Speaker Introduction

Kara Nazminia received her doctorate of pharmacy from the University of Wyoming in 2020. She then completed her PGY1 Pharmacy Residency at the University of Utah Health. She currently serves as one of the PGY2 Internal Medicine Pharmacy Residents at the University of Utah Health. She is interested in continually examining her implicit biases and their etiologies to ensure optimal care for all patients she serves. Kara's other areas of interest include infectious diseases, neurology, transitions of care, and academia.

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Checking Our Biases: Examining the Role of Race and Ethnicity in Pharmacy Care

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Disclosure

- Relevant Financial Conflicts of Interest
  - **CE Presenter, Kara Nazminia, PharmD:**
    - No relevant conflicts of interest exist
  - **CE mentor, Kristine Gray, PharmD, BCPS:**
    - Gilead, Illumina, Viatris, Proctor & Gamble, Kimberly Clark, Cardinal Health, Abbott Laboratories, Medtronic, Becton Dickinson and Co, 3M, CVS, Pfizer, Johnson & Johnson – Stock
  - **CE mentor, Kimmy Terry, PharmD, BCCCP, BCPS:**
    - No relevant conflicts of interest exist
- Off-Label Uses of Medications
- This presentation will not include off-label uses of medications

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Learning Objectives

Pharmacists:

1. Evaluate the appropriateness of using clinical calculators in directing pharmacy recommendations

2. Describe the differing impact clinical trials may have on patients from various ethnoracial backgrounds

3. Construct a process to include ethnoracial considerations into pharmacy care

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Learning Objectives

Technicians:

1. Identify the historical impacts of ethnoracial events on clinical care
2. List medications dosed based on estimated glomerular filtration rate (eGFR)
3. Evaluate an approach that includes ethnoracial considerations for patient centered care

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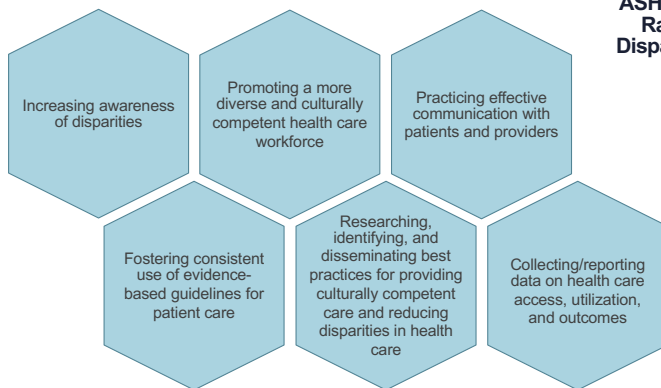## ASHP Statement on Racial and Ethnic Disparities in Health Care

"Pharmacists who practice in hospitals and health systems… can play a leading role in building culturally competent systems of care to reduce racial and ethnic disparities in health care"

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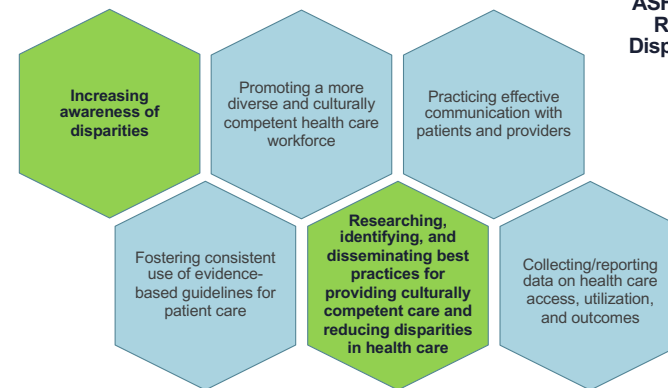
American Society of Health-System Pharmacists. ASHP statement on racial and ethnic disparities in health care. *Am J Health-Syst Pharm.* 2008; 65:728–733.

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ASHP Statement on Racial and Ethnic Disparities in Health Care

Increasing awareness of disparities

Promoting a more diverse and culturally competent health care workforce

Practicing effective communication with patients and providers

Fostering consistent use of evidence-based guidelines for patient care

Researching, identifying, and disseminating best practices for providing culturally competent care and reducing disparities in health care

Collecting/reporting data on health care access, utilization, and outcomes

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American Society of Health-System Pharmacists. ASHP statement on racial and ethnic disparities in health care. *Am J Health-Syst Pharm.* 2008; 65:728–733.

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American Society of Health-System Pharmacists. ASHP statement on racial and ethnic disparities in health care. *Am J Health-Syst Pharm.* 2008; 65:728–733.

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Roadmap

1. **Looking back at race and ethnicity in medicine and pharmacy**

3. **Race and ethnicity in clinical trials**

2. **The ubiquity of race corrections in clinical tools**

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Looking back at race and ethnicity in medicine and pharmacy
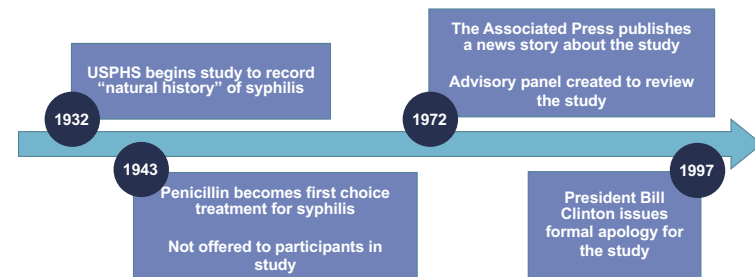
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Henrietta Lacks

- In 1951, Henrietta Lacks died at age 31 of an aggressive cervical cancer
- When initially being diagnosed, doctors at Johns Hopkins Hospital took samples of her cancerous cells
- A researcher was given her cells **without her knowledge or consent**
- Her cells (HeLa cells) allowed for many discoveries in modern medicine
- Companies that profited from her cells **did not compensate** her family
- Researchers did not ask her family for consent when they revealed her name publicly

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Henrietta Lacks: science must right a historical wrong. *Nature.* 2020;585(7823):7.

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U.S. Public Health Service Syphilis Study at Tuskegee

USPHS begins study to record "natural history" of syphilis

1932

1943

Penicillin becomes first choice treatment for syphilis

Not offered to participants in study

The Associated Press publishes a news story about the study

Advisory panel created to review the study

1972

1997

President Bill Clinton issues formal apology for the study

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Centers for Disease Control and Prevention. The U.S. Public Health Service Syphilis Study at Tuskegee, 2021. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. https://www.cdc.gov/tuskegee/timeline.htm

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Medical Ethics of Dr. J Marion Sims

- Acknowledged as father of modern surgical gynecology
- Reputation quickly deteriorated
  1. Unethical to perform experimental surgical operations on slaved because they could not give voluntary informed consent for surgery
  2. Failed to use anesthesia during experimental operations
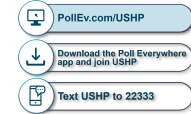- Some suggest these claims are unsubstantiated

Wall LL. The medical ethics of Dr J Marion Sims: a fresh look at the historical record. *J Med Ethics*. 2006;32(6):346-350.

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Which of the following historical events may drive a patient's mistrust in the healthcare system?

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A. USPHS Syphilis Study at Tuskegee

B. History of Henrietta Lacks and HeLa cells

C. Lack of informed consent in early experimental surgeries

D. Access to Federally Qualified Health Centers

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Race and ethnicity in clinical trials

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Drug Trials Snapshots Report 2020

	White	Black or African American	Asian	Hispanic
Average Percent Participation for New Molecular Entities	75%	**8%**	6%	11%

Drug Trials Snapshots Summary Report 2021. Food and Drug Administration Web site. https://www.fda.gov/media/145718/download.

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More than Tuskegee: understanding mistrust about research participation

Qualitative study published in 2010 in Journal of Health Care for the Poor and Underserved

- Examined barriers to research participation among African American adults

- Themes emerging from interviews with participants
  1. Mistrust
  2. No benefit to African American community
  3. Recent examples of racism or discrimination
  4. Inadequate information and delivery

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Scharff DP, Mathews KJ, Jackson P, Hoffsuemmer J, Martin E, Edwards D. More than Tuskegee: understanding mistrust about research participation. J Health Care Poor Underserved. 2010;21(3):879-897.

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More than Tuskegee: understanding mistrust about research participation

1. Mistrust

"One of the reasons most Black people are reluctant to get involved is suspicion. We've been kind of brainwashed, and we're guinea pigs."

"Just that awareness [about Tuskegee] is enough to stand up generation after generation."

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Scharff DP, Mathews KJ, Jackson P, Hoffsuemmer J, Martin E, Edwards D. More than Tuskegee: understanding mistrust about research participation. J Health Care Poor Underserved. 2010;21(3):879-897.

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More than Tuskegee: understanding mistrust about research participation

2. No benefit to African American community

"I think the deception is when we read studies, they don't relate to us. They don't … I mean, they're about another nationality. They're not really for African Americans. And they don't apply to us."

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Scharff DP, Mathews KJ, Jackson P, Hoffsuemmer J, Martin E, Edwards D. More than Tuskegee: understanding mistrust about research participation. J Health Care Poor Underserved. 2010;21(3):879-897.

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More than Tuskegee: understanding mistrust about research participation

3. Recent examples of racism or discrimination

"I'm not going to go into details. But he wasn't treated properly, given the proper tests at this hospital. He's in a coma to this day. And I guess because he's a black man. Like I said, I just haven't seen it happen to white patients."

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Scharff DP, Mathews KJ, Jackson P, Hoffsuemmer J, Martin E, Edwards D. More than Tuskegee: understanding mistrust about research participation. J Health Care Poor Underserved. 2010;21(3):879-897.

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More than Tuskegee: understanding mistrust about research participation

4. Inadequate information and delivery

"*The words are important but it's also the way you present those words, because they can say a lot of words but if it's not presented correctly or with some kind of feeling that you have concern... just don't talk to me.*"

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Scharff DP, Mathews KJ, Jackson P, Hoffsuemmer J, Martin E, Edwards D. More than Tuskegee: understanding mistrust about research participation. J Health Care Poor Underserved. 2010;21(3):879-897.

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Minority Participation in Clinical Trials

- When trial participants are homogenous, findings skew and result in a body of **ungeneralizable clinical knowledge**

- Given homogeneity of many clinical trials, however, African Americans, Hispanics, and other minority groups have **benefited less** than white patients

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Clark LT, Watkins L, Piña IL, et al. Increasing Diversity in Clinical Trials: Overcoming Critical Barriers [published correction appears in Curr Probl Cardiol. 2021 Mar;46(3):100647]. Curr Probl Cardiol. 2019;44(5):148-172.

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Barriers to Participation in Clinical Trials

Mistrust		Stigma of participating / Historical context	
Lack of comfort with process		Family opinions / Mistrust of process	Clear communication / Provide resources
Limited Time/Resources		Financial burden / Transportation	
Lack of awareness		Unclear value / Lack of information	

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Clark LT, Watkins L, Piña IL, et al. Increasing Diversity in Clinical Trials: Overcoming Critical Barriers [published correction appears in Curr Probl Cardiol. 2021 Mar;46(3):100647]. Curr Probl Cardiol. 2019;44(5):148-172.

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TL is a 47-year-old African American male who trial investigators would like to include in their study at the academic medical center in their city. He lives far away from the center and would have to take work off to participate.

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1. Describe the barriers that TL may feel prevent his participation in the trial

2. Provide TL with suggestions to overcome these barriers

Think- Pair- Share!

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Slide 25

The ubiquity of race corrections in clinical tools

Slide 26

The ubiquity of race corrections in clinical tools

Estimated glomerular filtration rate (eGFR)	Rectal Cancer Survival Calculator
ASCVD Risk Calculator	Osteoporosis Risk SCORE
AHA Heart Failure Risk Score	Fracture Risk Assessment Tool (FRAX)
The Society of Thoracic Surgeons Short Term Risk Calculator	National Cancer Institute Breast Cancer Risk Assessment Tool
Organ Procurement and Transplantation Network: Kidney Donor Risk Index	Breast Cancer Surveillance Consortium Risk Calculator
STONE Score	Pulmonary Function Tests

Vyas DA, Einsenstein LG, Jones DS. Hidden in plain sight – reconsidering the use of race correction in clinical algorithms. *N Engl J Med*. 2020;383(9):874-882.

Slide 27

The ubiquity of race corrections in clinical tools

Estimated glomerular filtration rate (eGFR)	Rectal Cancer Survival Calculator
ASCVD Risk Calculator	Osteoporosis Risk SCORE
AHA Heart Failure Risk Score	Fracture Risk Assessment Tool (FRAX)
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STONE Score	Pulmonary Function Tests

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Slide 28

Atherosclerotic Cardiovascular Disease Risk Score

- Pooled Cohort Equations (PCEs) from 2013 are integral in the prevention guidelines for ASCVD
  - May **misestimate CVD risk**, especially in black patients

Components of Score	
Age	Sex
Race	Smoking History
Systolic Blood Pressure	Diastolic Blood Pressure
Total Cholesterol	HDL Cholesterol
LDL Cholesterol	Diabetes History

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Yadlowsky S, Hayward RA, Sussman JB, McClelland RL, Min YI, Basu S. Clinical Implications of Revised Pooled Cohort Equations for Estimating Atherosclerotic Cardiovascular Disease Risk. Ann Intern Med. 2018;169(1):20-29.

Atherosclerotic Cardiovascular Disease Risk Score

- Revised PCEs may improve accuracy of ASCVD risk calculator
- Study published in 2018 suggests new PCEs are needed
  - Reduced extreme risk estimates for black adults compared to white adults with similar risk factors

Components of Score	
Age	Sex
Race	Smoking History
Systolic Blood Pressure	Diastolic Blood Pressure
Total Cholesterol	HDL Cholesterol
LDL Cholesterol	Diabetes History

Yadlowsky S, Hayward RA, Sussman JB, McClelland RL, Min YI, Basu S. Clinical Implications of Revised Pooled Cohort Equations for Estimating Atherosclerotic Cardiovascular Disease Risk. Ann Intern Med. 2018;169(1):20-29.

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American Heart Association Heart Failure Risk Score

- Risk score to predict in-hospital mortality for patients with heart failure
- Guide referrals to cardiology and treatment
- Assigns **three points** to any patient classified as "nonblack"

Components of Score
Systolic BP
BUN
Sodium
Age
Heart rate
COPD history
Race

Peterson PN, Rumsfeld JS, Liang L, et al. Circ Cardiovasc Qual Outcomes. 2010;3(1):25-32.   Eberly LA, Richterman A, Beckett AG, et al. Circ Heart Fail. 2019;12(11):e006214.
Vyas DA, Einsenstein LG, Jones DS. N Engl J Med. 2020;383(9):874-882.

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American Heart Association Heart Failure Risk Score

2019 Study on Racial Inequities in Heart Failure

- Black and Latinx patients **less likely** than white patients to be admitted to cardiology service

Score Interpretation	
Points	Predicted Mortality
0-33	<1%
34-50	1-5%
51-57	5-10%
58-61	10-15%
62-65	15-20%
66-70	20-30%
71-74	30-40%
75-78	40-50%
79+	>50%

Eberly LA, Richterman A, Beckett AG, et al. Circ Heart Fail. 2019;12(11):e006214.

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Osteoporosis Risk Score

- Determines risk for low bone density to guide decisions about DEXA scan screening
- Assigns all nonblack patients **5 additional points**
- Lower score in black patients may mean **delayed diagnosis and intervention for osteoporosis**
- Unclear if the evidence supports practice of placing all nonblack patients in higher risk class

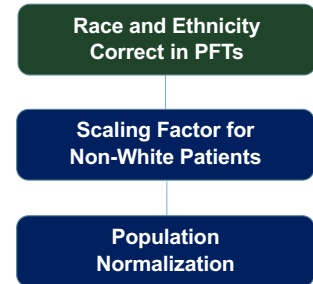| Components of Score	
Age	+3
Weight	-1
Estrogen use	+1
Rheumatoid arthritis	+4
Fracture history	+4
Race	**+5**

Vyas DA, Einsenstein LG, Jones DS. Hidden in plain sight – reconsidering the use of race correction in clinical algorithms. N Engl J Med. 2020;383(9):874-882.

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Fracture Risk Assessment Tool (FRAX)

- Estimates 10-year risk of hip or other major fractures
  - Country-specific calculator
- Uses **race correction** for black patients (0.43), Asian patients (0.50), and Hispanic patients (0.53)
- May **delay screening or intervention** for non-white patients

Components of Score
Age
Weight
Height
Fracture history
Parental fracture history
Race
Glucocorticoid use
Alcohol use
Rheumatoid arthritis

Vyas DA, Einsenstein LG, Jones DS. Hidden in plain sight – reconsidering the use of race correction in clinical algorithms. *N Engl J Med*. 2020;383(9):874-882.
El Miedany Y. FRAX: re-adjust or re-think. *Arch Osteoporos*. 2020;15(1):150.

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Pulmonary Function Tests (PFTs)

- Most available spirometers correct or adjust for race or ethnicity
- May blind clinicians to the complex relationship between lung function and a patient's environment

Race and Ethnicity Correct in PFTs

Scaling Factor for Non-White Patients

Population Normalization

Braun L. Race, ethnicity and lung function: A brief history. Can J Respir Ther. 2015;51(4):99-101.
Vyas DA, Einsenstein LG, Jones DS. Hidden in plain sight – reconsidering the use of race correction in clinical algorithms. *N Engl J Med*. 2020;383(9):874-882.\

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Pulmonary Function Tests (PFTs)

- Correction dates to comments made by Thomas Jefferson in his book *Notes on the State of Virginia*
  - Suggested white people had **larger lung capacity** and had **different pulmonary structures**
- Compounded by findings of Samuel Cartwright in the 1800s
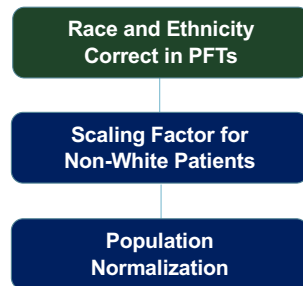
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Vyas DA, Einsenstein LG, Jones DS. Hidden in plain sight – reconsidering the use of race correction in clinical algorithms. *N Engl J Med*. 2020;383(9):874-882.\

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Estimated Glomerular Filtration Rate (eGFR)

- GFR generally estimated from serum concentrations of **creatinine or cystatin C**
- Automated laboratory reporting of **GFR estimated with creatinine** (eGFRcr) has become widespread over last two decades
- Focus on CKD-EPI equations

Inker LA, Eneanya ND, Coresh J, et al. Sep 23]. *N Engl J Med*. 2021;10.1056/NEJMoa2102953.
Levey AS, Stevens LA, Schmid CH, et al. *Ann Intern Med*. 2009;150(9):604-612.
Flamant M, Vidal-Petiot E, Metzger M, et al. *Am J Kidney Dis*. 2013;62(1):182-184.
Lewis J, Agodoa L, Cheek D, et al. *Am J Kidney Dis*. 2001;38(4):744-753.

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Estimated Glomerular Filtration Rate (eGFR)

- CKD-EPI Creatinine 2009

$$eGFR = 141 * \left[min\left(\frac{SCr}{\kappa}\right)^{\alpha} \times max\left(\frac{SCr}{\kappa}\right)^{-1.209} \right] \times age^{-0.993} \times 1.018\ [if\ female] \times \mathbf{1.157}\ [\mathbf{if\ black}]$$

- CKD-EPI Creatinine-Cystatin 2012

$$eGFR = 135 * \left[min\left(\frac{SCr}{\kappa}\right)^{\alpha} \times max\left(\frac{SCr}{\kappa}\right)^{-0.601} \times min\left(\frac{SCys}{\kappa}\right)^{-0.375} \times max\left(\frac{SCys}{\kappa}\right)^{-0.711} \right] \times 0.995^{age} \times 0.969\ [if\ female] \times \mathbf{1.08}\ [\mathbf{if\ black}]$$

Inker LA, Eneanya ND, Coresh J, et al. Sep 23). N Engl J Med. 2021;10.1056/NEJMoa2102953.
Levey AS, Stevens LA, Schmid CH, et al. Ann Intern Med. 2009;150(9):604-612.
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Lewis J, Agodoa L, Cheek D, et al. Am J Kidney Dis. 2001;38(4):744-753.

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Estimated Glomerular Filtration Rate (eGFR)

- Race Correction in eGFR
- Included in 2009 and 2012 studies that validated CKD-EPI equations for eGFR
- Late **1990s study** regarding appendicular skeletal muscle mass suggested black participants had **higher absolute amounts of skeletal muscle** than nonblack participants

Black Patients in eGFR Studies	
CKD-EPI Creatinine Study	32% (n=1728)
CKD-EPI Cystatin C Study	40% (n=2123)

Levey AS, Stevens LA, Schmid CH, et al. Ann Intern Med. 2009;150(9):604-612.
Gallagher D, Visser M, De Meersman RE. J Appl Physiol (1985). 1997; 83(1): 229-239.
Inker LA, Schmid CH, Tighiouart H, et al. N Engl J Med. 2012;367:20-29.

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Sequalae of Race Correction in eGFR

- Overestimation of eGFR
  - Recommending **larger doses of medication** than is necessary
- Later listing for kidney transplantation

- Underestimation of eGFR
  - Recommending **suboptimal doses** of medication
- Earlier listing for kidney transplantation – or ineligibility to donate

Selected Medications Adjusted Based on eGFRcr Rather than eCrCl
Metformin
Dapagliflozin
Empagliflozin
Ertugliflozin
Canagliflozin
Allopurinol*
Sacubitril and Valsartan
Baricitinib
Remdesivir

*Initial dose only

essard BA, Zaiken K. J Am Pharm Assoc. 2013;53(1):54-57.
iker LA, Eneanya ND, Coresh J, et al. Sep 23). N Engl J Med. 2021;10.1056/NEJMoa2102953.
tefani M, Singer RF, Roberts DM. Aust Prescr. 2019;42(5):163-167
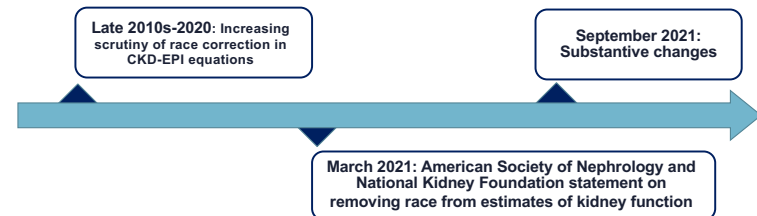Flamant M, Vidal-Petiot E, Metzger M, et al. Am J Kidney Dis. 2013;62(1):182-184.
Lewis J, Agodoa L, Cheek D, et al. Am J Kidney Dis. 2001;38(4):744-753.
Lexi-drugs online [database on the Internet]. Hudson (OH): Lexicomp, Inc.; 2021.

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New Equations for eGFR

Late 2010s-2020: Increasing scrutiny of race correction in CKD-EPI equations

September 2021: Substantive changes

March 2021: American Society of Nephrology and National Kidney Foundation statement on removing race from estimates of kidney function

Inker LA, Eneanya ND, Coresh J, et al. N Engl J Med. 2021;10.1056/NEJMoa2102953.
National Kidney Foundation, American Society of Nephrology. Removing Race from Estimates of Kidney Function.
Hsu CY, Yang W, Parikh RV, et al. N Engl J Med. 2021;10.1056/NEJMoa2103753.

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New England Journal of Medicine September 2021 Studies Regarding Race and eGFR

- Omitting race from eGFRcr **equations may introduce inaccuracies for both race groups** and differences in eGFR between groups but within an **appropriate margin of error**

- Estimating eGFR with both serum creatinine and cystatin C may **mitigate limitations of removing race from eGFR equations**

Inker LA, Eneanya ND, Coresh J, et al. *N Engl J Med.* 2021;10.1056/NEJMoa2102953.
Hsu CY, Yang W, Parikh RV, et al. N Engl J Med. 2021;10.1056/NEJMoa2103753.

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National Kidney Foundation and American Society of Nephrology Recommendations 2021

1. Recommend **immediate adjustment of eGFRcr equation without race variable** in all laboratories in the US
2. Recommend national efforts to facilitate **increased use of cystatin C**, especially to confirm eGFR in those with or at risk for chronic kidney disease

Delgado C, Baweja M, Crews DC, et al. A Unifying Approach for GFR Estimation: Recommendations of the NKF-ASN Task Force on Reassessing the Inclusion of Race in Diagnosing Kidney Disease [published online ahead of print, 2021 Sep 22]. *Am J Kidney Dis.* 2021;S0272-6386(21)00828-3.

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Prior to system level changes…

Evidence underlying race/ethnicity corrections in clinical calculators

Patient specific factors

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All the following are medications whose renal dose adjustments are recommended to be made based on eGFR rather than eCrCl EXCEPT:

A. Baricitinib

B. Metformin

C. Piperacillin/Tazobactam

D. Allopurinol

E. Sacubitril/Valsartan

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RW is a 67-year-old African American female who presents to your clinic for diabetes management. Her renal function seems to be declining but you are hoping to initiate dapagliflozin and she agrees to therapy. She clearly has low muscle mass, and you are trying to determine if her renal function is appropriate for dapagliflozin.

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1. What are some considerations you would make when assessing her renal function?

2. How would you counsel her about the benefits of dapagliflozin therapy if she qualifies for it to ensure she has accurate information?

Think- Pair- Share!

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Pain Assessment and Treatment Recommendations

- Several studies have suggested racial and ethnic minorities receive **less adequate treatment for acute pain** than non-Hispanic white patients

- May be fueled by **pain underreporting**

- Number of other factors including health care providers limited awareness of :
  - Patient **cultural beliefs**
 - **Stereotypes** regarding pain

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Mossey JM. Defining racial and ethnic disparities in pain management. *Clin Orthop Relat Res*. 2011;469(7):1859-1870.
Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci U S A*. 2016;113(16):4296-4301.

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Classifying a Patient's Race

- Racial categorization is often used in non-standardized way

- No **accepted definition** for patients nor providers

- In the U.S., **10.2% of patients** identify as **multiracial**

- **Underscores** importance of taking the whole patient into account

- At current level of knowledge, race may not be **clinically useful**
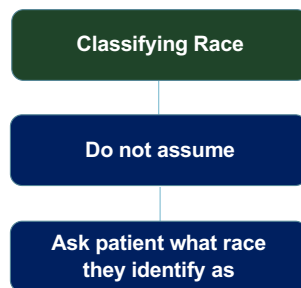
Classifying Race

Do not assume

Ask patient what race they identify as

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Eneanya ND. Yang W, Reese PP. Reconsidering the Consequences of Using Race to Estimate Kidney Function. *JAMA*. 2019;322(2):113-114.
Finucane TE. Mention of Patient's "Race" in Clinical Presentations. Virtual Mentor. 2014;16(6):423-427.   Jones N, Marks R, Ramirez R, Rios-Vargas M. *Census 2020*. Washington, DC: US Census Bureau; 2021.

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The Bottom Line

- There is a large amount of historical context that underlies the systemic injustices felt by racial and ethnic minorities

- Racial and ethnic minorities may have several barriers keeping them from participating in clinical trials

- Clinical calculators can be helpful in guiding a patient's medication therapy
  - Become aware of the evidence behind race and ethnicity corrections in these calculators

- Balance patient specific factors and calculator recommendations

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Resources for Next Steps

- New England Journal of Medicine
  - Race and Medicine
- American Academy of Family Physicians
  - Health Equity, Diversity, and Social Determinants of Health
- Rutgers
  - Resources for Diversity, Equity, and Inclusion in Medical Education

Race and Medicine. *N Engl J Med*. 2021. Available from: https://www.nejm.org/race-and-medicine?query=main_nav_condensed.
Health Equity, Diversity, and Social Determinants of Health. *FPM*. 2021. Available from: https://www.aafp.org/fpm/topicModules/viewTopicModule.htm?topicModuleId=114
Resources for Diversity, Equity, and Inclusion in Medical Education. Rutgers University Libraries. 2021. Available from: https://libguides.rutgers.edu/DEImeded

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Pharmacists and Technicians

What is one way you will change your practice to incorporate ethnoracial considerations into patient care?

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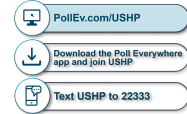
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Learning Objectives

Pharmacists:

1. Evaluate the appropriateness of using clinical calculators in directing pharmacy recommendations
2. Describe the differing impact clinical trials may have on patients from various ethnoracial backgrounds
3. Construct a process to include ethnoracial considerations into pharmacy care

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Learning Objectives

Technicians:

1. Identify the historical impacts of ethnoracial events on clinical care
2. List medications dosed based on estimated glomerular filtration rate (eGFR)
3. Evaluate an approach that includes ethnoracial considerations for patient centered care

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What questions do you have?

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Checking Our Biases: Examining the Role of Race and Ethnicity in Pharmacy Care

CE Code: (USHP will fill in)

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