

## Today's Webinar Agenda

Time	Title	Speaker
00:00 - 00:10	Introductions and Announcements	Nicolas Cuttriss, MD, MPH, FAAP
00:10 - 00:25	Addressing CKD Disparities and Social Determinants of Health to Achieve Diabetes Management Goals	Crystal A. Gadegbeku, MD George Thomas, MD
00:25 – 00:30	Presentation Q & A	Questions submitted via Q & A by attendees
00:30 - 00:35	Case presentation	Amit Singh, DO
00:35 – 00:55	Case questions and recommendations	Hub team faculty & attendees Please provide your clarifying questions and recommendations via the Q&A
00:55 - 01:00	Wrap-up and announcements	Nicolas Cuttriss, MD, MPH, FAAP

## Learning Objectives

Participants should be able to:

- Identify the disproportionate prevalence of CKD in different racial and ethnic populations
- Assess how racial, gender, and socioeconomic factors affect patient access to evidence-based treatment options
- Strategize ways to address biases that may lead to prescribing disparities in your practice
- Optimize hypertension and CKD prevention/management in your patients with type 2 diabetes

## **Presenting Faculty**

### Crystal A. Gadegbeku, MD,



Chair, Department of Kidney Medicine Glickman Urological and Kidney Institute, Cleveland Clinic Cleveland, OH

#### George Thomas, MD



Nephrologist Glickman Urological and Kidney Institute, Cleveland Clinic Cleveland, OH

## Disclosure Information

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Faculty Presenters			
Robert Gabbay, MD, PhD	Presenting Faculty	Consulting fees/advisory boards: Lark, Health Reveal, Vida Health, Onduo	
Crystal A. Gadegbeku, MD	Presenting Faculty	Consulting fees/advisory boards: Fresenius Kidney Care. Research Study	
		Advisory Board: Bristol Myers Squibb	
George Thomas, MD	Presenting Faculty	Consulting fees: Up to Date	
		Contracted research: Boehringer Ingelheim	
Katherine R. Tuttle, MD, FASN, FACP,	Presenting Faculty	Consulting fees/advisory boards: AstraZeneca, Bayer HealthCare	
FNKF		Pharmaceuticals, Boehringer Ingelheim, Eli Lilly and Company, Gilead Sciences,	
		Inc., Goldfinch Bio, Inc., Novo Nordisk	
		Contracted research: Bayer HealthCare Pharmaceuticals, Goldfinch Bio, Inc.,	
		Travere Therapeutics, Inc.	
Joseph Vassalotti, MD	Presenting Faculty	Consulting fees/advisory boards: Boehringer Ingelheim, Eli Lilly and Company,	
		Renalytix	

## Disclosure Information, cont.

Curriculum Development		
Nicolas Cuttriss, MD, MPH, FAAP	Course Director, Core Faculty	Nothing to disclose
Nayan Arora, MD	Core Faculty	Consulting fees/advisory boards: George Clinical
Matthew Bouchonville, MD, CDCES	Core Faculty	Nothing to disclose
Kelly Close, MBA	Patient Advocate, Core Faculty	Founder: The DiaTribe Foundation and Close Concerns,
		education, advocacy and news service organizations
Phyllisa Deroze, PhD	Patient Advocate, Core Faculty	Nothing to disclose
Korey Hood, PhD	Core Faculty	Consulting fees/advisory boards: Cecelia Health, Insulet
		Corporation, LifeScan Diabetes Institute
Sean Oser, MD	Core Faculty	Consulting fees/advisory boards: Dexcom, Inc.
Daniel Saltman, MD	Core Faculty	Nothing to disclose
Jay H. Shubrook, DO	Core Faculty	Consulting fees/advisory boards: Abbott, AstraZeneca,
		Bayer HealthCare Pharmaceuticals Inc., Eli Lilly and
		Company, Novo Nordisk
Lisa Taylor, DNP, FNP-BC, BC-ADM, CDCES	CNE Nurse Advisor, Core Faculty	Nothing to disclose
Julie Valdes, PharmD	Core Faculty	Nothing to disclose
Planning Committee	·	
Linda G. Baer, MSPH, CHCP	Planning Committee Member	Nothing to disclose
Michael Burk, BS	BU, Senior Program Manager	Nothing to disclose
Samantha Gordon, MS	Manager, Accreditation	Nothing to disclose
Ilana Hardesty, MLA	BU, Assistant Director	Nothing to disclose
Catherine Sullivan, MD	BU, CME Accreditation Reviewer	Nothing to disclose
Sara C. Miller, MS, CPHQ	Planning Committee Member	Nothing to disclose
Julie White, MS, CHCP	Director, CME	Nothing to disclose

### Accreditation

# Addressing Disparities in Diabetes With Project ECHO: A Focus on Diabetes-Related CKD SESSIONS ON THE THIRD WEDNESDAY OF THE MONTH

#### Physicians:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Boston University School of Medicine and the ECHO Diabetes Action Network. Boston University School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Boston University School of Medicine designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit(s) $^{\text{TM}}$ . Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### Nurses:

This educational activity has been provided by Boston University School of Medicine Continuing Nursing Education and jointly-provided by the ECHO Diabetes Action Network.

Boston University School of Medicine Continuing Nursing Education is accredited with distinction as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

Contact Hours: 1.0

Project ECHO® collects registration and participation data for some teleECHO® programs. Your individual data will be kept confidential. These data may be used for reports, maps, communications, surveys, quality assurance, evaluation, research, and to inform new initiatives.

## Assessment, Evaluation and How to Claim CME/CE Credit

In order to successfully complete this activity, you are required to attend the entire live virtual presentation and complete a posttest assessment and evaluation. A link to the assessment will be provided at the end of the presentation and in a follow-up email you will receive after the program. Upon completing the assessment, you will be provided with a link to complete the evaluation and claim your credit on Boston University School of Medicine's website.

#### **Presentation Slides**

A link to today's slides can be found in the Chat and in the Announcement email sent yesterday.

## **Case Presentations**

Sign up to present a case! <a href="https://redcap.link/caseform">https://redcap.link/caseform</a>



Thank you for joining us. The program will begin shortly.

## During the Webinar

#### **Q&A Feature**

For questions directed to the faculty related to the content of the session

#### **Chat Feature**

For Technical Questions or to Share Resources

## Language Matters: Help Facilitate System Change With Language in Your Workplace

We are working hard to change the language around diabetes by adopting person-centered, strengths-based, and empowering words and messages. In accordance with updated standards, please note:

- We no longer use the word "diabetic" in any context. Instead, we use "person with diabetes," "person living with diabetes," or "diabetes-related."
- Please refrain from using the words "compliant," "adherent," or "control," regarding people with diabetes, because these can be judgmental terms.
- Please refer to <a href="https://tinyurl.com/SpeakingtheLanguageofDiabetes">https://tinyurl.com/UseofLanguageDiabetes</a> for more information
  Thank you for helping us to reduce stigma and change the language of diabetes!

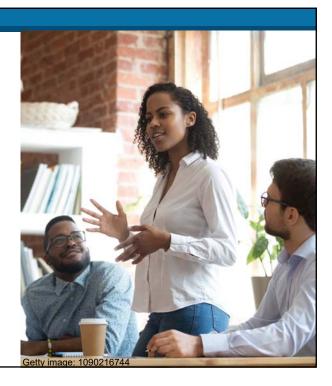
American Diabetes Association (ADA) and Association of Diabetes Care & Education Specialists (ADCES)

Our ECHO is a safe space for everyone.

We have a zero-tolerance policy for language that is discriminatory, disrespectful, racist, sexist, bullying, or offensive. As such, any participant will be removed from the webinar if you engage in any such behavior.

Thank you for keeping our ECHO a safe space for all.

Thank you for joining us. The program will begin shortly.



## Join us for the Next Session: Wednesday, April 20, 2022

#### Joseph Vassalotti, MD



Clinical Professor of Medicine Icahn School of Medicine at Mount Sinai, New York, NY Chief Medical Officer National Kidney Foundation Presents:
Halting CKD Progression:
From Optimizing
Hypertension Management
to Newer Agents

Registration Required <a href="https://cvent.me/qvDxg3">https://cvent.me/qvDxg3</a>



Thank you for joining us. The program will begin shortly.

Questions?
Looking for resources or more information?

Visit our website: <a href="https://cvent.me/qvDxg3">https://cvent.me/qvDxg3</a>

## Acknowledgment of Commercial Support

This activity is supported by an educational grant from Bayer HealthCare Pharmaceuticals.





Welcome! Thank you for joining!

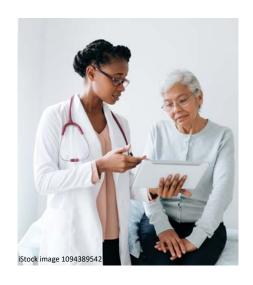
## Acknowledgment

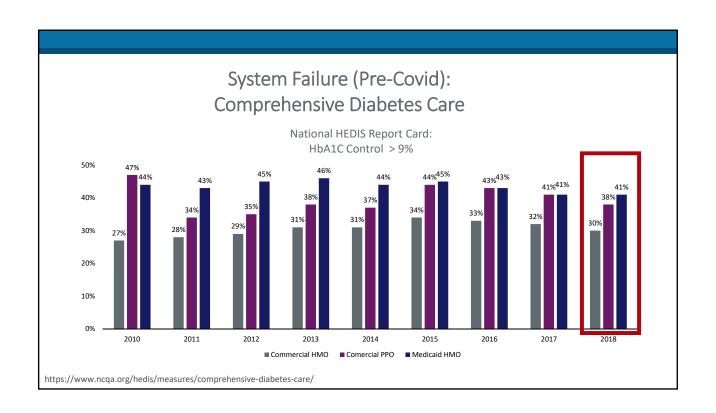
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### Our Goal

Address the urgent and persistent needs of vulnerable populations of people with diabetes complicated by CKD.

We seek to engage clinicians in the primary care setting by empowering and increasing their capacity to screen, diagnose, and manage renal complications of diabetes using the Project ECHO® (Extension for Community Healthcare Outcomes) model.





#### Diabetes-Related CKD: System Failure



1 in 10 adults in US have diabetes

(double the burden in community health centers)

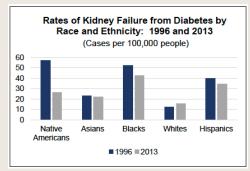
## 1 in 3 with diabetes have CKD





3 in 4 with DKD (stage 3 - 4) are UNAWARE!

## Addressing Racial Disparities: Reasons for Hope





CDC National Diabetes Statistic Report; Bullock et al. MMWR Morb Mortal Wkly Rep. 2017;66:26-32; Narva A. Am J Kidney Dis. 2018;71(3):407-411.

## #HealthEquityNow



#### **Health Equity Bill of Rights**

The current health pandemic and its disproportionate toll on minority, low-income, and historically underserved Americans shines a troubling light on historic, systemic inequities in American health care. It is time for health equity now.

The **Health Equity Bill of Rights** envisions a future without unjust health disparities. It ensures the 122 million Americans living with diabetes and prediabetes, along with the millions more who are at high risk for diabetes – no matter their race, income, zip code, age, education or gender – get equal access to the most basic of human rights: their health. These rights include:

## dStigmatize



Resources about diabetes

Click below to learn more about stigms and how to reduce its impact, as well as general information about disheres.

Language To-

Research

Basic Information About Diabetes

Organization



https://www.diabetes.org/healthequitynow

https://www.dstigmatize.org/

## Language Matters: Help Facilitate System Change With Language in Your Workplace

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   and <a href="https://tinyurl.com/UseofLanguageDiabetes">https://tinyurl.com/UseofLanguageDiabetes</a> for more information
   Thank you for helping us to reduce stigma and change the language of diabetes!

American Diabetes Association (ADA) and Association of Diabetes Care & Education Specialists (ADCES)

### Project ECHO

#### **Extension for Community Healthcare Outcomes**

#### Response to:

- 1. Poor outcomes and system failure
- 2. Lack of specialists
- 3. Increase disparities in care
- 4. Lack of confidence in primary care healthcare professions managing complex medical conditions





#### **Project ECHO® Mission:**

Democratizing medical knowledge and get best practice care to underserved people all over the world.

#### How ECHO® works:

ECHO is a hub-spoke model that connects providers with specialists through ongoing, interactive, **telementoring** sessions.





Moving knowledge instead of patients

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00:55 - 01:00	Wrap-up and announcements	Nicolas Cuttriss, MD, MPH, FAAP

## Housekeeping Items for Webinar



For questions about the *content* of the Webinar or case presentations, please use the Q & A Feature



For questions about *technical issues or for sharing resources*, please use the **Chat Feature** 



https://cvent.me/qvDxg3 website will have additional resources related to diabetes and CKD in primary care



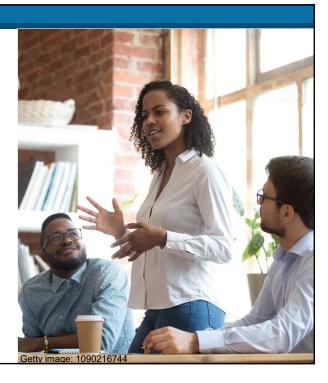
Please complete the **assessment** at the end of the session (essential for CME/CE credit)

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Thank you for joining us!



## **Series Topics**



January 19: Approaches to Identifying CKD & the New Kidney Health Evaluation

Katherine R. Tuttle, MD, FASN, FACP, FNKF, Providence Health Care



February 16: Looking Beyond Glucose Control: Best Practices to Address Diabetes-Related CKD

Robert Gabbay, MD, PhD, FACP, American Diabetes Association





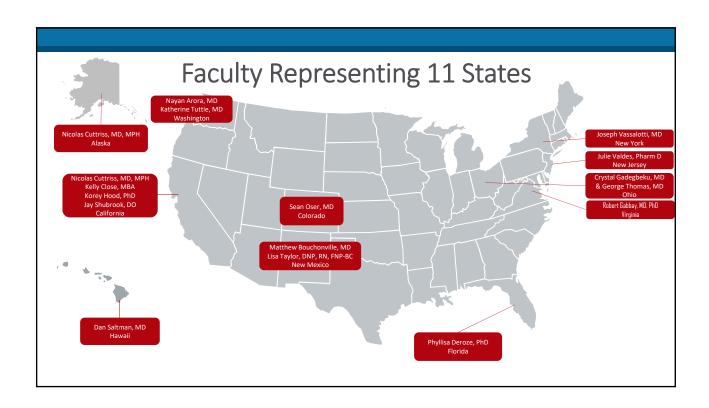
March 16: Addressing CKD Disparities and Social Determinants of Health to Achieve Diabetes Management Goals

Crystal Gadegbeku, MD, Cleveland Clinic George Thomas, MD, Cleveland Clinic



April 20: Halting CKD Progression: From Optimizing Hypertension Management to Newer Agents

Joseph Vassalotti, MD, National Kidney Foundation



## Crystal A. Gadegbeku, MD



Chair, Department of Kidney Medicine Glickman Urological and Kidney Institute, Cleveland Clinic Cleveland, OH

Present:
Addressing CKD Disparities and
Social Determinants of Health to
Achieve Diabetes Management
Goals

### George Thomas, MD



Nephrologist Glickman Urological and Kidney Institute, Cleveland Clinic Cleveland, OH







#### Crystal A Gadegbeku, MD FAHA FACP FASN

Chair, Department of Kidney Medicine

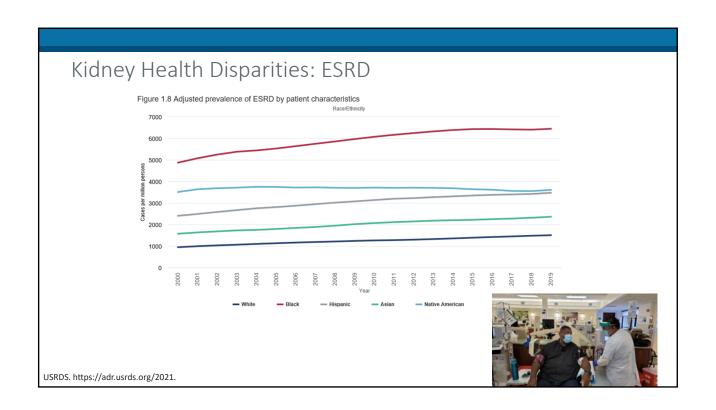
#### George Thomas, MD

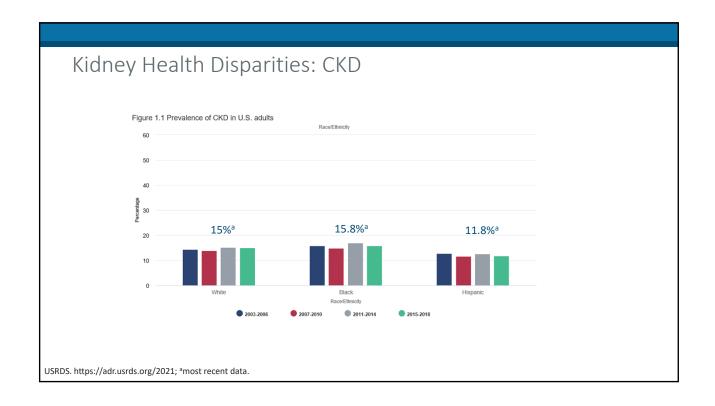
Director, Center for Blood Pressure Disorders
Department of Kidney Medicine

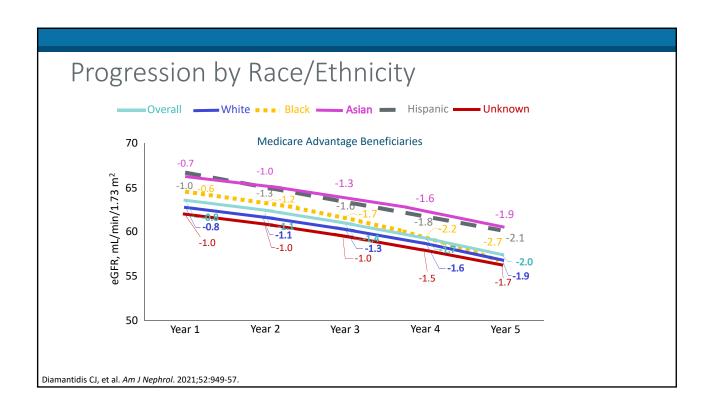
## **Learning Objectives**

Upon completion, participants should be able to:

- Identify the disproportionate prevalence of CKD in different racial and ethnic populations
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#### Overburdened With Risk Factors



#### Compared with White Americans:

- Black Americans are 3.5 times more likely to have kidney failure
- Latinx Americans are 1.5 times more likely to have kidney failure
- Black and Latinx Americans:
  - Are 60%-70% more likely to have diabetes
  - Have 2- to 4-fold more hypertension-related hospitalizations
  - Are 20%-30% more likely to be obese

CDC. https://www.cdc.gov/nchs/nhis/shs/tables.htm; Will JC, et al. *Public Health Rep*. 2014;129:8-18.

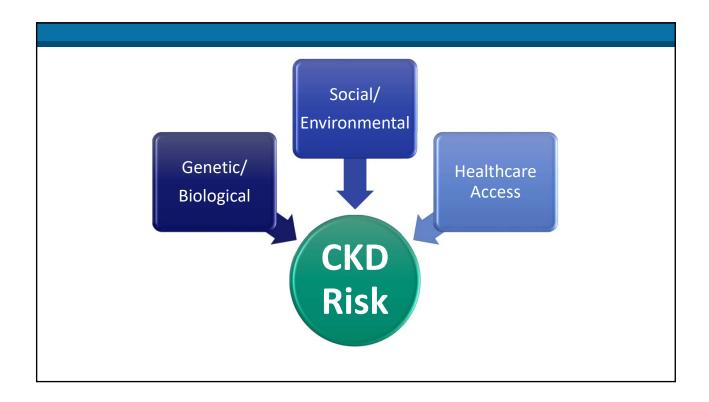
#### ....And Undertreated



#### Compared with White Americans:

- Black and Latinx Americans:
  - Are less likely to be insured
  - Are less likely to have 2 or more HbA1C measurements/year
- Black Americans are less likely to receive pre-ESRD care than all other racial groups

CDC. https://www.cdc.gov/nchs/nhis/shs/tables.htm; KFF. https://www.kff.org/uninsured/state-indicator/nonelderly-uninsured-rate-by-raceethnicity; Purnell TS, et al. *JAMA Netw Open*. 2020;3:e2015003.

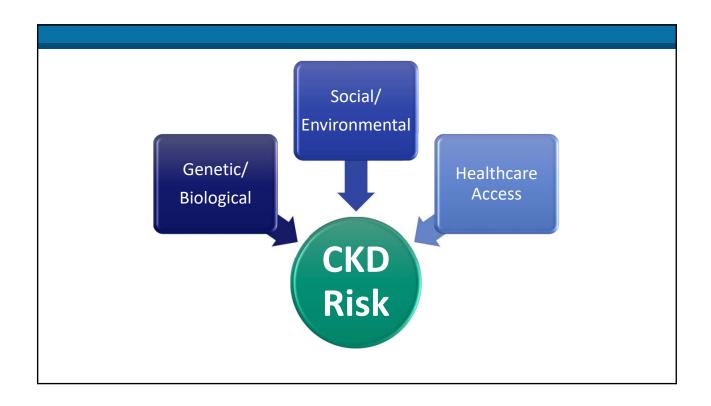


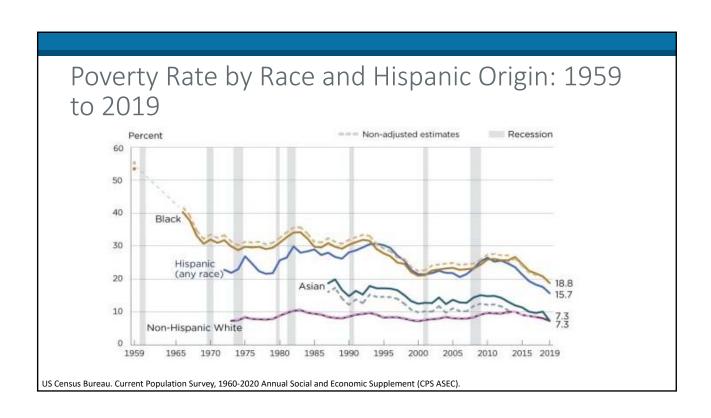
## APOL1 Risk Variants and Kidney Disease

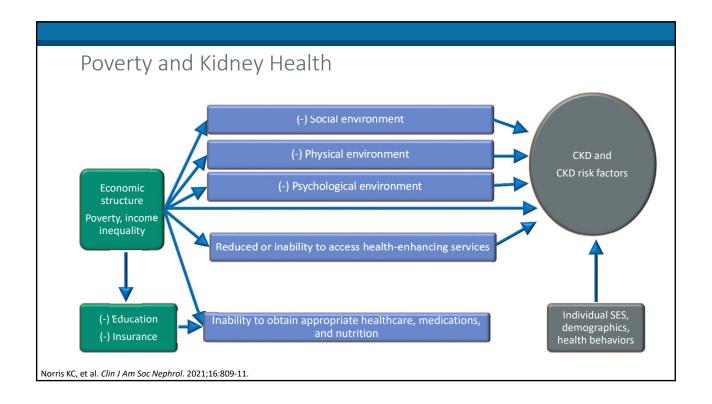
- 1 risk gene protects against African trypanosomiasis (sleeping sickness)
- Approximately 13% of African Americans have 2 risk genes
- "2-Hit" phenomenon for CKD

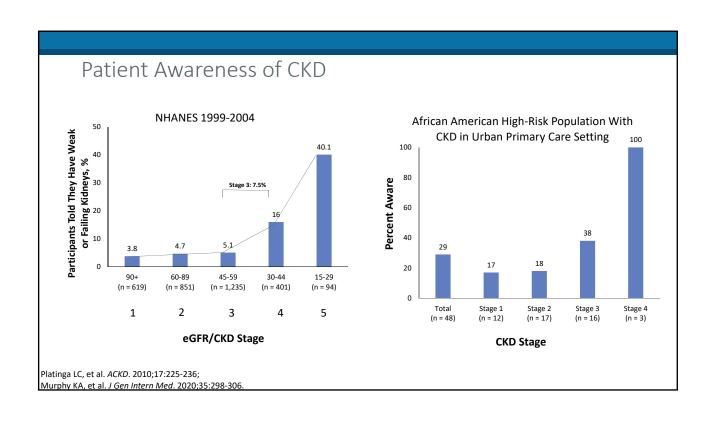
Case-Control	N	Odds Ratio/Relative Risk
HIV-associated nephropathy		29
Primary FSGS	217	17
Lupus with collapsing glomerulopathy	26	5.4
Lupus with ESRD	855	2.7
Sickle cell nephropathy	520	3.4
Hypertension-attributed nephropathy	675	2.6-4.6

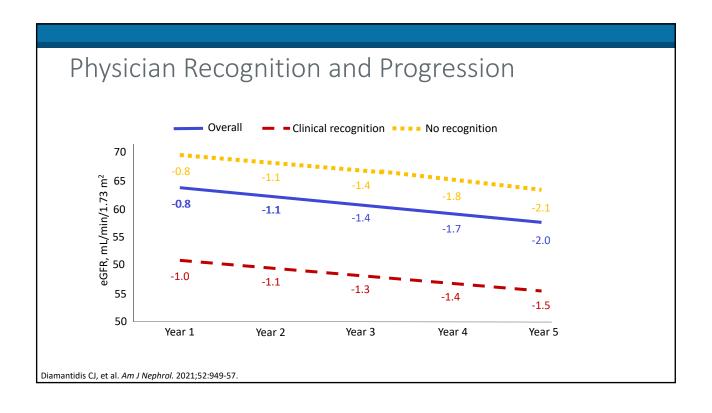
Drummer PD, et al. Semin Nephrol. 2015;35:222-36.

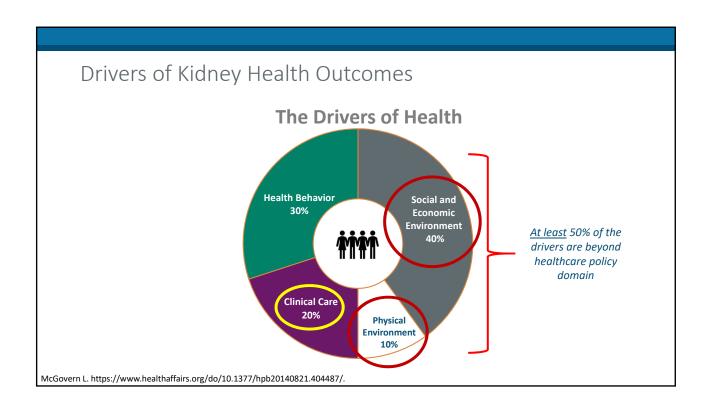


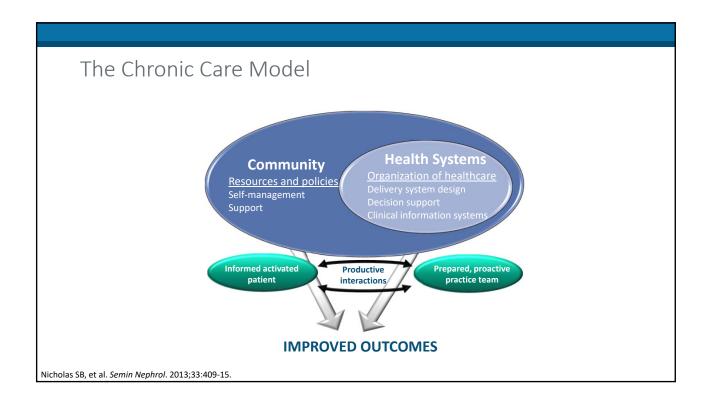




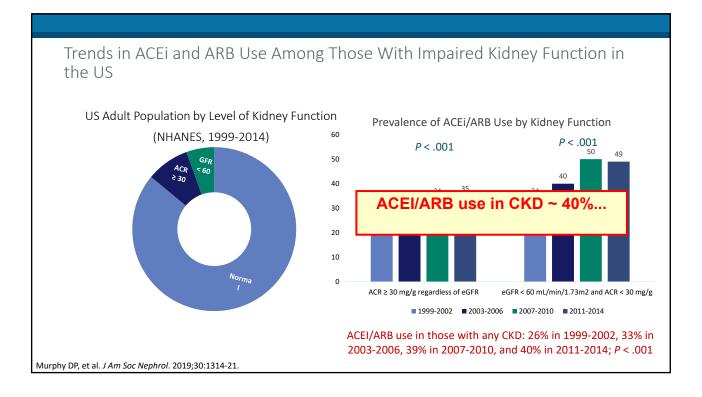








The challenge is implementation!



## Challenges

#### **Physician Factors**

- Lack of time to discuss new strategies/treatment options
- Lack of support, knowledge with expanding therapeutic options and guidelines
- Lack of organizational mechanisms to monitor response to therapy, resulting in:
  - Reluctance to take ownership for monitoring response to therapy—uncertainty as to which practitioner/specialty should follow up
  - Discomfort with dealing with potential adverse effects
  - Reluctance to deal with insurance/preauthorization

authorization Kazley AS, et al. *BMC Nephrol*. 2014;15:112; Unruh ML, et al. *Semin Dial*. 2008;18:82-90.

#### **Patient Factors**

- Socioeconomic factors affecting "required" lifestyle changes
- Engagement with treatment plan
  - Complex treatment regimen, multiple dietary restrictions
- Cost and affordability
- Fear of adverse effects
- Lack of trust in relationship with provider

## Challenges

- Office BP measurement
  - Improper BP measurement technique/lack of time
  - No consistent "correction factor" for improper technique
- ABPM (aka 24-hr BP monitoring)
  - Availability, cost, reimbursement
- Home BP monitoring
  - Correct technique
  - Validated devices
    - Are the devices validated for accuracy?

Kazley AS, et al. *BMC Nephrol*. 2014;15:112; Unruh ML, et al. *Semin Dial*. 2008;18:82-90.

### Solutions

- Patient input is key
- Discuss benefits, risks, alternatives, and possible adverse effects of new therapeutic options
- Advise patients to bring in all medications (pill bottles/OTC meds) and home BP machine
  - Medication/dosing changes by multiple providers can be confusing
  - Check at least once per year whether home BP machine readings correlate with office readings
- Discuss and give written instructions
- Lifestyle changes
  - Education
  - Process of behavior change is challenging—strive for specific, measurable, attainable goals

Kazley AS, et al. *BMC Nephrol*. 2014;15:112; Unruh ML, et al. *Semin Dial*. 2008;18:82-90.

## Solutions

- More research on implementation strategies
- Shared medical appointments
  - Consistent, small cohorts
  - Peer support, accountability
- De-fragmenting care
  - Fragmented healthcare can affect outcomes (days off work for multiple appointments, wait times to see different subspecialties, payments for parking/transportation)
  - · Coordinated care may facilitate better communication, engagement, and consistency in care
    - Share best practices, strategies to increase coverage
    - Coordinated follow-up visits to maintain optimal access to care

Kazley AS, et al. *BMC Nephrol*. 2014;15:112; Unruh ML, et al. *Semin Dial*. 2008;18:82-90.

## It Takes a Village...



## Summary

- Multiple complex interactions (genetic/biological, social/environmental, and healthcare access—related) can affect kidney health and lead to subsequent kidney health disparities
- Increase likelihood of success with a team-based, multipronged approach that manages medical ⇒⇒ social issues
- Patient activation is key; provider awareness is important
- Policy changes are needed to fully address this complex problem

## **Case Presentations**

Sign up to present a case! <a href="https://redcap.link/caseform">https://redcap.link/caseform</a>



#### Submitted Case Presentation

## 31 y/o F with T2D with A1c above target. How can we encourage lifestyle modifications? What medication adjustments should be made?

31-year-old Hispanic female with a 17-year history of type 2 diabetes (T2D) complicated by severe insulin resistance in setting of severe hyperglycemia, recurrent pancreatitis, obesity (BMI 31), hypertension, disordered eating, and anxiety disorder. Recent hospitalization for pancreatitis. Diabetes managed on long-acting concentrated U-500 regular insulin (~9u/k/d). Strong family history T2D and hypertriglyceridemia with premature heart disease. Most recent A1c 10.1% (decrease from 13.1%). Currently uses a CGM with Time in Range (TIR) increased to 12% with 0% hypoglycemia.

Kidney disease/Cardiometabolic disease:

- CKD: recent eGFR 100 mL/min/1.73m<sup>2</sup>; uACr 472 mg/g during hospitalization for pancreatitis. No previous uACR
- ASCVD: none known Heart Failure: no. Family Hx of premature heart disease; brother passed away in 30s due to heart attack in setting lipid disorder and insulin resistance.

Sertraline

ASA

Doxycycline 50 mg BID

Lispro (Humalog) 20 units PRN "large meals"

Empagliflozin (Jardiance) 25mg daily

Glucose-lowering agent(s):U-500R 490 units BID

- Hypertension: yes Hypercholesterolemia: yes (TG in 1000s baseline) strong family history hypertriglyceridemia
- Recent BP: 118/70 mmHg BMI: 31 Weight 90.7 kg Recent lipid panel: TC: 276 mg/dL, LDL: invalid result due to triglycerides, HDL: 24 mg/dL, TG: 1171 mg/dL
- Diabetes: Diagnosed with T2D 17 years ago with last A1c 10.1% (past week), 12.9% (approximately 2 months ago). T1D antibodies negative.

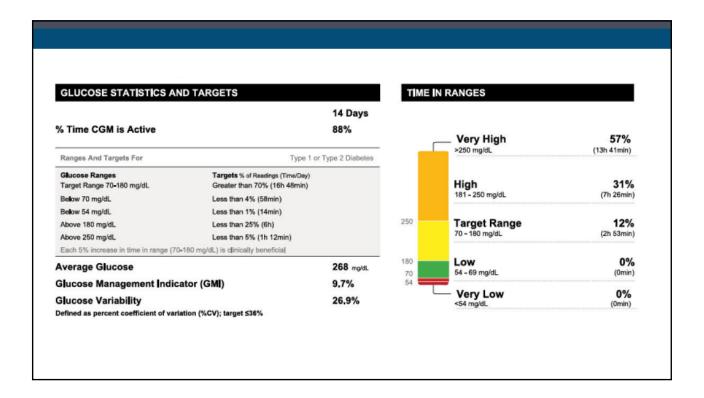
#### **Current Medication Management:**

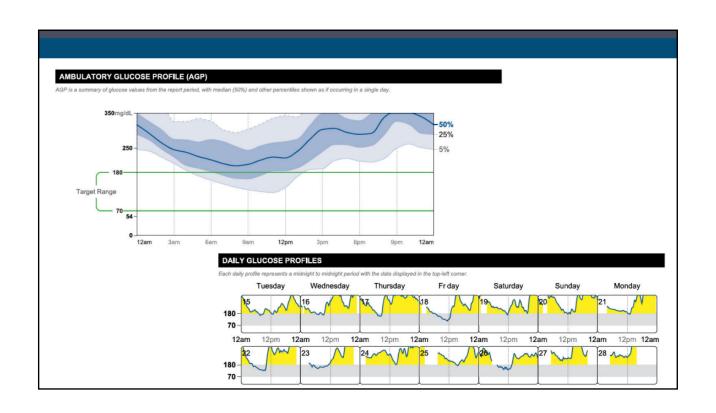
- Lisinopril 5mg
- Rosuvastatin 40 mg
- Fenofibrate 200 mg
- Ezetimibe 10mg
- Fish oil 1000 mg QID
- Spironolactone

#### Social support and concerns:

- Evaluation: No reported PHQ-2, PQH-9, or Diabetes Distress Scale
- Barriers: No age-appropriate social outlets, dependent on managed Medicaid
- Support: Lives with parents, does not have full time employment, no social outlets, video gamer

Question to the ECHO Diabetes Community: What are possible differentials for her severe insulin resistance? How can we optimize insulin dosing? Treatment recommendations for hypertriglyceridemia? Need strategies for encouraging lifestyle modifications.





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Clinical Professor of Medicine Icahn School of Medicine at Mount Sinai, New York, NY Chief Medical Officer National Kidney Foundation Presents:
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