



# Improving Diabetes Care through Health IT

Thursday, June 17, 2021 | 12 – 1 PM

# WELCOME



**Hannah Stanfield**  
Care Improvement &  
Innovation Manager

## FEATURED PRESENTER



**Chris Espersen**  
Quality Consultant  
The HITEQ Center



# Housekeeping



Your lines are currently muted.



You can raise your hand to have your line unmuted, or type into the *Chat* or *Questions* boxes.

This session is being recorded.

Slides and a recording will be available after the webinar.

HEALTH INFORMATION TECHNOLOGY,

**HIT EQ**

EVALUATION, AND QUALITY CENTER

**Improving Diabetes Care with Population Health Tools**

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June 17, 2021

# About The HITEQ Center

The HITEQ Center is a HRSA-funded National Training and Technical Assistance Partner (NTTAPs) that collaborates with HRSA partners including Health Center Controlled Networks, Primary Care Associations and other NTTAPs to engage health centers in the optimization of health IT to address key health center needs through:

- A **national website** ([www.hiteqcenter.org](http://www.hiteqcenter.org)) with health center-focused resources, toolkits, training, and a calendar of related events.
- **Learning collaboratives, remote trainings, and on-demand technical assistance** on key topic areas.



## HITEQ Topic Areas

Access to comprehensive care using health IT and telehealth

Privacy and security

Advancing interoperability

Electronic patient engagement

Readiness for value based care

Using health IT and telehealth to improve Clinical quality and Health equity

Using health IT or telehealth to address emerging issues: behavioral health, HIV prevention, and emergency preparedness

# Agenda

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- Introduction
- Use of PHM
- Data and report confidence
- Utilization of diabetes data
- Getting Started!

# Our Work Together Today

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- Optimize your population health management system
- Build on your current actionable data
- Utilize your reports for multiple purposes
- Amplify each other's work!

**Use of  
Population  
Health  
Management**

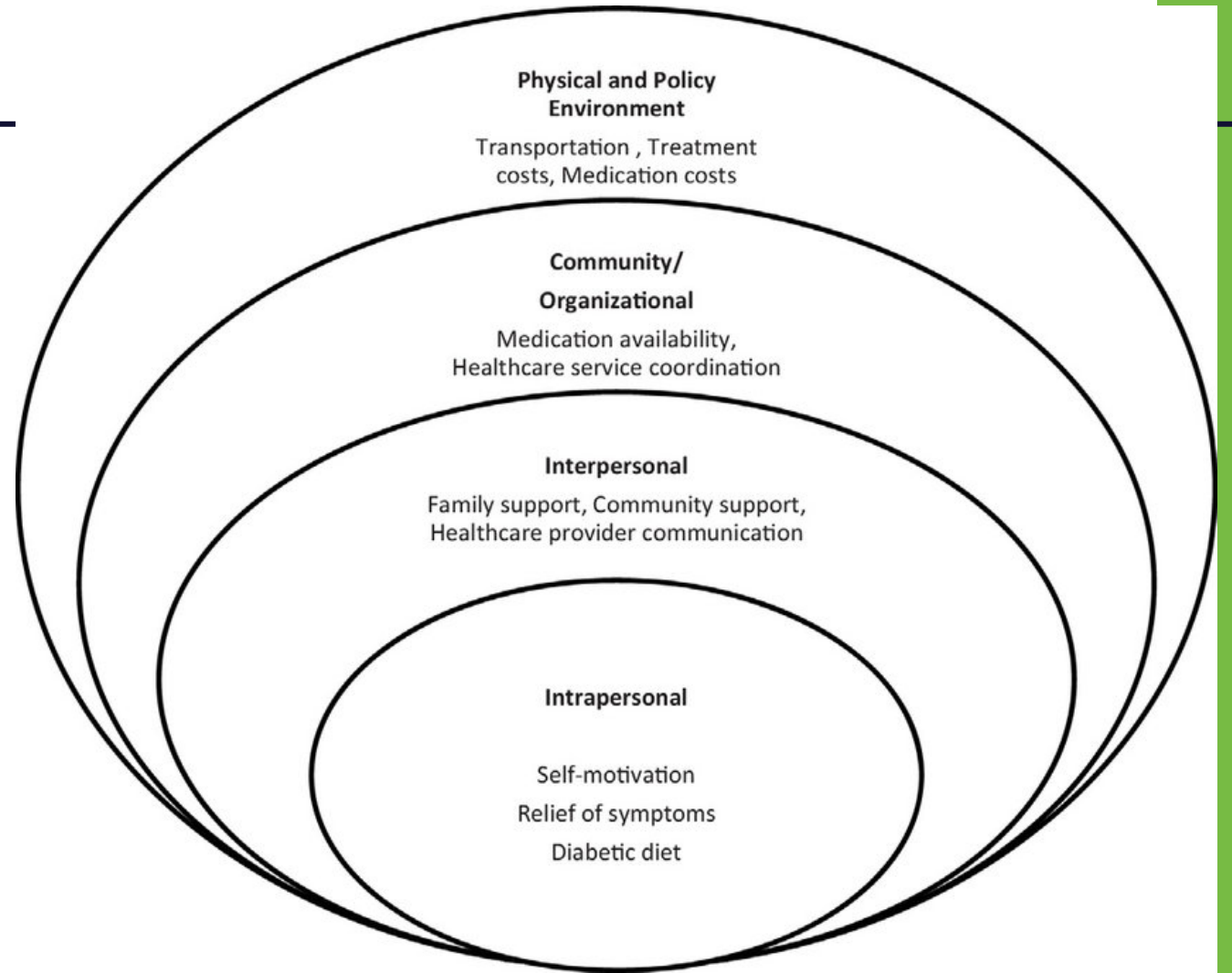




# PHM Overview

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- Changing face
- Human Centered Design
- CDS
- Pt/prov
- Org/pop level
- Comm level



Source: Mentock et al, April 2017, [Diabetes and Metabolic Syndrome Clinical Research and Reviews](#)

# Changing Face of Diabetes



# Human Centered Design

International Organization of Standards:

*'...an **approach** to interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying **human** factors/ergonomics, usability knowledge, and techniques'*



## INSPIRATION

In this phase, you'll learn how to better understand people. You'll observe their lives, hear their hopes and desires, and get smart on your challenge.



## IDEATION

Here you'll make sense of everything that you've heard, generate tons of ideas, identify opportunities for design, and test and refine your solutions.



## IMPLEMENTATION

Now is your chance to bring your solution to life. You'll figure out how to get your idea to market and how to maximize its impact in the world.

# CDS

COMPUTERISED PATIENT SUPPORT SYSTEM 2 - v1.5.0 (r7464) - NUH (MAAE)

VET HIDS eRX WORKLIST SIGN RESULTS GMRS ORDERS WORKLIST MEDICAL REPORT TO-DO-LIST TOOLS REFERENCES

PAT: **DIABETIC L13** ENDOCRINE DOCTOR:IC CLASS SUBSIDISED

OBS DATE: 14 Jul 2014 1.52m, 59.1kg, BMI 25.6, BSA 1.58 CDM Reminders (4) C-Doc

RESULTS LAST 6 MONTHS From 09-MAR-2014 to 09-SEP-2014 Last Updated: 09-Sep-2014 10:08:54

REPORT ALL 2 CRITICAL 39 ABNORMAL 13 NORMAL 0 UNSIGNED TOTAL: 63

SPECIMEN DATE/TIME	TEST	RESULTS	UNIT	REF INTERVAL
24-JUN-2014 10:15	Lipid Monitoring	10.3	%	6.5 - 7.0 Optimal 7.1 - 8.0 Sub-optimal >8.0 Unacceptable NGSP/DOCT HbA1c (%)
22-APR-2014 11:02	Glucose, POCT	89	mmol/mol	26 - 47 Ideal 48 - 53 Optimal 54 - 64 Sub-optimal >64 Unacceptable (FDC HbA1c) (mmol/mol)

1. Static numerical result display may easily evade physician attention

2. Results that are relevant to diabetes care are scattered all over different parts of patient's result page

### Diabetes Dashboard - ID: 1

Birthdate: 23 May 1953 (62.3 years) Sex: Female Race: Malay Nationality: Singaporean

**Overview**

<b>Glycemic Control</b>	<b>Renal</b>
Fasting Glucose NA Not done	eGFR 62.0 ml/min/1.73m <sup>2</sup> 02 Jul 2015
HbA1c * 9.3 % 19 Apr 2015	U.Aib/ Creatinine Ratio NA Not done
<b>Lipids</b>	
Total Cholesterol 3.91 mmol/L 19 Dec 2013	HDL-C 0.81 mmol/L Not done
LDL-C * 2.3 mmol/L 19 Dec 2013	Triglycerides NA Not done

Green: Good control Amber: Sub-optimal Control Red: Unacceptable Control \* : Recommended test interval has been exceeded

Patient details

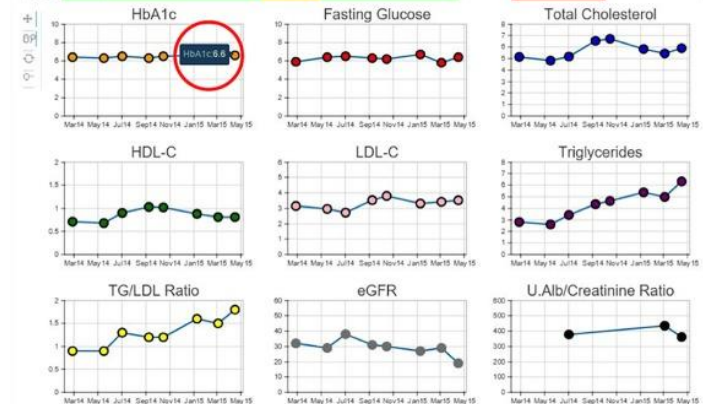
Summary Dashboard

Lab Test	Recommendation
HbA1c	4.1 months since last test.
Triglycerides	No previous record of test.
HDL-C	No previous record of test.
LDL-C	20.3 months since last test.

Alerts

Date	HbA1c (%)	Fasting Glucose (mmol/L)	Total Cholesterol (mmol/L)	HDL-C (mmol/L)	LDL-C (mmol/L)	Triglycerides (mmol/L)	TG/LDL Ratio	eGFR (ml/min/1.73m <sup>2</sup> )	U.Aib/Creatinine Ratio (mg/g)
2013-12-17	6.1	5.3	4.99	1.12	2.96	1.75	0.6	11.0	
2014-03-17	6.1	5.7	4.93	1.25	3.14	1.19	0.4	12.0	
2014-06-09	6.2	5.7	4.47	1.11	2.61	1.65	0.6	10.0	
2014-09-01	6.0	5.2	4.57	1.3	2.34	2.04	0.9	10.0	
2014-11-24	5.7	4.9	4.74	1.23	2.89	1.36	0.5	10.0	
2015-03-23	6.2	5.4	4.56	1.08	2.61	1.91	0.7	10.0	
2015-06-24	6.0	5.2	4.0	0.96	2.16	1.93	0.9	10.0	

Table



Interactive graphs

# Preparing for the Visit

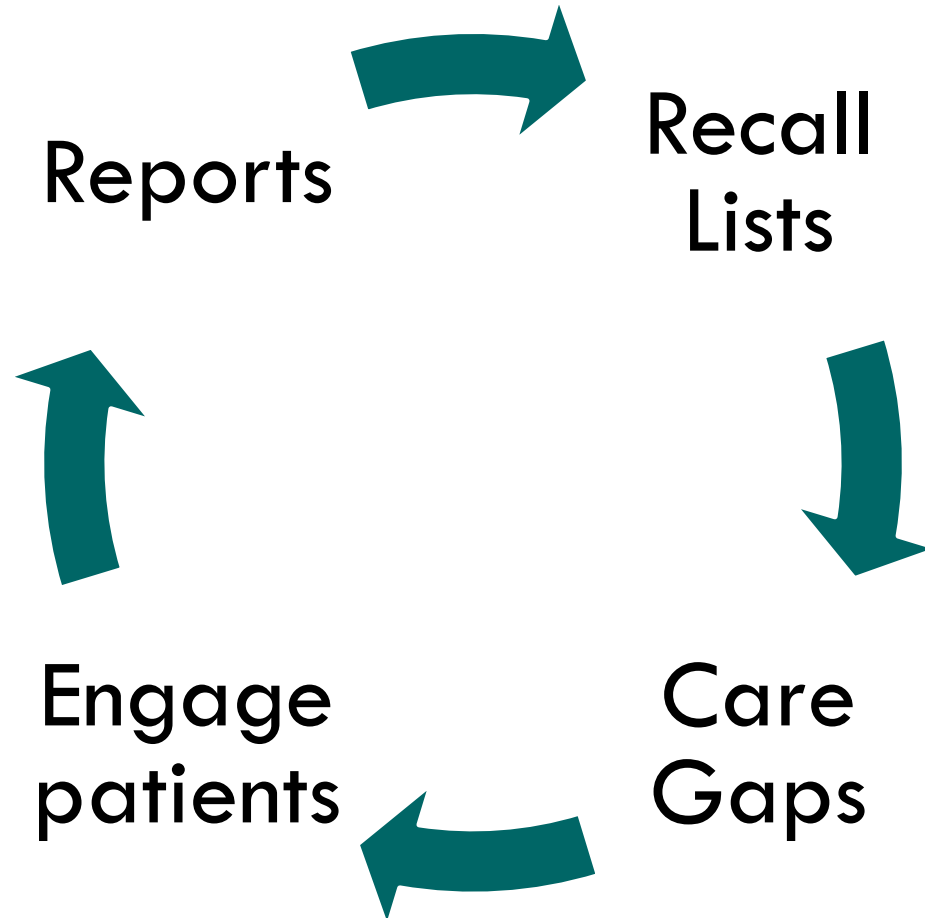
Time	Provider	Resource	Type	Patient	Age	Sex	Language	Race	PCP	Acuity
10:45 AM			Forms			M		White (uds)		0.48
<b>D H L</b>	Reason: History (12 Mo.): No Shows: <b>3</b> Canceled: 2 Visits: 1 ER: 0 Admits: 0 Last Visit DR: Outstanding Referrals: 0									
	Last BMI: <b>33.62 (11/12/15)</b> Weight Change (6 Mo.): Last BP: 123/76 (11/12/15) Last PHQ:									
	Last Colon Cancer Screening: 8/13/2014 FIT Smoker: No Framingham Risk Factor: 10.7% Last 3 A1c: 6.4 (11/12/15), 6.9 (2/28/15), <b>8.5 (4/16/13)</b>									
	Last 3 BP: 123/76 (11/12/15), 134/81 (2/28/15), 117/73 (8/20/14) Last 2 LDL: 109 (7/18/14)									
	Due: Education: Diabetes (i2i), Education: Diet (i2i), Education: Exercise (i2i), Immunization: Flu (i2i), Immunization: Pneumovax (i2i), Procedure / Referral: Dental Visit (i2i), Procedure / Referral: Depression Screening (i2i), Procedure / Referral: Foot Screening (i2i), Procedure / Referral: Ophthalmology Visit (i2i)									
<b>D H L</b>	Reason: History (12 Mo.): No Shows: <b>4</b> Canceled: 5 Visits: 13 ER: 0 Admits: 0 Last Visit DR: (									
	Last BMI: <b>32.23 (11/23/15)</b> Weight Change (6 Mo.): 2.2 lbs. Last BP: 136/77 (11/23/15) Last PHQ:									
	Last Colon Cancer Screening: Smoker: No Framingham Risk Factor: 5.00% Last 3 A1c: 7 (11/23/15), 7.7 (8/21/15), 6.4 (4/27/15)									
	Last 3 BP: 136/77 (11/23/15), 128/81 (8/21/15), 124/80 (4/27/15) Last 2 LDL: 101 (11/23/15), 105 (10/2/14)									

# Self-Management

- How are you tracking your self-management and patient engagement?
- Patient engagement
  - [Mobile Phone Diabetes Program](#)
  - [Connecting to Community Resources](#)
  - [Blood Glucose Devices](#)
  - [Online Health Coaching](#)
  - [Mayo's Diabetes Medication Choice Decision Aid](#)



# Population Level



## HEDIS Comprehensive Diabetes Care

- What are the difference in your practice?
  - Site
  - Care team
  - Other (e.g., dedicated resources)
- How well are your recalls working?
- Are care gaps met consistently?
- Are outcomes improving?

# **Data and Report Confidence**





# Diabetes Reports: UDS

UDS SUPPORT CENTER, 866-UDS-HELP, UDSHELP330@BPHCDATA.NET

## Section C: Diabetes: Hemoglobin A1c Poor Control

Line	Race and Ethnicity	Total Patients 18 through 74 Years of Age with Diabetes (3a)	Number Charts Sampled or EHR Total (3b)	Patients with HbA1c >9.0% or No Test During Year (3f)
	<b>Hispanic or Latino/a</b>			
1a	Asian			
1b1	Native Hawaiian			
1b2	Other Pacific Islander			
1c	Black/African American			
1d	American Indian/Alaska Native			
1e	White			
1f	More than One Race			
1g	Unreported/Refused to Report Race			
	<i>Subtotal Hispanic or Latino/a</i>			
	<b>Non-Hispanic or Latino/a</b>			
2a	Asian			
2b1	Native Hawaiian			
2b2	Other Pacific Islander			
2c	Black/African American			
2d	American Indian/Alaska Native			
2e	White			
2f	More than One Race			
2g	Unreported/Refused to Report Race			
	<i>Subtotal Non-Hispanic or Latino/a</i>			
	<b>Unreported/Refused to Report Race and Ethnicity</b>			
h	Unreported/Refused to Report Race and Ethnicity			
i	<b>Total</b>			

# Diabetes Reports

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- **UDS**
  - Control by race over time
  - Control by ethnicity over time
  - Disparities in control
  - Disparities in prevalence
- **HEDIS Comprehensive Diabetes Care**
  - A1C
  - Foot exam
  - Eye Exam
  - Nephropathy
  - Blood pressure

# Report Stratification

- Race/ethnicity/language
- Insurance status
- Income/poverty
- Transportation (access to care and healthy behaviors)
- Social Support
- Ability to afford Rx
- Zip code (what resources available? Safety?)



# PRAPARE/SDH Screening

*If screening does not occur in clinic,  
there still are opportunities to look  
at community data*

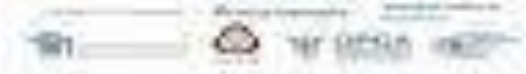


Partners for Improving Access to Community Health Services

PRAPARE Toolkit for Improving and Measuring Cultural, Health Status, and Engagement  
Report Update of PRAPARE<sup>®</sup> for Implementation of September 1, 2018

<p><b>Personal Characteristics</b></p> <p>1. Are you fluent in English?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> <td>I do not speak or understand the English language</td> </tr> </table>		Yes	No	I do not speak or understand the English language	<p>2. Are you fluent in Spanish/another language?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> <td>I do not speak or understand the Spanish/another language</td> </tr> </table>		Yes	No	I do not speak or understand the Spanish/another language												
Yes	No	I do not speak or understand the English language																			
Yes	No	I do not speak or understand the Spanish/another language																			
<p>3. Which race or ethnicity best describes all that apply?</p> <table border="1"> <tr> <td>Asian</td> <td>Other Hispanic</td> </tr> <tr> <td>Black/African American</td> <td>Black/African American</td> </tr> <tr> <td>White</td> <td>Asian or Asian American/Pacific Islander</td> </tr> <tr> <td colspan="2">Other (please specify): _____</td> </tr> <tr> <td colspan="2">I do not know or cannot answer this question.</td> </tr> </table>		Asian	Other Hispanic	Black/African American	Black/African American	White	Asian or Asian American/Pacific Islander	Other (please specify): _____		I do not know or cannot answer this question.		<p>4. Which education level best describes you?</p> <p>None</p> <p>Less than High School</p> <p>High School Graduate or GED</p> <p>Some College</p> <p>College Graduate</p> <p>Master's Degree</p> <p>Postgraduate degree</p> <p>PhD</p> <p><b>Missing or Refused</b></p> <p>10. What is the highest level of education you have finished?</p> <table border="1"> <tr> <td>Less than High School</td> <td>High School Graduate or GED</td> </tr> <tr> <td>Some College</td> <td>College Graduate</td> </tr> <tr> <td>Master's Degree</td> <td>Postgraduate degree</td> </tr> <tr> <td>PhD</td> <td>PhD</td> </tr> </table>		Less than High School	High School Graduate or GED	Some College	College Graduate	Master's Degree	Postgraduate degree	PhD	PhD
Asian	Other Hispanic																				
Black/African American	Black/African American																				
White	Asian or Asian American/Pacific Islander																				
Other (please specify): _____																					
I do not know or cannot answer this question.																					
Less than High School	High School Graduate or GED																				
Some College	College Graduate																				
Master's Degree	Postgraduate degree																				
PhD	PhD																				
<p>5. Are you eligible for your state's, but unable to, receive home care services in your family's usual language of choice?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> <td>I do not speak or understand the English language</td> </tr> </table>		Yes	No	I do not speak or understand the English language	<p>11. What is your marital status?</p> <table border="1"> <tr> <td>Married</td> <td>Divorced</td> <td>Widowed</td> </tr> <tr> <td>Single</td> <td>Partnering with</td> <td>Partnering with</td> </tr> </table> <p>12. What is your insurance status?</p> <p>Medicaid</p> <p>Medicare</p> <p>Private health insurance</p> <p>Uninsured</p> <p>Other (please specify): _____</p> <p>I do not know or cannot answer this question.</p>		Married	Divorced	Widowed	Single	Partnering with	Partnering with									
Yes	No	I do not speak or understand the English language																			
Married	Divorced	Widowed																			
Single	Partnering with	Partnering with																			
<p>6. Has a loved one been diagnosed from the onset of illness of the United States?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> <td>I do not speak or understand the English language</td> </tr> </table>		Yes	No	I do not speak or understand the English language	<p>13. What is your primary mode of transportation?</p> <p>Family &amp; Home</p> <p>14. How many family members, including yourself, do you currently live with?</p> <p>_____</p> <p>I do not know or cannot answer this question.</p>																
Yes	No	I do not speak or understand the English language																			
<p>7. What is your housing situation?</p> <p>I own my home</p> <p>I do not own my home (renting, including with others, or other, as partner, housemate or the tenant on a lease, etc. (in other words))</p> <p>I do not know or cannot answer this question.</p>		<p>15. During the past year, did you or your household receive the services for your family that you needed most? (This information will help us determine if you are eligible for our services)</p> <p>_____</p> <p>I do not know or cannot answer this question.</p>																			

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# SDH Data

countyhealthrankings.org/app/washington/2021/measure/factors/24/map

## Information

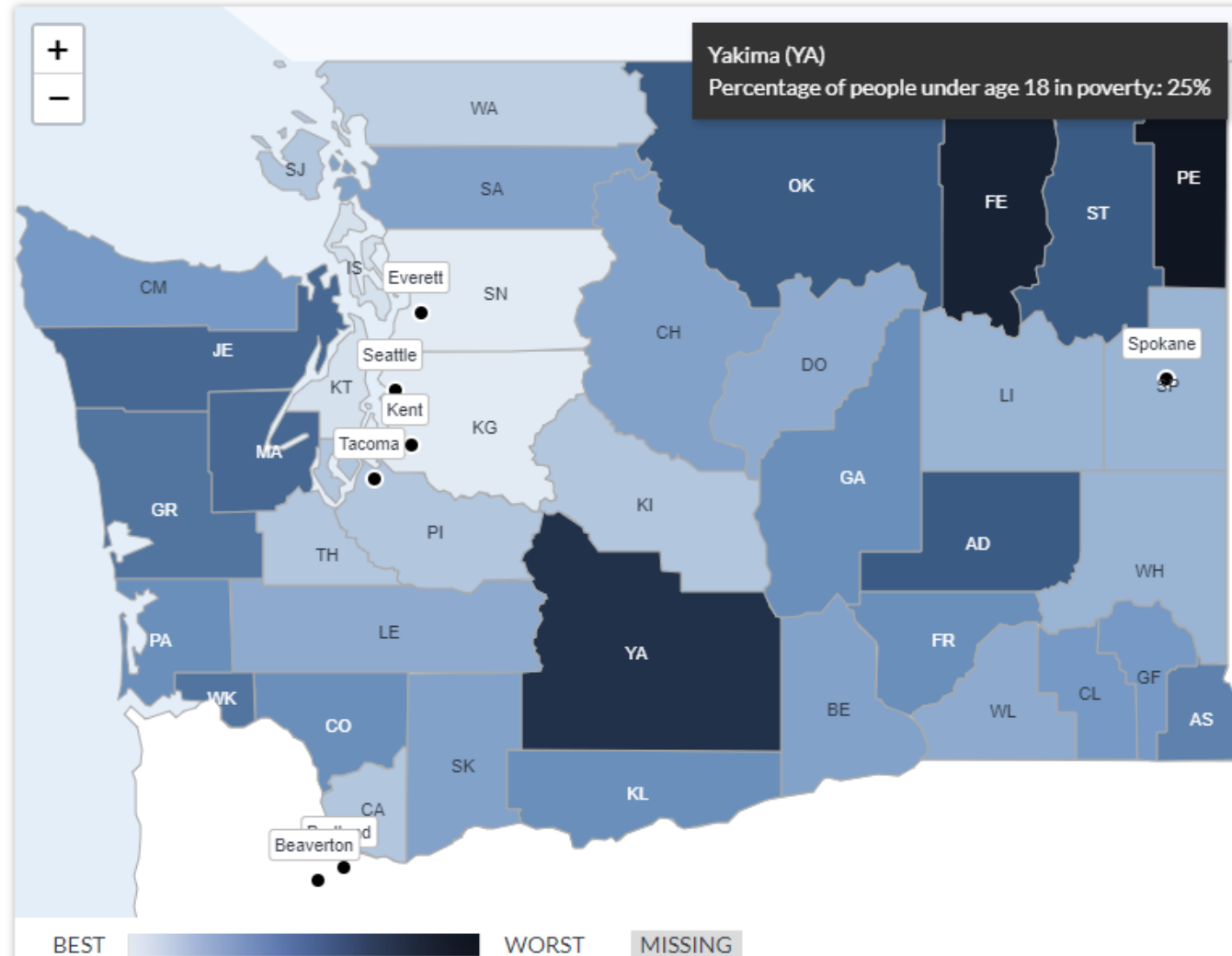
Top U.S. Performers: 10% (10th percentile)

Range in Washington (Min-Max): 8-27%

Overall in Washington: 12%

Years of Data Used:  
2019

Map | Data | Description | Data Source | Strategies



# Trust in Data

Measure:								Report Period:
	Total Cohort							
	# Charts Reviewed	0						
	# in Compliance	0						
#	Patient ID or MRN	Compliant/Non-Compliant	Issue	Form	Obs Term	Solution	Assigned To	D R
<i>Example</i>	<i>12345</i>	<i>Not Compliant (service complete)</i>	<i>No tobacco cessation completed</i>	<i>Tobacco screening form</i>	<i>Tobacco use = Yes</i>	<i>Add value options for smoking cessation counseling</i>	<i>Data Analyst</i>	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								

Instructions

Issue IdentificationResolution

**Audit Tool**

Randomization





# UDS Flags

**Note: Table 7 Cross-Table Considerations:**

- Patients with medical visits on Table 5 are generally eligible for inclusion in eQMs reported on Table 7.
- The relationship between the denominators on Table 7 should be verified as reasonable when compared to the total number of patients by age on Table 3A, patients by race and ethnicity on Table 3B, and the proportion of medical patients on Table 5.
- The count of patients by diagnosis reported on Table 6A will not be the same counts as on Table 7, due to differences in criteria that must be met for inclusion on Table 7.

- Is your medical population primarily older or pediatric?
- Do you have a higher (or lower) prevalence of diabetes in your geographic area?
  - Access to food
  - Access to exercise
  - Housing issues/Redlining
- Is access to care equitable in your area?

# Disparity Reports

healthequitytracker.org/exploredata?mls=1.diabetes-3.53&demo=race\_and\_ethnicity

Investigate rates of Diabetes in Washington

### Diabetes Cases By Race And Ethnicity In Washington

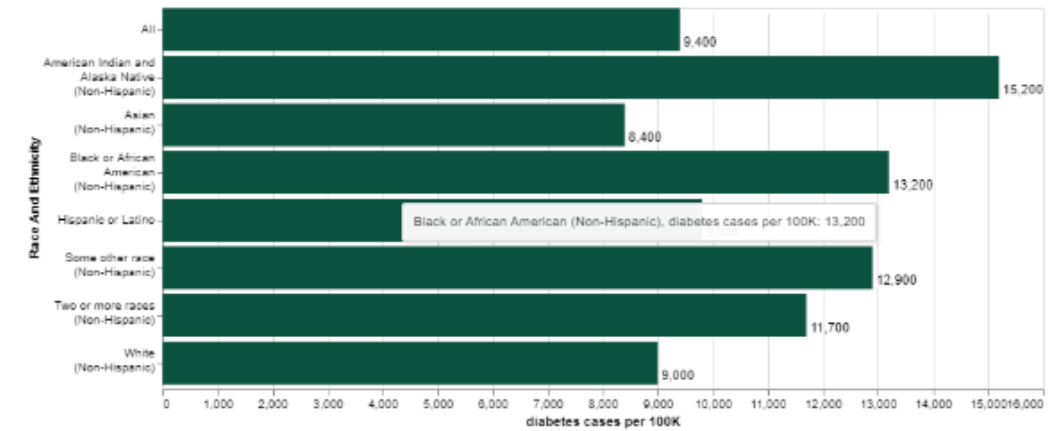
Race And Ethnicity	Diabetes Cases Per 100K People	Share Of Total Diabetes Cases	Population Share
All	9,400	100.0%	100.0%
American Indian and Alaska Native (Non-Hispanic)	15,200	1.7%	1.1%
Asian (Non-Hispanic)	8,400	7.6%	8.5%
Black or African American (Non-Hispanic)	13,200	5.1%	3.7%
Hispanic or Latino	9,800	13.2%	12.7%
Native Hawaiian and Pacific Islander (Non-Hispanic)	▲	▲	0.6%
Some other race (Non-Hispanic)	12,900	0.2%	0.2%
Two or more races (Non-Hispanic)	11,700	6.0%	4.8%
White (Non-Hispanic)	9,000	65.6%	68.5%

Rows per page: 10 1-9 of 9

Sources: [America's Health Rankings](#) (updated 2019) [American Community Survey 5-year estimates](#) (updated 2019)

Sources: [America's Health Rankings](#) (updated 2019) [American Community Survey 5-year estimates](#) (updated 2019)

Diabetes Cases Per 100K People By Race And Ethnicity In Washington



Sources: [America's Health Rankings](#) (updated 2019) [American Community Survey 5-year estimates](#) (updated 2019)

Share Of Total Diabetes Cases vs. Population By Race And Ethnicity In Washington





# Putting Disparity Reports into Action

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- Programmatic data will  $\neq$  surveillance data

## ***BUT***

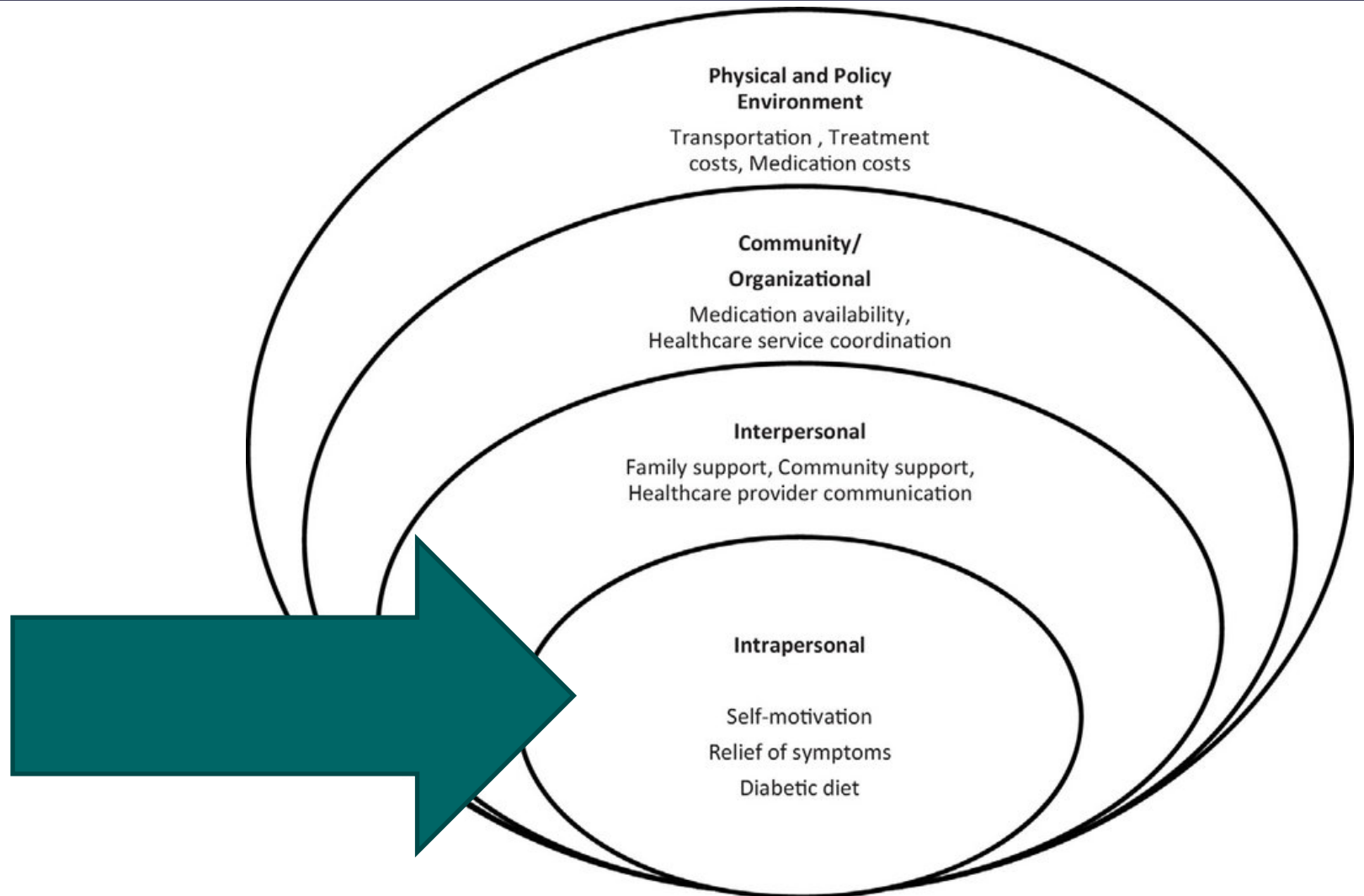
- Dig into validation of data
- Look for root causes (school, housing, justice policies)
- Access to healthy behaviors
- Opportunity for patient engagement

# **Use of Diabetes Data**



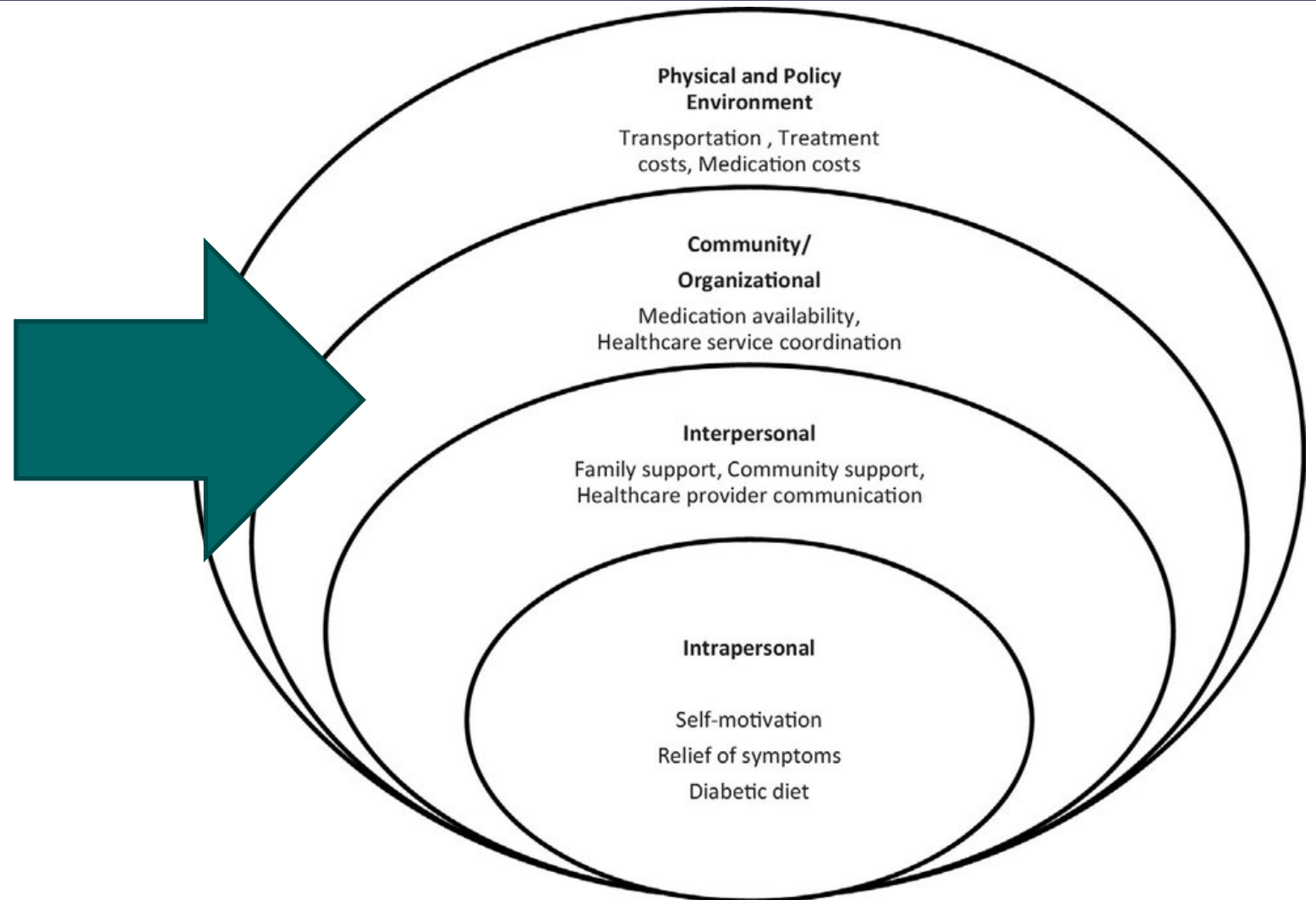
# Use of Data at Individual Level

- Patient level
  - Self management
  - Prediabetes
- Provider level
  - Patient panel
  - Therapeutic inertia
  - Prediabetes



# Organizational and Community Data

- Org level
  - Staffing
  - Supportive services
  - Resource Mapping
- Community level
  - Advocacy
  - Resource allocation
  - Improved surveillance systems



# Questions? Feedback?

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THANK YOU

**Collaborative Screening:  
Guidance for Person-Centered Inquiry**  
**June 21, 23 & 25, 2021**  
**9am-12pm PDT**

*Please complete our short evaluation.*



**Washington  
Association for  
Community Health**  
Community Health Centers  
Advancing Quality Care for All

[hstanfield@wacommunityhealth.org](mailto:hstanfield@wacommunityhealth.org)