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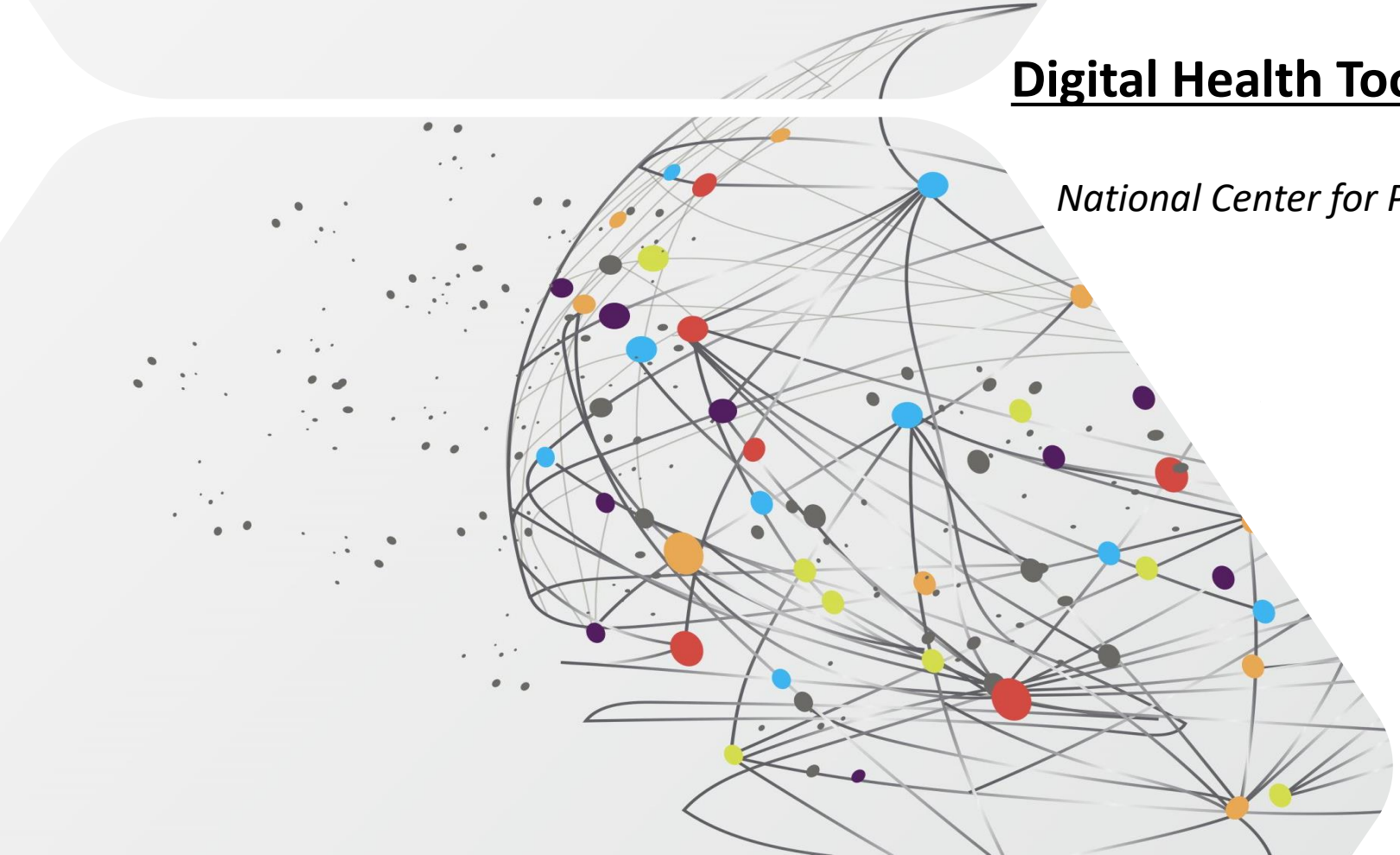
NCRN NATIONAL COVID-19 RESILIENCY NETWORK



Digital Health Tools & Primary Care in Communities

National Center for Primary Care, Morehouse School of Medicine

Dominic H. Mack MD, MBA
Professor, Family Medicine
Director NCPC, NCRN
Morehouse
School of Medicine

MSM.edu #MSMHealthEquity

MOREHOUSE SCHOOL OF MEDICINE | NCPC National Center for Primary Care

"Strengthening the primary care system through education, research and training to improve health outcomes while advancing health equity"

Divisions

- Health IT
- Health Policy
- Research
- Substance Use Disorder Prevention & Treatment

Projects/Programs

- HI-BRIDGE Solutions
- Southeast Addiction Technology Transfer Center
- Southeast Regional Clinicians Network
- HBCU Global Health Consortium
- National COVID-19 Resiliency Network

State of Primary Care & Technology

AMA
AMERICAN MEDICAL ASSOCIATION

May 2021

Policy Research Perspectives

Recent Changes in Physician Practice Arrangements: Private Practice Dropped to Less Than 50 Percent of Physicians in 2020

By Carol K. Kane, PhD

US Hospital Beds 1975 – 2019 (American Hospital Association)

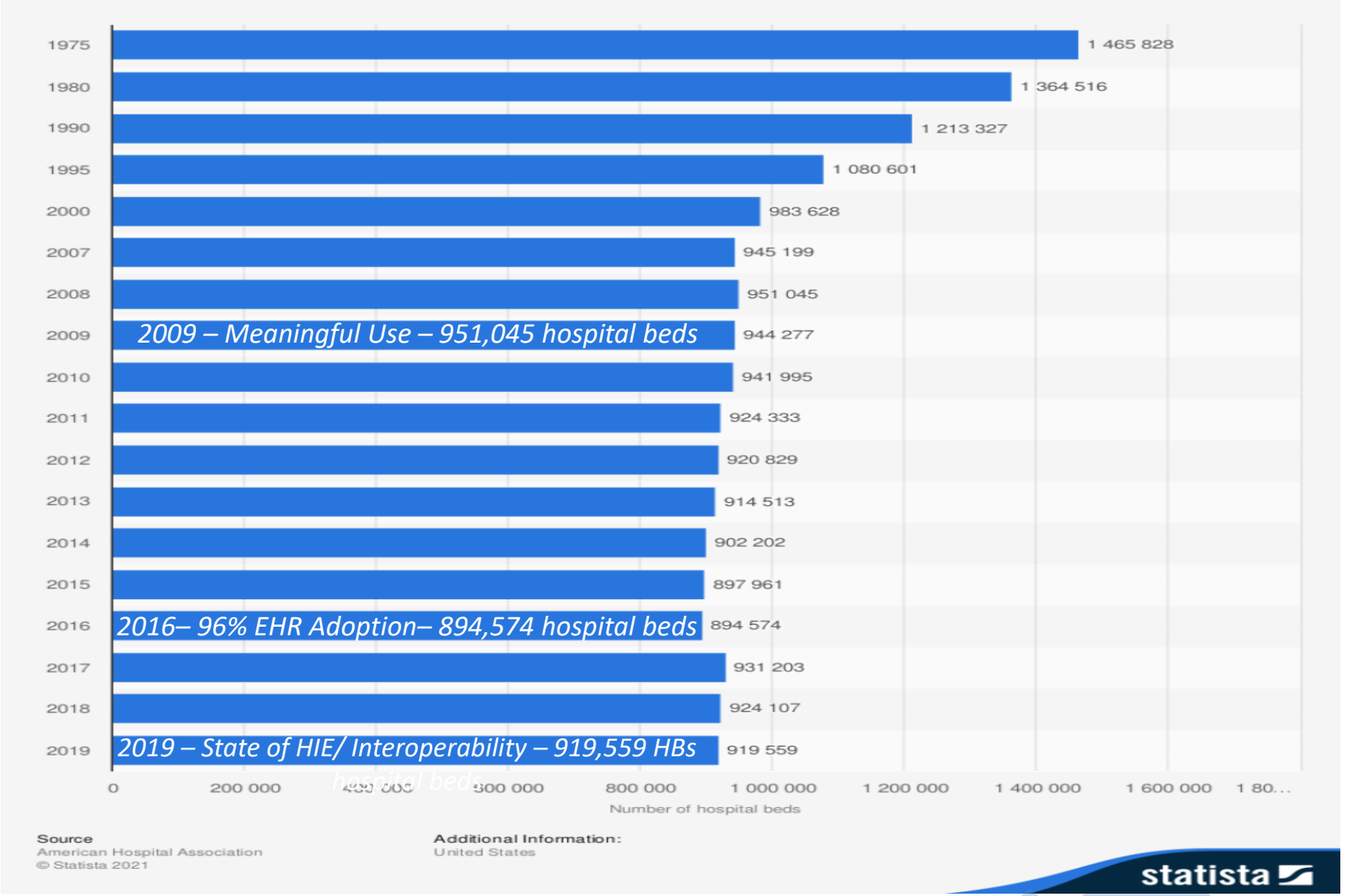
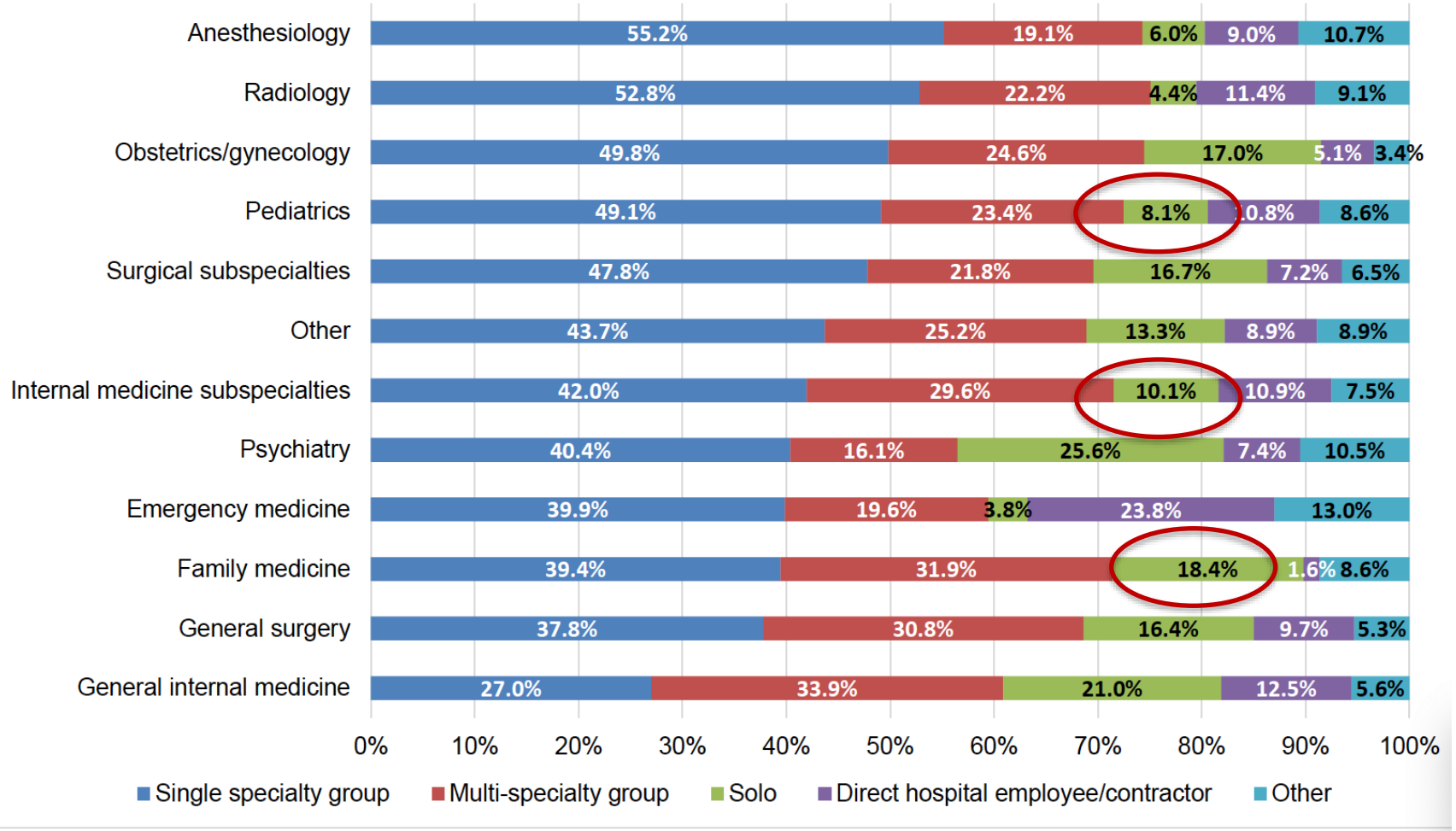


Exhibit 4: Distribution of physicians by practice type: specialty-level estimates (2020)



Source: Author's analysis of AMA 2020 Physician Practice Benchmark Survey

Exhibit 5. Distribution of physicians by practice size (number of physicians in practice) [1]

	2012	2014	2016	2018	2020
Practice size					
Fewer than 5 physicians	40.0%	40.9% [b]	37.9% [c]	35.7% [c]	33.6% [a]
5 to 10	21.4% [c]	19.8%	19.9%	20.8%	20.0%
11 to 24	13.4% [c]	12.1%	13.3%	12.7%	11.5% [b]
25 to 49	7.1%	6.3% [c]	7.4%	7.6%	7.8%
50+ physicians	12.2%	13.5%	13.8%	14.7% [a]	17.2% [a]
Direct hospital employee/contractor [2]	5.8% [a]	7.4%	7.7%	8.5% [c]	9.7% [a]
	100%	100%	100%	100%	100%
N	3326	3388	3381	3339	3353

Source: Author's analysis of AMA Physician Practice Benchmark Surveys.

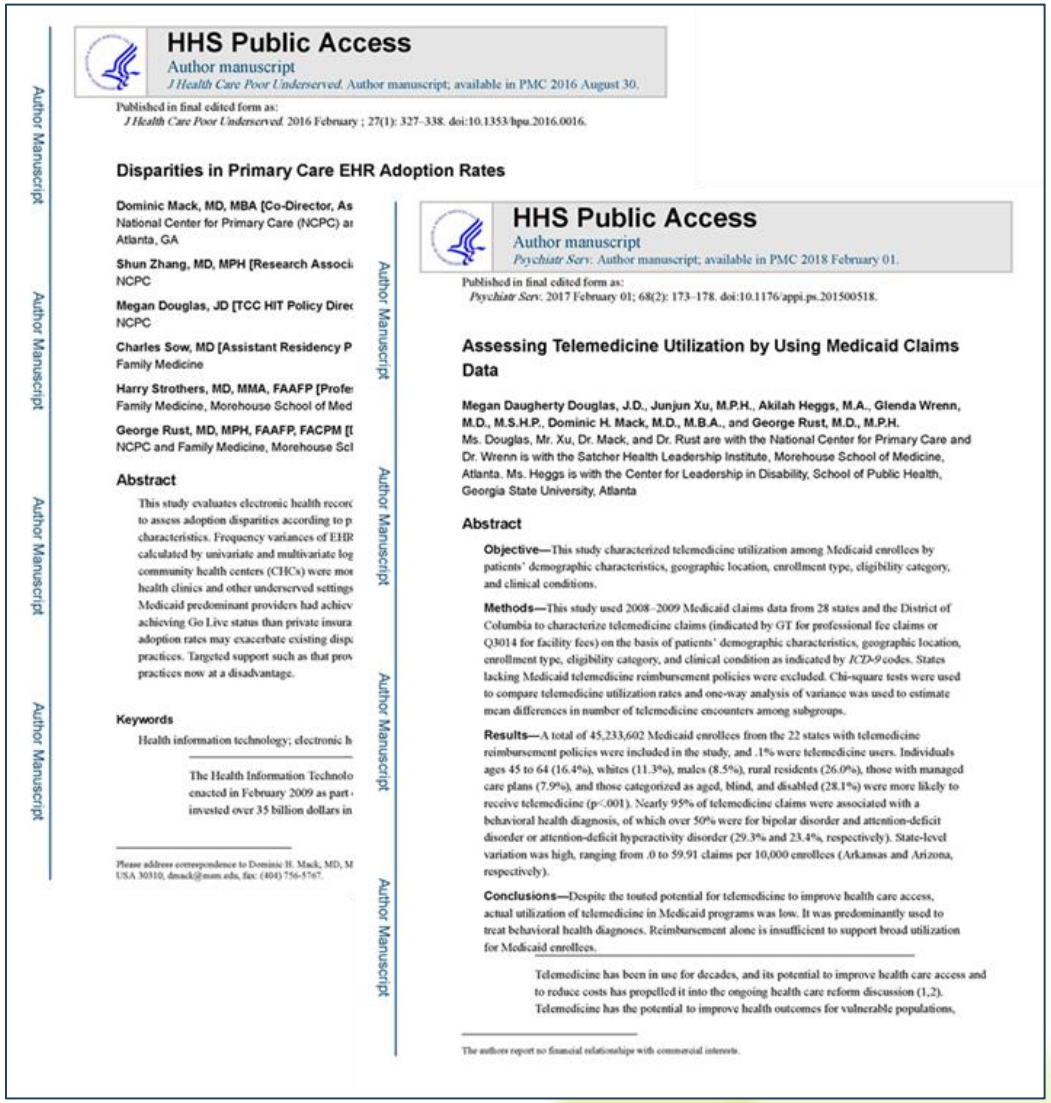
Exhibit 6. Age differences in practice size and practice ownership (2020)

	Under 40	40 to 54	55+
Practice size			
10 or fewer physicians	40.9%	49.7%	61.4%
11-49 physicians	21.0%	21.1%	17.4%
50+ physicians or direct hospital employee/contractor	38.1%	29.2%	21.2%
	100%	100%	100%
N	589	1375	1389
Practice ownership			
Wholly owned by physicians (private practice)	33.8%	48.0%	55.4%
Not wholly owned by physicians	66.2%	52.0%	44.6%
	100%	100%	100%
N	620	1438	1442

Source: Author's analysis of AMA 2020 Physician Practice Benchmark Survey

Community Approach & Evaluation

Digital health tools have tremendous potential to aid in the elimination of health disparities, but only if they are in the hands of the front-line clinicians serving underserved communities.



HHS Public Access
Author manuscript
J Health Care Poor Underserved. Author manuscript; available in PMC 2016 August 30.

Published in final edited form as:
J Health Care Poor Underserved. 2016 February ; 27(1): 327–338. doi:10.1353/hpu.2016.0016.

Disparities in Primary Care EHR Adoption Rates

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Atlanta, GA

Shun Zhang, MD, MPH [Research Associ
NCPC

Megan Douglas, JD [TCC HIT Policy Direc
NCPC

Charles Sow, MD [Assistant Residency P
Family Medicine

Harry Strothers, MD, MMA, FAAFP [Profe
Family Medicine, Morehouse School of Med

George Rust, MD, MPH, FAAFP, FACPM [
NCPC and Family Medicine, Morehouse Sc

Abstract

This study evaluates electronic health record
to assess adoption disparities according to p
characteristics. Frequency variances of EHR
calculated by univariate and multivariate log
community health centers (CHCs) were mo
health clinics and other underserved settings
Medicaid predominant providers had achiev
achieving Go Live status than private insura
adoption rates may exacerbate existing disp
practices. Targeted support such as that prov
practices now at a disadvantage.

Keywords

Health information technology; electronic h

The Health Information Technolo
enacted in February 2009 as part
invested over 35 billion dollars in

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HHS Public Access
Author manuscript
Psychiatr Serv. Author manuscript; available in PMC 2018 February 01.

Published in final edited form as:
Psychiatr Serv. 2017 February 01; 68(2): 173–178. doi:10.1176/appi.ps.201500518.

Assessing Telemedicine Utilization by Using Medicaid Claims Data

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Ms. Douglas, Mr. Xu, Dr. Mack, and Dr. Rust are with the National Center for Primary Care and Dr. Wrenn is with the Satcher Health Leadership Institute, Morehouse School of Medicine, Atlanta. Ms. Heggs is with the Center for Leadership in Disability, School of Public Health, Georgia State University, Atlanta

Abstract

Objective—This study characterized telemedicine utilization among Medicaid enrollees by patients' demographic characteristics, geographic location, enrollment type, eligibility category, and clinical conditions.

Methods—This study used 2008–2009 Medicaid claims data from 28 states and the District of Columbia to characterize telemedicine claims (indicated by GT for professional fee claims or Q3014 for facility fees) on the basis of patients' demographic characteristics, geographic location, enrollment type, eligibility category, and clinical condition as indicated by *ICD-9* codes. States lacking Medicaid telemedicine reimbursement policies were excluded. Chi-square tests were used to compare telemedicine utilization rates and one-way analysis of variance was used to estimate mean differences in number of telemedicine encounters among subgroups.

Results—A total of 45,233,602 Medicaid enrollees from the 22 states with telemedicine reimbursement policies were included in the study, and .1% were telemedicine users. Individuals ages 45 to 64 (16.4%), whites (11.3%), males (8.5%), rural residents (26.0%), those with managed care plans (7.9%), and those categorized as aged, blind, and disabled (28.1%) were more likely to receive telemedicine ($p<.001$). Nearly 95% of telemedicine claims were associated with a behavioral health diagnosis, of which over 50% were for bipolar disorder and attention-deficit disorder or attention-deficit hyperactivity disorder (29.3% and 23.4%, respectively). State-level variation was high, ranging from .0 to 59.91 claims per 10,000 enrollees (Arkansas and Arizona, respectively).

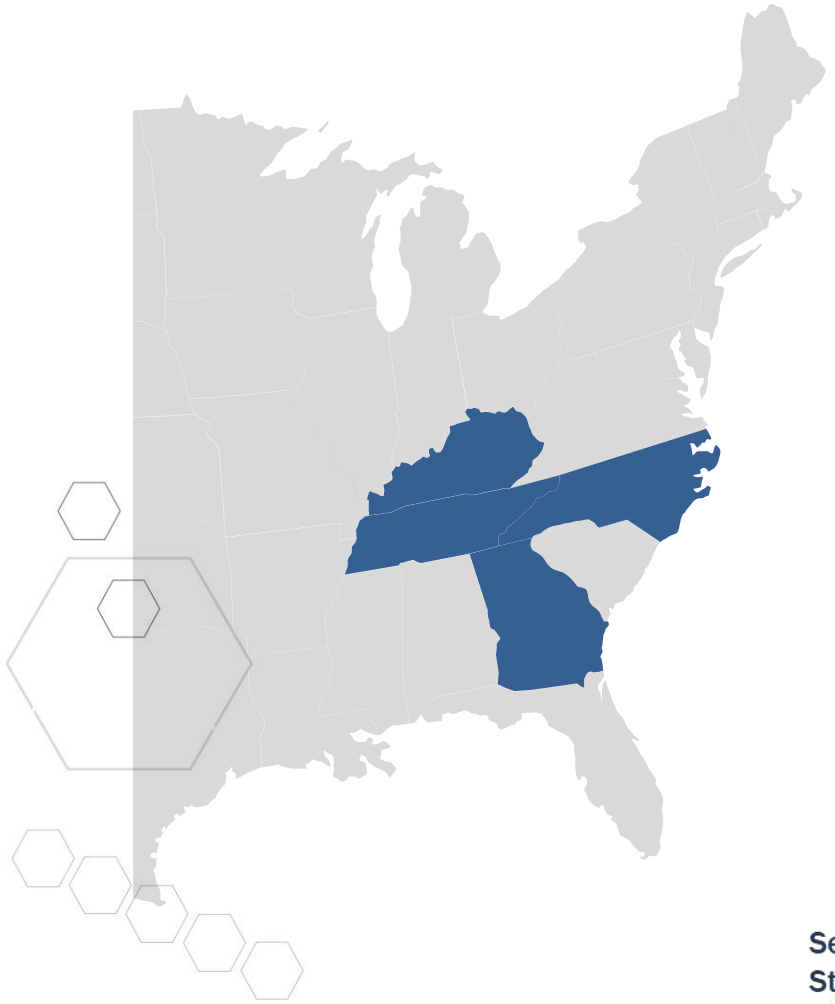
Conclusions—Despite the touted potential for telemedicine to improve health care access, actual utilization of telemedicine in Medicaid programs was low. It was predominantly used to treat behavioral health diagnoses. Reimbursement alone is insufficient to support broad utilization for Medicaid enrollees.

Telemedicine has been in use for decades, and its potential to improve health care access and to reduce costs has propelled it into the ongoing health care reform discussion (1,2). Telemedicine has the potential to improve health outcomes for vulnerable populations,

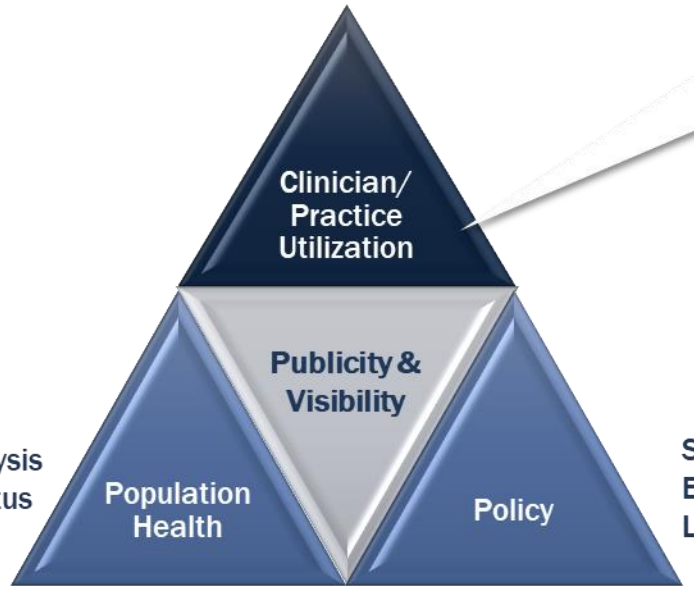
The authors report no financial relationships with commercial interests.

Digital Health Tools Study

Approach



Clinician Surveys
Focus Groups
Key Informant Interviews

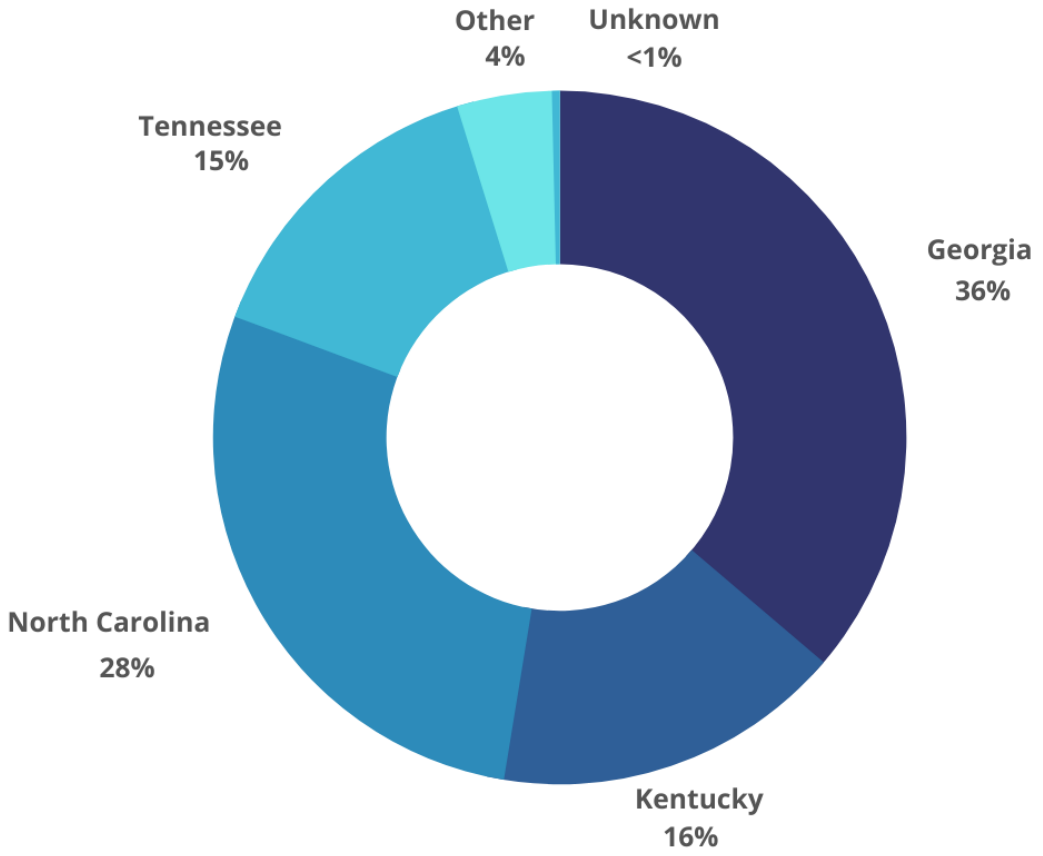


Publicity & Visibility
Policy Briefs
White Paper Series
Publications
Social Media
Partnerships
Advertisements
Conference Presentations

Secondary Data Analysis
Statewide Health Status
Technology Utilization

State-by-State Policy Analysis
Environmental Scan
Leadership Roundtables

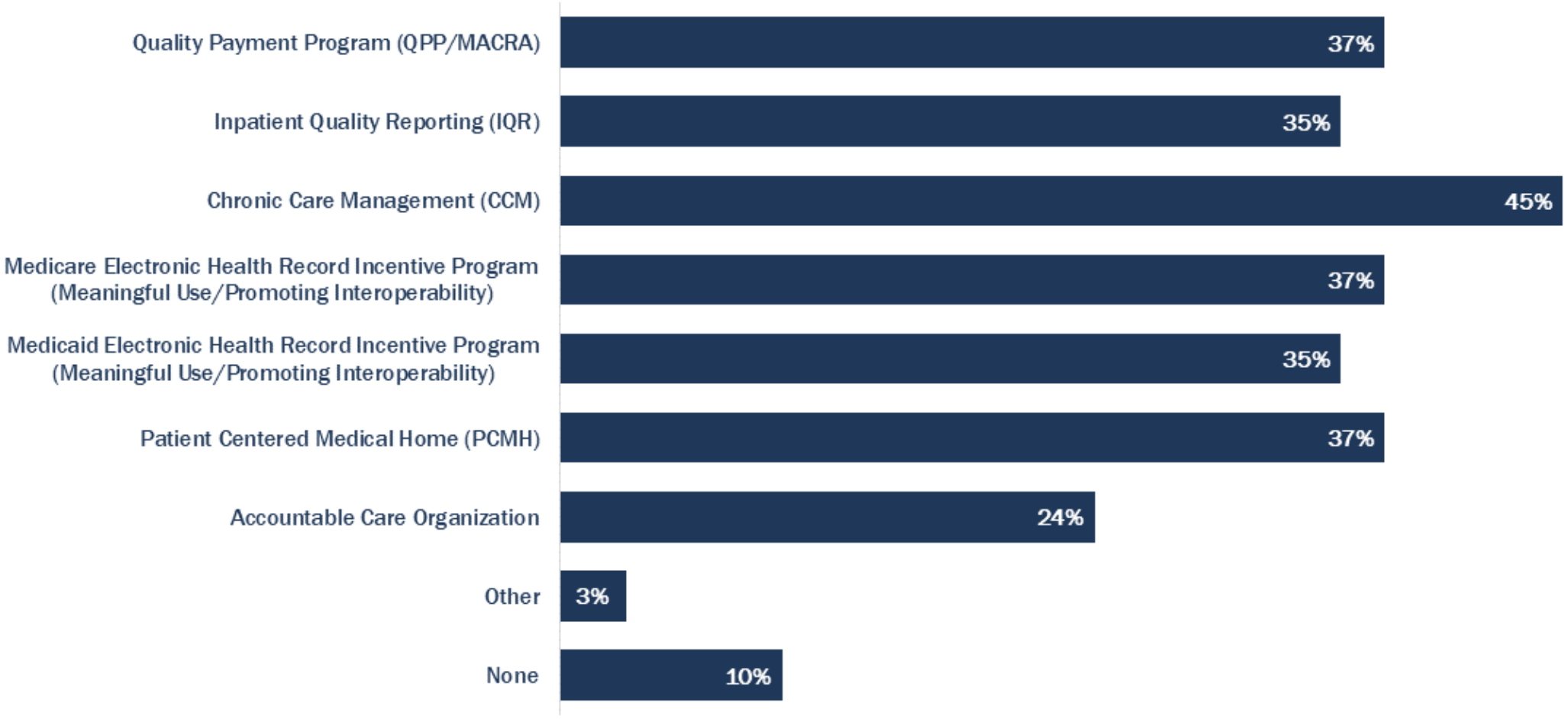
State of Practice



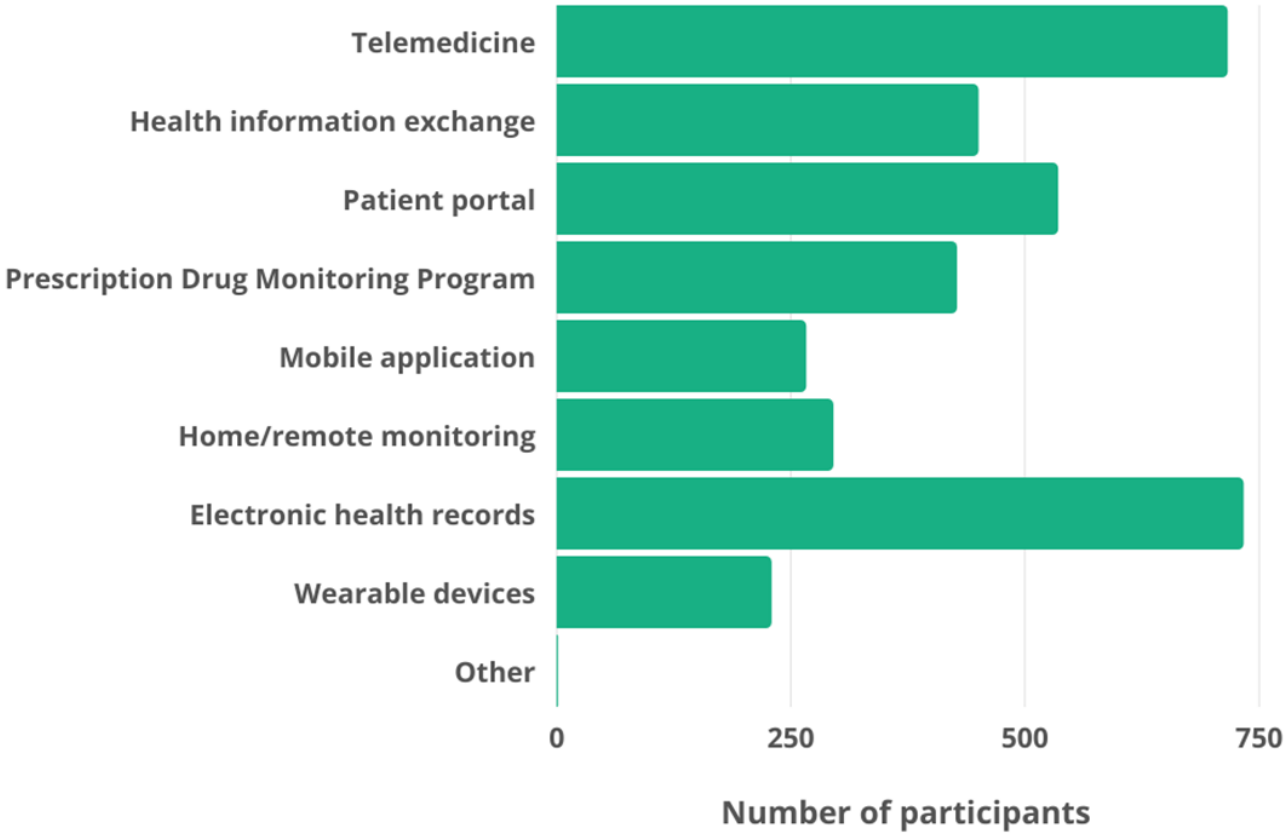
n = 1,107

Specialty

Participation in Quality Reporting Programs



Question: Which of the following digital health tools have you used or plan to use in your practice?

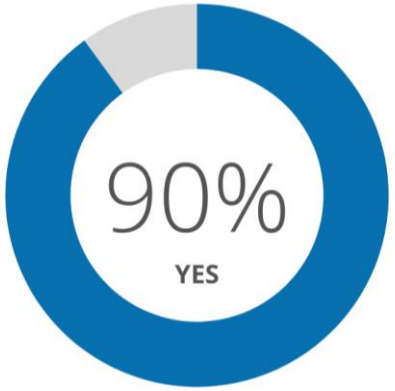


- Telemedicine (65%)
- Electronic health record (65%)
- Patient portal (50%)
- Health information exchange (45%)
- Prescription drug monitoring program (40%)
- Remote monitoring/home monitoring (30%)
- Wearable devices (20%)

AMA Digital Health Tool Survey (2019)
- Telemedicine (28%)
- Remote monitoring (22%)
- Patient Portal (58%)

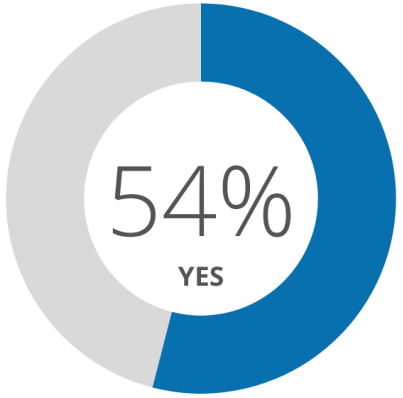
Advancing Equity Through Primary Care and Digital Health Tools

Question: Have you used digital health tools because of the COVID-19 pandemic?

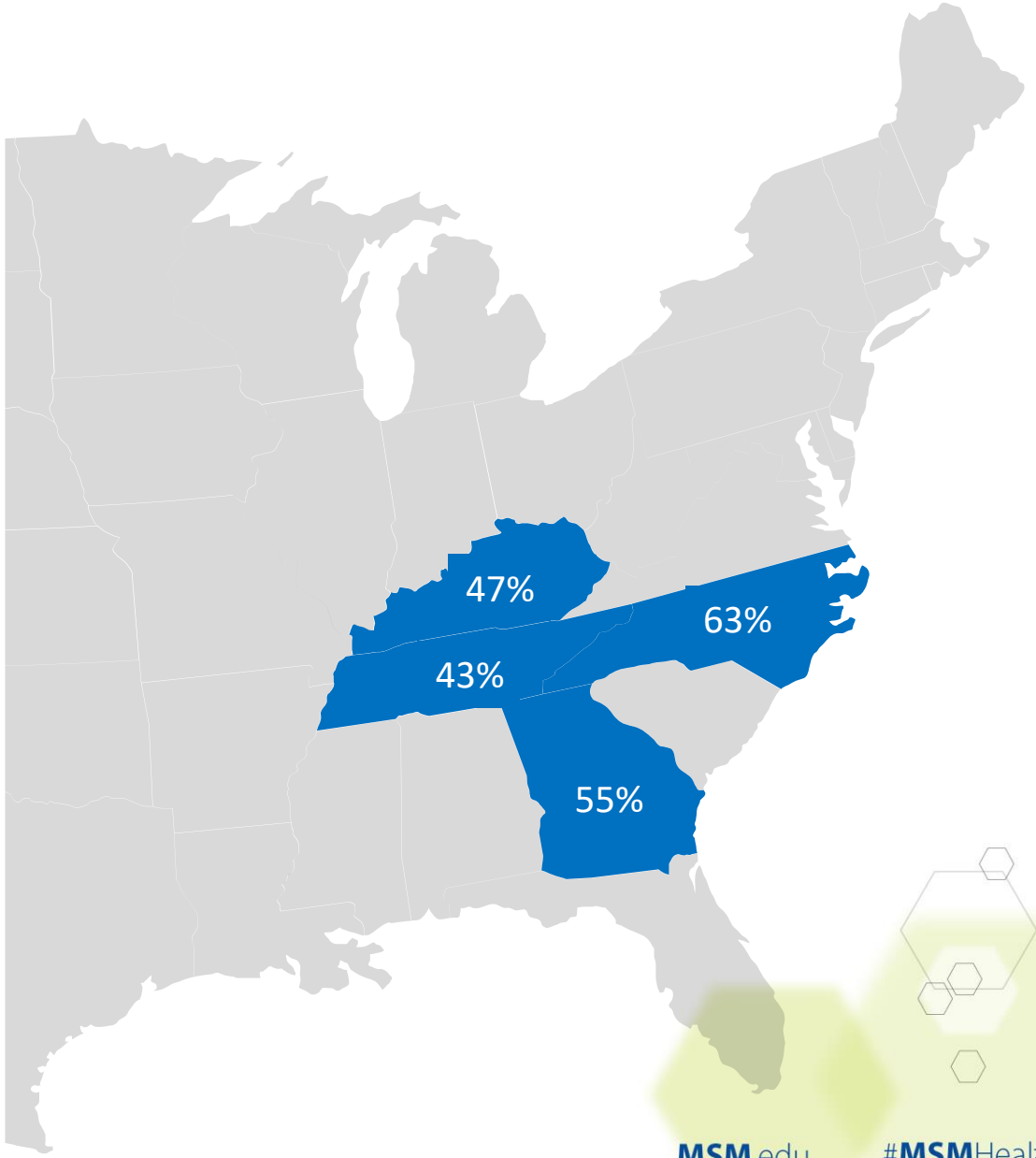


n = 936

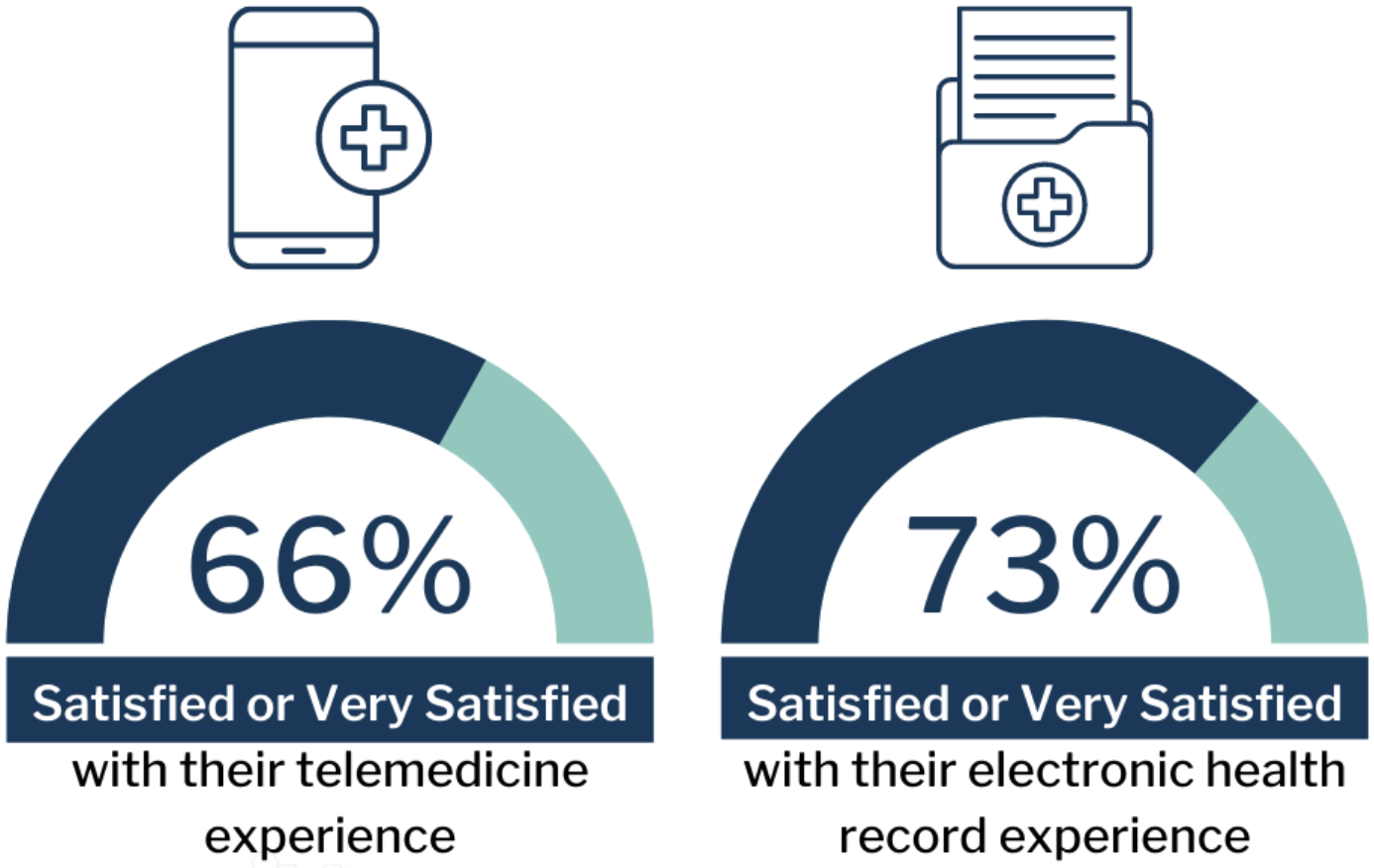
Question: If you are providing telehealth services during the COVID-19 pandemic, was this your first use of telehealth in your practice?



n = 632



Reported Levels of Satisfaction



FOCUS GROUPS

> We're doing a lot of phone visits…because of…where we live, bandwith and internet connectivity, there's been some painful appointments both via video and on phone. But when it works, it works very well. Patients are very receptive to it. It eliminates a barrier to access services, especially a transportation barrier, which is very heavy in our community. So I think patients are really loving that.

"

[I]t's very frustrating to not be able to access records within my own system. And I don't feel like anyone listens when I bring that up or maybe they do and it's just not possible. I don't know.

Interoperability

"

[T]he other big issue…is really that digital divide in those that have the availability and the capability to utilize different networks, cellular services, having both video and audio capabilities. I think that's been one of the biggest barriers that we've seen in our rural community.

Key Takeaways - DHT Experience

- **Findings demonstrate significant increase in adoption**
- **Primary care clinicians were generally satisfied with their DHT experiences**
- **To overcome workflow challenges, frontline clinicians should be engaged in decision making**

Health Equity Implications

- **COVID-19 policy changes improved access to telehealth for disproportionately impacted Value-based payment models rely on use of DHTs, but evidence of disparity reduction is limited**
- **The digital divide continues among *consumers and clinicians* in rural and underserved communities**

Equitable Digital Health Solutions

Health Information Exchange vs Interoperability

Health Information Exchange

The ability of 2 or more systems to exchange health information

Health Information Interoperability

The ability of those systems to use the Information that has been exchanged

Community Level Contextual Data

Employment

Housing

Food Availability

Environmental quality

Social connectedness

Neighborhood Safety

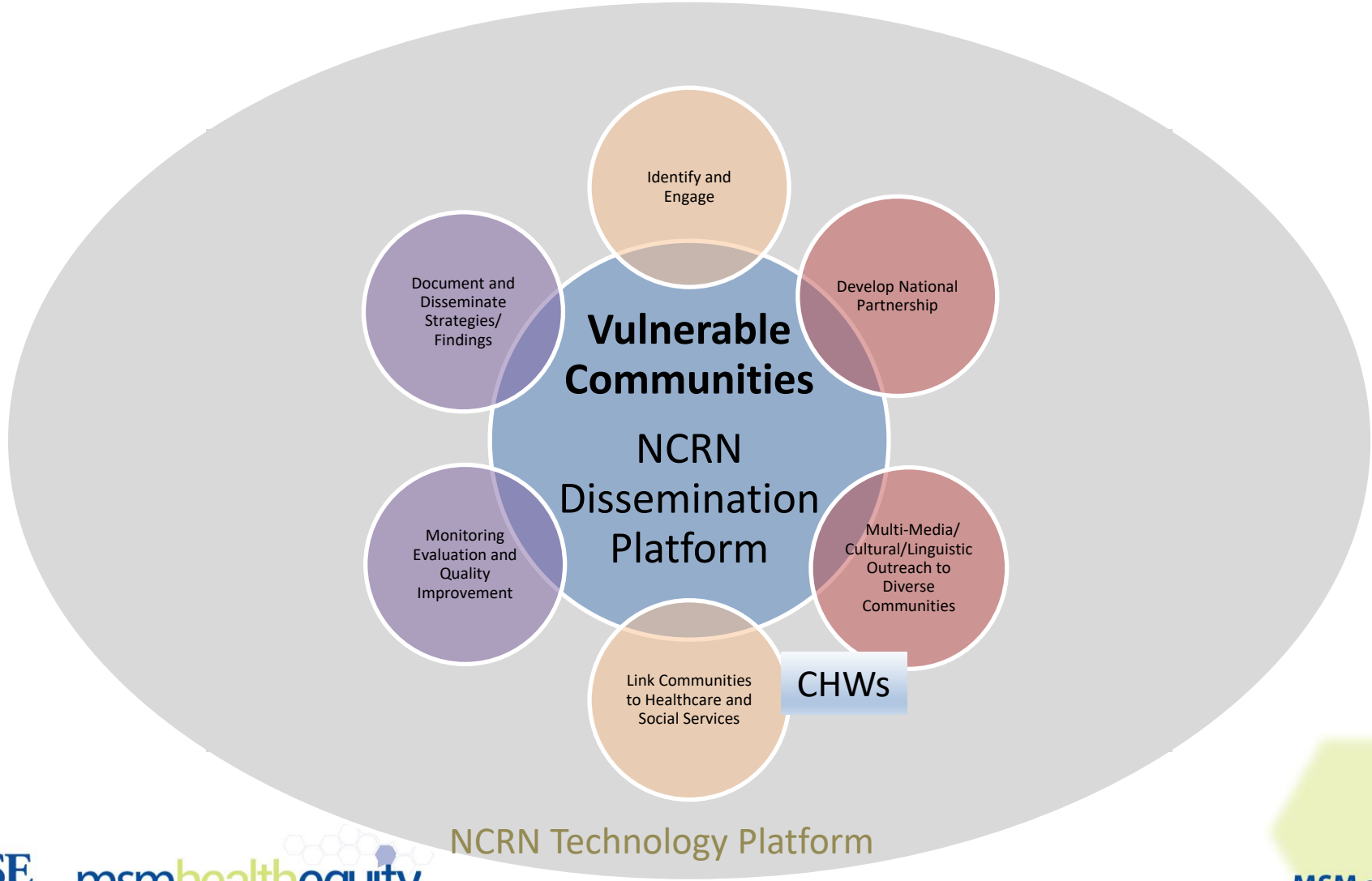
Community Health risk

Health Information Technology Division

SUPPORTS GEORGIA PROVIDERS & HOSPITALS

56 Hospitals
Over 4,000 Clinicians

EHR Optimization Resource & Support	• MACRA / QPP / MIPS and Medicaid Promoting Interoperability • EHR vendor selection / optimization • CMS, PECOS, and MAPIR registration and attestation
Outreach, Education & Training	• Boots on the ground technical assistance • Distance Learning / Web-based training • Barrier mitigation / Security risk analysis
HIT Infrastructure	• Service Area HIE with State HIE (interoperability) • Lab results and medication history review • HIE outreach and education
Practice Management	• Workflow Assessment/GAP Analysis • PCMH, ACOs, Clinical workflow redesign • Focus on improving clinical outcomes
Research	• EHR adoption, Vendor utilization, Population Health

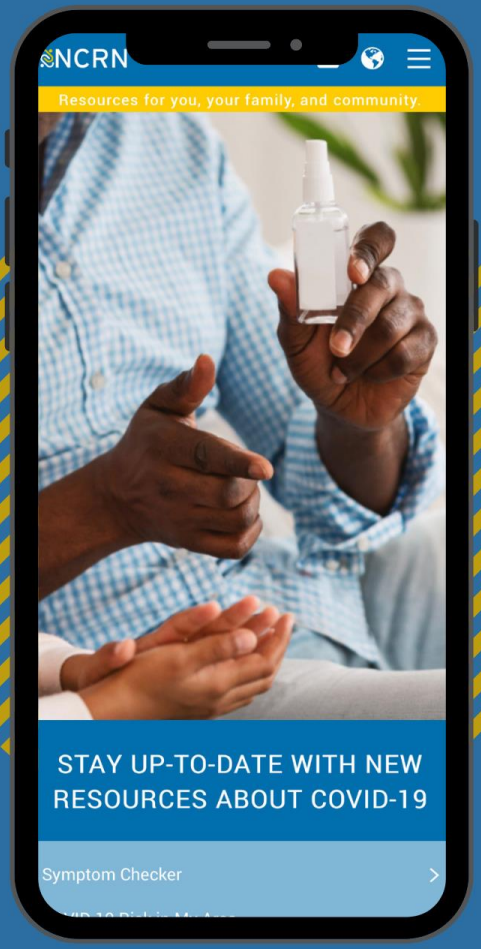

Identify and Engage
Develop National Partnership
Multi-Media/ Cultural/Linguistic Outreach to Diverse Communities
Link Communities to Healthcare and Social Services
Monitoring Evaluation and Quality Improvement
Document and Disseminate Strategies/ Findings
Vulnerable Communities
NCRN Dissemination Platform
CHWs
NCRN Technology Platform

Mobile App

GET IT ON Google Play

Available on the App Store

NEW COVID-19 RESOURCES



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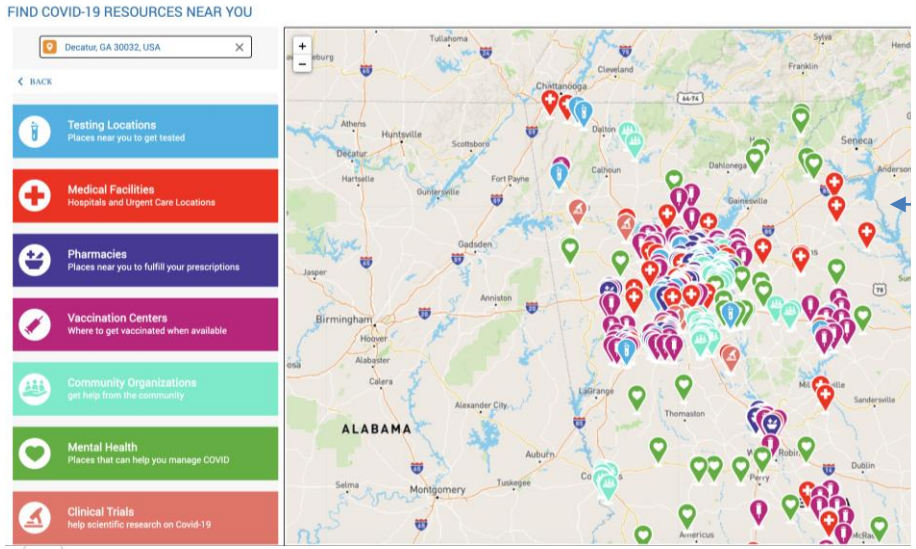
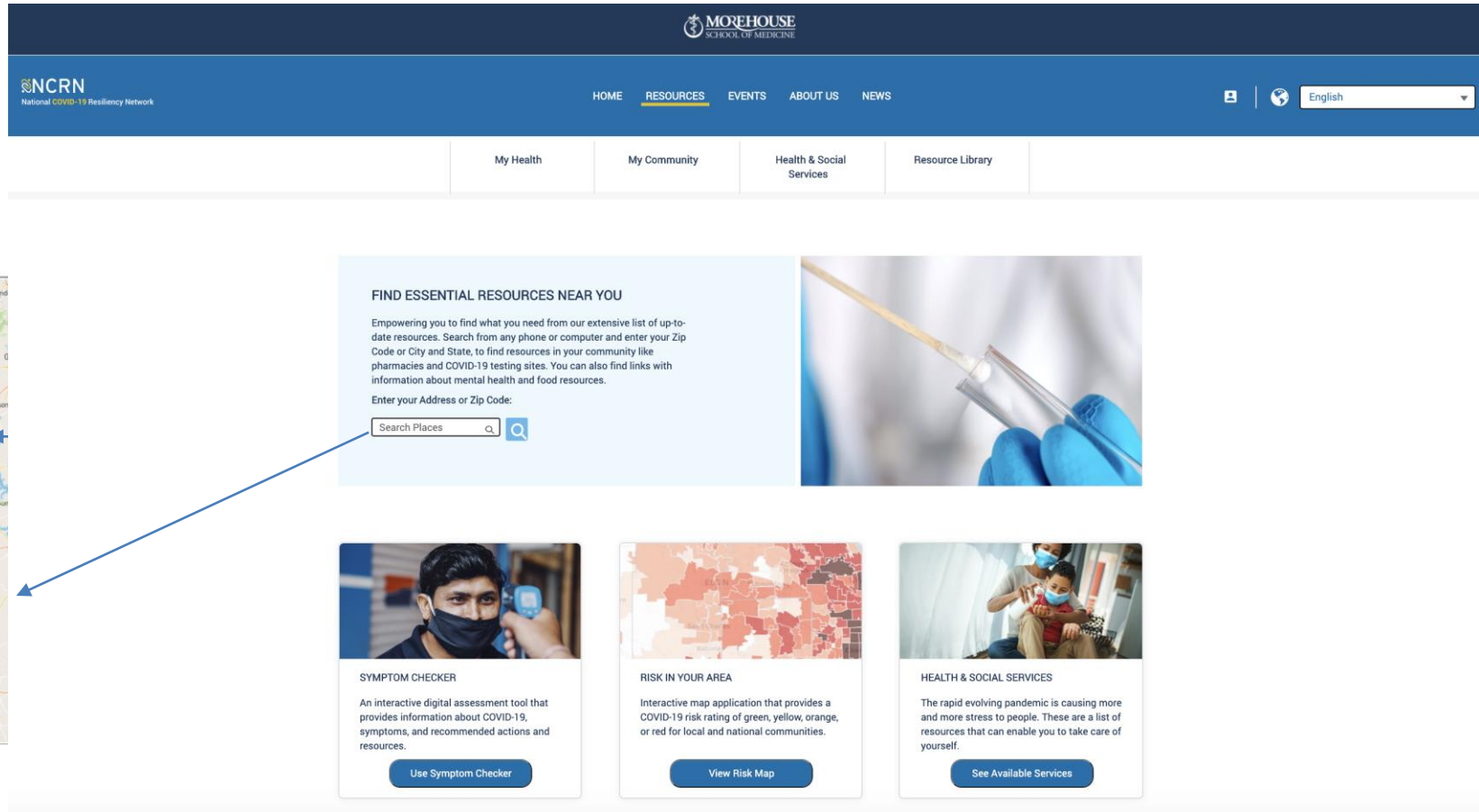
Location-Based Resource Navigator





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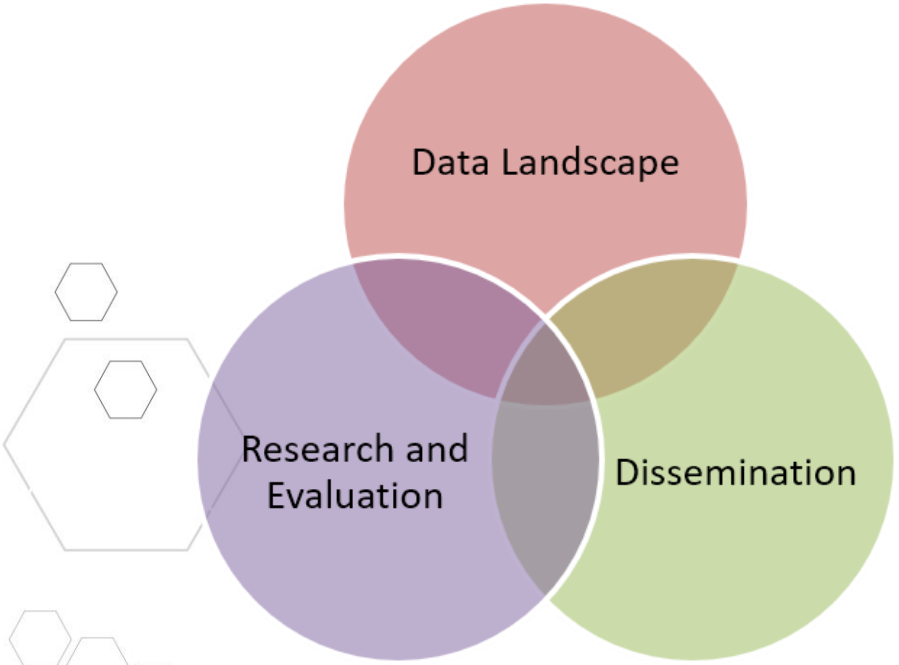
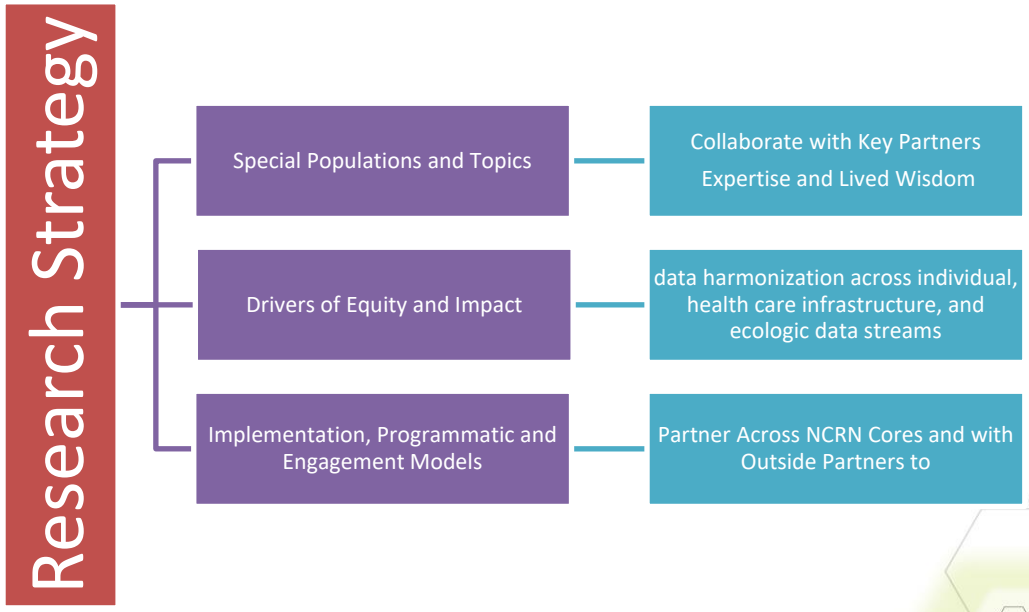
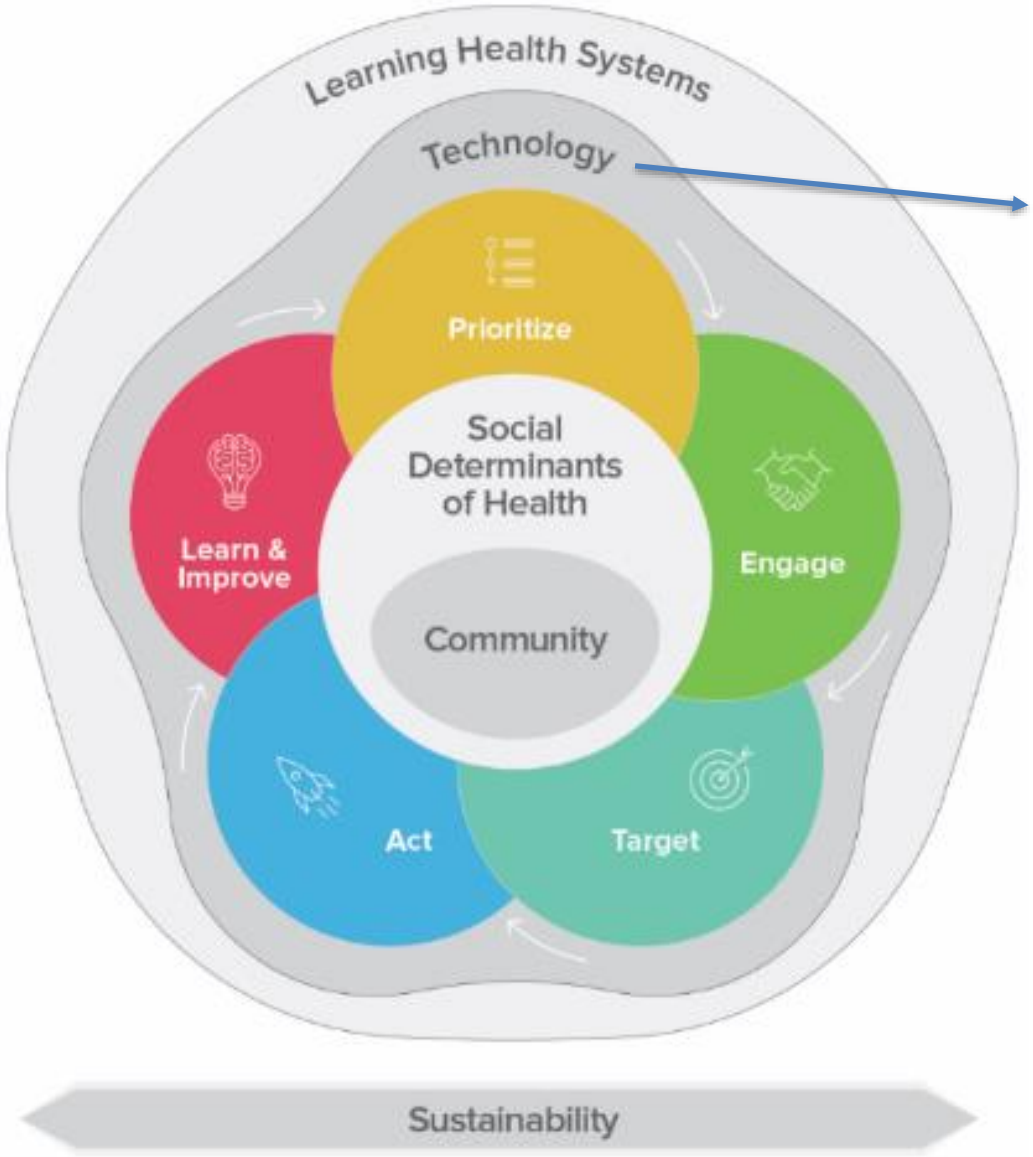
NCRN Research Strategy
Goals & Structure

Leverage the data streams and lessons learned via implementation of the NCRN to generate evidence to mitigate the impact of COVID-19 on vulnerable communities





PETAL: Overcoming Barriers with a Strategic Approach to Rural and Urban Disproportionately Impacted Communities

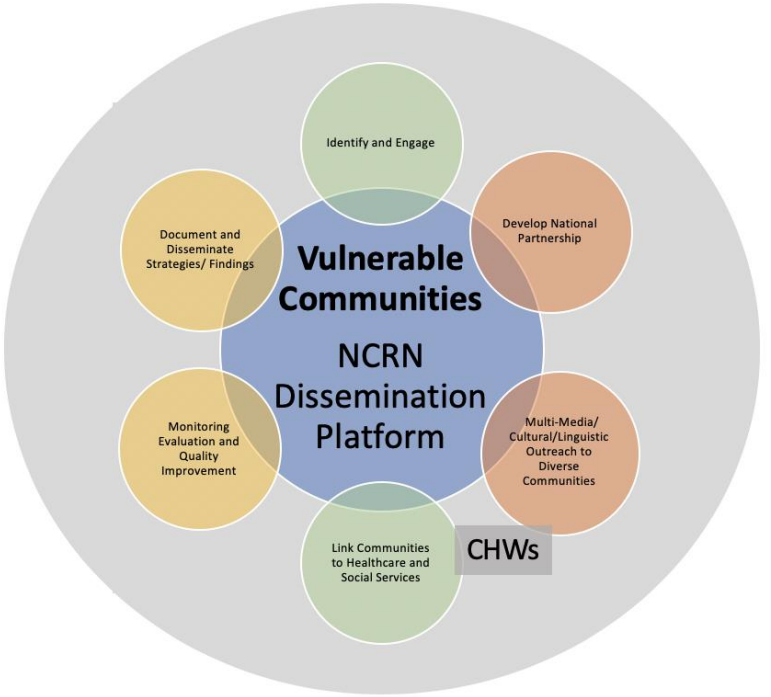


<u>Interoperability Challenges for Underserved</u>

- HIE silos
- Corporate Responsibility
- Affordability of DHT
- Small Practice Support

ZIP CODE/COMMUNITY → CULTURE→ RISK → TESTING → CARE

Thank YOU!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