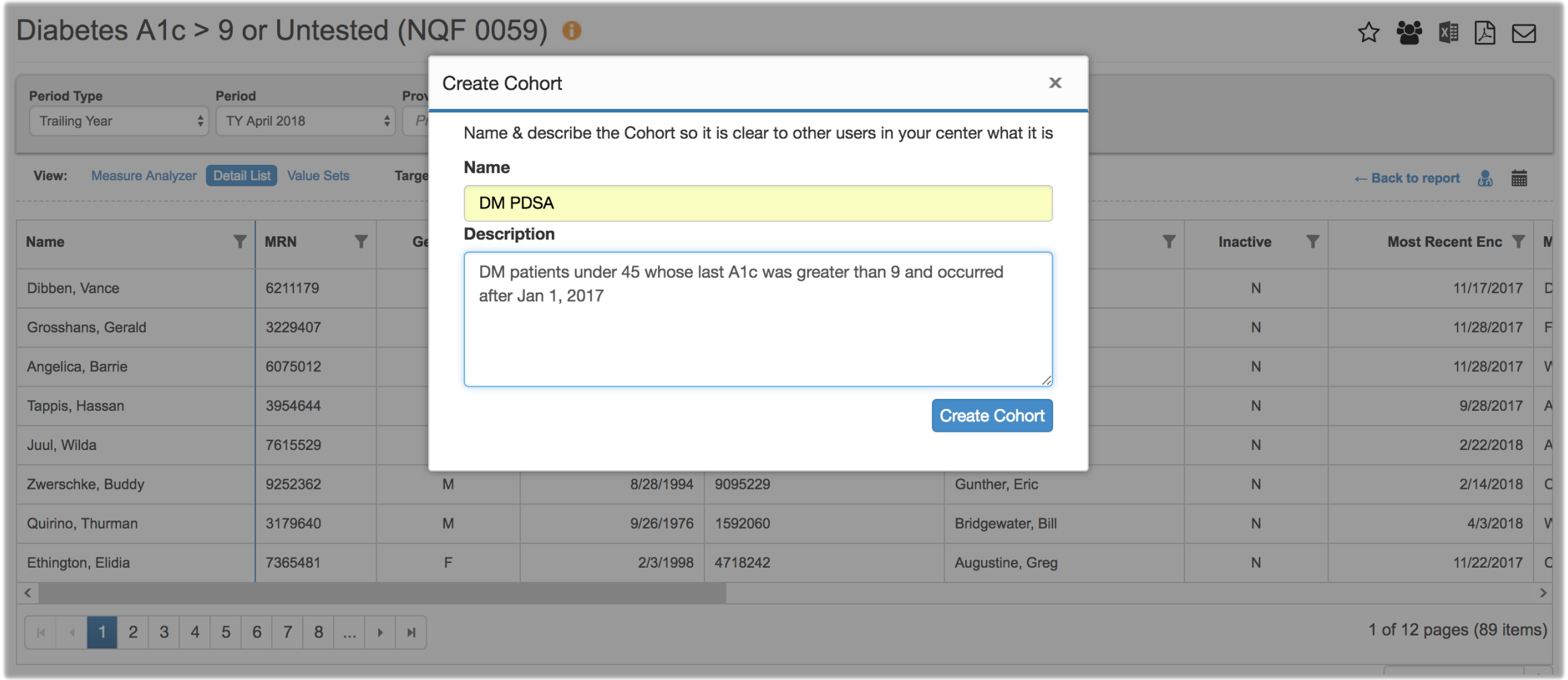
Patient Cohort Example



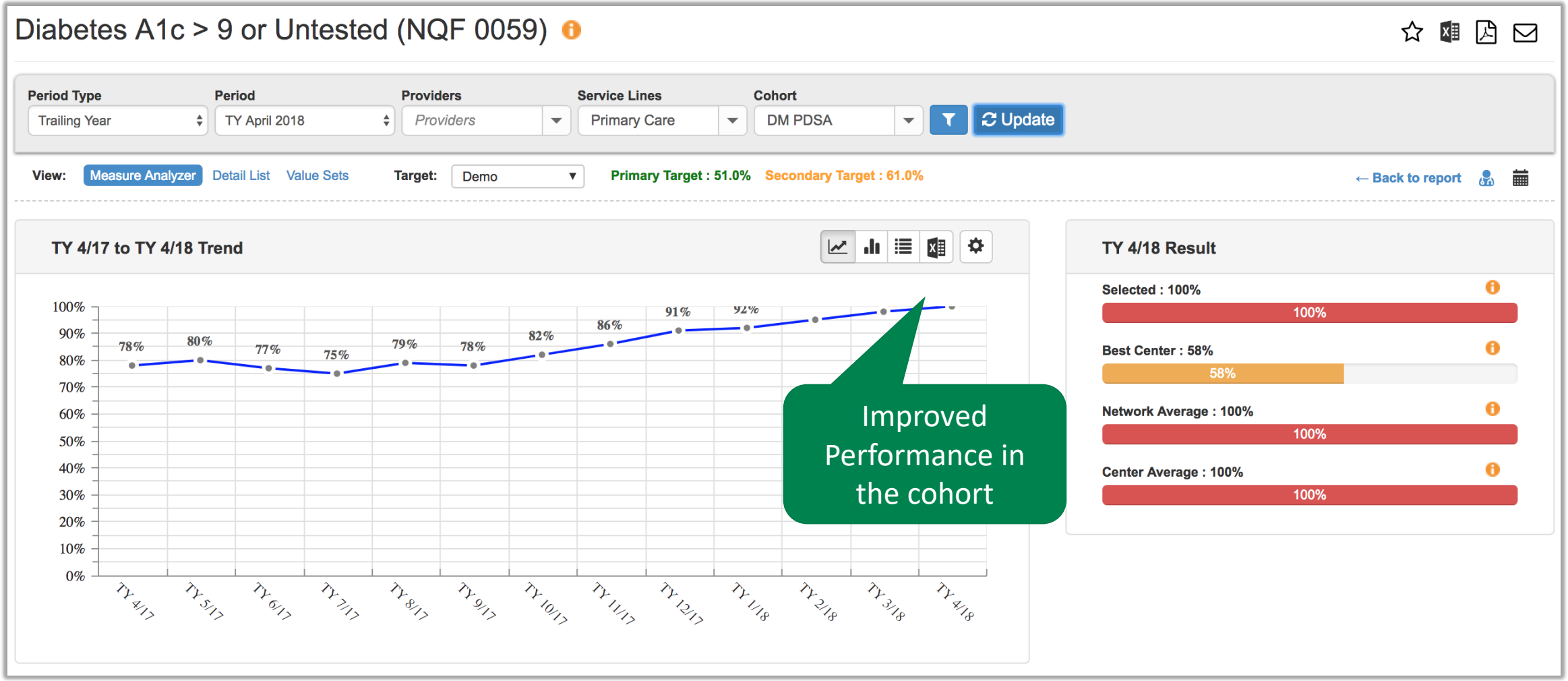
Patient Cohort Example



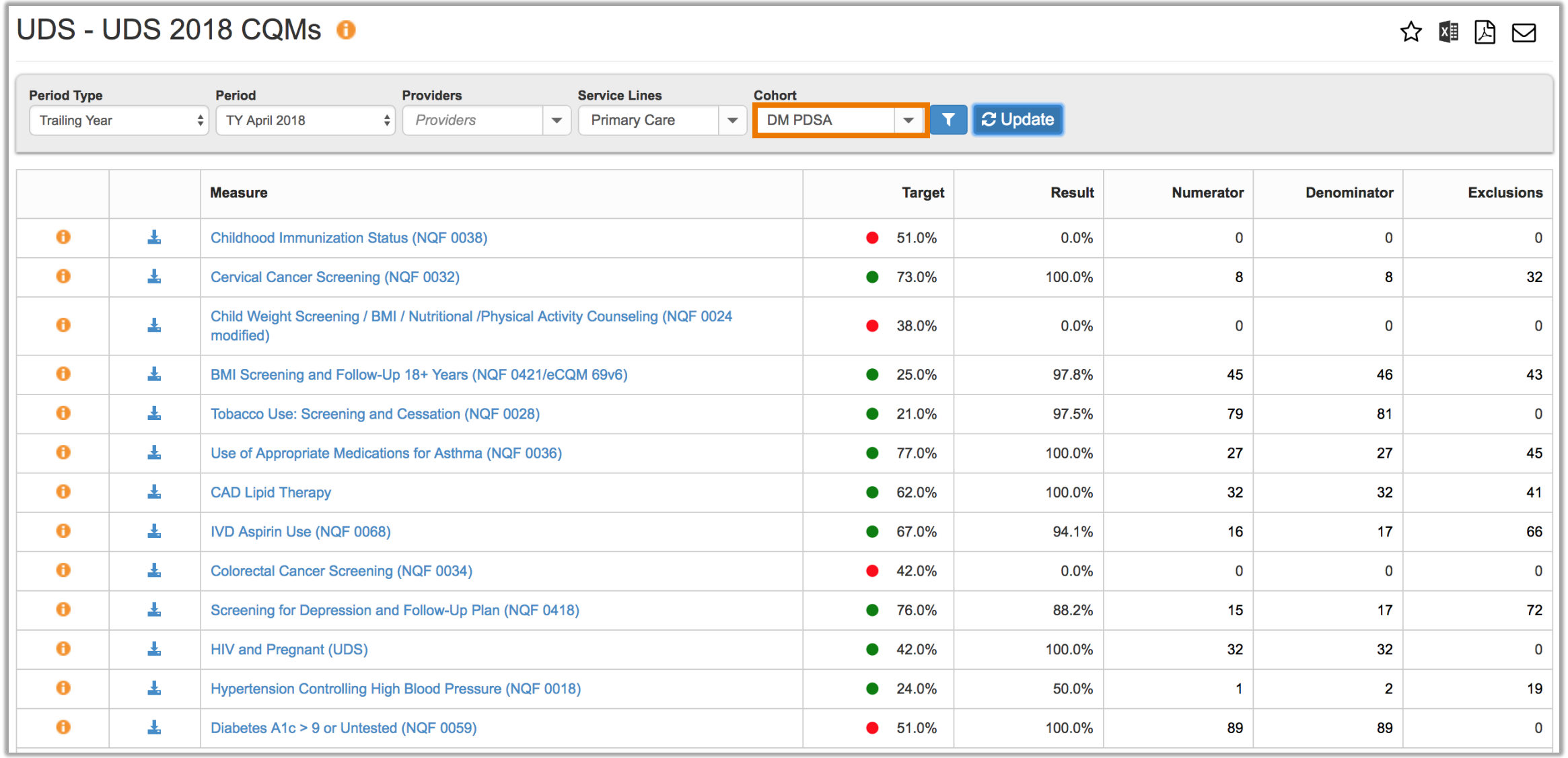
Patient Cohort Example



Patient Cohort Example

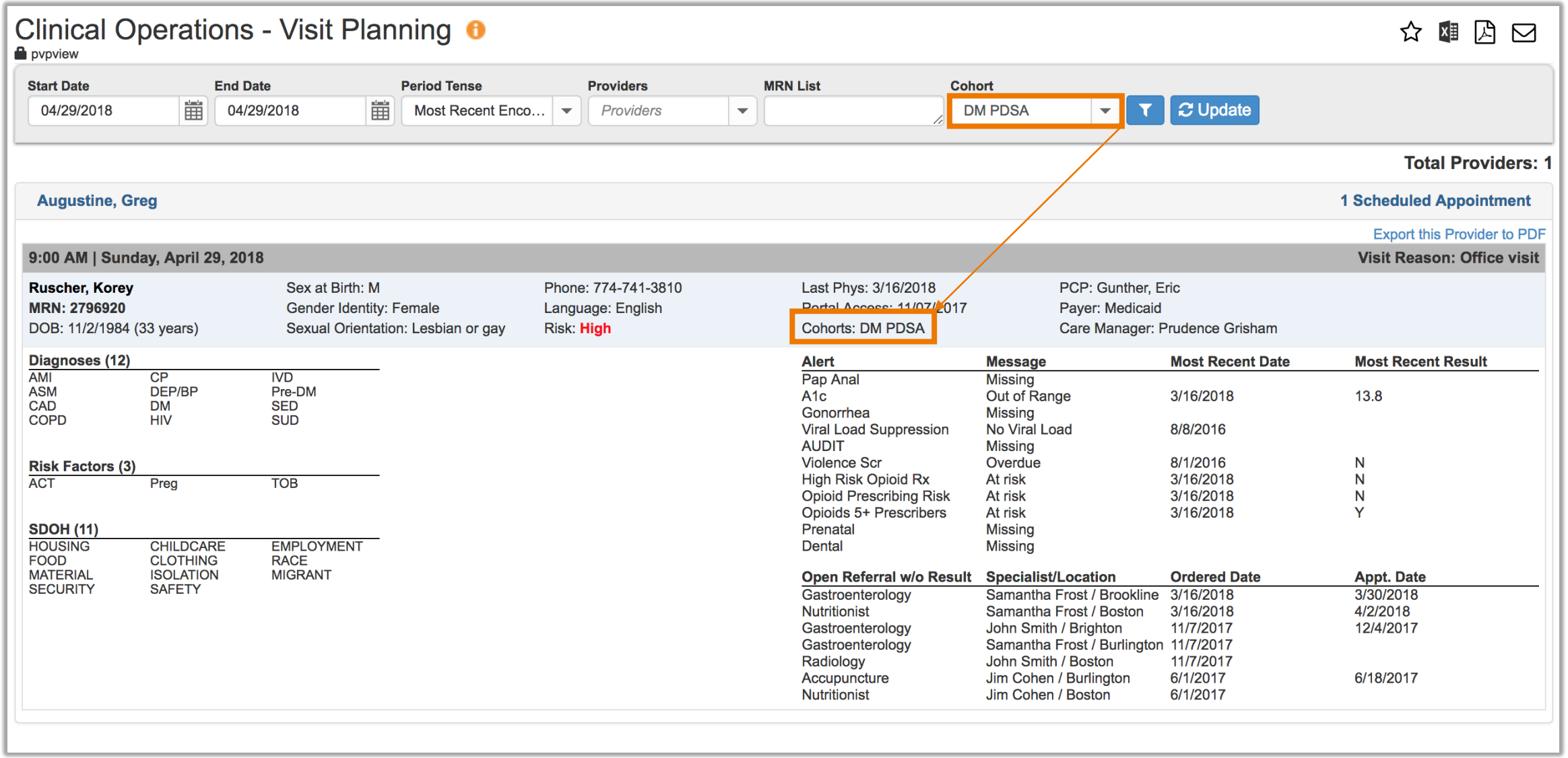


Patient Cohort Example



		Measure	Target	Result	Numerator	Denominator	Exclusions
		Childhood Immunization Status (NQF 0038)	51.0%	0.0%	0	0	0
		Cervical Cancer Screening (NQF 0032)	73.0%	100.0%	8	8	32
		Child Weight Screening / BMI / Nutritional /Physical Activity Counseling (NQF 0024 modified)	38.0%	0.0%	0	0	0
		BMI Screening and Follow-Up 18+ Years (NQF 0421/eCQM 69v6)	25.0%	97.8%	45	46	43
		Tobacco Use: Screening and Cessation (NQF 0028)	21.0%	97.5%	79	81	0
		Use of Appropriate Medications for Asthma (NQF 0036)	77.0%	100.0%	27	27	45
		CAD Lipid Therapy	62.0%	100.0%	32	32	41
		IVD Aspirin Use (NQF 0068)	67.0%	94.1%	16	17	66
		Colorectal Cancer Screening (NQF 0034)	42.0%	0.0%	0	0	0
		Screening for Depression and Follow-Up Plan (NQF 0418)	76.0%	88.2%	15	17	72
		HIV and Pregnant (UDS)	42.0%	100.0%	32	32	0
		Hypertension Controlling High Blood Pressure (NQF 0018)	24.0%	50.0%	1	2	19
		Diabetes A1c > 9 or Untested (NQF 0059)	51.0%	100.0%	89	89	0

Patient Cohort Example



Clinical Operations - Visit Planning

pvpview

Start Date	End Date	Period Tense	Providers	MRN List	Cohort
04/29/2018	04/29/2018	Most Recent Enco…	Providers		DM PDSA

Update

Total Providers: 1

Augustine, Greg — **1 Scheduled Appointment**

Export this Provider to PDF

9:00 AM | Sunday, April 29, 2018 — **Visit Reason: Office visit**

Ruscher, Korey	Sex at Birth: M	Phone: 774-741-3810	Last Phys: 3/16/2018	PCP: Gunther, Eric
MRN: 2796920	Gender Identity: Female	Language: English	Portal Access: 11/07/2017	Payer: Medicaid
DOB: 11/2/1984 (33 years)	Sexual Orientation: Lesbian or gay	Risk: **High**	Cohorts: DM PDSA	Care Manager: Prudence Grisham

Diagnoses (12)

AMI	CP	IVD
ASM	DEP/BP	Pre-DM
CAD	DM	SED
COPD	HIV	SUD

Risk Factors (3)

ACT	Preg	TOB

SDOH (11)

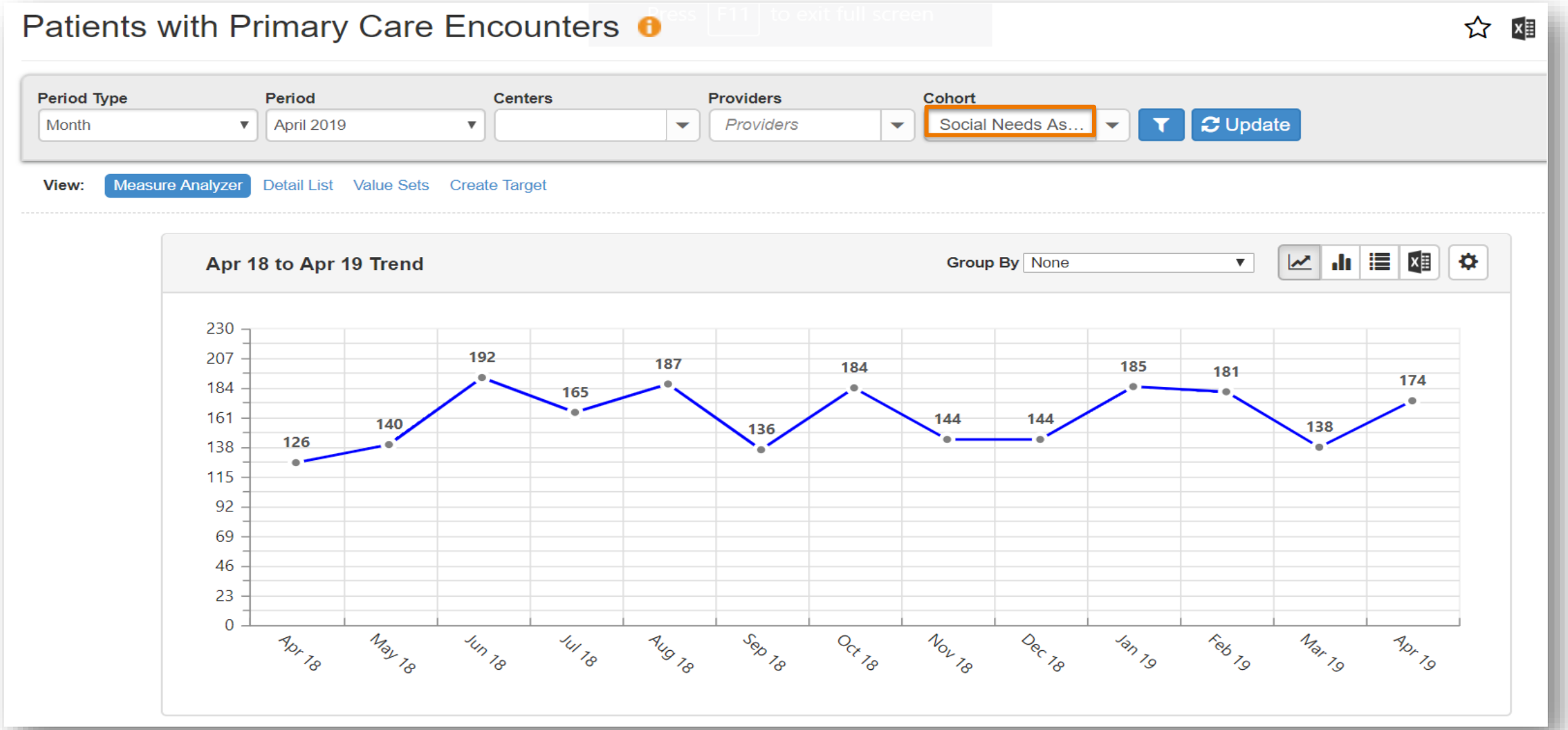
HOUSING	CHILDCARE	EMPLOYMENT
FOOD	CLOTHING	RACE
MATERIAL	ISOLATION	MIGRANT
SECURITY	SAFETY	

Alert	Message	Most Recent Date	Most Recent Result
Pap Anal	Missing		
A1c	Out of Range	3/16/2018	13.8
Gonorrhea	Missing		
Viral Load Suppression	No Viral Load	8/8/2016	
AUDIT	Missing		
Violence Scr	Overdue	8/1/2016	N
High Risk Opioid Rx	At risk	3/16/2018	N
Opioid Prescribing Risk	At risk	3/16/2018	N
Opioids 5+ Prescribers	At risk	3/16/2018	Y
Prenatal	Missing		
Dental	Missing		

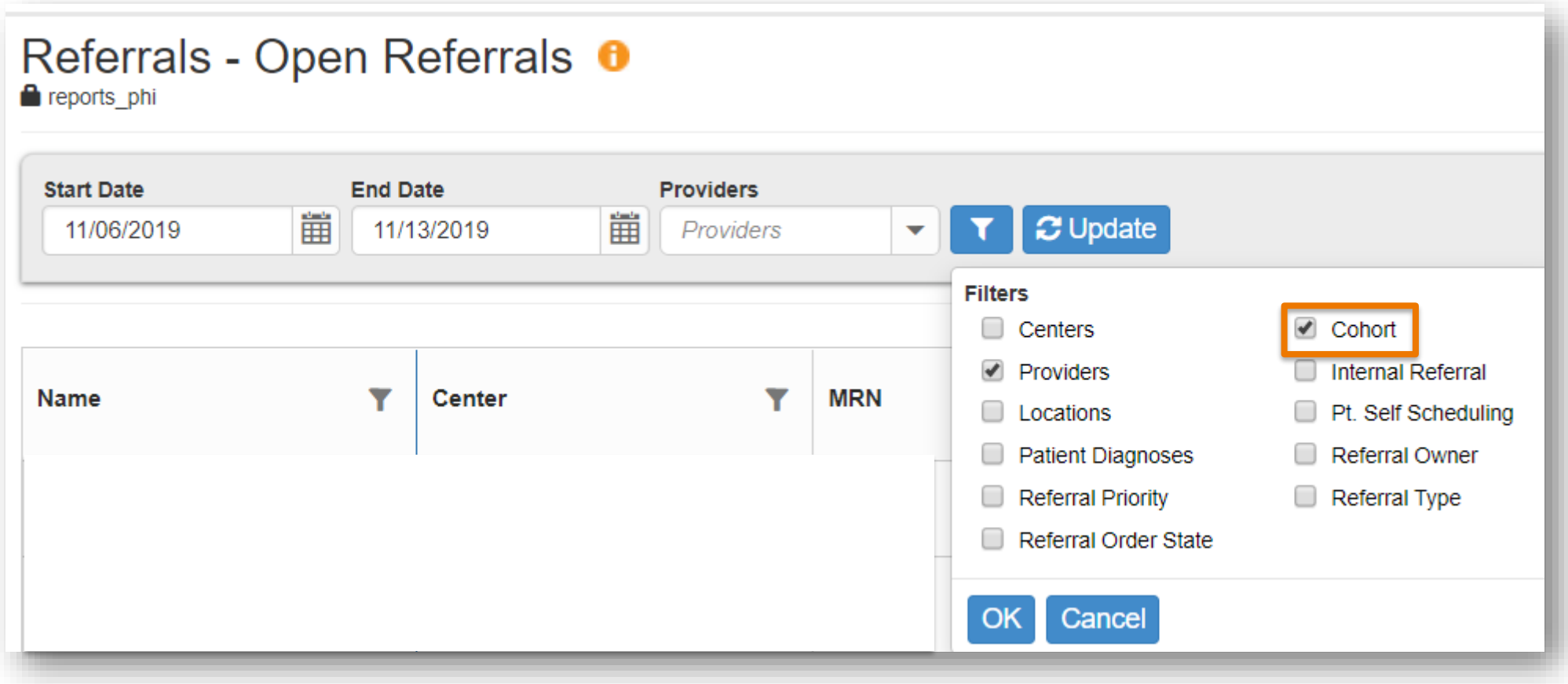
Open Referral w/o Result	Specialist/Location	Ordered Date	Appt. Date
Gastroenterology	Samantha Frost / Brookline	3/16/2018	3/30/2018
Nutritionist	Samantha Frost / Boston	3/16/2018	4/2/2018
Gastroenterology	John Smith / Brighton	11/7/2017	12/4/2017
Gastroenterology	Samantha Frost / Burlington	11/7/2017	
Radiology	John Smith / Boston	11/7/2017	
Accupuncture	Jim Cohen / Burlington	6/1/2017	6/18/2017
Nutritionist	Jim Cohen / Boston	6/1/2017	

SDOH Assessed in Primary Care Using Cohort

azara healthcare



Applying the Cohort Filter to Referrals



Next Steps and Vision

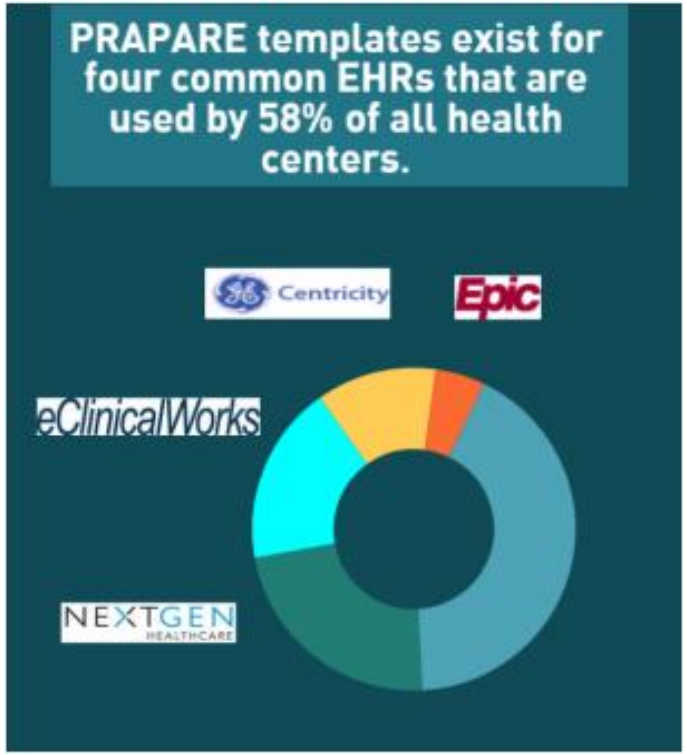
Where are we going from here?

SDOH Future Features

- ✓ Filter capability available in late June 2018.
  - All SDOH criteria
  - SDOH Tally count
- ✓ Basic measures available in Fall of 2018.
  - SDOH Survey Completed
- ✓ SDOH Assessed Dashboard
- ✓ Risk Criteria using an SDOH count (e.g., 0-3, 4-7, 8-12, >=13) – June 2019
- ✓ Cohorts available in Referral Module – May 2019
- Future Needs
  - Alerting needs
  - Protective factors /assets
  - Work with NACHC on weighted SDOH criteria
  - CHWs – qualifying visit

Resources

- NACHC PRAPARE Resources http://www.nachc.org/research-and-data/prapare/)
- PRAPARE Toolkit http://www.nachc.org/research-and-data/prapare/toolkit/
  - Access EHR templates
  - Resources for Responding to Social Determinants of Health



Questions?