



CENTER FOR VIRTUAL CARE VALUE AND EQUITY

Saif Khairat, PhD, MPH
Professor
University of North Carolina at Chapel Hill
NIHCM

Center for Virtual Care Value and Equity (ViVE)

Established: 2023

\$3.7m funding from NIH/NCATS: 2023-2028

Goal: To accelerate the adoption and dissemination of virtual care research capabilities.

National Collaborators:

American Heart Association (AHA)

American Academy of Pediatrics (AAP)

American Medical Association (AMA)

Local: NC DHHS, UNC Health, RTI
International



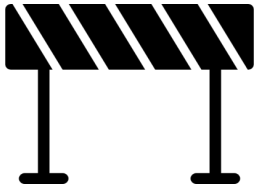
Center for Virtual Care Value and Equity (ViVE)

CORE ACTIVITIES



Develop and make available **a library of Real-World Data.**

Develop and validate **new methods for measuring the value and equity of virtual care.**



Conduct research to **identify and address barriers to the implementation and adoption of virtual care.**

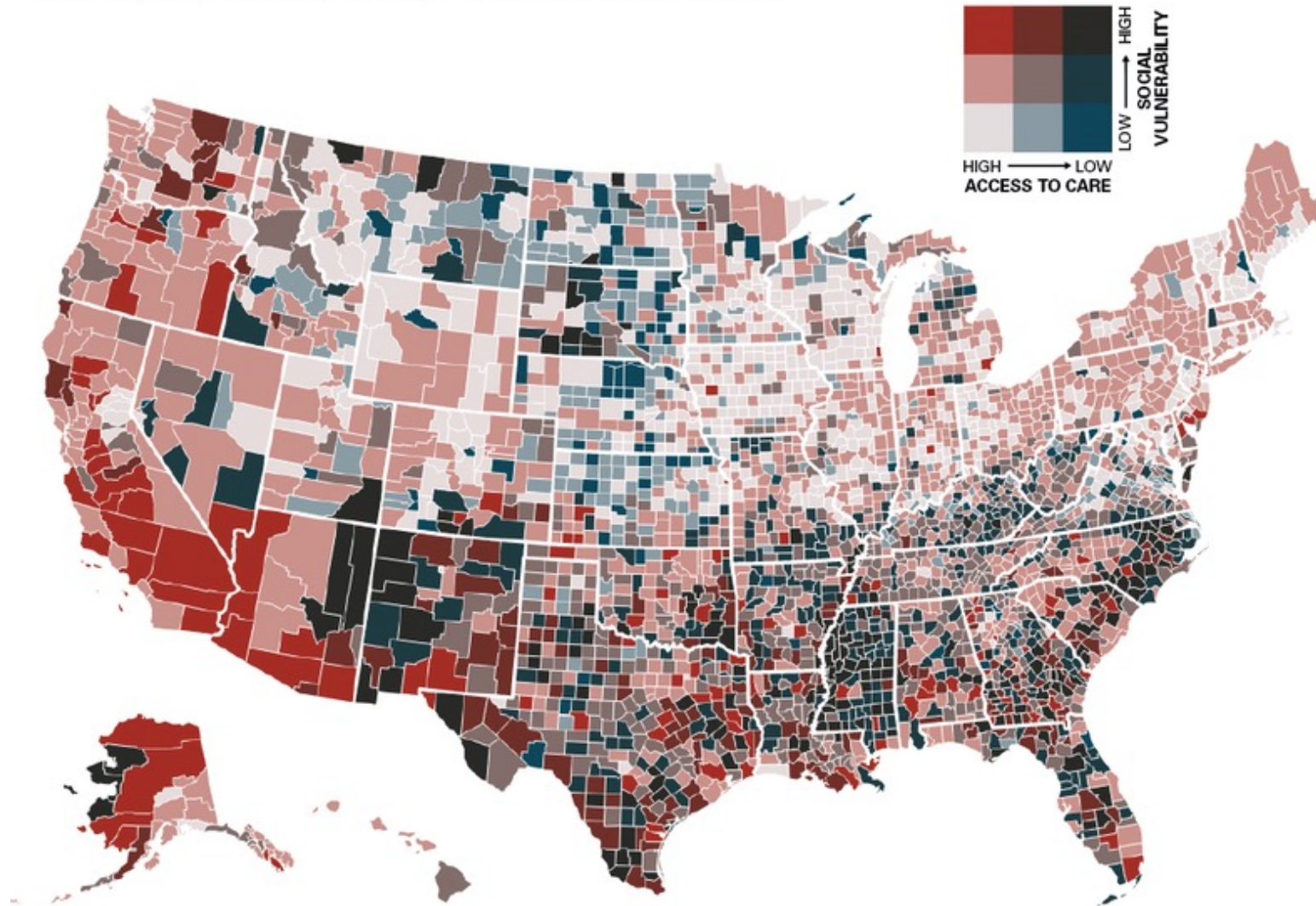


Train the **next generation of virtual care researchers.**



INEQUITABLE ACCESS

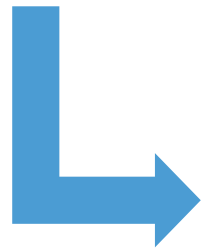
This map shows where social vulnerability and poor access to healthcare in the United States intersect. Massive gaps persist in the South and among rural, urban and tribal communities, which illustrate shortcomings of the industry to provide care to people that need it most.



Source: Modern Healthcare analysis of Centers for Disease Control and Prevention and the Health Resources and Services Administration data

Problem

Difficult to help people who lack digital access without the right tools to measure their needs.



Unequal healthcare access

Increased healthcare costs

Inefficiencies and unmet needs

The need..

Identify Populations at Risk

Risk Stratification
Categorize patients by vulnerability scores to prioritize outreach and interventions.

Early Intervention
Identify high-risk individuals enables targeted interventions, potentially improving health outcomes.

Reduce Inequities

Equity Gap Identification
Address disparities in digital health access and utilization among different demographic groups.

Targeted Interventions
Data insights can aid in developing targeted interventions for underserved populations.

M&E Utilization

Patient Suitability
Evaluate patients for telehealth based on skills, comfort, and barriers to ensure proper care delivery and reduce negative experiences.

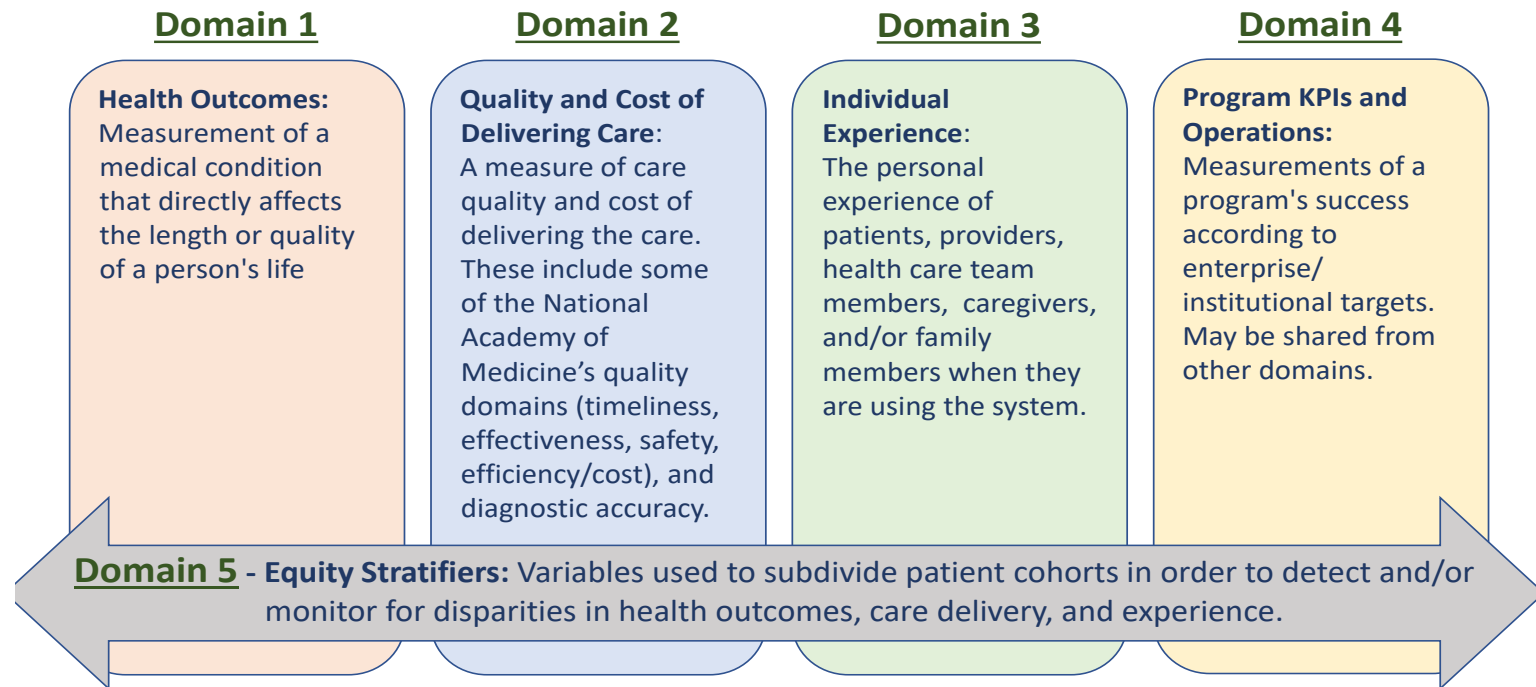
Resource Allocation
Patient preference and technology access data can optimize telehealth resource allocation and ensure availability where most needed.

SPROUT Telehealth Evaluation and Measurement (STEM) Framework

Enable the development of appropriate program metrics across all stages of program maturity in four domains:

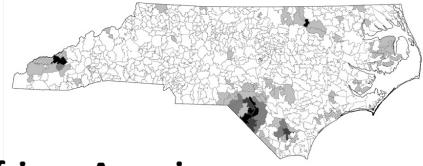
- **Health/Population outcomes,**
- **Quality and Cost of Care Delivery,**
- **Individual Experience,**
- **Program Implementation**

SPROUT Telehealth Evaluation and Measurement (STEM) Domains



Four Measurement Domains of STEM Framework

American Indian



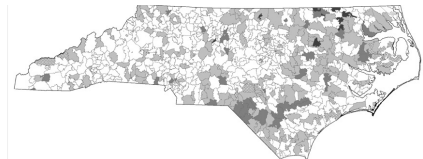
African American



Poverty



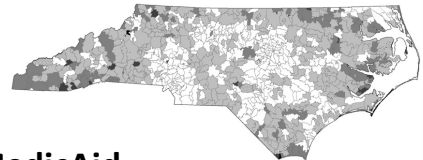
Female HH w/child Food Stamps



HH w/ 60+ Year Food Stamps



MediCare

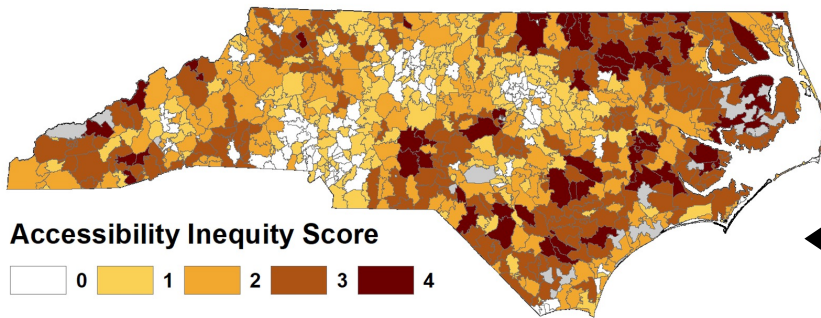


Medicaid



SOCIAL COMPONENTS

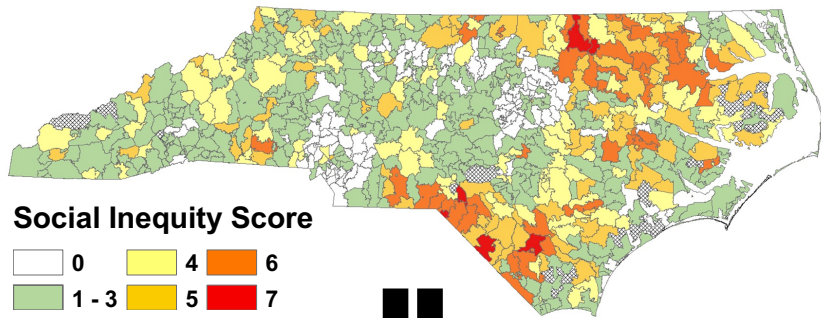
Total Accumulated Accessibility Inequity Measures



Accessibility Inequity Score



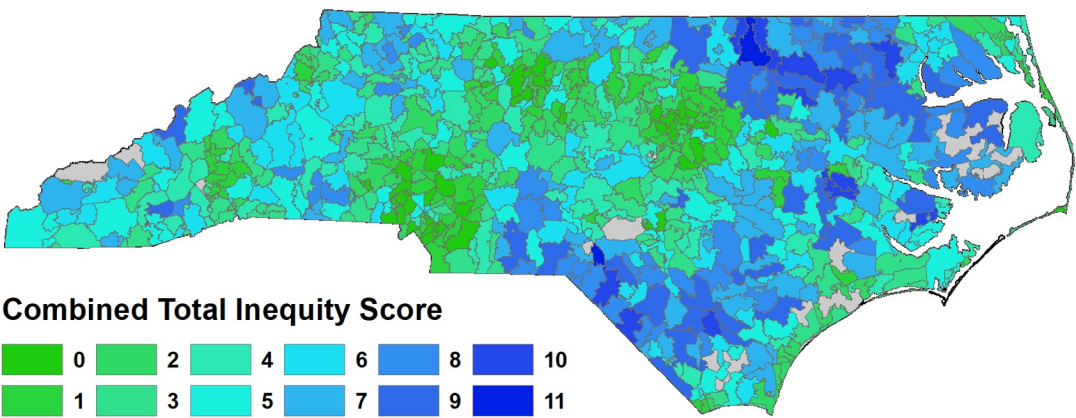
Total Accumulated Social Inequity Measures



Social Inequity Score



Combined Social and Access Inequity



Combined Total Inequity Score

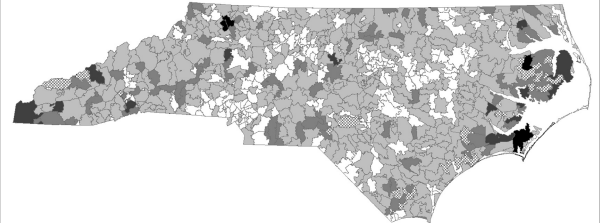


ACCESS COMPONENTS

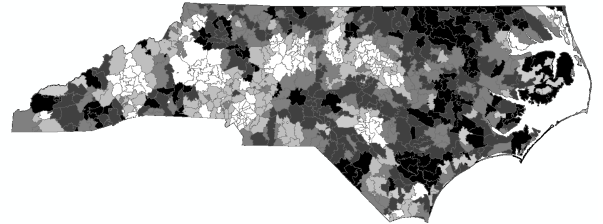
Mean Distance to Health Services (Emergency Medical Services or Medical Facilities)



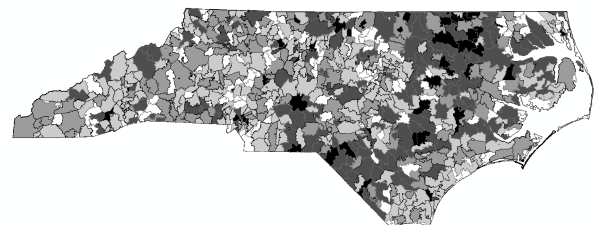
Mean Distance to Primary Roads



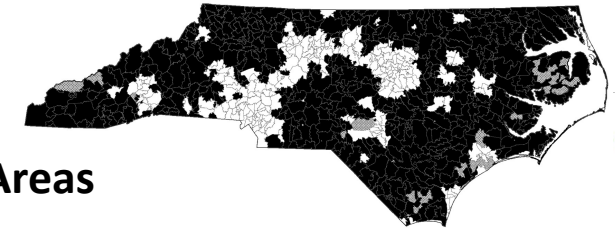
Mean Number Broadband Providers



HH No Access to Vehicle



Rural Areas



Digital Health Equity Index Score

Social Factors

- 1.Hispanic
- 2.Black/African American
- 3.Population in Poverty
- 4.Single Parent Head of Household with Children Under 18 Receiving Food Stamps
- 5.Households with person aged 60+ receiving Food Stamps
- 6.Medicare
- 7.Medicaid
- 8.Non-native English speakers
- 9.Disability
- 10.Employment
- 11.Education
- 12.Health Insurance Coverage Status

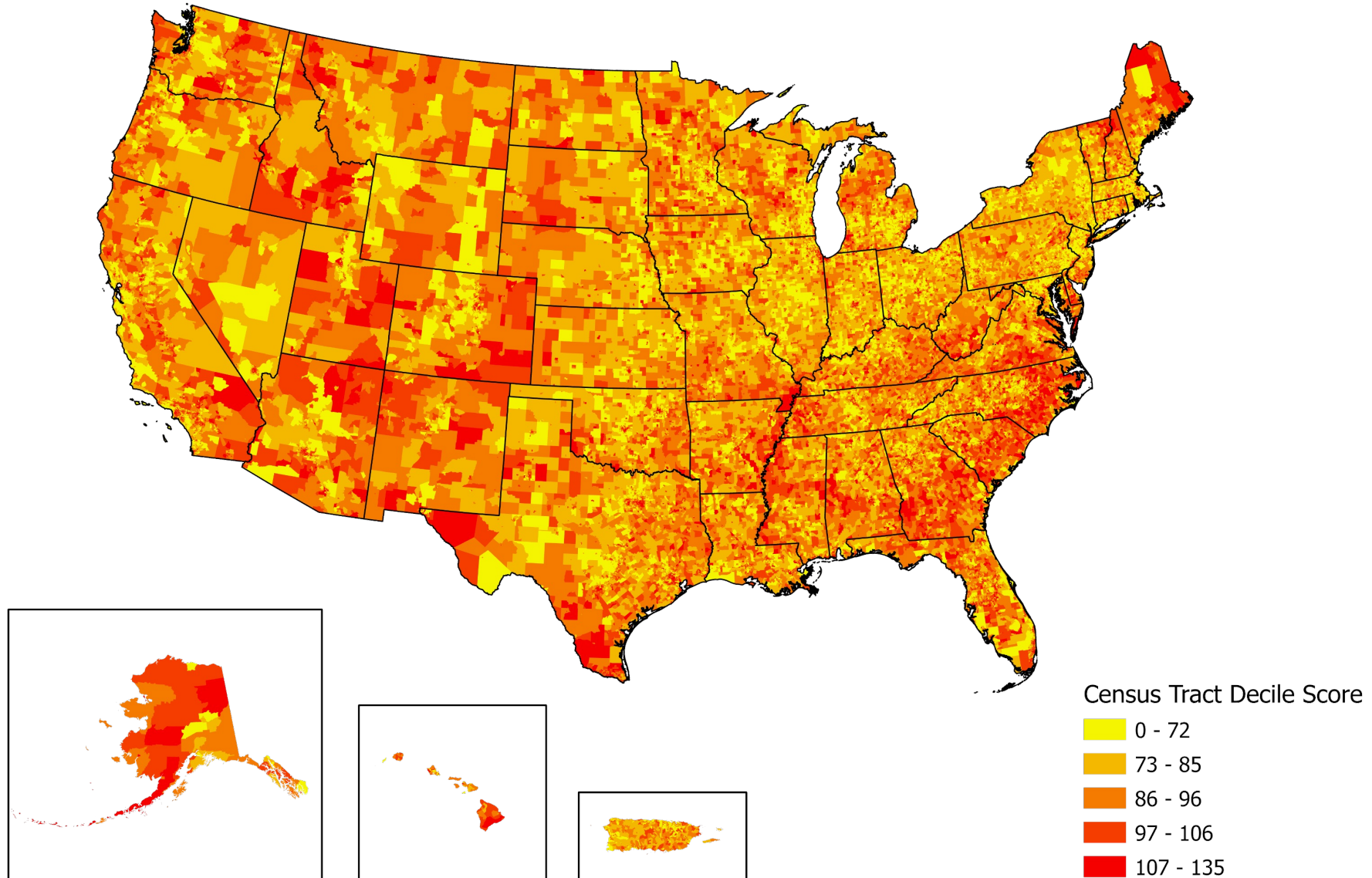
Access Factors

- 1.Access to vehicle
- 2.Access to Urgent Care
- 3.Medically Underserved Area (MUA)
- 4.Access to ED

Digital Factors

- 1.% Households with an Internet Subscription
- 2.% of Households with Cellular Data Plan for smartphone
- 3.% of Households that Have No Computer, Smartphone, or Tablet
- 4.Number of available ISP

Digital Health Equity Index Score



Takeaways



Integrated telehealth delivery models

Novel ways to identify populations at-risk

Need for validated implementation and evaluation frameworks

Interested in Virtual Care Equity and Value?



Questions?



Interested? Email us: Vive@unc.edu



Thank
You!