Using Data Analysis to Drive Health Equity

The Health Center Experience

CHAD Conference
September 14, 2021
Zak Clare-Salzler
www.partnershiphealthcenter.org

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Outline

1. Principles of data analysis
2. Gathering data and how to approach PRAPARE
3. Azara DRVS functionality
4. Azara DRVS PRAPARE module
5. Breakout session
6. COVID-19 vaccination equity
7. Questions and ideas

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Data for Action

Principles for being data informed

Garbage In, Garbage Out

- Your analysis can only be as good as the data that you start with.

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Data In

- EHR data are notoriously messy, lack structure, and can be difficult to access.
- Striving for *perfect* data may be overly ambitious.
- More important to know the data quality landscape.
- Workflows should empower patient-facing staff while adhering to good data management principles.

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Data Out

- Analyses and reports support:
  - Grant funding
  - Program development
  - Outreach and community partnerships
  - Operational and quality improvement
  - Panel management
  - Patient-centered care

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Stages of Analytics Development

Excel sheets, basic reporting & financials; not strategic nor systematically supporting improvement projects

Dedicated data analyst, at least one BI tool, simple dashboards

Warehousing, automating, broadening scope

Predicting, correlating, integrating multiple data types quickly

Supporting Analytics Development

- Utilize structured templates and smart forms when possible.
- Reinforce good workflows among staff who add information to patient charts.
- Invest in data analysts, HIT, and data management tools.

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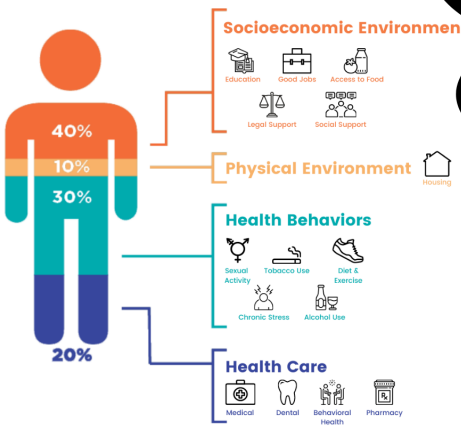
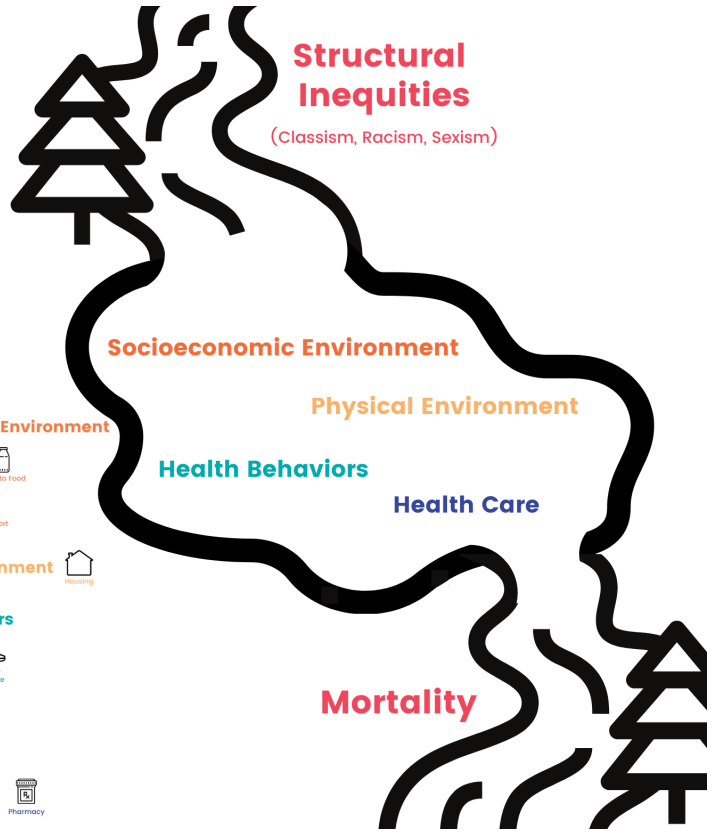
Gathering Data

Guiding values to PHC's approach

Health Is Much More Than Healthcare

- On average, **80%** of patient wellness is correlated with **SDOH and behaviors**, while access to quality **health care** accounts for only **20%**.*





*Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

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Collaborative

- **Toffer Lehnherr**, Health Equity Coordinator, *PHC*
- **Alana McCreery**, Community Health Specialist, *PHC*
- **Becca Goe**, Director of Innovations, *PHC*
- **Ariel Singer**, *Oregon Primary Care Association*
- **Stephanie Castano**, *Oregon Primary Care Association*

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June 2020 PRAPARE Pilot

- Community Health Workers called patients with addresses in a specific lower-income city neighborhood.

- This pilot informed CHWs *HOW* to administer the PRAPARE screener.

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PRAPARE Tool and eCW Smart Form

Personal Characteristics

1. Are you Hispanic or Latino?

Yes	No	I choose not to answer this question

2. Which race(s) are you? Check all that apply

Asian	Native Hawaiian
Pacific Islander	Black/African American
White	American Indian/Alaskan Native
Other (please write):	
I choose not to answer this question	

3. At any point in the past 2 years, has season or migrant farm work been your or your family's main source of income?

Yes

4. Have you be the United

Yes

5. What langu

Family & Hom

6. How many you current

I choose n

7. What is you

I have hou
I do not ha a hotel, in street, on
I choose n

8. Are you worried about losing your housing?

Yes	No	I choose not to answer this question

9. What address do you live at?
Street:_____
City, State, Zip code: _____

Money & Resources

10. What is the highest level of school that you have finished?

Less than high school degree	High school diploma or GED
More than high school	I choose not to answer this question

14. 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**? Check all that apply.

Yes	No	Food	Yes	No	Clothing
Yes	No	Utilities	Yes	No	Child Care
Yes	No	Medicine or Any Health Care (Medical, Dental, Mental Health, Vision)			
Yes	No	Phone	Yes	No	Other (please write):
I choose not to answer this question					

15. Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living? Check all that apply.

Yes, it has kept me from medical appointments or
Yes, it has kept me from non-medical meetings, appointments, work, or from getting things that I need
No
I choose not to answer this question

Social and Emotional Health

16. How often do you see or talk to people that you care about and feel close to? (For example: talking to friends on the phone, visiting friends or family, going to church or club meetings)

Less than once a	1 or 2 times a week
3 to 5 times a week	5 or more times a
I choose not to answer this question	

17. Stress is when someone feels tense, nervous, anxious, or can't sleep at night because their mind is troubled. How stressed are you?

Not at all	A little bit
Somewhat	Quite a bit
Very much	I choose not to answer this question

Optional Additional Questions

18. In the past year, have you spent more than 2 nights in a row in a jail, prison, detention center, or juvenile correctional facility?

Yes	No	I choose not to answer this

19. Are you a refugee?

Yes	No	I choose not to answer this

20. Do you feel physically and emotionally safe where you currently live?

Yes	No	Unsure
I choose not to answer this question		

21. In the past year, have you been afraid of your partner or ex-partner?

Yes	No	Unsure
I have not had a partner in the past year		
I choose not to answer this question		

Has lack of transportation kept you from medical appointments, meetings, work or from getting things needed for daily living?

- ☐ Yes, it has kept me from medical appointments or from getting my medications
- ☐ Yes, it has kept me from non-medical meetings, appointments, work, or getting things needed for daily living
- ☐ No
- ☐ I choose not to answer this question

Social and Emotional Health

How often do you see or talk to people that you care about and feel close to? (For example: talking to friends on the phone, visiting friends or family, going to church or club meetings)

- ☐ Less than once a week
- ☐ 1 or 2 times a week
- ☐ 3 to 5 times a week
- ☐ More than 5 times a week
- ☐ I choose not to answer this question

How stressed are you? Stress is when someone feels tense, nervous, anxious, or can't sleep at night because their mind is troubled

- ☐ Not at all
- ☐ A little bit
- ☐ Somewhat
- ☐ Quite a bit
- ☐ Very much
- ☐ I choos not to answer this question

Additional Questions

In the past year have you spent more than 2 nights in a row in a jail, prison, detention center, or juvenile correctional facility?

- ☐ Yes
- ☐ No
- ☐ I choose not to answer this question

Are you a refugee?

Print Preview... | Print... | Fax | Save | Close

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Key Values

- Trauma-informed Care
- Free, Prior & Informed Consent
- Empathic Inquiry

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Trauma-informed Care

- Not accomplished through any single particular technique or checklist
  - Prevalence of trauma
  - Impact of trauma on health and engagement to services
  - Current service systems can re-traumatize individuals

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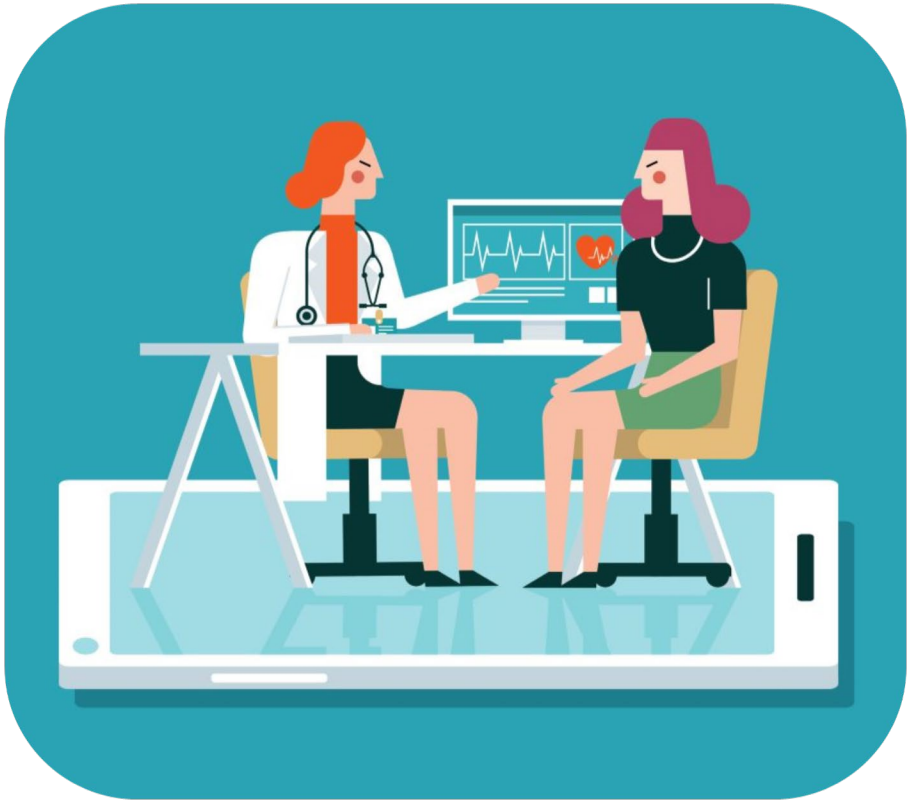
Free, Prior & Informed Consent

- Free
- Prior
- Informed
- Ongoing



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Empathic Inquiry

- Guided discussion
  - Open-ended questions
  - Active listening
  - Self-disclosure
- Allow people to draw their own conclusions without judgement

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Empathic Inquiry

- Strengths-based framework
  - Resiliency
- Respectful
- Curious
- Compassionate
- Safety
- Self-determination / agency

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Values into Practice

- Develop a script
  - Practice with co-workers
- Iterative process
  - What will work for your communities?

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PHC's PRAPARE Journey

PRAPARE pilot

Phone outreach to established patients and new patient follow-up.

3-6/2020

2020: PHC decided to utilize the 28 questions from the PRAPARE form in conjunction with Empathic Inquiry to screen all patients for SDOH.

13/27 asked annually

4/2020

Food & housing asked at intake

During rooming process, MA asks if experiencing **food or housing insecurity**. Refers to social work for support.

15/27 asked annually

SDOH strategic goal set

Impeccable Quality/Equity: "Create plan and timeline for universal SDOH screening."

1/1/2021

7/13/2021

Transportation asked at intake

During rooming process, MA asks if experiencing **transportation barriers**. Refers to social work for support.

16/27 asked annually

Added more PRPARE to intake

Added education, jail, refugee, and revised social interaction questions to annual registration.

8/2021

20/27 asked annually

Next Steps Toward Universal PRAPARE Screening

- *September:*
  - Integrate social work students utilizing PRAPARE.
  - Enhance transportation resources.
- *October:*
  - Define technology & personnel roles for annual patient screening that includes remaining seven PRAPARE questions.
- *Future:*
  - Reinforce use of the PRAPARE smart form in EHR and enhance referrals to social work dept., community resources.

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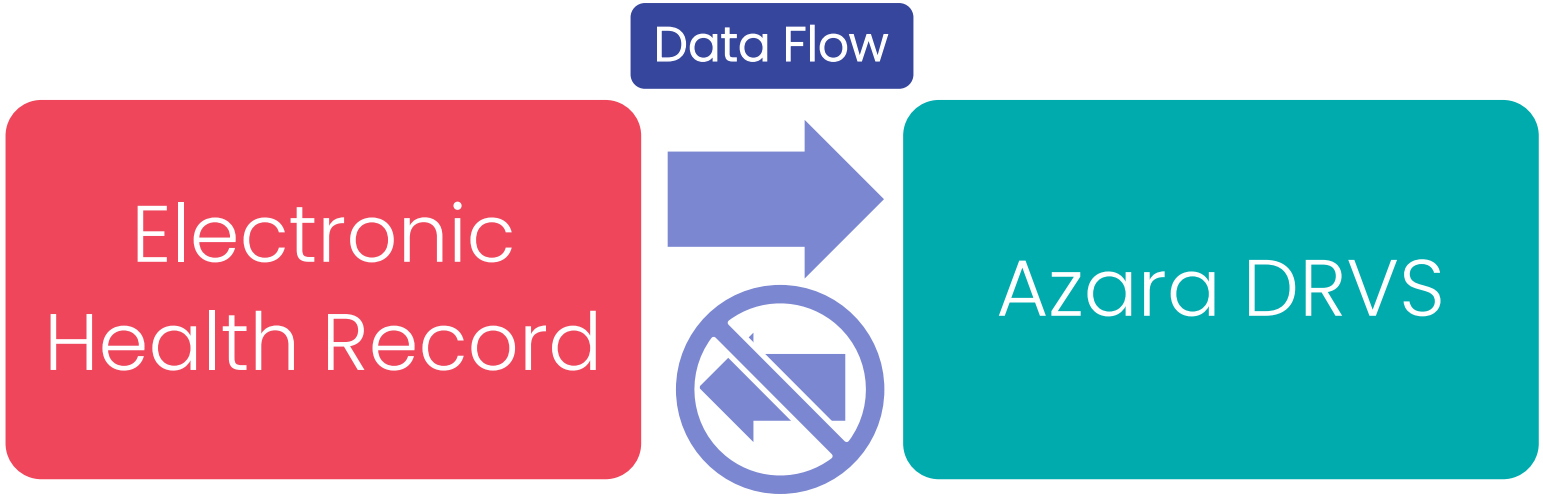
Leveraging SDOH in Azara DRVS

Disaggregating patient outcomes and measures

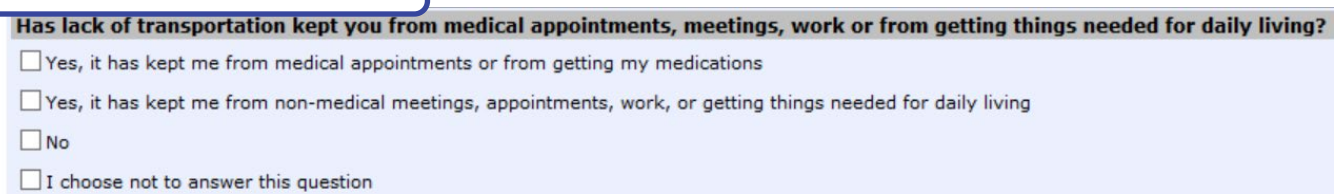
Azara DRVS

- Centralized data reporting, visualization, and analysis tool for electronic health record data.



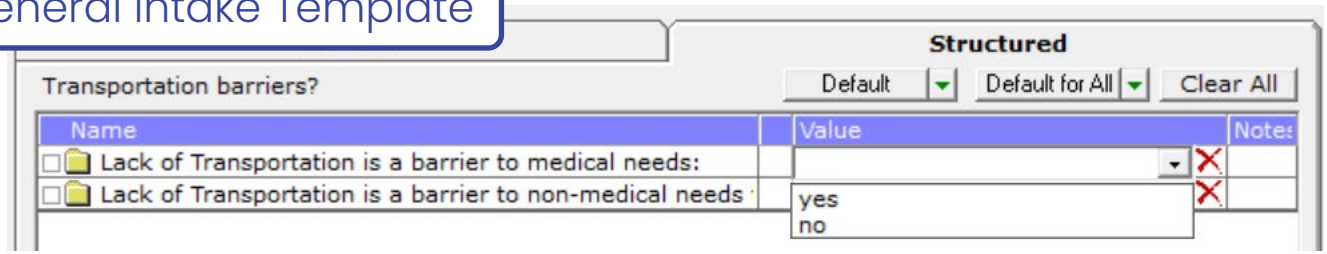
DRVS Mapping

PRAPARE Smart Form



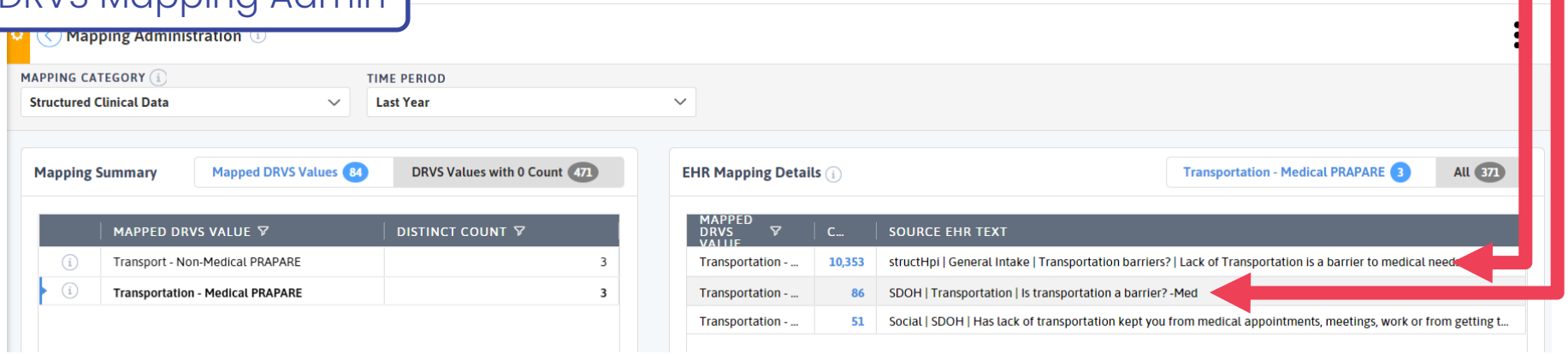
Yes/No

General Intake Template



Yes/No

DRVS Mapping Admin



PRAPARE Categories

- Education
- Employment
- Income*
- Housing Insecurity*
- Homelessness
- Material Insecurity
  - Child care
  - Clothing
  - Food*
  - Medicine
  - Phone
  - Utilities
- Domestic Violence
- Safety
- Social Integration
- Stress
- Medical Transportation*
- Non-Medical Transportation*
- Incarceration

None?

* UDS Appendix D

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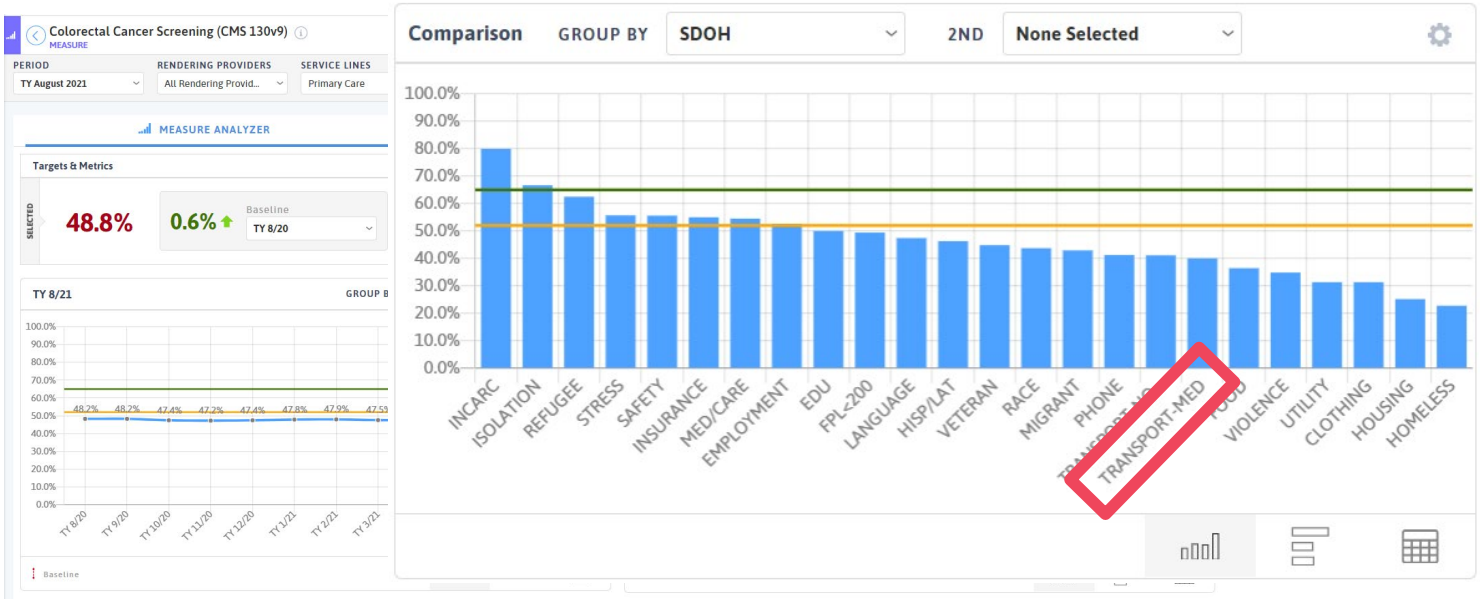
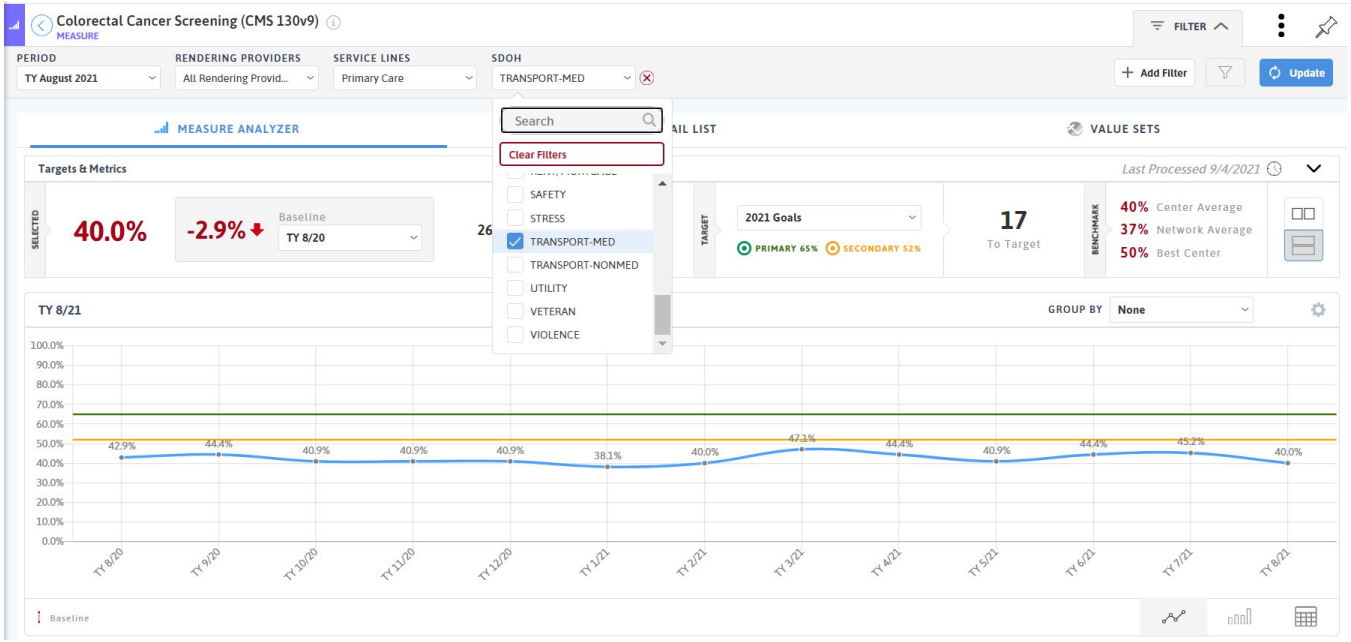
Grouping

- Measures can be disaggregated into patient groups.
  - Group comparisons can reveal health disparities and inform quality improvement and operational initiatives.



Filtering

- Measures can be filtered on a number of variables.
  - For example, patients with medical transportation barriers.



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PRAPARE Module

azara healthcare + SDOH

- DRVS PRAPARE module includes measures, dashboards, and a registry:
  - (2) Measures
    - SDOH Assessment Done, SDOH Core Screening
  - (2) Dashboards
    - Social Needs All Patients, Social Needs Assessed
  - (1) Registry

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PRAPARE Module Measures

- *Social Determinant of Health Assessment Done*:
  - Numerator
    - Patients with a completed health related social needs assessment – defined by clinic.
  - Denominator
    - Patients with a UDS qualifying encounter.

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PRAPARE Module Measures

- *Social Determinant of Health Core Criteria Screening*:
  - Numerator
    - Patients with social needs assessments that include: Food, housing status, transportation, utility insecurity, and either employment, education, domestic violence, or social integration.
  - Denominator
    - Patients with a UDS qualifying encounter.

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PRAPARE Module Dashboards

- *Social Needs All Patients*
  - Overview of SDOH documented in whole patient population.

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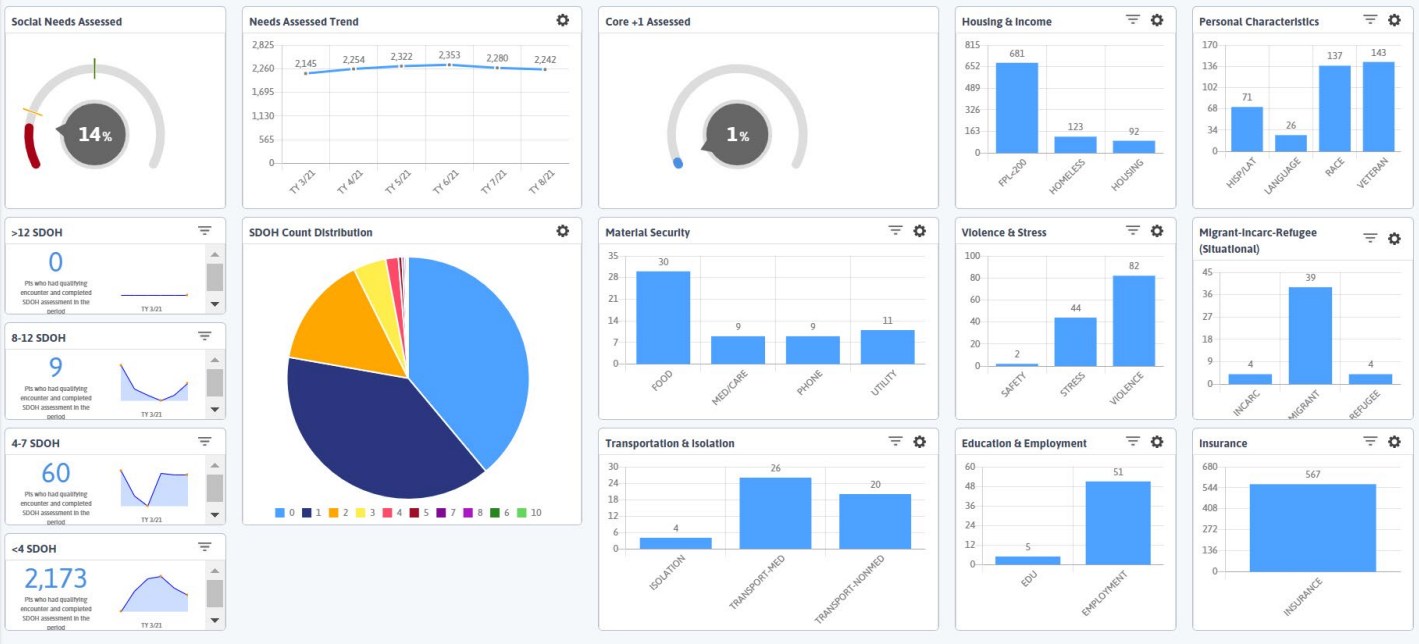
PRAPARE Module Dashboards

- *Social Needs Assessed*
  - Overview of social needs screenings occurring in clinic.
    - Monitor how well clinic is screening the population.



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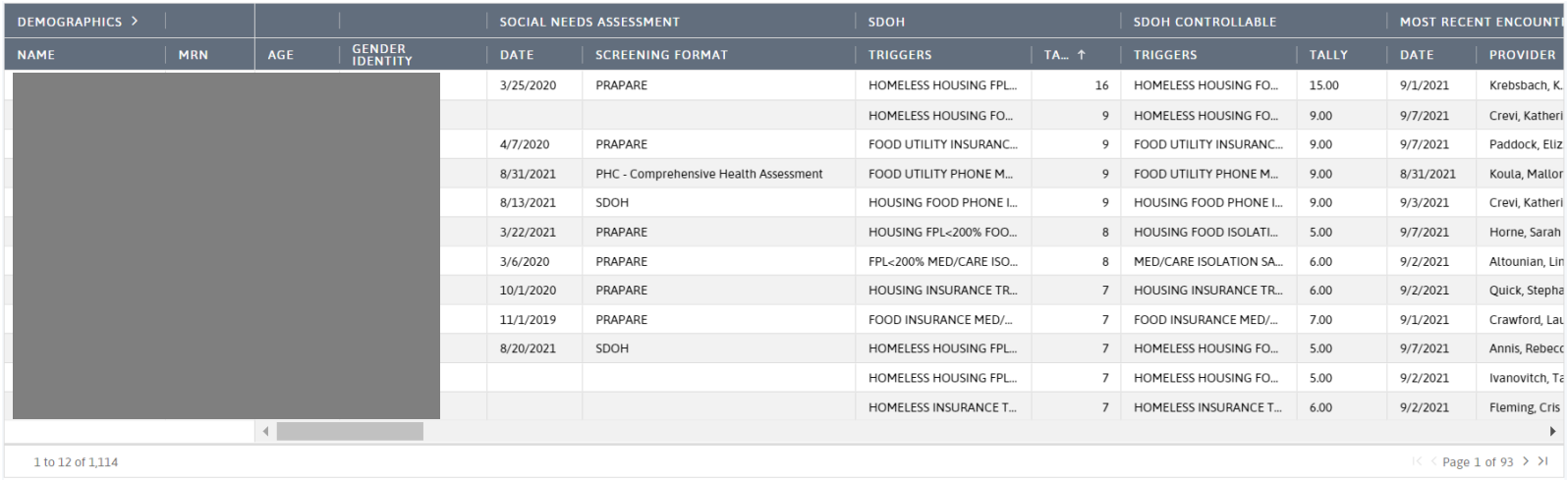
PRAPARE Module Registry

- Population management tool centered on SDOH data.
- Registries list sets of data elements for each patient.



DEMOGRAPHICS				SOCIAL NEEDS ASSESSMENT		SDOH		SDOH CONTROLLABLE		MOST RECENT ENCOUNTE	
NAME	MRN	AGE	GENDER IDENTITY	DATE	SCREENING FORMAT	TRIGGERS	TA... ↑	TRIGGERS	TALLY	DATE	PROVIDER
[redacted]				3/25/2020	PRAPARE	HOMELESS HOUSING FPL...	16	HOMELESS HOUSING FO...	15.00	9/1/2021	Krebsbach, K.
						HOMELESS HOUSING FO...	9	HOMELESS HOUSING FO...	9.00	9/7/2021	Crevi, Katheri
				4/7/2020	PRAPARE	FOOD UTILITY INSURANC...	9	FOOD UTILITY INSURANC...	9.00	9/7/2021	Paddock, Eliz
				8/31/2021	PHC - Comprehensive Health Assessment	FOOD UTILITY PHONE M...	9	FOOD UTILITY PHONE M...	9.00	8/31/2021	Koula, Mallor
				8/13/2021	SDOH	HOUSING FOOD PHONE I...	9	HOUSING FOOD PHONE I...	9.00	9/3/2021	Crevi, Katheri
				3/22/2021	PRAPARE	HOUSING FPL<200% FOO...	8	HOUSING FOOD ISOLATI...	5.00	9/7/2021	Horne, Sarah
				3/6/2020	PRAPARE	FPL<200% MED/CARE ISO...	8	MED/CARE ISOLATION SA...	6.00	9/2/2021	Altounian, Lin
				10/1/2020	PRAPARE	HOUSING INSURANCE TR...	7	HOUSING INSURANCE TR...	6.00	9/2/2021	Quick, Stepha
				11/1/2019	PRAPARE	FOOD INSURANCE MED/...	7	FOOD INSURANCE MED/...	7.00	9/1/2021	Crawford, Lau
				8/20/2021	SDOH	HOMELESS HOUSING FPL...	7	HOMELESS HOUSING FO...	5.00	9/7/2021	Annis, Rebecc
						HOMELESS HOUSING FPL...	7	HOMELESS HOUSING FO...	5.00	9/2/2021	Ivanovitch, Ta
						HOMELESS INSURANCE T...	7	HOMELESS INSURANCE T...	6.00	9/2/2021	Fleming, Cris

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Page 1 of 93

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Breakout Session (10 minutes)

- Along the stages of analytics development, where do you see your organization?
- Do you collect SDOH data? What questions do you ask and how?
- What are lessons learned?
- Where do you see a tool like DRVS facilitating analytics development and patient equity?

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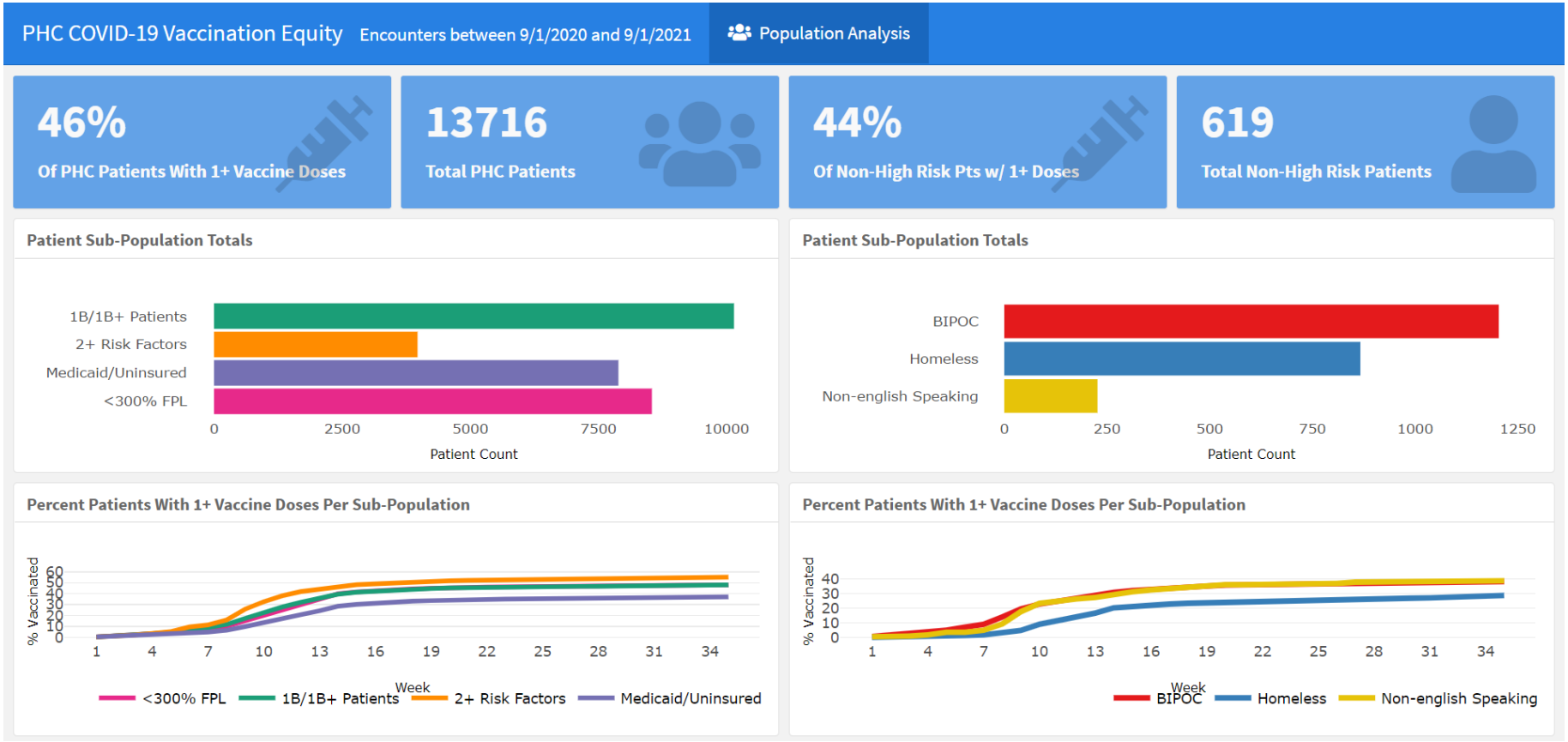
COVID-19 Vaccinations

Tracking vaccinations & equity using SDOH

Tracking Vaccination Equity



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Discerning Vaccination Equity

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Questions/Ideas?