#### VETERANS HEALTH ADMINISTRATION

# Office of Health Equity

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#### OFFICE OF HEALTH EQUITY

### Created in 2012

### Vision

All Veterans will attain equitable health through high-quality health care and support for their social needs.

### Mission

OHE advances health equity and ensures social needs are met for all Veterans through leadership, data analysis, education, tool development, and quality improvement initiatives.

#### OFFICE OF HEALTH EQUITY GOALS

- 1. Leadership: Strengthen VA leadership to address health inequalities and reduce health disparities.
- 2. Awareness: Increase awareness of health inequalities and disparities.
- 3. Health Outcomes: Improve outcomes for Veterans experiencing health disparities.
- **4. Workforce Diversity:** Improve cultural and linguistic competency and diversity of the VHA workforce.
- **5. Data, Research and Evaluation:** Improve data and diffusion of research to achieve health equity.

#### **VETERAN POPULATIONS**

# Veterans who experience greater obstacles to health related to:

- Race or ethnicity
- Gender
- Age
- Geographic location
- Religion
- Socio-economic status

- Sexual orientation
- Mental health
- Military era
- Cognitive /sensory / physical disability

#### OFFICE OF HEALTH EQUITY WEBSITE



https://www.va.gov/healthequity

#### **TODAY'S SESSION**

# The Relationship Between Health System Quality and Racial and Ethnic Disparities in Diabetes Care

#### CYBERSEMINAR PRESENTERS



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#### **DEFINITIONS**

#### **Equality**

Equality means each individual or group of people is given the **same resources or opportunities**.

#### **Equity**

Equity recognizes that **each** person has different circumstances and is **allocated the exact resources** and opportunities needed to reach an equal outcome.

#### **Health disparity or inequity**

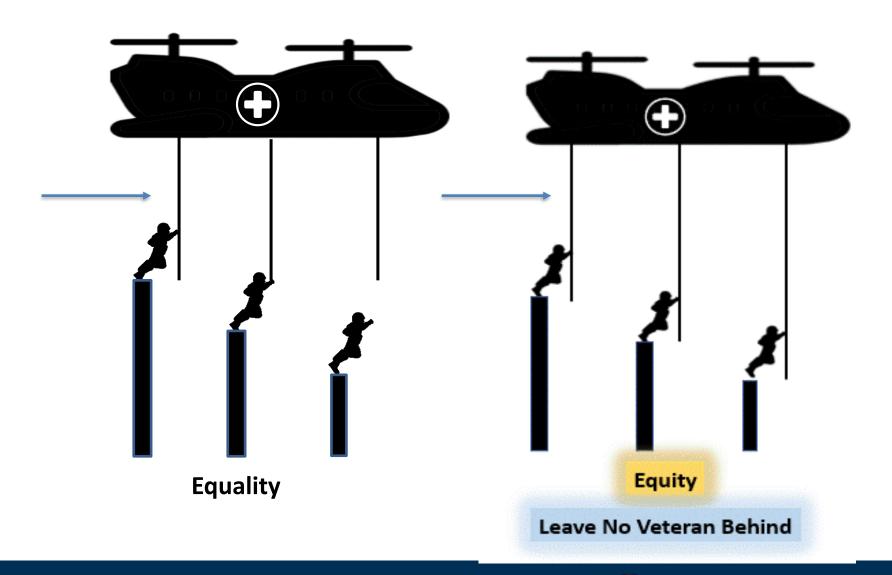
A health disparity is a particular type of <u>health difference that is closely linked with social or economic</u> <u>disadvantage</u>. Health disparities adversely affect groups of people who have systematically experienced greater social and/or economic obstacles to health and/or a clean environment.

#### **Health equity**

Health equity is the <u>attainment of the highest level of health for all people</u>, valuing everyone equally, but focusing efforts and resources to reach equal outcomes. This entails addressing avoidable inequalities and historical and contemporary injustices.

### **EQUALITY VERSUS EQUITY**

We're not all in the same place. **Equity** is reaching out to those in need, so no one is left behind.





### **EQUITY-GUIDED QUALITY IMPROVEMENT**

- Improving population health
- Enhancing care experience
- Reducing costs
- Improving the work life of health care providers
- Advancing health equity



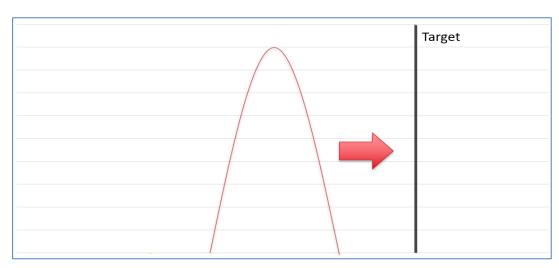
References: <a href="https://pubmed.ncbi.nlm.nih.gov/25384822/">https://pubmed.ncbi.nlm.nih.gov/25384822/</a>; <a href="https://pubmed.ncbi.nlm.nih.gov/35061006/">https://pubmed.ncbi.nlm.nih.gov/35061006/</a>

Reference: https://www.pwc.com/ca/en/industries/healthcare/system-fit-for-purpose.html

### **EQUITY-GUIDED QUALITY IMPROVEMENT**

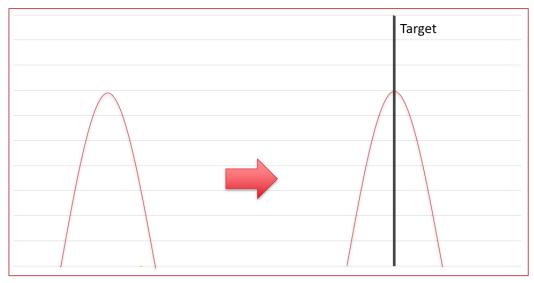
# Equity-guided QI leverages existing quality improvement infrastructure

#### **Traditional Quality Improvement**



Redesigns processes to move a homogeneous population closer to target

#### **Equity-Guided Improvement Strategy**



Customizes processes to move an underperforming subset of a heterogeneous population closer to target

#### **EQUITY-GUIDED QUALITY IMPROVEMENT FY2023**

# SGLT2i/GLP-1 RA Community of Practice

- QI Pilot Awards went to 5 project teams for FY23
- Diverse geography of participating VAMCs
- Projects include provider and patient education, pharmacistdriven improvement activities, addressing patient concerns
- Using a CoP/QI collaborative model for project teams to learn and problem solve with one another

Clinical/Equity Characteristics for QI Project Focus	Site A	Site B	Site C	Site D	Site E
DM2	Х	Х	Х	X	Х
CKD	Х				
HF	Х		Х	Х	
ASCVD	Х	Х			
High risk for ASCVD	X	X			
Race/ Ethnicity	X		X	Х	
Gender			х		
Geography			X		X

#### **EQUITY-GUIDED QUALITY IMPROVEMENT FY2023**

# Reducing Statin Utilization and Adherence Disparities Community of Practice

- QI Pilot Awards went to 5 project teams in FY2023
- Teams used the Primary Care Equity Dashboard
- Diverse geography of participating VAMCs
- Projects include provider and patient education, pharmacistdriven improvement activities, addressing patient concerns
- Using a CoP/QI collaborative model for project teams to learn and problem solve with one another

Clinical/Equity Characteristics for QI Project	Site A	Site B	Site C	Site D	Site E
Gender	Х	Х	х	Х	
Race/Ethnicity	Х			X	Х
Measure: statn1_ec*			Х	X	
Measure: statn4_ec	X	Х		X	Х
Measure: statn7_ec*		Х	Х	X	
Measure: statn8_ec				X	Х

#### **EQUITY-GUIDED QUALITY IMPROVEMENT FY2024**

### **Chronic Disease Prevention and Management Project Titles**

Utilizing the entire team to improve blood pressure in Black female veterans

Impact of Proactive Pharmacist-Delivered Education and Follow-Up to Improve Minority Veteran Hypertension Management and Care Engagement

Reducing Disparities in Hypertension: "Get Low" and "Let's Talk About Blood Pressure"

Integrating PACT Outreach and Whole Health Programming as a Diabetes Management Intervention to Reduce Race/Ethnicity-Based Disparities

Using Virtual Care and Home Telehealth to Improve Diabetes Control in Veterans Living in Rural Areas

Improving zoster vaccination rates in Black Veterans

# **Cancer Screening Project Titles** The Boost Team: SERVICE Act Outreach & Cancer Care Navigation Improving Overall Colorectal Cancer Screening Rates and Practices in Women Improving Colorectal Cancer Screening for Veterans Experiencing Homelessness

#### **EQUITY-GUIDED QUALITY IMPROVEMENT TAKE AWAYS**

- Practicing equity-informed health care delivery values **every** individual, regardless of background, tailoring care to help them reach their healthiest outcomes
- Equity-guided QI is tailored QI, using stratified data to inform diverse, tailored strategies to improve overall population health and reduce disparities among different groups
- Unlike research, equity-guided QI, like traditional QI, allows for rapid tests of change when encountering barriers during a project/approach
- Equity-guided QI is meant to be accessible for busy people and can be done at the frontline level up to the executive level

# The Relationship between Health System Quality and Racial and Ethnic Disparities in Diabetes Care Michelle S Wong, PhD

Cyberseminar • OHE Focus on Health Equity and Action Series July 10, 2024



# **Disclosures**

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The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or of the United States.



# Background

- Healthcare systems rely on healthcare quality measures that are often calculated for the overall patient population
- Overall measure of quality may mask disparities



#### For example:

In a hospital with overall high quality, some patient groups may still receive suboptimal care

Looking at overall quality measures obscures this disparity!



# **Objective**

Quality and equity relationship in diabetes care in Veterans Health Administration (VA)

- Diabetes: known racial and ethnic disparities
- VA: national learning healthcare system that prioritizes improving care quality

Study Objective:

Are there racial and ethnic differences in diabetes care based on VA facility-level measure of quality?



# Methods: Data & Sample

**Sample:** Veterans who used VHA ambulatory care between Mar 2020 – Feb 2021 & eligible for diabetes quality measure (age 18-75 & evidence of diabetes)

#### Data:

- Electronic medical record data
- VA Medical center (VAMC) quality: 2020 VA
   Strategic Analytics for Improvement and Learning Value Model (SAIL) report card: selected quality measures publicly reported for each VAMC



## **Methods: Measures**

### **Independent variables:**

- 1. VAMC performance: SAIL report card measure relevant to diabetes: diabetes and ischemic heart disease control composite
- 2. Veteran self-identified race and ethnicity



## **Methods: Measures**

### **Dependent variables:**

 Poor diabetes care: Glycosylated hemoglobin (HbA1c) > 9% <u>OR</u> no diabetes testing

2. No diabetes testing

Process measure

3. HbA1c > 9 % (among those tested)

Outcome measure



# **Methods: Analysis**

### Mixed effects logistic regression model

- Multi-level data: Veterans nested in VAMCs
- Cross-level interaction: VAMC performance level x Veteran race and ethnicity



# Sensitivity analyses

- 1. Controlled for age and sex
- 2. Independent variable: VAMC performance level based on diabetes composite component of the SAIL measure

(remember... SAIL measure used was diabetes control and ischemic heart control composite)





# Results: Differences in VAMC racial and ethnic composition

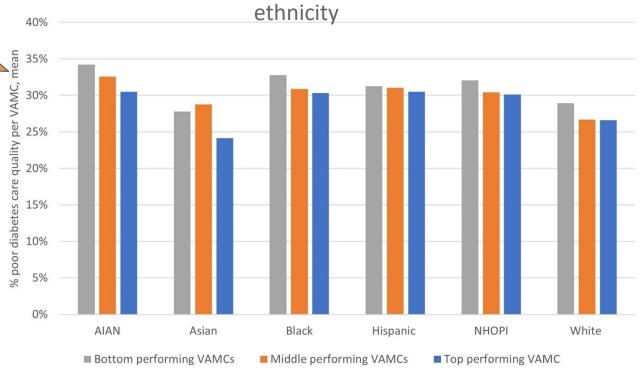
	Top-performing VAMCs (Top Quintile)	Middle-performing VAMCs (Q 2-4)	Bottom-performing VA (Bottom Quintile)						
Total # of VAMCs	28	86	29						
Mean # VA-users eligible for diabetes quality assessment per VAMC (SD)	7885.9 (4656.7)	.7) 6542.2 (2080.9) 4921.1							
Racial and ethnic composition of VA-users eligible for diabetes quality measurement assessment, %									
American Indian or Alaska Native	0.7	0.7	1.2						
Asian	1.2	1.0	0.9						
Black or African American	25.5	24.1	14.0						
Hispanic	10.3	6.6	7.0						
Native Hawaiian or Other Pacific Islander	0.8	1.0	0.7						
Other (Multi-race, missing)		4.3 Department	5.5						
White		eterans Affairs er Los Angeles Healthcare System 62.3	70.7						

Lower %

is better!

# Results: Poor diabetes care decreases with better VAMC performance

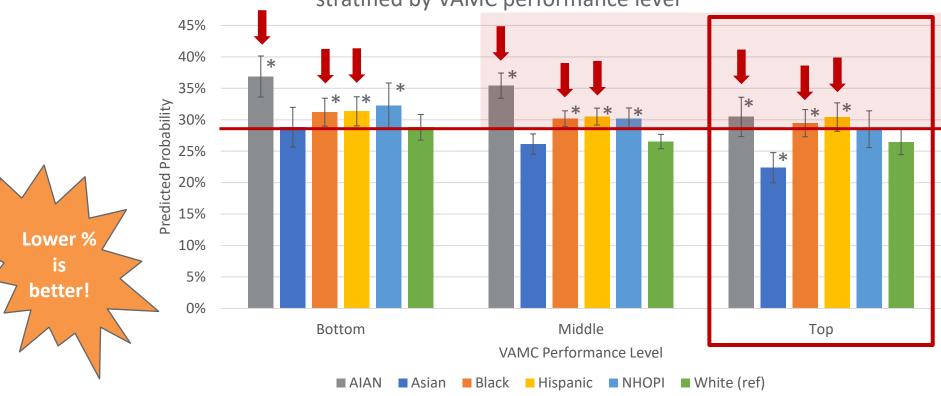
Mean % of Veterans with poor diabetes care per VAMC in top, middle, and bottom-performing VAMCs, by race and





# Results: Disparities in diabetes care across all VAMC performance levels

Predicted Probability of having poor diabetes care for each racial and ethnic group, stratified by VAMC performance level

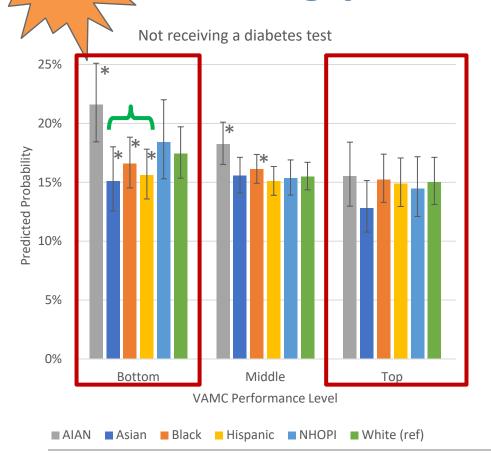


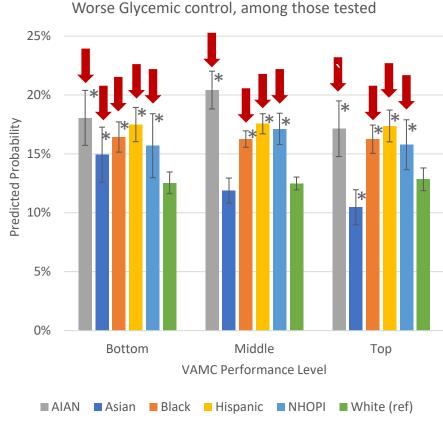


Lower

% is better!

# Results: Disparities driven by poor glycemic control



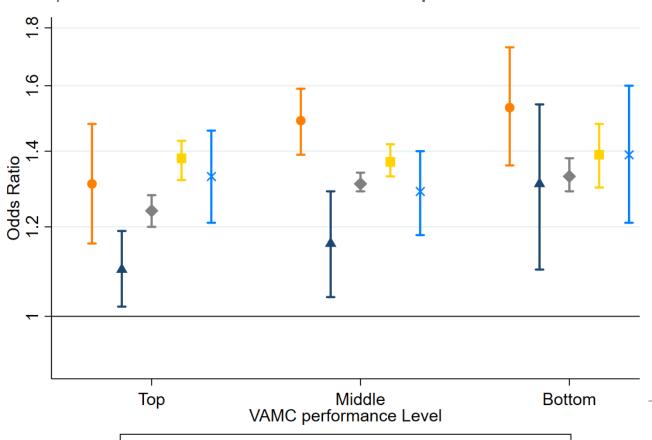


# Sensitivity analysis: Few differences with age and sex adjustment

		Model 1: Upadiusted			Model 2: Age and Sex Adjusted			
		Model 1: Unadjusted		i				
	OR	95%CI	p-value	OR	95%CI	p-value		
Race and Ethnicity								
White	1	(ref)		1	(ref)			
AIAN	1.22	(1.09, 1.36)	< 0.05	1.19	(1.07, 1.33)	0.002		
Asian	0.8	(0.73, 0.88)	< 0.05	0.72	(0.66, 0.80)	< 0.05		
Black	1.16	(1.14, 1.19)	< 0.05	1.09	(1.06, 1.12)	< 0.05		
Hispanic	1.22	(1.18,1.26)	<0.05	1.12	(1.08,1.17)	<0.05		
NHOPI	1.11	(1.00,1.23)	0.05	1.05	(0.94,1.16)	0.396		
Race and ethnicity * VAMC performance level interaction								
AIAN * Middle	1.25	(1.10, 1.42)	0.001	1.21	(1.07, 1.38)	0.003		
AIAN * Bottom	1.19	(1.02,1.38)	0.023	1.16	(1.00, 1.35)	0.053		
Asian * Middle	1.23	(1.09, 1.37)	< 0.05	1.22	(1.09, 1.36)	0.001		
Asian * Bottom	1.25	(1.07,1.46)	0.004	1.19	(1.02,1.39)	0.03		
Black * Middle	1.03	(1.00, 1.06)	0.042	1.03	(1.00, 1.06)	0.022		
Black * Bottom	0.97	(0.92,1.01)	0.12	0.97	(0.93, 1.01)	0.136		
Hispanic * Middle	1.00	(0.95,1.05)	0.957	1.00	(0.95,1.04)	0.885		
Hispanic * Bottom	0.93	(0.87,0.98)	0.013	0.93	(0.87,0.98)	0.011		
NHOPI * Middle	1.08	(0.96,1.22)	0.212	1.07	(0.95,1.21)	0.253		
NHOPI * Bottom	1.06	(0.89,1.26)	0.49	1.03	(0.87,1.23)	0.697		

# Sensitivity analysis: Disparities at all VAMC performance levels

Sensitivity analysis: Odds ratio of poor diabetes care (vs. White Veterans) stratified by VAMC performance level **based on diabetes composite of SAIL measure** 



Black

Hispanic

× NHOPI

AIAN

Asian

# Conclusion: Diabetes Care Quality



- Racial and ethnic disparities in diabetes care exists even in top-performing VAMCs
- Diabetes care for White Veterans at bottomperforming VAMCs was similar to, or better than some minoritized groups at topperforming VAMCs
- Disparities consistent at all performance levels for some racial and ethnic groups



# Conclusion: Process vs. Outcome



- Disparities in diabetes care driven by HbA1c control rather than by monitoring
  - Advantages for some racial and ethnic groups in bottom performing VAMCs: interventions to improve glycemic control
  - Top performing: good diabetes monitoring
- Disparities by VAMC performance level varies by race and ethnicity... implications for interventions!



# **Strengths and Limitations**

#### **LIMITATIONS**

- Overlapped with COVID-19 pandemic
- Considered only one condition and one type of disparity
- Limited generalizability to US population

#### **STRENGTHS**

- National data from a diverse patient sample within a learning healthcare system
- Included smaller racial and ethnic groups often excluded from other national studies
- Case study to demonstrate discordance between quality and equity





# **Implications**

- High quality ≠ equitable care
- Increasing recognition e.g., The Joint Commission elevated health equity as a new National Patient Safety Goal
- Healthcare quality measures should include separate equity measures
- Differences by race and ethnicity: tailored approach to diabetes care





# Implications: for Quality Improvement (QI)

- Incentivize equity efforts
  - SAIL measure on equity???
- Incorporate health equity into quality improvement (QI) projects:
  - QI measures: Process, outcome, balancing...equity?
  - Equity measures, dashboards, and tools



# Brainstorming opportunity: how to incorporate health equity into QI



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- Ernest Moy
- Kenneth T. Jones
- Amit J. Kothari
- Donna L. Washington



# Manuscript forthcoming



EMERGING & GLOBAL HEALTH POLICY

JOURNAL ARTICLE

ACCEPTED MANUSCRIPT

### Relationship between health system quality and racial and ethnic equity in diabetes care



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# Questions?

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Link to manuscript here







## **APPENDIX**



# **SAIL Diabetes composite**

- Diabetes composite: HbA1c annual testing, blood pressure <140/90, HbA1c >9 or no evidence of test (reverse coded so that higher achievement is better), renal testing, statin therapy for patients with diabetes
- Ischemic heart disease composite: blood pressure <140/90 among patients age 18-59 with active diagnosis of hypertension, blood pressure <140/90 among patients age 60-85 with diagnoses of both hypertension and diabetes, blood pressure <150/90 among patients age 60-85 with diagnosis of hypertension and no diagnosis of diabetes, statin therapy for patients with cardiovascular disease



# **Sensitivity Analysis**

	Model 1: Unadjusted			Model 2: Age and Sex Adjusted				
	OR	95%CI	p-value	OR	95%CI	p-value		
VAMC performance level								
Low performing	1	(ref)		1	(ref)			
Medium performing	1.00	(0.89, 1.13)	0.939	1.01	(0.90, 1.14)	0.81		
High performing	1.13	(0.97, 1.30)	0.108	1.14	(0.99, 1.32)	0.075		
Sex								
Male				1	(ref)			
Female				0.85	(0.83,0.87)	<0.05		
Age categories								
19-24 years				1	(ref)			
25-29 years				0.76	(0.60, 0.97)	0.028		
30-34 years				0.67	(0.53, 0.85)	0.001		
35-39 years				0.61	(0.48, 0.77)	< 0.05		
40-44 years				0.55	(0.43, 0.69)	< 0.05		
45-49 years				0.49	(0.39, 0.62)	< 0.05		
50-54 years				0.43	(0.34, 0.55)	< 0.05		
55-59 years				0.39	(0.31,0.49)	< 0.05		
60-64 years				0.35	(0.27, 0.44)	< 0.05		
65-69 years				0.32	(0.25, 0.40)	< 0.05		
70-75 years				0.25	(0.05, 1.27)	$0.095^{26}$		