



2025 Transforming Quality Conference

Encore Series

August 12, 2025

Champions for Children's Health

Tackling the Social Drivers of Health
with Texas Children's Hospital

- Aired July 31, 2025

**Meet TABBICAT: A Framework for
Advancing Mental Health Services** with
Akron Children's Hospital

- Aired August 5, 2025

**AI-Driven Insights: Uncovering Patient
Safety Trends with ChatGPT** with
Stanford Medicine Children's Health

- Aired August 7, 2025

**Leveraging REaL Data to Shine the
Light on Health Disparities** with
Children's National, Seattle Children's and
CHA

- August 12, 2025, at 2 p.m. ET



Transforming Quality Conference Encore Webinar Series

Explore the Best of TQC 2025

CHA's Transforming Quality Conference offers children's hospitals the opportunity to connect and collaborate on care and system improvements impacting child health outcomes. This encore series highlights the top-rated presentations from the 2025 conference.



EVENT —

Tackling Social Drivers of Health

Explore how Texas Children's Hospital's tiered public health model addresses social drivers of health to reduce health disparities and improve outcomes.

July 31, 2025 | 2 p.m. ET

2025 Annual Leadership Conference

Registration Opened: August 11th

Date of Conference: November 3-5, 2025

Location: Gaylord Pacific Resort & Convention Center in Chula Vista, CA

Register now: [Home - 2025 ALC](#)

For more information, contact Rachael Green at Rachael.Green@childrenshospitals.org or Samantha Hayes at Samantha.Hayes@childrenshospitals.org



We'd love to hear from you!



Thank you for
completing the
survey!

Leveraging REaL Data to Shine the Light on Health Disparities

Kavita Parikh, MD, MSHS; Children's National Hospital

Joel S. Tieder, MD, MPH; Seattle Children's Hospital

Matt Hall, Ph.D.; Children's Hospital Association

August 12, 2025
CHA Transforming Quality Care



Disclosure

- CHA paid Dr. Tieder a consultation fee to lead improvements to PHIS/IE databases
- CHA paid Dr. Parikh consultation fee as Mentor for CHA Health Services Research Program
- Dr. Hall has nothing to disclose

Learning Objectives

- Understand the limitations of REaL data
- Using the data to improve outcomes
- Apply best practices to your work

Quick Poll

What are the biggest challenges for the use of data for race, ethnicity and language at your hospital?

****Consider: collection, storage, transformation, use in EMR, use to improve care****



Join by
Web

PollEv.com
/hannahhettinger112

Join by
Text

Send **hannahhettinger112** and your
message to **22333**



What are the biggest challenges for the use of data for race, ethnicity, and language at your hospital?

Nobody has responded yet.

Hang tight! Responses are coming in.

Understand the limitations of REaL data

Importance

You manage what you measure

- Outcomes
- Experience
- Quality

Understanding Drivers

- Access
- Disability
- Discrimination
- Social support networks
- Communication
- Education and health literacy
- Food security
- Neighborhood and physical environment

Understanding Drivers → Measurement

- Access → Insurance
- Disability → Complex care
- Discrimination → Race/ethnicity
- Social support networks → Survey
- Communication → Language
- Education and health literacy → Education
- Food security → Survey
- Neighborhood and physical environment → Zip code

Measurement Limitations

- Best practice
- Patient or family/caregiver awareness and buy-in
- Multiple caregivers
- Staff and resources
- Alignment with financial incentives or requirements
- Technical barriers to collection, storage, and reporting
- Definitions driven by many stakeholders and changing
- Others?

Consequences

- Quality, safety and **harm**
- Ineffective use of resources
- Inability to identify, quantify, and track equity gaps and adaptation of solutions

What do we know about our data?

- Accuracy?
- Completeness?
- Consistency?

Race and ethnicity in PHIS/IE (78 hospitals, 2023)

[illegible]

- **2/3 of hospitals have substantial amount of unanalyzable data**
- Gray= $<0.05\%$ in a R/E group or $>10\%$ in missing/other

Survey of hospitals data collection

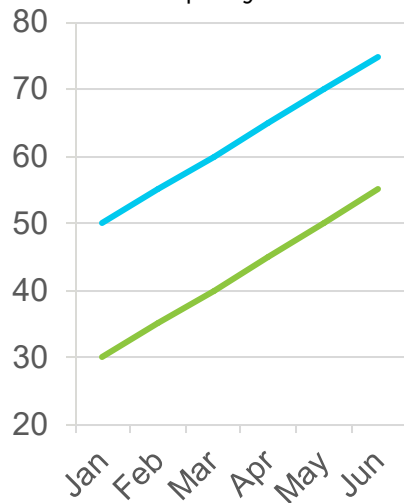
- How do hospitals (ED/IP) collect, record and transform REaL data?
- **42/48 (88%)** PHIS hospitals completed
- Quantitative and qualitative
- More than one race is only an option at 17% of hospitals
- Language collected for
 - at least one caregiver: 63%
 - more than one: 29%

Using the data to improve outcomes

Possible Outcomes of Interventions



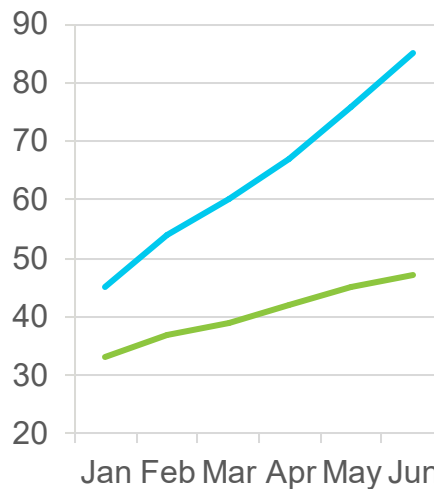
Intervention benefits all groups equally



Difference Remain Constant



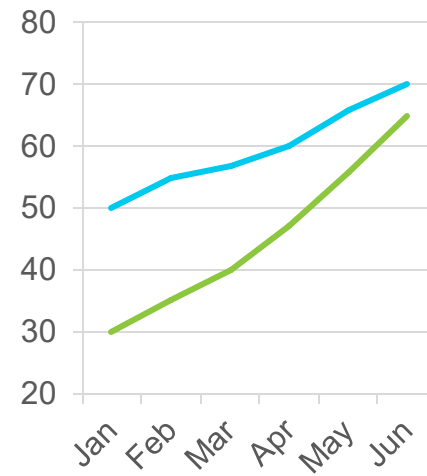
Intervention disproportionately benefits some groups



Differences Widen



Intervention improves outcomes for all



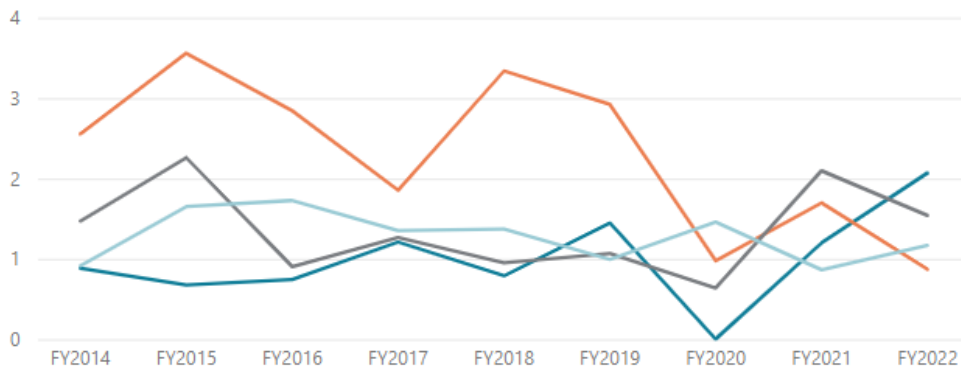
Differences Reduce



Case Example: CLABSI

Outcomes focused Quality Improvement

- Data transparency
- Improving interpreter and translation utilization
- Improving patient and family teaching on central line care
- Central line audits
- Unit buy-in and leadership engagement



Social Determinants of Health

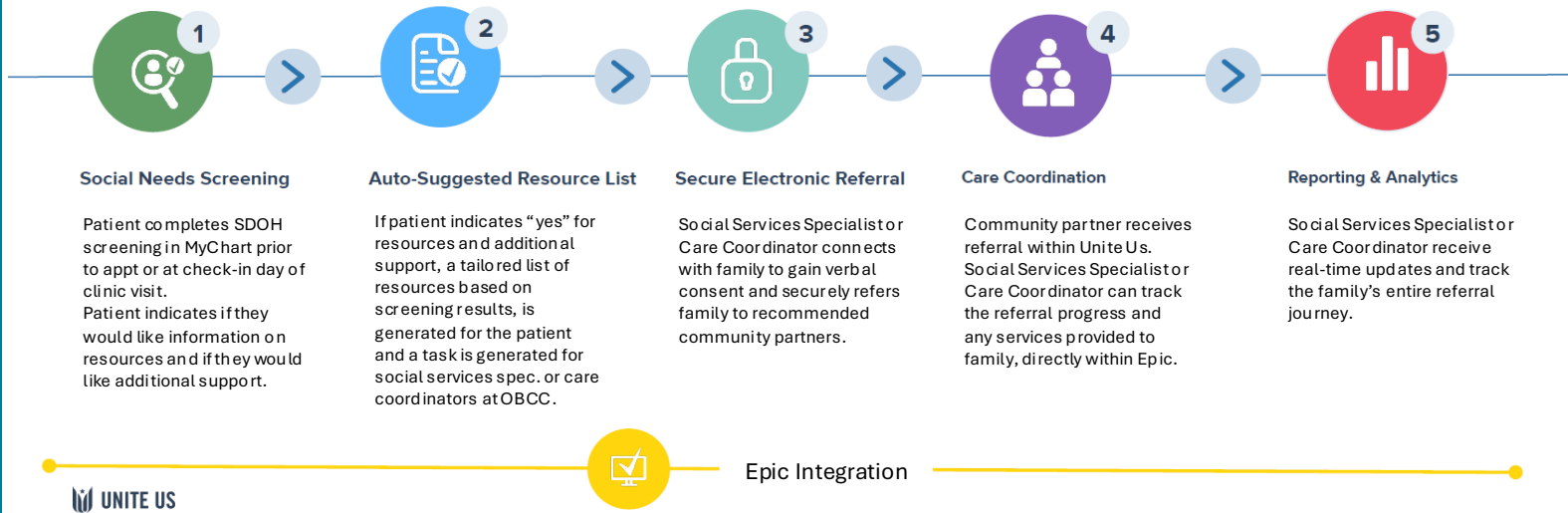
- Care that **improves patient outcomes** and enables Seattle Children's to live our mission
- Effectively understanding patient and community needs involves asking focused questions, learning about needs, and **incorporating this context into care plans**
- Delivering on our commitment to **health outcomes and access**, and aligning with our quality and safety strategic imperative.

Layout of Adult and Pediatric SDOH Domains

Infant Domains	Child Domains (3-11 years)	Adolescent Domains (12-17 years)	Adult Domains (18+ years)
Caregiver Education & Work	Caregiver Education & Work	Caregiver Education & Work	—
Safety & Environment	Safety & Environment	Safety & Environment	—
Caregiver Health	Caregiver Health	Caregiver Health	—
—	Education	—	—
—	—	Adolescent Edu. & Socialization	—
—	—	Adolescent Substance Use	—
—	—	—	Alcohol
—	—	Depression	Depression
Financial Resource Strain	Financial Resource Strain	Financial Resource Strain	Financial Resource Strain
Food Insecurity	Food Insecurity	Food Insecurity	Food Insecurity
—	—	Intimate Partner Violence	Intimate Partner Violence
—	Physical Activity	Physical Activity	Physical Activity
—	—	—	Social Connections
—	—	Stress	Stress
—	—	—	Tobacco Use
Transportation Needs	Transportation Needs	Transportation Needs	Transportation Needs
—	—	—	Postpartum Depression
Housing Stability	Housing Stability	Housing Stability	Housing Stability



Workflow with Unite Us



SDOH Meets Essential Needs

- Screening across all eligible ambulatory sites
- Implementation of closed loop referral platform (6/2024 – 3/58/25)
 - 17,967 patients provided resource lists
 - 59 closed loop referrals



Rebecca Del Re
Social Service Specialist

“No request is too small if it has the potential to ensure better health for the patients and families we serve.”



Example of data-drive equity work: PDI

Accidental Puncture or Laceration

Iatrogenic Pneumothorax

Post-operative Hemorrhage or Hematoma

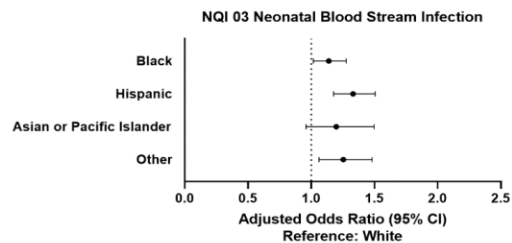
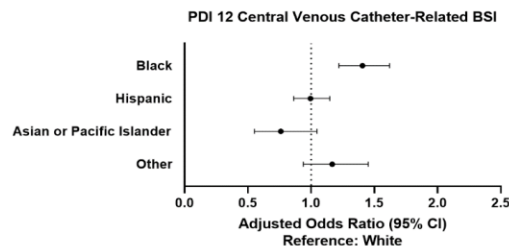
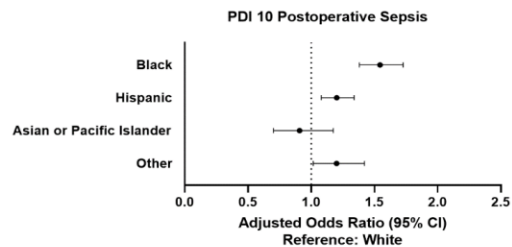
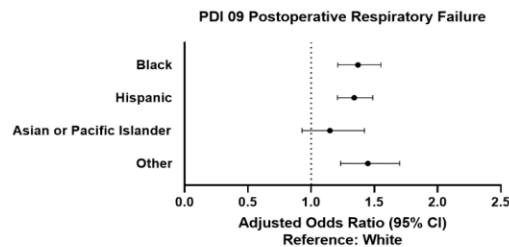
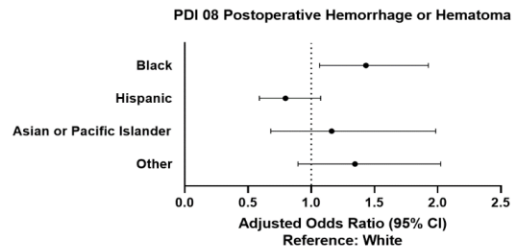
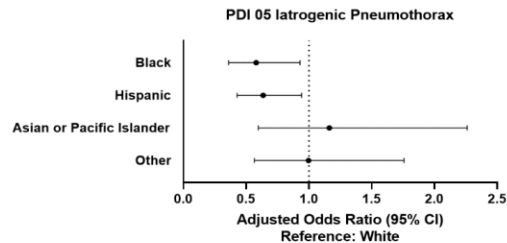
Post-operative respiratory failure

Post-operative sepsis

Central Venous Catheter-Related Blood Stream Infection

Neonatal Blood Stream Infection

Example of data-drive equity work



Disparities in Racial, Ethnic, and Payer Groups for Pediatric Safety Events in US Hospitals

Kavita Parikh, MD, MSHS^{a,b} Matt Hall, PhD^c Joel S. Tieder, MD, MPH^d Gabriela Dixon, MD, MEd^{a,b}
 Marence C. Ward, EdD, MPH^e Pamela S. Hinds, PhD, RN, FAAN^{a,b} Monika K. Goyal, MD, MSc^{a,b} Shawn J. Rangel, MD,
 Glenn Flores, MD^f Sunitha V. Kaiser, MD, MSc^{a,b}

Example of data-drive equity work

Postoperative respiratory failure (n = 101 883)	White	110.13 (101.64–119.32)	<.001	Reference	
	Black	150.26 (133.44–169.16)		1.37 (1.21–1.55)	159.7 (88.4–240.7)
	Hispanic ethnicity	147.07 (133.34–162.19)		1.34 (1.21–1.49)	
	Asian or Pacific Islander	126.32 (102.55–155.51)		1.15 (0.93–1.42)	
	Other race or multiracial	158.74 (135.94–185.3)		1.45 (1.23–1.7)	
Postoperative sepsis (n = 212 719)	Asian or Pacific Islander	51.56 (40.09–66.28)	<.001	Reference	
	White	56.73 (52.55–61.24)		1.1 (0.85–1.42)	253.3 (144.1–373.5)
	Black	87.34 (78.88–96.7)		1.7 (1.3–2.22)	
	Hispanic ethnicity	68.14 (61.88–75.02)		1.32 (1.02–1.72)	
	Other race or multiracial	68.07 (57.93–79.96)		1.32 (0.99–1.77)	
Central venous catheter-related BSI (n = 2 535 923)	Asian or Pacific Islander	1.17 (0.85–1.62)	<.001	Reference	
	White	1.54 (1.35–1.75)		1.32 (0.96–1.81)	111.6 (60.9–170.8)
	Black	2.16 (1.86–2.52)		1.85 (1.33–2.58)	
	Hispanic ethnicity	1.53 (1.31–1.79)		1.31 (0.94–1.82)	
	Other race or multiracial	1.79 (1.43–2.25)		1.54 (1.06–2.22)	
Neonatal blood stream infection (n = 67 264)	White	216.12 (199.69–233.86)	<.001	Reference	
	Black	245.57 (224.09–269.04)		1.14 (1.02–1.28)	163.1 (67.1–271.1)
	Hispanic ethnicity	285.74 (258.56–315.69)		1.33 (1.18–1.51)	
	Asian or Pacific Islander	257.94 (209.55–317.15)		1.2 (0.96–1.5)	
	Other race or multiracial	269.67 (232.52–312.57)		1.25 (1.06–1.48)	
Sample size of the total population was 5 243 750: white 46.2%, Hispanic 19.1%, Black 14.5%, Asian/Pacific Islander 4.8%, Native American 0.8%, other race/multiracial 6.5%, and missing 8.3%.					

Analyzing Pediatric Safety Events Using Antiracist Principles

Kavita Parikh, MD, MSHS,^{1,2} Maranda C. Ward, EdD, MPH,² Matt Hall, PhD,³ Sunitha V. Kaiser, MD, MSc,^{4,5} Joel S. Tieder, MD, MPH⁶

Qualitative work: positive deviance approach

Work in Progress

- Completed 16 interviews across 4 hospitals

Aims

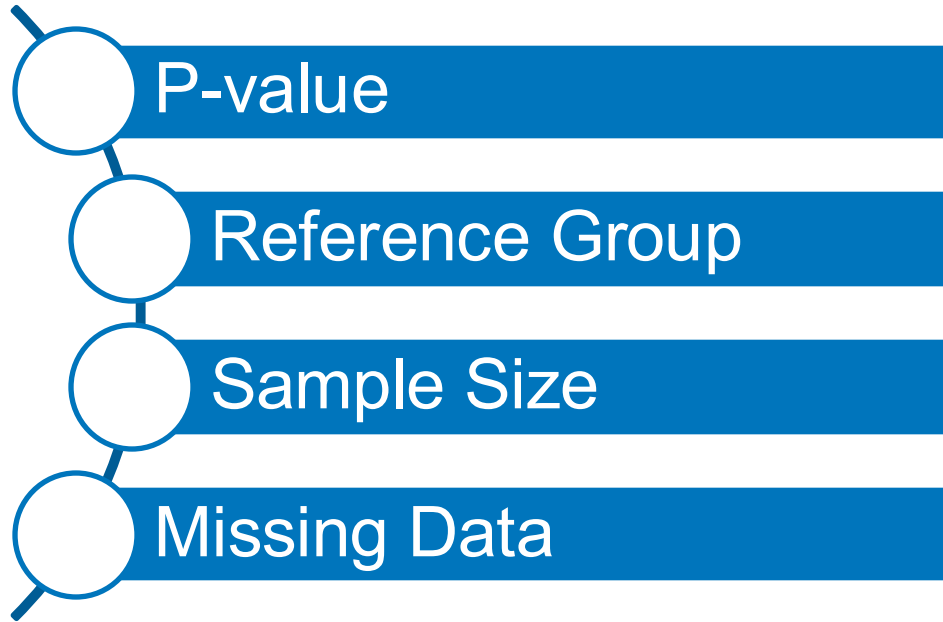
- Identify and compare clinical processes and equity efforts between hospitals with lower and higher disparities
- Identify drivers of disparities and potential interventions to improve them.

Preliminary Findings

- Positive Deviants
 - Degree of data feedback on equity performance
 - Degree of integration of equity leaders into QI operations
 - Extent of standardized protocols
 - Engagement of families
- 

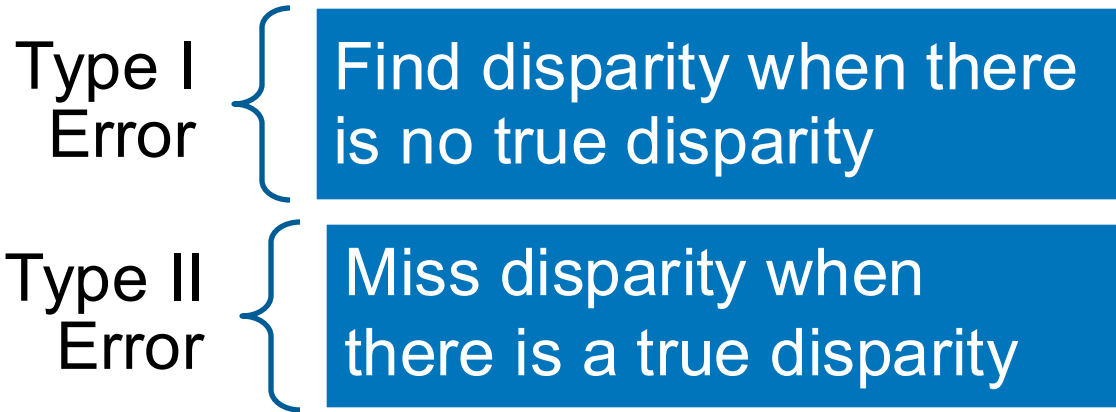
Apply best practices to your work

Managing analytic challenges



P-value: what is the “right” p-value?

- Need to be contextualized
- Thresholds of significance selected carefully



SPECIAL ARTICLE

Detecting Health Care Disparities and the Problem With $P < 0.05$

Matt Hall, PhD,^a Joel Tieder, MD,^b Troy Richardson, PhD,^a Kavita Parikh, MD MSHS,^c Samir S. Shah, MD, MSCE^{d,e}

Reference group

- What is the “right” reference group?
- Always using one reference group can perpetuate racism in research by erroneously implying that the group should define the standard for health
- Ultimately, it depends on your question. Options include...
 - Best performing group
 - The largest group
 - Most socially advantaged group to assess health inequities rooted in discrimination and systemic biases

Sample size

- Groups too small to study (e.g., American Indian)
 - While they not be statistically analyzable, can we learn qualitatively from them?
 - Groups with heterogeneity (e.g., Other)
 - Be careful about conclusions drawn from heterogeneous groups.
- 

Missing data

- Missing data can arise when we fail to ask or parents/patients 'decline to answer'
- Most statistical models drop these cases (complete case analysis)
- We could consider imputing the missing data, but only under certain circumstances and makes some assumptions.
 - Be mindful of the ethical implications of imputing race
- Use missing as a category

Plan with your team

- Centering reference categories
 - Which group will be our reference category and why?
 - Value of statistical significance/p-value?
 - What will be our level of statistical significance and how will we use it?
 - Handling missing data
 - How will we handle missing data and what is the impact?
 - Approaches to learning from low volumes groups
 - Can we include data from low volume groups in qualitative analyses?
- 

Next Steps

Next steps

- Test new R/E standardization fields centrally at CHA
- Pilot new collection of language data across some PHIS hospitals
- Ongoing data collection, reporting, and impact of improvement efforts

Questions Discussion Group Learning



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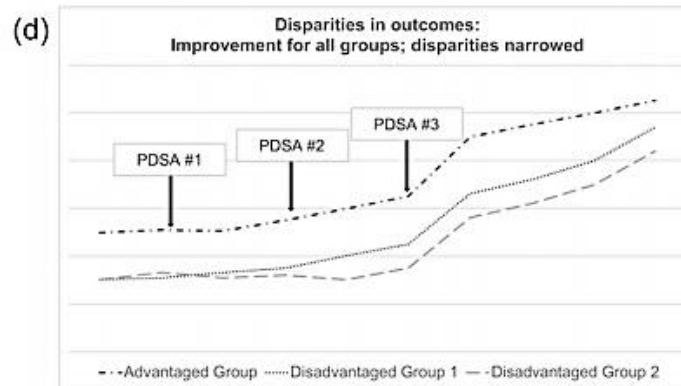
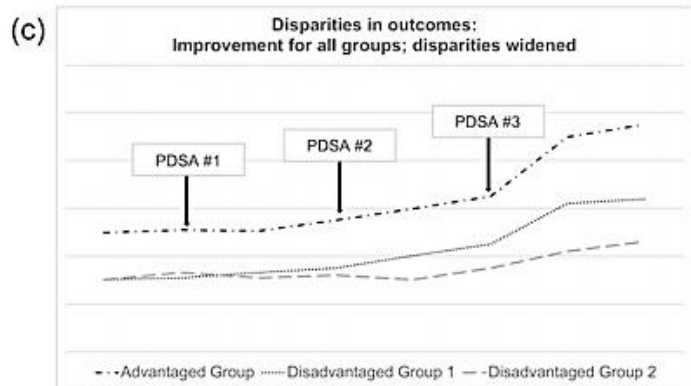
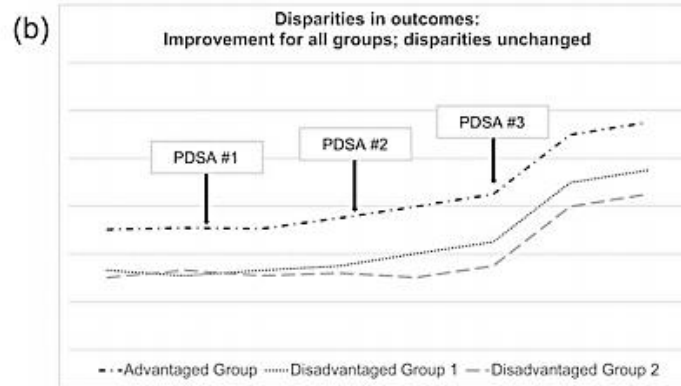
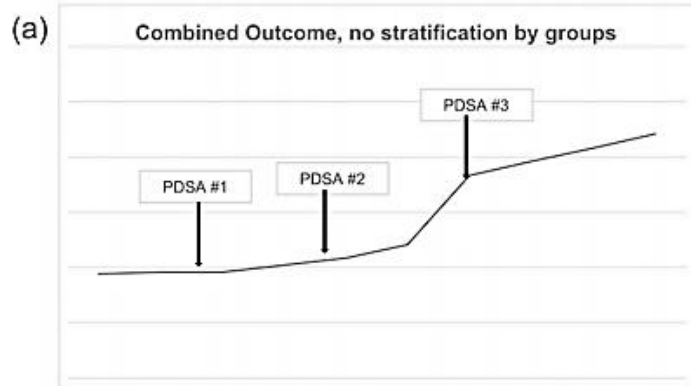
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Additional Discussion Slides

REaL Data in QI



Race & Ethnicity Data Collection: Who

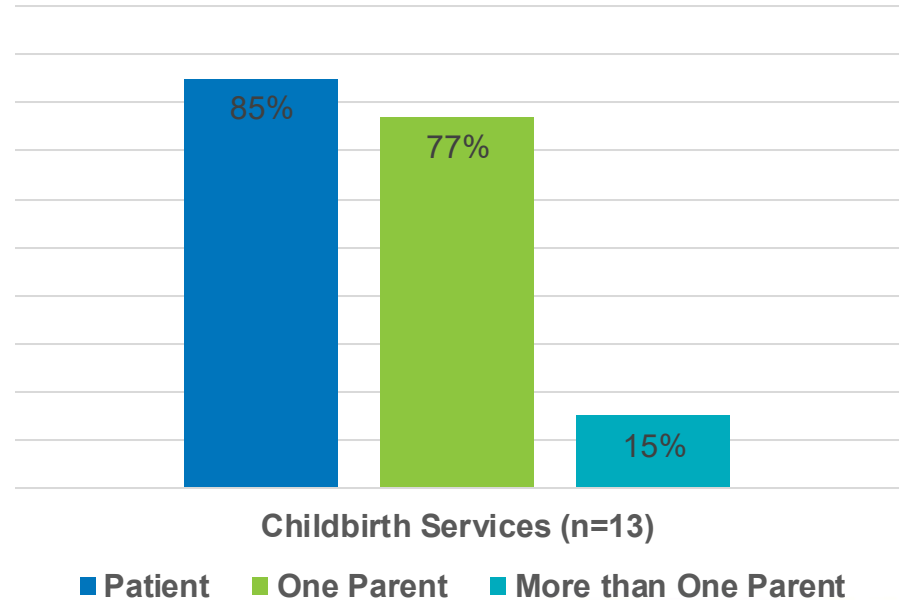
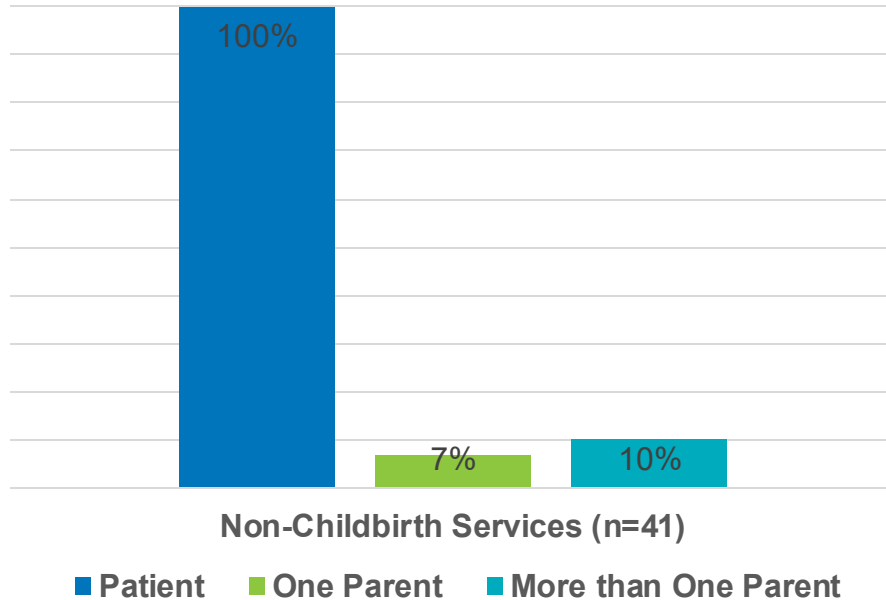


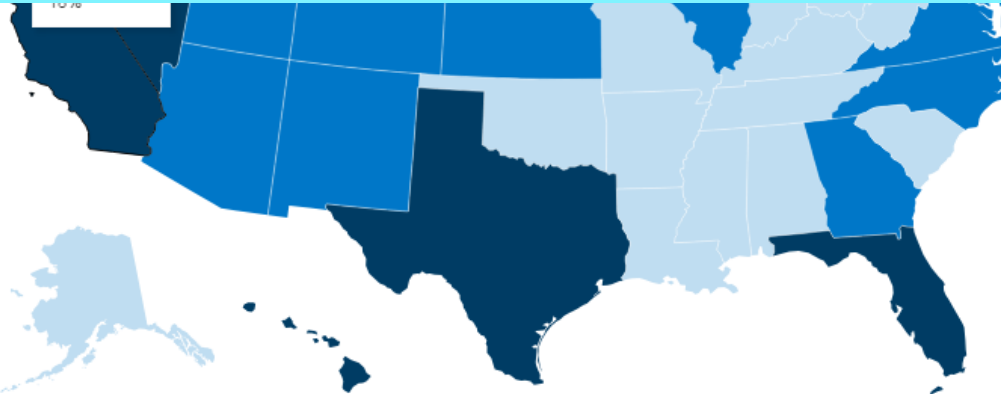
Figure 2

Percent of Total Population with Limited English Proficiency by State, 2021

■ < 5% (23 states) ■ 5 - 10% (18 states and DC) ■ ≥ 10% (9 states)



22% use language other than English at home
8% use “English less than very well”

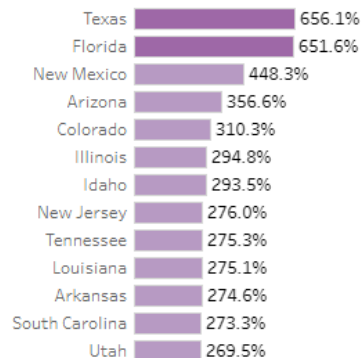


NOTE: Individuals with limited English proficiency (LEP) are those who do not speak English as their primary language and who speak English less than very well. Includes individuals age 5 and older

SOURCE: KFF Analysis of 2021 American Community Survey • PNG

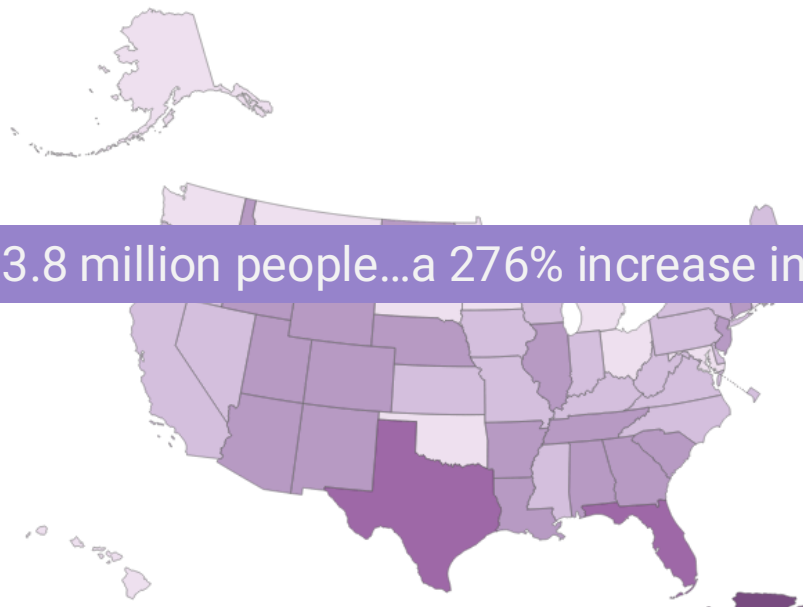
KFF

U.S. States



Percent Change Two or More Races, Total Population by State: 2010 to 2020

United States: 275.7%



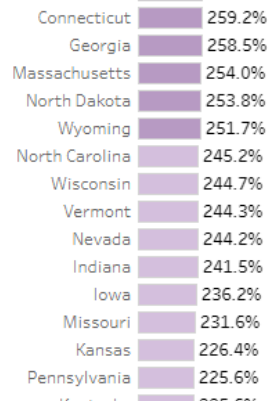
Interested in viewing counties?

Use the filter to select a
state then click the arrow to
view counties.

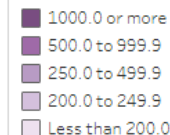
Alabama ▼



9 million people -> 33.8 million people...a 276% increase in 10 years



Percent Change



Race & Ethnicity Data Collection

Multiple RACES in EHR		Multiple ETHNICITIES in EHR	
“Multiracial” is an option	17%	“Multiethnic” is an option	7%
>1 race specified	68%	>1 ethnicity specified	29%
No	12%	No	63%

**Race & Ethnicity
Collected Separately**



Language Data Collection

Whose Language?



Multiple Caregivers (29%)



One Caregiver (63%)



Patient (71%)

What Language?



Spoken (76%)



Written (20%)



Unspecified (24%)

REaL Collection Strategies

Plan	Engage senior leadership and incorporate into strategic plan
Improvement	-Define goals for data collection -Build data collection into quality improvement initiatives -Track and report progress on an organization-wide basis -Review, revise, and refine process and categories constantly
Alignment	-REaL data collection with existing reporting requirements -Utilize national, regional, and state resources
Inclusion	Thoughtfully engage patient and community groups
Accountability	Assign accountability for improvement

REaL Collection Strategies

Policy and Training	-Standard methods, expectations and training (who, when format) -Across all organizational ecosystems (ambulatory vs ED/inpatient)
Technology	Leverage EMR and existing technologies (eg, patient portal)
Collaborate	Understand how and why new ideas spread
Forecast	Be aware of upcoming changes to federal and local policy

Additional Survey/Focus Group Feedback

Scripted
questions

Options for self-
report, multiple
races and
languages

Validation
process

Alignment with
QI/DEI efforts

Dedicated team

Identification
and mitigation
of upstream
problems

Bilateral
communication
with data
receivers

Anticipation of
upcoming
changes

Our team

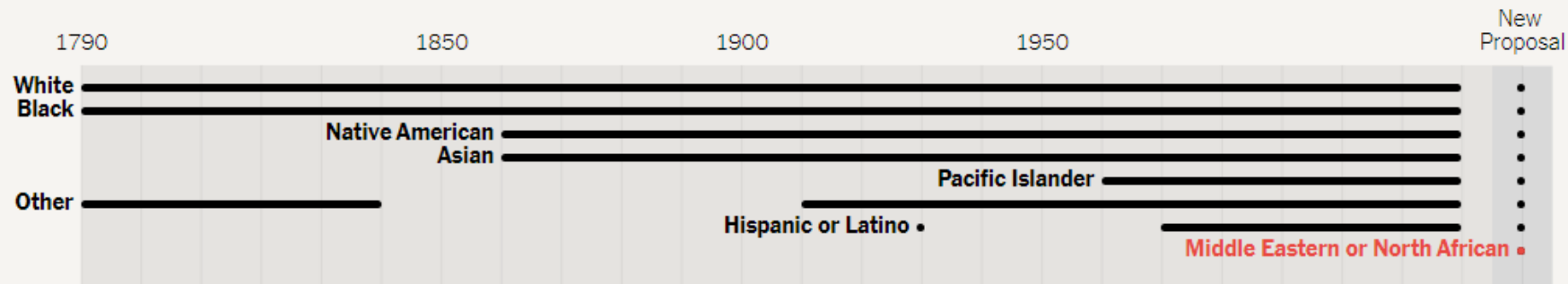
Core Team

- John D. Cowden, MD, MPH
- Emily Cramer PhD
Children's Mercy Kansas City
- Matt Hall, PhD
Children's Hospital Association
- Joel S. Tieder, MD, MPH
Seattle Children's

Advisory Group

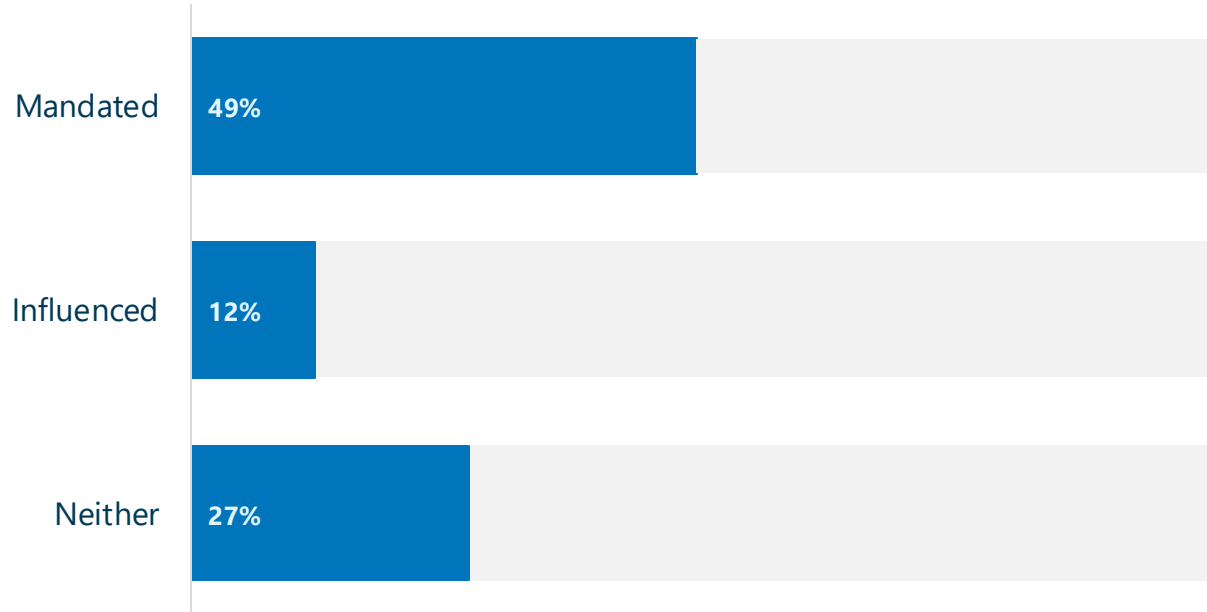
- Amani Hasian
Family representative
- Sunitha Kaiser, MD, MS
UCSF Benioff Children's
- Katherine Nash, MD, MHS
New York Presbyterian
- Valerie L. Ward, MD MPH
Boston Children's Hospital
- Meghan Fanta, MD
- Matthew Frazier, MPH, MBA
- Ndidi Unaka, MD, MEd
Cincinnati Children's Hospital
- Eric Kirkendall, MD, MBI
Wake Forest, Advocate Health

When data for different racial and ethnic groups was collected



Source: [U.S. Census Bureau](#)

External Influences on Process



Qualitative

“Potential changes to race/ethnicity collection fields in order to align with future changes to Census and OMH standards”

“Hospital does not allow more than one preferred language to be recorded.”

“Supporting an ideological shift in medicine requires the buy in of patients, patient families, providers, staff, and leaders.”

“Supporting an ideological shift in medicine requires the buy in of patients, patient families, providers, staff, and leaders.”

“We have standards but this may vary across sites and it's hard to know if everyone person is consistently adhering to the standards.”

OMB Proposed Example for Self-Response Data Collections: Combined Question with Minimum and Detailed Categories

What is your race or ethnicity?
Select all that apply AND enter additional details in the spaces below.
Note, you may report more than one group.

☐ **WHITE** – Provide details below.

☐ German ☐ Irish ☐ English
☐ Italian ☐ Polish ☐ French
Enter, for example, Scottish, Norwegian, Dutch, etc.

☐ **HISPANIC OR LATINO** – Provide details below.

☐ Mexican or
☐ Mexican American ☐ Puerto Rican ☐ Cuban
☐ Salvadoran ☐ Dominican ☐ Colombian
Enter, for example, Guatemalan, Spaniard, Ecuadorian, etc.

☐ **BLACK OR AFRICAN AMERICAN** – Provide details below.

☐ African American ☐ Jamaican ☐ Haitian
☐ Nigerian ☐ Ethiopian ☐ Somali
Enter, for example, Ghanaian, South African, Barbadian, etc.

☐ **ASIAN** – Provide details below.

☐ Chinese ☐ Filipino ☐ Asian Indian
☐ Vietnamese ☐ Korean ☐ Japanese
Enter, for example, Pakistani, Cambodian, Hmong, etc.

☐ **AMERICAN INDIAN OR ALASKA NATIVE** – Enter, for example,
*Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of
Barrow Inupiat Tribal Government, Tlingit, etc.*

☐ **MIDDLE EASTERN OR NORTH AFRICAN** – Provide details below.

☐ Lebanese ☐ Iranian ☐ Egyptian
☐ Syrian ☐ Moroccan ☐ Israeli
Enter, for example, Algerian, Iraqi, Kurdish, etc.

☐ **NATIVE HAWAIIAN OR PACIFIC ISLANDER** – Provide details below.

☐ Native Hawaiian ☐ Samoan ☐ Chamorro
☐ Tongan ☐ Fijian ☐ Marshallese
Enter, for example, Palauan, Tahitian, Chuukese, etc.

OMB Proposed Example for Self-Response Data Collections: Combined Question with Minimum Categories

What is your race or ethnicity?
Select all that apply.

☐ White

☐ Hispanic or Latino

☐ Black or African American

☐ Asian

☐ American Indian or Alaska Native

☐ Middle Eastern or North African

☐ Native Hawaiian or Pacific Islander

OMB proposal

- Collecting race and ethnicity information using one combined question
- Adding “Middle Eastern or North African” (MENA)
- Requiring the collection of detailed race and ethnicity categories by default
- Terminology, definitions, and question wording
- Guidance on implementation and adoption of revised standards
- Guidance on how to collect and report administrative and proxy data

**Thank you for attending
and transforming pediatric
health!**





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