

DISSERTATION

“SOCIOECOLOGICAL DYNAMICS INFLUENCING THE IMPLEMENTATION OF
COMMUNITY-CENTERED CARE MODELS: CROSS-SECTOR INSIGHTS FROM RURAL AND
TRIBAL GEORGIA AND OKLAHOMA”

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DEDICATION:

To the KOAs, the loves of my life.

The Four Musketeers. First Team, Best Team.

And to my Baby Bunnies, this is for you.

Always.

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LIST OF ABBREVIATIONS

AAFP: American Academy of Family Practice

AAMC: Association of American Medical Colleges

AAP: American Academy of Pediatrics

ACA: Affordable Care Act

ACO: Accountable Care Organization

ACP: American College of Physicians

AOA: American Osteopathic Association

AHC: Accountable Health Communities

AHRQ: Agency for Health Research and Quality

APHA: American Public Health Association

Beacon: Beacon Community Program

CBPR: Community-Based Participatory Research

CER: Comparative Effectiveness Research

CHIO: County Health Improvement Organization

CHOA: Children's Health Care of Atlanta

CHW: Community Health Worker

CMMI: Center for Medicare & Medicaid Innovation

CMS: Center for Medicare & Medicaid Services

CME: Continuing Medical Education

LIST OF ABBREVIATIONS (Continued)

COPC: Community-Oriented Primary Care

COPHC: Community-Oriented Primary Healthcare

CPC: Comprehensive Primary Care Initiative

CPC+: Comprehensive Primary Care Initiative Plus

CPP: Community Partnership Program

DHHS: Department of Health & Human Services

DO: Doctor of Osteopathic Medicine

EHR: Electronic Health Record

EMR: Electronic Medical Record

IHS: Indian Health Services

IOM: Institute of Medicine

IRB: Institutional Review Board

MD: Medical Doctor

MHEC: Maternal Health Environmental Context Model

NDP: National Demonstration Project

NIH: National Institutes of Health

NP: Nurse Practitioner

NSAWM: National Academies of Sciences, Engineering, and Medicine

ONC: Office of the National Coordinator for Health Information Technology

OSCTR: Oklahoma Shard Clinical & Translational Resources

LIST OF ABBREVIATIONS (Continued)

OPHES: Oklahoma Primary Healthcare Extension System

PA: Physician Assistant

PCMH: Patient-Centered Medical Home

PCOR: Patient-Centered Outcome Research

PCORI: Patient-Centered Outcomes Research Institute

PHC: Primary healthcare

PHIO: Public Health Institute of Oklahoma

SEM: Socioecological Model

SODH: Social Drivers of Health

WHO: World Health Organization

ABSTRACT

LAURA M. ROSS

“SOCIOECOLOGICAL DYNAMICS INFLUENCING THE IMPLEMENTATION OF
COMMUNITY-CENTERED CARE MODELS: CROSS-SECTOR INSIGHTS FROM RURAL AND
TRIBAL GEORGIA AND OKLAHOMA”

Under the direction of ANNE MONTGOMERY, PHD

Despite significant Federal investments aimed at improving health outcomes and addressing disparities, rural and Tribal communities in Georgia and Oklahoma continue to face profound inequities in health and social care delivery. This study explores the socioecological barriers and facilitators to implementing community-centered care models, utilizing insights from semi-structured interviews (N=50) with Direct Care Providers, Health Systems Administrators, Population Health & Public Health Experts, and Community Health Leaders. Guided by the socioecological model and employing a Grounded Theory approach, this research critically examines how societal, policy, organizational, community, interpersonal, and individual factors shape the delivery of care in underserved settings.

Findings highlight entrenched challenges, including fragmented funding streams, workforce shortages, cultural mistrust, and geographic isolation, compounded by the systemic neglect of public health infrastructure. The voice of Population Health & Public Health Experts, though limited in representation, offered critical insights into systemic barriers, including data inconsistencies, legislative constraints, and jurisdictional challenges that hinder the alignment of public health with direct care systems. Their perspective underscores the urgent need for integrated, data-driven solutions to bridge gaps in care and address population-level disparities.

Facilitators such as the adoption of telehealth, cross-sector collaborations, culturally tailored interventions, and community-driven approaches were identified as key pathways for improving community engagement and sustaining care delivery. However, interviewees consistently emphasized the limitations of current efforts, highlighting how efforts fall short of generating transformational change, relying instead on episodic, grant-dependent strategies that fail to address the root causes of socioecological health inequities.

This study underscores the necessity of long-term, flexible funding mechanisms and policy reforms that engage local communities, particularly in Tribal and rural settings, as co-designers of health and social care interventions. To achieve sustainable and equitable outcomes, future initiatives must prioritize investments in implementation infrastructure, interdisciplinary collaboration, community-informed policy development, and the dismantling of structural barriers impacting health outcomes. Study findings offer actionable insights for rural and Tribal providers, policymakers, and local stakeholders committed to driving systemic change through community-informed action.

Chapter 1

INTRODUCTION

This study aims to identify actual or perceived socioecological barriers to implementing community-centered models of care in rural and Tribal geographies across Georgia and Oklahoma, as a healthcare improvement model. Community-oriented models of care, such as Community-Oriented Primary Care (COPC), aim to serve individuals using a more comprehensive, community-based perspective to improve the individual and their surrounding community members through established, continuous processes in which the community collaborates to explore and determine its health priorities and design its unique delivery systems (Mullan & Epstein, 2002; Ceccarelli et al., 2023). By integrating clinical care with public health and fostering active community participation, COPC empowers communities to collaboratively define their health priorities, design tailored delivery systems, and sustain a shared commitment to health improvement (Mullan & Epstein, 2002; Ceccarelli et al., 2023). These models not only address individual health needs but also engage with the social, economic, and environmental determinants of health that shape population well-being.

As rural and Tribal communities face persistent health disparities compounded by historical inequities and resource limitations, the potential of using community-oriented care to bridge these gaps and enhance health outcomes is immense. However, the successful implementation of this model requires an integrated understanding of the barriers and facilitators encountered by healthcare providers, public health officials, and community leaders. Through an evaluation of historical and current care delivery models, we are able to uncover limitations to community engagement/participation while identifying opportunities for implementation of community-centered care delivery models, such as COPC,

This study utilizes a qualitative approach through a series of interviews with health experts in Georgia and Oklahoma to explore these dynamics through the lens of the socioecological mode (SEM)l. The utilization of the SEM offers a comprehensive framework to

examine how individual, interpersonal, organizational, community, and societal factors converge and shape care delivery. A model of healthcare delivery, such as COPC, which addresses each of these levels, is necessary to sustain healthcare improvement activities and ultimately sustain improvements across health and social care measures. By centering the voices of those at the forefront of health and social care delivery, this research contributes to actionable knowledge for designing a more equitable, community-centered health and social care system.

Background of the Study

The Alma Ata Declaration of 1978 called for the movement to community and equity-focused participation in healthcare from the established model of doctors, hospitals, and biomedical sciences; this vision for healthcare improvement was coined primary healthcare (PHC) (Rifkin, 2018.) Primary healthcare is most often delivered by Medical Doctors (MDs), Doctors of Osteopathic Medicine (DOs), Nurse Practitioners (NPs), Physician Assistants (PAs), and Clinical Nurse Specialists based upon individual state laws; primary healthcare provides treatment for various health needs within a community (Healthcare, Healthcare.gov, n.d.; Willis et al., 2020., Shi, 2012).

Primary Healthcare Defined

Primary healthcare is considered a model of healthcare focused on improving population health and eliminating health disparities; primary care is centered around five identified functions: accessibility, continuity, comprehensiveness, coordination, and people-centered care (World Health Organization (WHO), 2022.). Primary care delivery is a process in which individual providers or health systems offer promotive, protective, preventive, rehabilitative, and palliative care across the lifespan (WHO, 2022). WHO suggests primary healthcare is a societal approach with three key components: the blending of primary care and public health for fully integrated health services, policy change and action driven by a multisector approach addressing systemic, upstream social drivers of health, and empowered people and empowered communities (WHO, 2023).

Primary care is intended to be patient-centered, team-based, aligned with the community, and crafted to improve health outcomes, improve the quality of care delivered, and reduce healthcare costs (American Academy of Family Physicians (AAFP, 2022). The National Academies of Sciences, Engineering, and Medicine (NASWM) built on the definition of primary care by detailing the accountability of clinicians to address healthcare needs in partnership with their patients while simultaneously acknowledging the context of family and community for the patient; this definition was also incorporated into the Patient Protection and Affordable Care Act (ACA) of 2010 (ACA, 2010; Donaldson, Yordy, Lohr, & Vanselow, 1996).

Primary Healthcare and Policy

The ACA addressed various shortcomings within the healthcare system, including limited access to care, poor health outcomes and quality of care, and substantial medical expenses (Silberman, 2020). The ACA was designed to implement system-level changes to address delivery system challenges and improve overall population health (Silberman, 2020). With the adoption of the ACA, efforts in managing population health efforts across the healthcare delivery system became central to improvement efforts (Wang et al., 2023). Shifting the focus of healthcare from specialized treatments towards a greater emphasis on primary care, the ACA supported programs aimed at improving health behaviors and outcomes for underserved populations and educating primary care providers to better treat the overall community's health (Gofin et al., 2015).

The ACA established the Center for Medicare and Medicaid Innovation (CMMI) and tasked the Agency with developing reimbursement models across various Federally funded insurance programs (Buehler et al., 2018). The programs from this center collaborated with state governments to develop regulations to enhance the quality and value of healthcare for individuals and the broader population (Buehler et al., 2018). One solution from this center was covering certain preventive services without copayment (Buehler et al., 2018). Through its

expansion of Medicare and Medicaid, implementation of community assessments, and formulation of various policies, CMMI significantly bolstered both personal and public health initiatives (Buehler et al., 2018). The ACA requires nonprofit hospitals to continuously assess community needs and establish programs to address them, effectively pushing these hospitals closer to COPC mechanisms (Buehler et al., 2018). Since the implementation of the ACA, non-profit hospitals have either improved an already existing system for assessing their community or have developed and begun implementing a new system for evaluation (Franz et al., 2017).

The ACA has also opened the door to combining population health with healthcare access, specifically through PCMHs; COPC would be a way to further develop and cultivate the use of PCMHs to propel healthcare quality forward (Gofin et al., 2015; Silberman, 2020). The Patient Centered Outcomes Research Institute (PCORI) created through the ACA, works to fund Comparative Effectiveness Research (CER) and Patient-Centered Outcomes Research to guide health care providers, consumers of health care, purchasers of health care, and policy makers in making informed decisions, since 2010 PCORI has awarded \$4.5billion in funding (PCORI, 2024). In Spring 2024, PCORI released their Foundational Expectations for Partnership in Research, the six expectations are designed to promote active and ongoing partnerships between researchers, patients, and other stakeholders to ensure diversity and representation, early and ongoing engagement, dedicated funds for engagement and partner compensation, building capacity to work as a team, meaningful inclusion of partners in decision-making, and ongoing review and assessment of engagement to advance patient-centered CER (PCORI, 2024). PCORI updated these expectations based upon 10-years of findings from CER studies; findings are intended to set expectations for meaningful engagement in patient-centered CER studies in the future (PCORI, 2024). Findings align with the same expectations of patient-engagement as COPC, aligning a model of primary care delivery and a long-standing patient-centered research funding stream to further localized, community-designed health improvement efforts.

Primary Healthcare Delivery Models

The Institute of Medicine (IOM) has identified five unique ways primary healthcare is valuable for individuals, including establishing a place where individuals can address a wide variety of health concerns with the expectation of most issues being addressed without requiring an external referral, supporting navigating the healthcare system, including referral management, the intentional facilitation of a relationship between patients and providers with a goal of shared-decision making in plans of care, the provision of an environment where preventive, promotion-based, and early-intervention centered are offering, and the intentional bridge-building between healthcare services, individuals, families, and communities to best meet the patients' healthcare needs (IOM, 1996).

There are many healthcare delivery models designed to integrate and build upon the key components of primary healthcare identified by the WHO, AAFP, the ACA, the IOM, the NASWM, and other similarly aligned entities to address health and social care outcomes through primary care. In the late 1960s, the American Academy of Pediatrics (AAP) adopted a medical home concept in an initial effort to centralize pediatric medical records; moving into the 2000s, AAP incorporated accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective care. In 2006, the National Demonstration Project launched a randomized controlled trial on 36 family practices to test facilitated or self-directed transition into the *Patient-Centered Medical Home (PCMH)* model; the NDP's goal was to offer recommendations for policy-makers, PCMH implementors, and other stakeholders involved in primary care transformation activities (Crabtree et al., 2010). In 2007, AAP, American Academy of Family Physicians (AAFP), American College of Physicians (ACP), and American Osteopathic Association (AOA) and a collective representation of over 330,000 physicians issued a Joint Statement on the characteristics of a PCMH (AAFP, AAP, ACP, & AOA, 2007). The collective believed in the principles that all patients should have a relationship with their personal physicians offering first-contact, continuous, and comprehensive care; care should be directed

by a physician provider who guides the practice to take responsibility for their patient population; and providers should approach care from a whole-person orientation and seek coordination to arrange care with other healthcare professionals (AAFP, AAP, ACP, & AOA, 2007).

Evaluating models such as the PCMH, Accountable Care Organizations (ACOs), Accountable Health Communities (AHC), and Comprehensive Primary Care (CPC and CPC+) provides critical insights into past and ongoing efforts to enhance the integration, comprehensiveness, and quality of primary healthcare delivery. These models serve as foundational frameworks for understanding systemic challenges, successes, and gaps in aligning healthcare with community needs. By analyzing these initiatives, this study identifies key elements and omissions that inform the development and implementation of more effective, community-centered care models, such as COPC.

Patient Centered Medical Home

A PCMH is considered more than a clinical environment; it is a site dedicated to comprehensive care, patient-centeredness, coordinated care, accessible services, and quality and safety (Agency for Health Research and Quality (AHRQ), 2022). PCMH work focuses on quality and safety while expanding access and reforming payment (AAFP, AAP, ACP, & AOA, 2007). PCMH implementation activities across varied demonstration projects highlighted the need for practice-level leadership and champions behind PCMH development, implementation, and evaluation, and continued workforce development to be paired with implementation activities, individualized practice-level implementation strategies, not a one-size-fits-all approach, to support implementing health information technology (Solberg et al., 2014; Clancy & Duffy, 2013; Green et al., 2012). PCMH implementation sites, regardless of challenges, have been shown to reduce emergency room visits and, in some cases, healthcare costs (Fakeye, Hsu, Weiner, Martsteller, 2023, Saynisch et al., 2021; Jackson et al., 2013).

Accountable Care Organization

A fundamental piece of the ACA was the development of *Accountable Care Organizations (ACOs)* designed to focus on the redesign of payment models and the delivery of care through clinical structures focused on quality and efficiency across a group of providers or clinics; redesign efforts targeted integration of care across various healthcare settings, financial improvements, increased transparency and availability of information related to process, costs, and healthcare outcomes (Burke, 2011). Through ACOs, providers accept accountability for the quality, cost, and health outcomes of Medicare fee-for-service eligible beneficiaries for 3-years, minimum, create a legal entity for leadership, management, and administrative oversight, including distribution of shared savings payments to participants, in addition participating providers, must ensure a robust network of healthcare providers including an ample primary care provider base to provide services to assigned beneficiaries, while offering patient-centered care, and defining processes promoting evidence-based medicine and patient engagement (ACA, 2010). ACO models focus on providers and patients working from a mutually determined treatment plan for health conditions, where patients are armed with the knowledge to participate more in their overall treatment (Burke, 2011). ACOs were found to have similar ratings in patient satisfaction when compared to their fee-for-service peers; they were also found to have mixed evidence on the extent of the impact on quality of care; indicators showed improvements in some chronic diseases but no difference in mental health (Wilson et al., 2020).

Beacon Community Program

A cooperative agreement program, the *Beacon Community Program* focused on how investments in health information technology infrastructure and intentional utilization of electronic health records (EHR) to improve healthcare costs, outcomes, and delivery of care (The Office of the National Coordinator for Health Information Technology (ONC), 2012). ONC provided 17 communities with \$250 million to explore the planning, development, and implementation of secure and private EHR systems while promoting the adoption and

utilization of HIT for patient care (ONC, 2012). Improvements in Care Management were focused on supporting enhancements in information technology-based improvements, including medication therapy programs, telehealth delivery, in-home telemonitoring, and mobile device integrated utilization (NORC, 2015). Projects focused on increasing the flow and volume of information for providers to utilize in clinical decision-making and population health management activities; these elements were integrated into Beacon Community Projects to improve care at the Point of Service (NORC, 2015). Relationship building, workforce training, changing healthcare landscape, provider and stakeholder engagement, and legal and policy barriers were all identified as barriers to successfully implementing the Beacon Community Project (NORC, 2015; ONC, 2012).

Comprehensive Primary Care Initiative

In 2012, the Centers for Medicare & Medicaid Services (CMS) initiated its *Comprehensive Primary Care Initiative (CPC)* effort, followed by *CPC Plus (CPC+)* in 2017 to align efforts of Commercial health insurers and State health plans in an attempt to provide shared savings structures and fee incentives for offering population-based care management services for primary care practices participating in the Initiative (CMS, n.d.). Focused on five functions to test multi-payer payment reform, CPC and CPC+ participants were charged with utilizing data-driven continuous improvement and health information technology in meaningful ways to offer risk-stratified Care Management services, center access and continuity to care, deliver predetermined care for chronic disease and preventive care services, patient and caregiver engagement opportunities through shared decision-making, and facilitate the coordination of patient's care across a Medical Neighborhood (CMS, n.d.). CPC efforts aimed to determine if these functions would collectively improve the delivery of care while improving health outcomes and reducing overall healthcare costs; the project was utilized to inform future CMS policy, including the development of the CPC+ effort, which integrated elements of practice readiness, care delivery redesign, performance-based incentives, claims data sharing, and the

continued meaningful use of health information technology (CMS, n.d.). The CPC and CPC+ models centered efforts in a clinical environment and relied on care managers to successfully support patients' ability to navigate the medical neighborhood when experiencing multiple chronic conditions; data sharing between practices and community organizations delivering health-related social needs remained challenging for participating practices (Mathematatica Policy Research, 2016).

Accountable Health Communities

The *Accountable Health Communities (AHC) Model* from CMS announced in 2016 was designed to improve gaps in care between a clinical and a community environment by identifying health-focused social needs for eligible Medicare and Medicaid beneficiaries (CMS, n.d.). The AHC Model centered on screening, referrals, navigation, and local service alignment between clinicians and community services to improve health outcomes and healthcare spending (CMS, n.d.). Bridge organizations were selected to pilot innovative, localized approaches to improve service linkages; funding for AHC activities did not directly or indirectly support the provision of community services (CMS, n.d.). While reducing emergency room visits, the AHC Model did not increase the resolution of health-focused social needs identified through AHC-administered screening (RTI International, 2023). The AHC Model required using a standardized screening tool for health-related social needs designed by CMS; communities did not design localized screening tools (RTI International, 2023). Small working groups acting as advisory boards supported bridge organizations in the local implementation of the AHC Model, and the recruitment and retention of community members remained a challenge throughout the project (RTI International, 2023). Advisory Board members, including community members experiencing identified health-related social needs (through AHC standardized screenings), were not compensated for their participation or offered barrier-removal support, such as transportation vouchers for attending Advisory Board meetings (RTI International, 2023).

Evaluation of Primary Healthcare Improvement Models

Each highlighted primary healthcare improvement model represents an intentional effort to improve primary care through a more integrated approach to care delivery for various beneficiaries and populations. Evaluations of each model revealed complex challenges to initiating and sustaining community engagement to improve population health outcomes. When evaluating these primary care transformation models from the WHO framework, each highlighted model contains elements to support the WHO's societal approach to primary healthcare delivery, yet not one model fully encompasses the blending of primary care and public health while also promoting policy change and action through addressing upstream, systemic socio-ecological drivers of health through a multi-sector lens, and empowering individuals to participate in health improvement activities and empower communities to participate fully. The most common element missing from implementing these models is intentional, sustained participation and engagement from community members in the healthcare delivery systems.

Statement of the Problem

Community participation and engagement are fundamental to addressing the complex health and social needs of communities, particularly those in rural and Tribal settings. However, as highlighted through the reviews of current and historical primary healthcare delivery models, efforts to integrate meaningful community involvement into planning, design, implementation, and evaluation processes remain inadequate. While models such as the PCMH, ACO, CPC, and CPC+ have demonstrated value in improving care coordination, quality, and access, they often fall short in fostering sustained community-driven engagement. This gap is evident in their limited success in addressing the physical, behavioral, and social drivers of health comprehensively, through community-informed planning, implementation, and evaluation.

The lack of intentional, structured mechanisms to engage community members at every stage of healthcare delivery undermines the long-term effectiveness and relevance of these models. Models designed to serve communities often rely on top-down approaches that overlook the lived experiences and priorities of the populations they are intended to support. Further, systemic barriers such as fragmented funding streams, regulatory complexities, and insufficient infrastructure further complicate embedding community voices into healthcare improvement efforts. Without integrating community participation into decision-making processes, these models risk perpetuating inequities and failing to meet the dynamic needs of underserved populations.

This study seeks to address these gaps by exploring how community-oriented models, such as Community-Oriented Primary Care (COPC), can provide a framework for sustained, meaningful engagement in rural and Tribal geographies. By emphasizing the critical role of community collaboration in defining health priorities and designing tailored interventions, COPC offers a pathway to bridge the disconnect between healthcare systems and the communities they serve. This research not only examines the barriers and facilitators to implementing community-centered care models but also highlights the necessity of redefining health system structures to prioritize and institutionalize community engagement as a core component of health and social care delivery.

Researcher Identity, Positionality, and Reflexivity

I, the Author of this study, acknowledge my professional identity and positionality within the context of this study, requiring a level of reflexivity in the study design.

Identity, in this context, relates to the professional identity of the Author and their self-perceptions in an occupational context (Neary, 2014). Positionality refers to the position of the Author within the study and how the Author may assess the study population based on their experiences (Savin-Baden & Major, 2023). As a response to identity and position, critical

appraisal of my processes and assumptions, known as reflexivity, must occur to promote the ability of me, as the researcher, to obtain authentic accounts throughout the research process (Lazard & McAvoy, 2017; Corlett et al., 2018).

Identity

Since 2012, I have directed the Oklahoma Primary Healthcare Extension System (OPHES), a networked cross-sector health collaborative focused on improving the quality of primary healthcare available to Oklahomans through working to reduce the cost of care and health insurance premiums (Oklahoma Shared Clinical & Translational Resource (OSCTR), n.d.). Through the County Health Improvement Organization (CHIO) Model, the Author has supported the activation of local health and social care entities to improve the health of the population by increasing their visibility and overall alignment with local, state, and National-level health and social care improvement initiatives (OSCTR, n.d.). I have worked directly with Oklahoma communities to increase their efficiency and effectiveness in delivering health services while increasing their capacity to leverage funding from a broader range of sources to address identified needs, all while creating pathways for community engagement in health and social care programming (OSCTR, n.d.). Through this work, I have supported the development of mechanisms to incentivize community entities to sustain meaningful community engagement in health improvement activities (Rural Health Information Hub, 2022). In 2020, I was named the Rural Health Advocate of the Year by the Rural Health Association of Oklahoma for their advocacy work related to centering communities in healthcare delivery efforts state-wide.

I am a member of the Cherokee Nation of Oklahoma, a Tribal Sovereign Nation. My ancestors were forcibly removed from their lands in Northern Georgia under the Indian Removal Act of 1830 (Department of State, United States, n.d.), relocating to Northeastern Oklahoma, now home to their 7,000+ square-mile Tribal reservation, with headquarters in

Tahlequah, Oklahoma (Cherokee Nation, 2024). My family currently resides in the Cherokee Nation.

Positionality

Through my work with the OPHES and CHIOs, I have historically been positioned to engage in Oklahoma-based activities related to the ACA, ACOs, AHC, Beacon Community efforts, CPCI and CPCI+, and PCMH Accreditation efforts. In support of community-centered care delivery, I have supported projects with the National Quality Forum, developing and testing their Action Guide for Population Health with Communities (Nationally Quality Forum, 2014), with the Urban Institute to develop the plan for “Prevention, Treatment, and Recovery: Towards a 10-Year Plan for Improving Mental Health & Wellness in Tulsa” (Urban Institute, 2018). I have recently facilitated community-based National Institute of Health COVID-19 Testing and Vaccine Hesitancy Studies (Bray et al., 2024; Janitz et al., 2023). I currently hold Board positions within multiple health and social care-related organizations, including entities providing care to rural and Tribal populations. I additionally hold the position of Research Assistant for the Georgia Rural Health Innovation Center located at Mercer University’s School of Medicine. This role has permitted me access to opportunities to enhance my understanding of the health and social care delivery landscape of rural Georgia, including barriers and facilitators to community engagement/participation. For the past two summer semesters, I have supported two cohorts of rising Second Year Medical Students in community-based research efforts on food insecurity, rural domestic violence intervention, healthcare provider engagement, and community-based care models. Curriculum elements of my doctorate program have included field-based work as an organizer and evaluator across rural Georgia.

Reflexivity

To ensure the study design was not skewed by my identity or positionality, I have engaged in and sought critical support in developing research questions for the study,

structuring the study methodology, specifically recruitment strategies, and approaching the analysis plan. During the study development process, I engaged Medical Students with limited to no knowledge of the Oklahoma health and social care landscape to support the development of study tools, including interview questions.

The combination of my historical and current identity and positionality creates a unique environment for the collection of data related to barriers and facilitators to engaging community members in health and social care improvement activities. Historical participation in the highlighted health improvement efforts supports my ability to identify missing elements in care delivery models. Through exercising reflexivity, I have worked to ensure the design of the study limits the reduction of unnecessary biases or assumptions while still collecting authentic responses from study participants.

Purpose of Study

This study seeks to identify the actual or perceived socioecological barriers to implementing community-centered models of care (i.e., Community-Oriented Primary Care (COPC)) in rural and Tribal geographies across Oklahoma and Georgia (chosen based on the Author's identity and positionality) as a primary healthcare improvement delivery model. COPC aims to serve individuals using a more comprehensive, community-based perspective to improve the individual and their surrounding community members through established, continuous processes in which the community collaborates to explore and determine its health priorities and design its unique delivery systems (Mullan & Epstein, 2002; Ceccarelli et al., 2023). COPC is designed to account for the needs of the community to better serve the individuals within a designated geography; these guidelines include coordinated and complete care of a community, defining health needs, understanding and utilizing pre-existing data, and developing a healthcare delivery model, plan to implement tailored interventions, and attending to the individuals of a community through continuous assessments (Patrik et al., 2020).

Rural is defined as population, housing, and territories not included in an urban area (United States Census Bureau, 2024). Tribal geographies are defined as physical areas within the identified boundaries of American Indian reservations (United States Census, 2020). A community is defined as a group of individuals with diverse characteristics linked together by social ties, shared perspectives, and joint action within a determined geographical location or setting (MacQueen et al., 2001). See Appendix A for the State-Level Crosswalk of participation in highlighted healthcare improvement models. See Appendix B for a map of Tribal geographies in Oklahoma. Focusing on the socioecological barriers to COPC implementation, this study will utilize the Mental Health & Well-Being Model (Appendix C) designed by the Center for Leadership Education in Maternal & Child Public Health at the University of Minnesota School of Public Health (Erickson et al., 2024).

Research Questions

- What are the perceived or actual socioecological barriers to implementing community-oriented care models in rural and tribal communities in Oklahoma and Georgia?
- What are the facilitators for the successful implementation of community-oriented care models in these communities?
- How do the socioecological barriers and facilitators differ among various provider types?

Significance of Study

COPC integrates public health and community engagement to meet the community's health needs and encourage health maintenance and disease prevention (Gofin et al., 2015; Gofin & Gofin, 2007). When using this model, providers can better understand the complex needs of their patient population, improving their overall ability to treat and work towards improving the overall quality of a community's health (Gofin et al., 2015).

One example of the application of community-oriented care was during the initial phases of the COVID-19 pandemic; primary care's role in understanding the communities' needs and being a trusted distributor of accurate information, was undervalued and not maximized throughout communities (Leyns et al., 2023). Throughout the pandemic, social drivers of health were often highlighted, which led to an uneven distribution of the negative impacts COVID-19 had on health (Leyns et al., 2023). A community-oriented model would consider these social drivers and help reduce negative consequences during public health emergencies such as a pandemic (Leyns et al., 2023). Additionally, studies highlight when physicians involve themselves in the community, the community benefits by increasing public trust in healthcare professionals, resulting in a higher rate of physician recruitment and retention in rural communities (Sweeny, 2016; Moore et al., 2024, Strasser, R.P., 2010). These two examples highlight the significant, positive relationship between providers and their communities when working to improve health outcomes, or manage a pandemic.

Study Context

This study focuses on Georgia and Oklahoma due to their unique socio-ecological landscapes, extensive rural geographies, historical and current Tribal connections, and persistent health disparities. Both states consistently rank near the bottom in health, social, and economic performance measures despite receiving substantial Federal funding for health and social care delivery. According to the Commonwealth Fund's 2023 Scorecard on State Health System Performance, Georgia ranks 45th and Oklahoma 49th overall, with particularly poor outcomes in reproductive and women's health, access and affordability, prevention and treatment, avoidable hospital use and costs, healthy lives, income disparity, and racial and ethnic health equity. These rankings underscore the urgent need to explore models that address systemic inequities and improve outcomes, particularly in underserved and marginalized populations.

Application of the SEM to the Study Context

To critically examine the health outcomes and underlying social drivers of health in Georgia and Oklahoma, this study applies the Minnesota Maternal and Child Health Environmental Context Model (MHEC), a socioecological framework. This model allows for an exploration of barriers and facilitators across multiple levels, providing a comprehensive understanding of the challenges faced in implementing community-centered care. The following sections outline key socioecological factors influencing health outcomes in Georgia and Oklahoma at the Individual, Interpersonal, Community, Organizational, Policy, and Societal levels.

Individual Level: Demographics and Health Behaviors

At the individual level, both Georgia and Oklahoma contend with demographic characteristics and health behaviors driving poor health outcomes. These challenges are shaped by a combination of systemic barriers and personal risk factors, which are particularly pronounced in rural and underserved populations. Georgia's larger and more diverse population (10.9 million) contrasts with Oklahoma's smaller population (4 million). Georgia's racial and ethnic composition includes a higher proportion of Black (32.1% vs. 7.5%) and Hispanic residents (10.5% vs. 12.1%), while Oklahoma has a significantly larger American Indian or Alaska Native population (9.5% vs. 0.6%). These demographic differences highlight the need for tailored health interventions with the ability to address the unique cultural and historical contexts of these populations (County Health Rankings & Roadmaps 2024; Feng & Mardon, 2022, Liu et al., 2016; U.S. Census Bureau, 2023;).

Behavioral risk factors are pervasive in both states, contributing to high rates of chronic disease and premature mortality. Oklahoma's obesity rate (40%) outpaces Georgia's (34%), as does its rate of physical inactivity (27% vs. 23%). Smoking prevalence is also higher in Oklahoma (18% vs. 16%). These behaviors, while influenced by individual choices, are deeply rooted in systemic inequities, such as limited access to food environments, transportation

infrastructure, physical environment/recreational spaces, and preventive health education (NASEM, 2017; Pampel et al., 2010; Newsome et al., 2021). Oklahomans report more mentally unhealthy days per month (5.5 vs. 4.8 in Georgia), reflecting broader disparities in mental health access and treatment (County Health Rankings & Roadmaps, 2024).

Both states struggle with low rates of preventive care utilization, with mammogram screenings at 40% in Oklahoma and 41% in Georgia. (County Health Rankings & Roadmaps, 2024). Addressing these behavioral health challenges requires culturally competent health promotion programs that target individual-level determinants while addressing the broader social and structural contexts that shape these behaviors (Chiu, 2009; Joo & Liu, 2021; English et al., 2008).

Interpersonal Level: Family Dynamics and Social Networks

Family and social relationships are critical to shaping health behaviors and outcomes. A significant proportion of children in both states live in single-parent households, a known risk factor for adverse childhood experiences (ACEs). In Georgia, 31% of children live in single-parent households compared to 26% in Oklahoma (County Health Rankings & Roadmaps, 2024). Single-parent households are often disproportionately affected by economic insecurity and limited access to resources, which can negatively impact both mother and child physical, emotional, and cognitive development (Jacoby et al., 2017; Dharani & Balamurugan, 2024; Helmstetter et al., 2010).

Oklahoma's teen birth rate of 27 per 1,000 significantly exceeds Georgia's rate of 20 per 1,000. Additionally, both states face high percentages of children living in poverty (20% in Oklahoma and 17% in Georgia), further compounding the challenges faced by families in providing stable and nurturing environments (County Health Rankings & Roadmaps, 2024; Conrad-Hiebner, A., & Byram, E. 2020; Sano et al., 2021; Komro et al., 2013). Social networks and community support systems, which are critical for buffering against adversity, vary between the states. Oklahoma's higher social association rate (11.3 vs. 8.9 in Georgia) suggests slightly

stronger community engagement, which can be leveraged to build programs that foster social cohesion and mutual support (County Health Rankings & Roadmaps, 2024; Agashe et al., 2021; Naslund et al, 2016; Mercado et al., 2024).

Organizational Level: Healthcare Infrastructure and Institutional Barriers

Access to primary care is a critical issue in both states. Oklahoma has a higher primary care physician ratio (1,694:1) compared to Georgia (1,517:1), underscoring the difficulty rural residents may face in accessing basic medical care. Physician ratios indicate the number of patients each provider cares for, the higher the number, the more patients the provider sees. The shortage of other primary care providers is also notable, with Oklahoma having a ratio of 821:1 compared to Georgia's 735:1. These gaps are compounded by high rates of uninsured among adults (21% in Oklahoma and 18% in Georgia), which limit access to preventive and acute care (County Health Rankings & Roadmaps, 2024). Fewer primary care providers within a rural geography is associated with lower life expectancies, higher age-adjusted mortality rates, across a variety of causes of death, when compared to urban populations (Basu et al, 2019; Callaghan et al., 2020).

While Oklahoma outperforms Georgia in mental health provider availability (235:1 vs. 559:1), its higher rates of frequent mental distress (18% vs. 15%) and suicide (21 per 100,000 vs. 14 per 100,000) indicate substantial unmet mental health needs (County Health Rankings & Roadmaps 2024). Preventable hospitalizations are alarmingly high in both states, with rates of 3,076 per 100,000 in Georgia and 3,069 per 100,000 in Oklahoma. (County Health Rankings & Roadmaps, 2024). These figures underscore systemic inefficiencies in managing chronic conditions and providing timely, continuous outpatient care (Jørgensen et al, 2022; Dantas et al., 2016). Expanding healthcare infrastructure, particularly in rural and Tribal communities, is essential to reducing these preventable health crises (Luxon, 2015).

Community Level: Social Determinants of Health and Environmental Contexts

At the community level, Georgia and Oklahoma face entrenched disparities that shape health outcomes. These challenges are particularly evident in food security, housing, transportation, public safety, and access to community resources. Food insecurity affects 14% of Oklahomans compared to 11% of Georgians, a disparity that is reflected in the Food Environment Index scores of 5.6 and 6.4, respectively. These figures point to systemic barriers, including the prevalence of food deserts in both states, particularly in rural areas. Limited access to fresh and affordable food contributes to higher rates of and chronic conditions, such as diabetes and heart disease. Oklahoma, has higher obesity rates than Georgia (40% vs. 34% in Georgia) (County Health Rankings & Roadmaps, 2024; Leung et al., 2020; United States Department of Agriculture, 2024).

Severe housing problems impact 15% of Georgians and 13% of Oklahomans. Both states face a shortage of affordable housing, with rising costs forcing families to live in substandard or overcrowded conditions. Broadband access, crucial for telehealth, education, and employment, is slightly lower in Oklahoma (86%) than in Georgia (88%), exacerbating rural-urban disparities in access to essential services (County Health Rankings & Roadmaps, 2024).

Public safety metrics reveal disparities in community stability and wellbeing. Oklahoma has higher rates of firearm fatalities (19 vs. 17 per 100,000), motor vehicle mortality (18 vs. 15 per 100,000), and drug overdose deaths (20 vs. 18 per 100,000). These preventable deaths highlight opportunities for the development of systemic, collaborative behavioral health interventions, harm reduction strategies, and transportation safety measures to improve health outcomes (County Health Rankings & Roadmaps 2024).

Policy Level: Systemic Inequities and Structural Barriers

Policy-level factors shape the health disparities observed in Georgia and Oklahoma. Each state faces significant challenges in addressing systemic inequities in economic stability, healthcare access, education, and public health infrastructure. Economic disparities are more pronounced in Oklahoma, where the median household income is \$59,632 compared to \$72,742

in Georgia. The poverty rate is higher in Oklahoma (15.9% vs. 13.6%), and childcare costs consume a larger share of household income (29% vs. 24%). These economic stressors disproportionately impact low-income families, particularly in rural areas where job opportunities are limited, and public transportation is often nonexistent (County Health Rankings & Roadmaps 2024; Sano & Mammen, 2022; Gedikli et al, 2022; Syed et al., 2014). Oklahoma has a higher rate of uninsured adults (21% vs. 18% in Georgia), further limiting access to preventive and ongoing care (County Health Rankings & Roadmaps 2024).

Education funding inadequacies are a persistent challenge in both states. While Oklahoma spends more per pupil than Georgia (\$12,088 vs. \$10,486), both states exhibit significant funding gaps. High school graduation rates are lower in Oklahoma (80% vs. 85%), and fewer residents hold a bachelor's degree or higher (18.6% vs. 21.3%). These disparities highlight opportunities to support equitable education funding and expanded access to early childhood education and vocational training (County Health Rankings & Roadmaps 2024).

Societal Level: Structural Contexts

Broader economic inequality exacerbates health disparities in both states. The income gap between men and women is wider in Oklahoma (0.76 vs. 0.81 in Georgia), reflecting systemic inequities in each state related to workforce participation and compensation. These disparities are compounded by limited social safety nets and inadequate access to affordable childcare and housing; the percentage of household income required for childcare expenses in Georgia is 24% and 29% in Oklahoma. For example, federal policies on Medicaid expansion, nutrition or child care assistance, and infrastructure investment have direct implications for state-level health outcomes (Cole et al., 2021; County Health Rankings & Roadmaps 2024, NASEM, 2019).

The health disparities in Georgia and Oklahoma reflect a complex interplay of individual, interpersonal, organizational, community, policy, and societal factors. Addressing these disparities requires a holistic, community-oriented approach that leverages the strengths of the

socioecological model. A model of healthcare delivery, such as COPC, which addresses each of these levels is necessary to sustain healthcare improvement activities and ultimately sustain improvements across health and social care measures.

Community-centric care models provide the platform for policymakers, direct care providers, public health professionals, and community leaders to collaborate in the development of targeted interventions to address the root causes of health inequities while promoting resilience and equity at the local level. By expanding access to healthcare, improving educational opportunities, strengthening community resources, and addressing systemic barriers through intentionally centering healthcare delivery in the community, Georgia and Oklahoma are better positioned to foster healthier environments for their residents. While both states have historically engaged in Federally funded healthcare delivery system improvement activities, health outcomes have to see sustained health improvements. See Appendix A for the crosswalk of participation in programs highlighted in the Introduction.

Chapter 2

LITERATURE REVIEW

This literature review investigates the utilization of COPC in domestic and international, rural, and tribal communities; reviewing the history, implementation, evaluation, and model improvements, this review will suggest future applications for COPC based on current healthcare improvement approaches. Literature exploring the socioecological model as a framework for exploring barriers will be highlighted as a theoretical framework for COPC implementation.

COPC History

As early as the 1920s in rural England, a provider named William Pickles, MD integrated epidemiological principles into his medical practice (Longlett et al., 2001). While not utilizing COPC principles by name, Pickles led a charge to record what are now known as vital statistics (birth and death records), infectious disease registries, including contact tracing, school absenteeism, and other health-related social outcomes (Longlett et al., 2001). Pickles famously authored the book "Epidemiology in a Country Practice," laying the groundwork for what COPC would evolve into today (Longlett et al., 2001).

Building off the work of Pickles, in 1942, physicians Sidney and Emily Kark, MD, received funding from the South African government to further develop the conceptual and applied bases for the development and implementation of COPC (Longlett et al., 2001), through heavy investments in the National Health Service Commission Network, the Drs. Kark established community health practices to support improved health outcomes with the support of the Institute of Family and Community Health and its divisions of epidemiology, data management, health administration, community nursing, health education, environmental sanitation, laboratory services, and nutrition (Longlett et al., 2001). Through health center efforts, communities were directed to develop comprehensive, curative, and preventive services blending clinical epidemiology, social psychology, basic science, and primary care (Longlett et

al., 2001). During this period, Dr. Sidney Kark coined the term Community-Oriented Primary healthcare (COPHC) for their healthcare delivery method practice at the South African Pholela Health Center; Kark's model of practice was later shortened to Community-Oriented Primary Care (COPC; Longlett et al., 2001; Nutting et al., 1985).

While working across South Africa, Kark continued to refine the COPC conceptual and applied functions, implementing it in various projects, including sanitation, soil erosion, and improved nutritional status initiatives (Longlett et al., 2001). These efforts led to a remarkable decrease in Scabies and Impetigo outbreaks, reducing prevalence from 82% in 1942 to 7.8% by 1950 and infant mortality from 27.5% to 10% per 1,000 live births (Longlett et al., 2001). Following the 1960s rise of the South African National Party, the extensive network of COPC-centered health centers disbanded, resulting in the Drs. Kark leaving South Africa and eventually relocating to Israel to the Hadassah School of Public Health and Community Medicine of the Hebrew University in Jerusalem to continue their COPC efforts (Longlett et al., 2001; Susser, 1999; Mullan & Epstein, 2002). With government support and financing, Kark developed a training program for a COPC team of physicians, nurses, and healthcare workers to substantially improve community health in the region (Longlett et al., 200).

COPC implementation in the United States was initially based upon a series of Governmental efforts focused on community-responsive initiatives to improve healthcare access and outcomes for underserved populations throughout the country (Longlett et al., 2001). Focused on addressing poverty and improving access to healthcare for low-income populations through the use of community health workers, initial COPC efforts in the 1950s and 1960s focused on Tribal, rural, and urban implementation efforts through community health centers to determine if the COPC model could be clinically and structurally successful (Longlett et al., 2001; Gofin et al., 2015; Deuschle, 1982; and Nevin & Gohel, 1996). Like the South African

Pholela Health Center, once funding was removed, the initiatives failed (Gofin et al., 2015; Longlett et al., 2001).

In the early 1980s, as funding for community health clinics was challenged, the Institute of Medicine (IOM) convened a COPC-focused conference to study the model's operationalization, refinement, and feasibility (Longlett et al., 2001). Studies concluded that COPC is a widely effective model across diverse populations that can be sustained with multiple funding streams (Longlett et al., 2001). Recommendations for the future of COPC included widespread implementation, continued studies on cost versus outcomes, and strides to increase accessibility and utilization of demographic and epidemiological data methods and models to diverse healthcare provider types (Longlett et al., 2001). In 1987 and concluding in 1992, the W.K. Kellogg Foundation and the National Rural Health Association launched their collaborative COPC Demonstration project among 13 rural healthcare practices with a target of supporting rural community adoption of COPC while achieving success, with minor framework adaptations, with each of the demonstration sites, funding, workforce, implementation timeframe, and the level of coordination required remained challenges for sites, along with the need for a physician champion who is focused on overall community need (Longlett et al., 2001; Kukulka, 1994). COPC remains a highly considered model of healthcare delivery in 1998 The American Public Health Association (APHA) published a seminal text on COPC: "COPC: Healthcare for the 21st Century," a guide to COPC skills, curriculum, and COPC competencies, highlighting the need for action and process based learning to examine and comprehend the needs of the community (Longlett et al., 2001;

COPC in Healthcare Education, Research, and Policy

COPC has been embraced and integrated into many medical and undergraduate programs worldwide (Gofin et al., 2015; Mullan & Epstein, 2002). The George Washington (GW) University School of Public Health and Health Services, in collaboration with the Hebrew

University of Jerusalem and the National School of Public Health in Pretoria provides an international certificate in COPC; this offering is in addition to their COPC track in their Master of Public Health Program (Mullan & Epstein, 2002; GW University, n.d.). GW's commitment to COPC extends to their PA Program where students are trained on the utilization of electronic medical records to support population health efforts, the design of mobile applications for health improvement in addition to their clinical training (GA, 2024).

Creighton University in Omaha, Nebraska has utilized National Institutes of Health (NIH) COPC Endowment (NIH# 5S21MD001102-03) funding to develop a COPC Program to increased underrepresented minority student representation in healthcare education through offering scholarship funding and academic supports, program goals also include increasing the number of students focusing on health disparity research and public health focused learning and research (Creighton University, 2024). The COPC Program offers students summer research experiences, opportunities to participate in longitudinal public health research, collective learning cohorts, tutoring services and scholarships to advance the utilization of COPC (Creighton University, 2024).

The Robert Graham Center (Graham Center), a collective of clinician researchers and social scientists focused on providing support for primary care improvements, founded in 1997 from the AAFP Board of Directors to guide research and evaluation for AAFP's policy work and to advocate for the delivery of effective primary care services (Graham Center, n.d.). The Graham Center offers a COPC curriculum, approved for Continuing Medical Education (CME) to educate providers on the tenants and implementation strategies for COPC in communities (Graham Center, n.d.). The four-module curriculum includes pre-module activities, case-studies, data training, resource guides, and community-activity tools to build a provider's competency in COPC implementation (Graham Center, n.d.).

Core Components/Theoretical Framework of Community-Oriented Primary Care

A healthcare delivery model established in the mid-1900s, COPC, shown in Figure 1, is an approach to healthcare delivery designed to blend elements of primary care, community, public health, and epidemiologic or patient data. (Abramson & Kark, 1983; Mullan & Epstein, 2002). COPC aims to serve individuals using a more comprehensive, community-based perspective to improve the individual and their surrounding community members through established, continuous processes in which the community collaborates to explore and determine its health priorities and design its unique delivery systems (Mullan & Epstein, 2002; Ceccarelli et al., 2023). COPC aims to account for the needs of the community to more effectively provide primary care, public health, and social care services; these aims include understanding and utilizing pre-existing data to provide coordinated and complete care for a community; coordinated care efforts include the developing of models or standards of care that support a defined community-identified health and social care needs (Patrik et al., 2020).

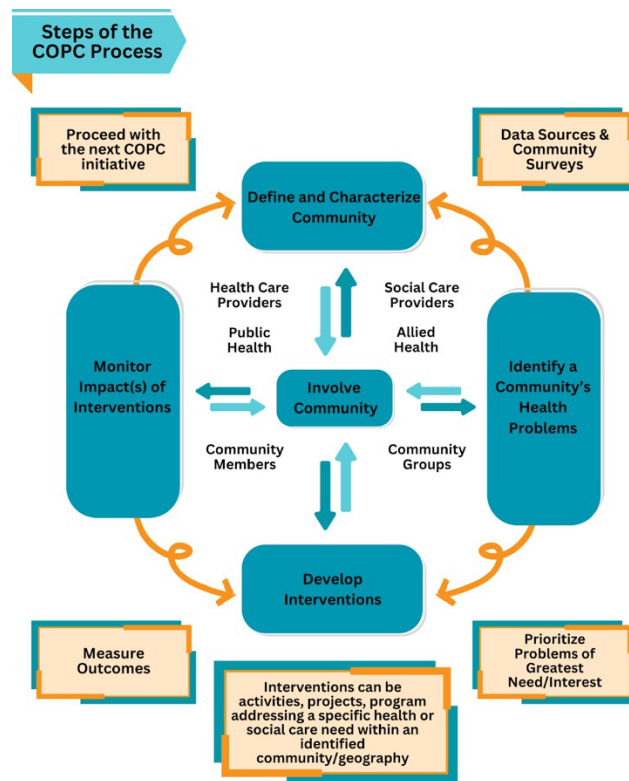


Figure 1: Steps of COPC

Five key principles encompass COPC: 1) the provision of care to a defined population; 2) the tailoring of healthcare service delivery through the local identification of need; 3) the development of a hierarchy of healthcare needs to support the effective implementation of health improvement programming; 4) focus on health services which promote prevention, early

intervention, and treatment; and 5) the inclusion of community participation and ongoing engagement (Gofin et al., 2015).

Community collaboration and engagement are important elements in identifying the needs of a community and improving health equity (Savage Hoggard et al., 2023). Collaboration between healthcare providers and organizations within a community strengthens the health infrastructure and the public's health (Baum et al., 2024). Studies highlight even within the field of academic medicine, working with individuals and groups within a community allows providers and academic medicine programs to more effectively connect with patients and work together to address barriers and needs within a community, ultimately building a foundation of trust (Savage Hoggard et al., 2023).

Current and Historical COPC Implementation

Domestic Tribal Implementation

In partnership with the Navajo Nation, the United States Public Health Services- Indian Health Services and Cornell University (New York) developed a COPC model for the many Farms-Rough Rock Chapters, a political district of 2,000 Navajo Tribal Members, from 1955 to 1960; this COPC effort facilitated by Cornell's academic medical center was designed to improve healthcare delivery systems while creating a more response system to meet tribal nation needs (Deuschle, 1982; Longlett et al., 2001). The pilot demographics of the COPC effort were considered representative of the Navajo Nation in addition to many third-world countries in terms of socioeconomic, economic, geographic, and health-related challenges (Deuschle, 1982). Using CHWs, cultural, communication, and linguistic challenges were overcome, and cross-cultural gaps were narrowed (Deuschle, 1982). The Navajo Nation's COPC project included enhanced localized assessments, education, promotion, and prevention activities, improving participants' socioeconomic status outcomes. However, the project was shown to be effective,

and Federal funding for the effort was not sustained, including the workforce development model for CHWs (Deuschle, 1982; Longlett et al., 2001).

Domestic Rural Implementation

From 1962 to 1968, in Martin County, Kentucky, in the heart of Appalachia, a young local physician entered into a partnership with the University of Kentucky Medical Center (UKMC) after a successful local project to eradicate tuberculosis at the county level to develop a modern primary care practice program, similar to the Navajo Nation effort, the UKMC and Martin County effort included robust localized data collection and intervention design activities (Deuschle, 1982). During the project implementation period, the employment, healthcare, political, and economic landscape changed dramatically in Martin County, including the reorganization of the State Health Department and Local Health Department dismantling, potentially impacting community participation and the long-term sustainability of the COPC effort (Deuschle, 1982).

Domestic Urban Implementation

JPS Health Network, a public healthcare provider in Texas, created the JPS Health and Wellness program post-COVID-19 pandemic to re-engage the community. The program aimed to improve the health of their community through targeted activities, including health education classes for patients focusing on improving their individual and collective ability to directly address identified health problems within their community (Hunter et al., 2024). To carry out their efforts, JPS met with community center leaders to establish trust and gain a deeper understanding of community needs; additional workforce efforts included hiring and training community health workers (CHW), most commonly community members themselves, to reinforce trust in JPC as a health network (Hunter et al., 2024). Focusing on patients most in need, the JPC program supported patient referrals to network partners focused on addressing identified social drivers of health challenges while simultaneously offering system navigation

assistance (Hunter et al., 2024). Through this means of collaboration between the healthcare provider, patient, and the community, patient encounters increased, more individuals had their social drivers of health needs addressed, and the JPS Health Network worked to further strengthen the community's trust- all through a less costly, less resource-intensive model of care (Hunter et al., 2024).

International Implementation

Since its early implementation success in South Africa, there have been several successful attempts to implement elements of COPC again in healthcare delivery models. During the COVID-19 pandemic, communities within various sub-Saharan African countries showed an average lower excess mortality and an overall more successful response to the pandemic when they had factors such as more resources for primary care, paid community health workers, an infrastructure of community networks, more trust in the government, and a belief within the community of mutual aid, or collaboration between the community to provide and support each other, all elements of COPC (Leyns et al., 2023). The Chiawelo Community Health Centre in South Africa, an active COPC-modeled program serving 150,000 people across five regions, conducted through interviews with general practitioners and found the cost to fund the eight to 14-person COPC staff needed to manage a patient base of 10,000 was nearly equivalent to government budgeting for such expenses, showcasing that South Africa has the potential funding and support to continue implementing COPC into healthcare practice (Moosa, 2021). The Chiawelo Community Practice has set a financial and collaborative example for their country, setting the tone for the future use of COPC in South African Health Systems (Moosa, 2021).

Barriers to Implementing COPC

Although in its own South Africa birthplace, there is some conflicting evidence regarding the utilization of COPC (Gavagan, 2008). A more recent study reported little evidence of COPC

effectiveness despite strong support from family physicians, with the main challenge being that very few established COPC programs used all parts of the model defined by Sidney and Emily Kark (Moosa, 2021). A case study of community health workers within provinces of different healthcare programs in South Africa was conducted to determine their alignment with COPC principles, collaboration with the current healthcare and community structures, and its impact with emphasis on the specific needs of the community (Malatji et al., 2023). The research found many programs struggled with funding, whether due to funds being diverted for other activities or a complete cessation of funding (Malatji et al., 2023). Lack of thorough or complete training, low literacy rates, and unreliability of resources were some observed barriers to implementing COPC (Malatji et al., 2023).

From the IOM-hosted COPC conference in 1982 came the decision to continue the development of COPC nationwide and sponsor a study to follow the progression of development, refine the mechanism, and evaluate the barriers of COPC (Longlett et al., 2001; Nutting et al., 1985). Within this study, the IOM chose seven primary care sites throughout the United States and performed case studies on them; this study found a primary barrier to the implementation of COPC was the fee-for-service structure of the private practices in America (Gofin et al., 2015; Nutting et al., 1985). It also found the key determinant to the successful implementation was a provider who pioneered the change (Longlett et al., 2001).

A potential structural and organizational challenge preventing the application of COPC principles is the lack of a COPC-based curriculum in medical education, resulting in fewer providers implementing COPC principles into their practice behaviors and clinical environment (Gofin et al., 2015). One survey found that less than half of family medicine residency programs implemented COPC principles within their curriculum (Gofin et al., 2015). Another survey found that while about 40% of residency programs may report teaching COPC, only roughly 7%

of physicians report implementing COPC in their practices after residency (Gofin et al., 2015; Gavagan, 2008).

For COPC to serve its purpose, engagement from the community must be facilitated by authentic supporters/utilizers of the process and well-defined collaborative goals (Leyns et al., 2023). COPC has shown to be effective when fully supported and maintained by a community and its governing officials, a widespread lack of COPC use in communities with less access to healthcare is seen, (Leyns et al., 2023). While the awareness of drivers of health is higher, the overall willingness of a community to identify barriers and set goals has declined, even though the technology and resources to do so have greatly improved since the beginning of COPC as a model (Savage Hoggard et al., 2023).

Gaps in COPC Research

Implementations of COPC efforts in Tribal populations are limited, and associated literature remains scarce. The 1950s Navajo Tribe COPC project remains one of the only community-involved projects IHS COPC projects (Deuschle, 1982). A central agency that provides healthcare to Tribal populations is IHS, an agency under the Department of Human and Health Services (DHHS). The IHS services 2.56 million Native Americans and Alaskan Natives in 37 states from 574 tribes recognized by the U.S. government (IHS, 2020). While there are many positive aspects the health programs under the IHS bring to Tribal populations, this organization is severely underfunded, and services typically reach only a fraction of the eligible population it serves, contributing to the health disparities (McCauley et al., 2021). Despite this obstacle, programs within the IHS have seen great success in providing community-oriented care, such as the SCF's Nuka System of Care (McCauley et al., 2021). Even with this success, there is no explicit mention of COPC as a healthcare delivery model when forming current healthcare programs for Tribal populations.

Despite Federally funded efforts calling for high levels of community engagement, barriers to implementing COPC in a post-ACA implementation era have yet to be evaluated as a mechanism of primary healthcare improvement. In a systematic review, researchers determined many projects and studies similar to COPC in various ways, utilizing only some principles taught in COPC or teaching the principles as close to their original structure; much of the literature was regarding education and theory (Gavagan, 2008). While programs like COPC, in theory, are effective in supporting community and patient health, more research and real-world implementation are needed to truly assess their effectiveness (Gavagan, 2008).

Socioecological Model (SEM) as a Framework for COPC Implementation

Utilizing the SEM to evaluate the ability for a community to implement COPC, the diverse layers of influence on behaviors and practices for individuals and systems can be identified and strategies for collective action crafted. Originally conceptualized by Urie Bronfenbrenner and later refined by McLeroy et al., (1998) for health promotions work, the SEM model describes the levels of influence of an individual within a system and considers interactions between levels of influence along with the risk and protective factors that exist for each (Bronfenbrenner, 1986; McLeory et al., 1988; UNICEF, n.d.).

This study will utilize the SEM Model from the University of Minnesota's Center for Leadership Education in Maternal and Child Public Health at the School of Public Health (See Appendix C) (Erickson et al., 2024). Implementing COPC through a SEM lens, stakeholders can work to systematically address health determinants across multiple levels, from individual behaviors to societal influences, to improve health outcomes in rural and Tribal communities. This framework emphasizes the interplay between individual, interpersonal, organizational, community, and policy factors that shape health outcomes, offering a multidimensional lens to understand and address disparities.

Individual level SEM focuses include personal health behaviors, knowledge, and attitudes (McClay et al., 2023; Abramson & Kark, 1983). Interpersonal level SEM attributes focus on relationships, including those with family, friends, and social support networks; health behaviors are influenced by relationship and social interactions, including access to care timing and overall adherence to medical advice (McClay et al., 2023). Organizational-level SEM focuses on providers of care, workplaces, schools, and community organizations (non-profits) to support overall accessibility and quality of care (McClay et al., 2023). At the Community-level, SEM focuses on the relationships between organizations and local context, which influence health, including social cohesion, economic stability, and cultural factors (McClay et al., 2023). Focusing on local, state, and national level policies and laws, the Policy level of the SEM works to evaluate the impacts on healthcare delivery systems, funding opportunities, drivers of health, communities, and individuals.

At the SEM Societal Level, the focus is on cultural norms, social attitudes, and inequities, including elements that may profoundly impact the health of a community or a population, for example, systemic racism, economic inequalities, and overall healthcare access for rural and Tribal communities (Erickson et al., 2024).

Implications of Proposed Study

COPC utilization in a post-COVID era has yet to be studied. This study offers a contribution to the literature on barriers and facilitators for implementing a community-centered model of healthcare delivery with the potential to effectively prepare communities for future health or social care crises. The academic medical community continues to shift toward community approaches to delivering healthcare service, with organizations such as the AAMC stating, “Now is the time to act” (Alberti et al., 2021). Medical school missions no longer meet the criteria needed to train the type of physician equipped to address all Americans' healthcare needs. (Alberti et al., 2021). Alberti et al. states, “All of us are part of one big community –

whether we treat each other equally or not [...] academic medicine must integrate with communities, collaborating and co-creating in more in-depth, ongoing ways” (Alberti et al., 2021). This study offers insights into partnership development for academic medical institutions considering the utilization of COPC.

While Kark assessed community needs by going door-to-door for information and keeping detailed notes on cases at the clinic, while developing the COPC model, the evaluation of community needs is easier than ever through EMR utilization (Gofin et al., 2015; Mullan & Epstein, 2002). EMR allows for the rapid assessment of community needs, and this aligns with one of the first steps in COPC models, which is a needs assessment of a population (Gofin et al., 2015). EMRs provide secure and organized access to laboratory data, progress notes, medical history, patient demographics, and other health and social care-related information (Rodriguez et al., 2021). Despite the benefits EMRs provide to COPC effectiveness, there are still many barriers that future professionals need to overcome. Many practitioners are unaware of the full functionality of their EMR system. This lack of awareness may lead to data entry that is inaccurate or unrepresentative of the community (Rahal et al., 2021).

Further examination into how practitioners and patients utilize EMR systems could lead to better formatting and improved functionality. A wide array of EMR systems exist, with different practices within a community often opting for specific ones to meet individual needs or budgets. When conducting community assessments using EMR databases, assessors must recognize that the data available is constrained to what is entered by practices employing a particular EMR system (Rahal et al., 2021). Providers and other EMR utilizers have noted a lack of awareness of the full capability of EMRs, resulting in a missed opportunity for accurate data entry that is representative of the community (Rahal et al., 2021). EMRs promote access to patient information to streamline continuity of care and assess community needs (Mullan & Epstein, 2002). EMR systems often allow for communication between providers and the

patient, this communication function promotes the development and sustainment of the provider-community relationship, which is essential for successful COPC execution (Franz & Murphy, 2015). The proposed study would allow for an exploration of the socioecological barriers preventing technology (EMR/EHR) or maximization among healthcare providers in rural and Tribal areas of Oklahoma and Georgia.

As primary care continues to transform toward more community and patient-centric approaches, COPC may be the answer to complex implementation challenges, this proposed study offers insights into potential barriers to implementing COPC in rural and Tribal populations as a health and social care improvement strategy. This study seeks to identify the socioecological barriers to implementing community-centered care delivery models in rural and Tribal geographies, across Oklahoma and Georgia, as a healthcare improvement delivery model among diverse health and social care stakeholders.

Chapter 3

METHODOLOGY

Research Design

This study employed an exploratory, qualitative approach to investigating the socioecological barriers and facilitators to implementing community-centered care, by provider types, in rural and Tribal communities in Oklahoma and Georgia. The qualitative study involved conducting semi-structured interviews with healthcare providers, public health officials, and community stakeholders focused on analyzing perceived or experienced socioecological barriers to implementing COPC; study participants will consist of those delivering or supporting the delivery of health or social care services in rural or Tribal Oklahoma or Georgia.

Healthcare providers, public health officials, nonprofit leaders, and community stakeholders who work in rural or Tribal communities in Oklahoma and Georgia, older than 18 years were eligible for inclusion in the study. Those not meeting inclusion criteria were not eligible for participation. Participants were recruited through a combination of virtual and physical outreach strategies. Digital flyers were distributed via social media platforms (LinkedIn, Message Boards, Newsletters, X (Twitter)), while physical flyers were placed in health departments, primary care clinical sites, academic medical environments, community centers, nonprofit organizations, and hospitals. Participants in the qualitative portion of the study were eligible to receive a \$25 gift card as compensation for their time. Funding for survey participation was made available through scholarship funding from the Cherokee Nation of Oklahoma and the American Indian College Fund.

Interview Recruitment & Incentivization

Leveraging existing rural, tribal, public health and social care convenings, interviewees were recruited through direct in-person solicitation utilizing Institutional Review Board (IRB) approved recruitment materials. Interviews were conducted in October and November 2024. Interviewees were offered a \$25 gift card as an incentive for their participation in the study, of

those consenting to be interviewed, in Oklahoma, 7/25 accepted compensation, in Georgia 14/25 accepted compensation, for a total of \$175 in compensation in Oklahoma and \$375 in compensation in Georgia, for a total of \$525 for interview incentives for the study. The study was approved by the Mercer University IRB. All interviews were conducted via synchronous video conference on the Zoom online platform. Interviews were transcribed and condensed for clarity.

Data Collection

Semi-structured interviews were conducted with 50 participants (25 from Oklahoma and 25 from Georgia), until saturation emerged. The interviews explored participants' actual or perceived barriers and facilitators to implementing community-centered care based on the SEM framework conceptualized by the University of Minnesota's Center for Leadership Education in Maternal and Child Public Health at the School of Public Health. Interviewees were not briefed on COPC, COPC elements, or key principles of the model prior to the interview. Considerations were made to ensure heterogeneity of the sample, ensuring the full range of experiences and perceptions of barriers were captured across provider groups. Interviews were conducted by the Principal Investigator and volunteer Medical Students at the Mercer University School of Medicine's Macon and Savannah Campuses. Medical Students participated in initial study efforts, including the design of qualitative questions. Qualitative questions did not focus on COPC implementation, but rather the barrier or facilitators to engaging community members and other stakeholders in community-based care delivery. Medical Students completed CITI Training, HIPAA Training, and Qualitative Interview training in preparation of interviews to ensure preparedness, adherence to research ethics and practices, and research confidentiality. The qualitative survey was tested with Medical Students involved in the study; interviews lasted from 10-26 minutes based on interviewee engagement. To support interviewer prompting and overall standardization of the study, a qualitative interview guide was designed and submitted as

part of the Institutional Review Board (IRB) documentation required for human-subject research approval. Qualitative interview questions are can be found in Appendix D.

Participants were informed of their rights, including the right to skip any questions, take breaks, or discontinue participation at any time without penalty. Informed consent was obtained prior to participation in the study. Participants were provided with contact information for the Principal Investigator to address any future concerns or to withdraw from the study.

Interviews were audio-recorded with participants' consent and transcribed verbatim for analysis. Recordings were conducted through web-based technology (Zoom) and stored virtually on a platform (Mercer-based Zoom) requiring multi-factor authentication for access.

Qualitative Data Analysis Approach

The original data analysis approach included the utilization of the NVivo software platform to systematically code and analyze over 1,500 interview data points (30 questions, per interview, 50 interviews). NVivo was chosen based upon its ability to handle large qualitative datasets for analysis. NVivo was utilized to initiate open coding, generate primary labels for data segments, to axial code though grouping labels into broad categories (relationships and commonalities), and then developing selective codes to refine categories.

Early in the analysis process challenges arose while utilizing NVivo, while the platform supported the organization of the dataset, flexibility in the platform presented challenges when engaging in the Ground Theory approach to constantly comparing and adjusting data segments, codes, and themes. NVivo's automated functions were efficient in the initial organization of the data, it did not allow for a natural, interpretive process to emerge when analyzing the data. In response to these challenges, the decision was made to transition from NVivo to hand coding the qualitative data while still adhering to the principles of Grounded Theory. This approach allowed for a deeper level of engagement with the data and provided the flexibility needed to continually refine codes, categories, and themes. Open coding was conducted manually, with

detailed notes and primary labels assigned to each data segment. Constant comparisons were systematically employed, and the iterative nature of axial and selective coding was maintained.

Grounded Theory Qualitative Approach

Using a Grounded Theory approach, codes were initially identified (open coding), and then organized into categories (axial coding), and were then synthesized into themes (selective coding). Each state was analyzed independently, a comparative analysis was conducted to identify variations among states. Grounded Theory's systematic approach to research provides a conceptual understanding of the study topic (Charmaz & Thornberg, 2020). The Grounded Theory approach to qualitative analysis supports the ability of researchers to develop useful intervention strategies from their theoretical analysis (Charmaz & Thornberg, 2020). Grounded theory-based studies support the researcher's ability to engage in data collective, most traditionally purposive sampling, while moving through coding processes in parallel (Tie et al., 2019). The process of Grounded Theory analysis is not linear and requires flexibility to interconnect consistencies in the data (Tie et al., 2019).

This study utilizes the approach to Grounded Theory outlined in the "Basics of Qualitative Research: Techniques and Procedures for Development Grounded Theory" (Corbin & Strauss, 2010). Appendix E contains Grounded Theory coding details for Georgia-based interviews, Appendix F contains Oklahoma-based interview coding details, and Appendix G contains socioecological model interview coding details.

Coding Approach

The numbers in parentheses in the results chapters of the study represent the total frequency with which a particular code was applied across all interviews. These frequency counts were determined using a systematic approach to coding, aligned with Grounded Theory principles. If an interviewee mentioned a specific concept, such as "funding constraints," multiple times within an interview, each occurrence of the concept was coded if it was expressed

in a distinct context or contributed additional depth to the understanding of the concept. For example, if "funding constraints" were mentioned both in terms of program sustainability and barriers to hiring staff, these were coded separately to reflect the nuanced application of the concept. Coding was conducted primarily at the paragraph level rather than line by line to capture the full context and meaning of the interviewee's statements. However, when a single sentence encapsulated a distinct idea or insight, it was coded independently. This coding approach ensured that the coding process preserved the integrity of the data while allowing for meaningful aggregation of codes into broader themes. Segments of data were coded iteratively and revisited during axial and selective coding to refine categories and identify relationships.

As the sole coder, the Author followed a systematic and transparent process to ensure the integrity of the analysis. The Author maintained memos throughout the process to document coding decisions, reflections, and emerging patterns, enhancing overall accountability in the analysis. Earlier codes and themes were constantly revisited during the axial and selective coding phases to ensure consistency and coherence in coding, further minimizing bias and constantly refining the thematic structure associated with Grounded Theory. A code book was developed and continuously refined throughout the coding process that included definitions, examples, and notes for each code to promote consistency. Throughout the coding process, the Author consulted with research experts and reviewed relevant literature to ensure coding and thematic analyses adhered to best practices in Grounded Theory coding.

Chapter 4

GENERAL OVERVIEW OF DEMOGRAPHICS OF STUDY PARTICIPANTS AND SEM FRAMEWORK OVERVIEW

Interviewees Demographics

A total of 50 (N=50) interviews were conducted in Fall 2024 with individuals meeting the study's inclusion criteria. All interviewees deliver or support the delivery of health or social care services in Georgia or Oklahoma.

Georgia Demographics of Interviewees, n=25

Interviewees from Georgia ranged from 29-52 years in age, averaging 40 years old with an average of 13.44 years in service. A total of 13 males and 12 females were interviewed. Male interviewees in Georgia were an average age of 41, reporting an average of 14.62 years providing health or social care services, slightly greater than female interviewees in both demographic categories.

Oklahoma Demographics of Interviewees, n=25

Interviewees from Oklahoma ranged from 32-56 years old, averaging 45 years old with an average of 19.08 years providing health or social care services. A total of 14 males and 11 females were interviewed. Females reported practicing slightly longer than males (17.79 years males vs. 20.72 years females). Females participating in interviews were, on average, older than male participants (43.86 years males vs. 46.36 years female).

Provider Variation

As highlighted in Table 1, most interviewees from Georgia (60%) and Oklahoma (56%) self-identify as Direct Care Providers, followed by Community Health Leaders at 12% in Georgia and 28% in Oklahoma. Although Population Health & Public Health Experts only represent 8% of the total interviewees, the interviews are evenly represented in gender collectively (50% Male, 50% Female). Health System Administrators represent 14% of the interviewees; although

limited in numbers, the interviewees included Tribal leaders, State Agency leaders, and rural hospital administrators.

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Table 1
Demographic Information & Interviewee Provider Type Details

	GA- Male	GA- Female	GA- Total	OK- Male	OK- Female	OK- Total	Total	% Total
Average Age	41	38.08	39.6	43.86	46.36	44.96	42.33	
Age Range	29-52	29-48	29-52	32-56	38-55	32-56	29-56	
Average Years Providing Services	14.62	12.16	13.44	17.79	20.72	19.08	16.32	
Average Years Range	5-27	4-20	4-27	7-30	12-30	7-30	4-30	
Direct Care Provider	8	7	15	8	6	14	29	58%
Health System Administrator	2	2	4	2	1	3	7	14%
Population Health & Public Health Experts	1	2	3	1	0	1	4	8%

Community Health Leaders	2	1	3	3	4	7	10	20%
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Visualization of Interviewee Distribution, Georgia and Oklahoma

All study participants, in Georgia and Oklahoma, reported serving in rural or Tribal communities. Study participants were asked to identify the primary county where they delivered or supported the delivery of services. Georgia and Oklahoma interviewee county-based distribution is highlighted in Figure 2. Rural county designation was determined by the Federal Office of Rural Health Policy (FORHP) (FORHP, 2010).

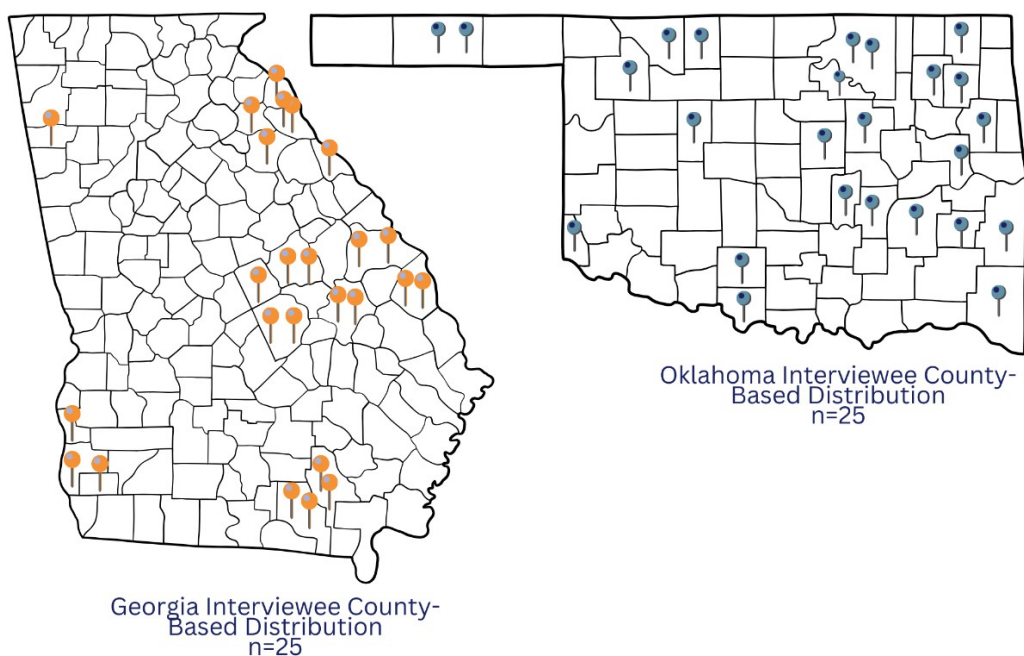


Figure 2
County-Based Distribution of Interviewees, Georgia and Oklahoma

Georgia interviewees represented providers from Burke, Clay, Clinch, Early, Elbert, Emanuel, Hart, Laurens, Lincoln, Madison, Miller, Oglethorpe, Polk, Screven, Ware, Washington, and Wilkes Counties, all rural counties. Oklahoma interviewees represented

individuals from the following rural counties, Alfalfa, Beaver, Cherokee, Craig, Creek, Harmon, Hughes, Jefferson, Latimer, LeFlore, Lincoln, Mayes, McCurtain, Muskogee, Osage, Pawnee, Pittsburg, Rogers, Seminole, Stephens, Texas, Woods, and Woodward

Socio-Ecological Framework Application

The Mental Health and Well-being Socio-Ecological Model (SEM) developed by the University of Minnesota's Center for Leadership Education in Maternal & Child Public Health provides a comprehensive framework for understanding the multifaceted factors influencing mental health. This framework delineates five interconnected levels: individual, family, organization, community, and societal, each contributing uniquely to mental well-being (McClay et al., 2023).

By implementing community-centered care through an SEM lens, stakeholders can work to systematically address health determinants across multiple levels, from individual behaviors to societal influences, to improve health outcomes in rural and Tribal communities. By applying a SEM lens when considering barriers and facilitators to implementing community-oriented care models, stakeholders are well-positioned to systematically consider the complex individual, interpersonal, organizational, community, and societal factors influencing physical and mental health behaviors and outcomes. This study utilizes the SEM to emphasize the interplay between individual, interpersonal, organizational, community, and policy factors that shape health outcomes, offering a multidimensional lens to understand and address disparities.

Individual Level: This innermost layer focuses on personal attributes such as biological factors, personal history, and behaviors affecting physical and mental health. It emphasizes the importance of self-efficacy and personal coping mechanisms in managing stress and adversity. The Individual Level works to consider personal health behaviors, knowledge, and attitudes (McClay et al., 2023; Abramson & Kark, 1983).

Interpersonal Level: This layer examines the immediate social environment, including family dynamics and relationships, which are crucial in shaping health outcomes. Focusing on

exploring family, friends, and social support networks and their influence on health behaviors, including timely access to care and adherence to treatment plans, supportive family interactions can protect against health challenges (McClay et al., 2023).

Organization Level: This level pertains to institutions and organizations, such as workplaces and schools, that individuals interact with regularly. Focusing on providers of care, workplaces, schools, and community organizations, these entities can influence the delivery of physical and mental health through their policies, cultures, and the resources they provide, ultimately supporting increased accessibility to care (McClay et al., 2023).

Community Level: This layer encompasses the broader social networks and environments, including neighborhoods and local communities. Focusing on relationships and the influence between organizations and local contexts, examples include social cohesion, economic stability, and cultural factors, all impacting mental and physical health; community support systems and social cohesion are vital at this level (McClay et al., 2023).

Societal Level: The outermost layer addresses overarching societal factors, including cultural norms, social attitudes, economic policies, and systemic inequalities, that shape the context in which individuals and communities operate. These factors can promote or hinder mental and physical well-being on a large scale and deeply impact the overall health of a community and its population; examples of these elements are systemic racism, economic inequalities, and access to health services (McClay et al., 2023; Erickson et al., 2024).

Interview findings were analyzed through an SEM lens to determine similarities and variations in barriers and facilitators across provider types when considering implementing community-centered care models. The analysis highlights the frequency of findings, variations between states, cross-cutting themes, alignment of findings to the SEM, and findings to support or reject the study hypotheses.

Chapter 5

PRESENTATION OF BARRIER DATA

This chapter presents a comprehensive analysis of the barriers to implementing community-oriented care models in rural and Tribal communities in Georgia and Oklahoma, based on qualitative interview data. Barriers are examined across multiple socioecological levels, including individual, community, organizational, and societal dimensions, to uncover the challenges that hinder effective implementation of community-centered models of care delivery.

Appendices E and F provide detailed grounded theory coding, for Georgia and Oklahoma, that align these identified barriers with the SEM framework, offering a deeper understanding of the interconnected barriers limiting the scalability and sustainability of community-centric health model implementation. A summary of the identified resource, logistical, social, economic, and policy barriers identified by interviewees is detailed in Table 2. Each number count presented represents the unique time each barrier was identified by interviewees.

Table 2
Identified Barriers, Georgia and Oklahoma Interviewees

Barrier Type	Barrier	Georgia Count	Oklahoma Count	Total Count
Resource Barriers	Funding constraints/limitations	97	122	219
	Resource infrastructure	50	53	103
	Workforce/Staffing	43	68	111
	Fragmented care	23	24	47
	Resource alignment	21	36	57
Logistical Barriers	Transportation issues	67	81	148
	Geographic isolation /Long travel distance	34	24	58
	Telehealth infrastructure	20	21	41
	Broadband infrastructure	5	7	12
	Trust	40	70	110

Social Barriers	Historical/generational trauma	39	17	56
	Mistrust of healthcare providers	36	19	55
	Stigma	34	32	66
	Cultural	23	83	106
	Cultural mistrust	18	7	25
Economic Barriers	Financial limitations	23	37	60
	Poverty	18	14	32
	Food insecurity	16	11	27
	Housing instability	11	27	38
Policy Barriers	Regulatory/reporting requirements	16	10	26
	Funding/data inconsistencies	6	13	19
	Jurisdictional conflicts	6	5	11

The most frequently noted barriers across each category, highlighted in Table 2, provide a clear picture of the barriers to implementing community-centered care in rural and tribal communities. In the resource category, funding constraints and limitations were the most significant barrier, with 219 total mentions (97 in Georgia, 122 in Oklahoma). Participants repeatedly emphasized that inconsistent funding disrupts program sustainability and limits the ability to address community needs effectively. Among logistical barriers, transportation issues were cited 148 times (67 in Georgia, 81 in Oklahoma), underscoring the challenge of connecting patients to healthcare services in geographically isolated or infrastructure-limited areas. For social barriers, trust issues emerged as the most reported concern, with 110 mentions (40 in Georgia, 70 in Oklahoma). Variations in this category highlighted higher levels of mistrust in Oklahoma, driven by cultural and historical factors, while stigma, particularly related to mental health, was a recurring theme in Georgia. In the economic category, financial limitations were the most prevalent barrier, noted 60 times (23 in Georgia, 37 in Oklahoma), with respondents frequently connecting poverty to poor health outcomes. Lastly, in the policy category, funding and data inconsistencies were emphasized in Oklahoma (13 mentions) compared to Georgia (6

mentions), reflecting disparities in policy implementation and systemic fragmentation. These findings not only highlight the critical barriers but also reveal variations in state-specific challenges, setting the stage for exploring facilitators that may address these systemic and contextual gaps.

Georgia Barriers to Community-Centered Care Implementation

A consistent theme among all Georgia interviewees is the substantial challenge posed by resource limitations, particularly insufficient funding and workforce shortages. Interviewees indicated resource barriers significantly hinder the sustainability and scalability of community-centric care. Frequently noting financial constraints limited the ability to implement preventive care strategies in a clinical environment and engage in outreach programs in the community. Work force shortages were noted as compounded issues, leading to provider burnout and reduced capacity for community engagement.

Geographic isolation and limited communication infrastructure were identified as logistical barriers that further restrict access to care. Transportation challenges emerged as a critical factor preventing patients from attending appointments and participating in health initiatives by all interviewee categories. One respondent said,

“Transportation issues are a major barrier. Patients often can’t get to the clinic, which undermines our efforts to deliver consistent care. They are coming from different counties often and often reliant upon others to get to the clinic.”

Social barriers, including mistrust of healthcare providers and stigma, particularly surrounding mental health, were cited as significant impediments to community engagement. Noting historical trauma and cultural differences exacerbated this mistrust, making it difficult to build lasting relationships within the community. Interviewees highlighted the pervasive stigma associated with accessing mental health and social care services, further limiting community engagement. Interviewees detailed how community engagement challenges are amplified in areas with high levels of poverty, housing instability, and limited access to foods, noting

economic barriers compound the difficulties of addressing basic health and social needs in rural communities. Responses included,

“There’s a deep-rooted mistrust in some communities; it is hard to get past that...”

“Most community members feel grateful for these initiatives but often express concerns about the sustainability and accessibility of these programs over time”

“Many community members are supportive but skeptical due to past experiences with short-lived initiatives. Consistency and transparency are crucial for building trust and sustained participation”

Policy barriers also emerged as a significant obstacle. Interviewees pointed to fragmented services, regulatory hurdles, and funding inconsistencies that disrupt long-term planning and program implementation. The siloed nature of funding streams was frequently noted as a challenge, forcing providers to prioritize short-term goals or emergent health needs over sustainable, community-centered primary care. Many interviewees expressed frustration with the lack of policy support for rural and underserved communities, noting the disconnect often limits efforts to integrate healthcare and social services effectively. One interviewee said,

“We rely on grants that don’t provide the consistency we need to make real progress.

It’s a constant struggle to keep programs running.”

Logistical barriers, such as limited communication infrastructure and complicated outreach efforts, were noted as influences that reduce the effectiveness of community engagement. The absence of reliable broadband access in rural areas often limited the adoption of telemedicine and other innovative care delivery models. Many interviewees highlighted fragmented care systems and limited integration between telehealth healthcare and social services, which further weakened the ability to address social drivers of health, such as housing and food security. One interviewee described,

“There’s often no coordination between telehealth and social services, which makes it difficult to address the broader needs of our patients, clients, and the

community when we have them for a virtual visit. We all want to do address the issues; we just don't have the resources locally to offer them."

Interviewees identified economic and policy barriers as systemic challenges in delivering health or social care services, highlighting financial hardships, poverty, housing instability, and food insecurity as pressing issues for many communities, creating a cycle of unmet healthcare needs and worsening health outcomes. Many interviewees noted funding inconsistencies and fragmented services further restrict the ability of healthcare providers to implement sustainable and comprehensive community health programs.

Oklahoma Barriers to Community-Centered Care Implementation

The biggest barrier to working for the community as a provider, in Oklahoma, appears to be lack of consistent funding and resources. Many interviewees expressed financial constraints significantly hindered their ability to engage with the community effectively and sustain long-term initiatives. This includes challenges related to workforce shortages, leading to burnout and limiting the time available for community outreach and preventive care.

Transportation issues were frequently mentioned as a barrier, preventing patients from accessing care and participating in community health programs. One participant shared,

"The biggest barriers are workforce shortages and lack of funding for preventive care initiatives. Patients often face transportation issues limiting participation in programs. If they cannot get to us, how can we engage them in a meaningful way to change their health behaviors"

"Transportation and workforce shortages are persistent challenges. Even with funding, it's difficult to find qualified staff willing to work in isolated areas, which delays program implementation.

"Limited funding and workforce shortages make it difficult to sustain programs. Transportation issues also reduce patient participation."

Interviewees reported a general mistrust of healthcare providers, particularly among underserved populations, complicated efforts to engage the community and ensure follow-up care, particularly related to mental health, prevented individuals from seeking care or participating in health programs. One interviewee shared,

“Misinformation and mistrust within the community also limits ongoing engagement, especially with mental health services related to substance use.”

Interviewees indicated complex challenges including, cultural mistrust, logistical, patient load, burnout, funding and resources, service integration, and language/communication. Many indicated they faced challenges due to the historical mistrust within marginalized communities, hindering patient engagement and adherence to treatment plans. Historical mistrust was noted as primarily tribal members mistrusting IHS or non-tribal health services offered within their communities. Issues such as limited clinic hours, transportation barriers, and the geographical isolation of patients were highlighted as complications in accessing care.

“Transportation is a recurring issue. Patients can't get to clinics, and even when they do, they often don't return for follow-ups because of how far they have to travel. Then we need to refer them to specialty care outside of the IHS system, which further complicates service delivery, because they don't know the provider.”

Interviewees frequently reported feeling overwhelmed by high patient volumes, attributed to burnout and affecting the quality of care they provide, acknowledging this was particularly pronounced in rural areas where fewer healthcare providers are available. Many interviewees reported that community health initiatives struggled to maintain adequate funding, limiting their ability to sustain programs and effectively address community needs in real-time. Interviewees reported they often rely on short-term grants that do not fully cover operational costs, making long-term planning difficult.

“Burnout is real when you're dealing with high volumes of patients and limited staff. We're often just trying to keep the doors open, let alone plan for long-term initiatives.”

Collectively, interviewees noted there is often a lack of integration between healthcare services and social services, preventing comprehensive care delivery, highlighting the ability to address social determinants of health, such as housing and food security, is critical but remains neglected due to a silo'ing of service delivery. Interviewees reported language differences and limited health literacy among patients complicate care delivery and patient education efforts, emphasizing the need for bilingual resources and culturally competent care to improve engagement.

“We know housing and food insecurity are major barriers but addressing them requires better integration between social services and healthcare—which we just don't have right now.”

Resource barriers were consistently identified as the most significant barrier to working within the community. Resource barriers include adequate workforce, consistent, available funding, and robust services to address social-ecological drivers of health. Social barriers, such as mistrust of healthcare providers and stigma surrounding mental health, compound these challenges. Historical trauma among Tribal populations amplifies these barriers, underscoring the need for culturally informed care strategies to rebuild trust and engagement. Provider-specific barriers include burnout, limited non-clinical time, and a supportive workforce within clinical environments.

Geographic Comparative Analysis of Barriers, Georgia and Oklahoma

Barriers identified by Georgia and Oklahoma interviewees include resource, social/cultural, and economic/policy factors. These barriers challenge the implementation of community-centered primary care models. Interviewees from both states indicated facing substantial hurdles in funding, staffing, and trust-building, while acknowledging the

interrelatedness of each of these barriers. Georgia respondents highlighted the importance of localized approaches through setting expectations for community engagement tied to the receipt of funding.

Resource Barriers

Resource barriers were the primary barriers identified by interviewees from Georgia, including geographic isolation of resources and limited communication infrastructure between telehealth and social care partners. Georgia respondents indicated limited broadband access restricts the ability to expand telemedicine. Only two Oklahoma interviewees identified geographic isolation of resources as a significant barrier in delivering care. Oklahoma respondents identified the variations in Tribal vs. Non-Tribal healthcare delivery, financing, and policy. In Oklahoma, systemic resource barrier challenges were primarily identified as insufficient staffing, inadequate funding, and fragmented care systems. Georgia and Oklahoma interviewees noted transportation resource barriers as a factor preventing patients from accessing care; transportation was consistently identified as an area of improvement for addressing disparities in care.

Social/Cultural Barriers

Interviewees from Georgia and Oklahoma indicated they are aware of the mistrust of healthcare providers, specifically in rural, Tribal, and under-resourced communities. Georgia interviewees noted mistrust between the Black community and mental health providers. Similarly, Oklahoma respondents noted the mistrust many Tribal persons experience when seeking physical healthcare services. Oklahoma interviewees noted variations in healthcare delivery in Tribal vs. Non-Tribal communities.

Economic and Policy Barriers

Economic hardships, such as poverty, housing instability, and food insecurity, were identified by interviewees in each state but were experienced differently. In Georgia, interviewees noted that many barriers are closely tied to the state's limited Medicaid Expansion

and underinvestment in rural healthcare infrastructure. Oklahoma's economic barriers are similar; interviewees indicated funding inconsistencies, and the fragmented nature of its healthcare system restricts flexibility to adapt services in real-time to meet expressed community needs.

Cross-Cutting Themes Across States

The analysis of barriers to implementing community-oriented care models in rural and Tribal communities in Oklahoma and Georgia reveals a complex interplay of systemic, social, logistical, and economic challenges. These barriers are not isolated but rather interwoven across multiple socioecological levels, highlighting the structural inequities and contextual factors that hinder effective community engagement. Identifying cross-cutting themes provides a framework for understanding these persistent challenges and informs targeted strategies for overcoming them.

Resource Limitations as a Systemic Barrier

Both states highlight consistent funding constraints and workforce shortages as significant impediments to implementing and sustaining community-centric care. These resource issues contribute to provider burnout, limit program scalability, and disrupt long-term planning for preventive and integrative healthcare. Key supporting data includes, Funding Constraints: 219 total (97 Georgia, 122 Oklahoma) and Workforce/staffing: 111 total (43 Georgia, 68 Oklahoma).

Transportation and Geographic Isolation

Transportation issues and long travel distances are consistent logistical barriers across both states, making it challenging for patients to access care and for providers to maintain engagement. This issue is further exacerbated by inadequate infrastructure in rural areas. Key supporting data includes, Transportation issues: 148 total (67 Georgia, 81 Oklahoma) and Geographic isolation: 58 total (34 Georgia, 24 Oklahoma).

Social Mistrust and Cultural Barriers

A pervasive mistrust of healthcare providers, fueled by historical trauma and stigma, hinders efforts to engage with communities effectively. This mistrust is particularly pronounced among marginalized populations and is compounded by stigma surrounding mental health and cultural differences. Key supporting data includes, Trust/mistrust of providers: 110 total (40 Georgia, 70 Oklahoma), Historical/generational trauma: 56 total (39 Georgia, 17 Oklahoma) and Stigma: 66 total (34 Georgia, 32 Oklahoma).

Socioecological Model Alignment

Appendix G provides detailed Grounded Theory coding that supports the alignment of identified barriers and facilitators with the SEM framework utilized in this study. This Appendix offers a comprehensive breakdown of the resource, logistical, social, economic, and policy barriers identified through qualitative interviews.

Individual & Interpersonal Level-Barriers to Knowledge and Training

Many interviewees cited insufficient preparation for rural-specific challenges, like resource limitations. Culturally sensitive care and grant writing workshops were identified as key gaps.

“As a family physician, I offer comprehensive patient care but struggle with training in telemedicine platforms to reach isolated patients.”

“Workshops on grant writing could help us secure funds to sustain programs.”

Organizational Level-Workforce Challenges

Overwhelming patient volumes and a shortage of skilled staff create bottlenecks in care delivery. Organizational inefficiencies, such as insufficient staff for specialty referrals, are common.

“High patient volumes and limited access to specialists are major hurdles in rural practices.”

Community Level- Community Trust and Mistrust

Some interviewees highlight significant patient mistrust toward healthcare providers, especially in Tribal communities, due to historical mistreatment. Community coalitions, when leveraged effectively, improve trust and engagement.

“Mistrust of healthcare providers among some community members stems from historical mistreatment.”

Societal Level- Policy Barriers and Systemic Inequities

Funding inconsistencies are a major concern, particularly for programs targeting rural populations. Broader economic policies and transportation limitations restrict access to care in these communities.

“Patients often lack transportation, and there’s limited financial support for such services in rural areas.”

This SEM alignment illustrates how barriers at individual, organizational, community, and societal levels collectively hinder the implementation of community-oriented care models. Addressing these interconnected challenges requires targeted interventions that reduce systemic inequities, strengthen provider capacity, and foster trust, enabling more effective engagement with rural and Tribal communities.

Research Question Analysis

Research Question 1: Barriers to Community-Oriented Care Implementation

What are the perceived or actual socioecological barriers to implementing community-oriented care models in rural and tribal communities in Oklahoma and Georgia?

Resource barriers were consistently identified as the most significant obstacle to implementing community-oriented care models in rural and tribal communities. These include inadequate workforce capacity, insufficient and inconsistent funding, and the lack of robust systems to address social-ecological drivers of health. Social barriers, such as mistrust of

healthcare providers and the stigma surrounding mental health, further compound these challenges, creating significant hurdles to community engagement. Historical trauma, particularly among Tribal populations, amplifies these issues, underscoring the urgent need for culturally informed care strategies that rebuild trust and foster long-term engagement. Additionally, logistical challenges, such as geographic isolation, limited transportation, and inadequate communication infrastructure, highlight systemic inequities that disproportionately affect rural and Tribal communities. Policy-level barriers, including fragmented services, regulatory complexities, and short-term funding mechanisms, further inhibit the sustainability and scalability of community-centered initiatives. Despite these challenges, the interview findings also revealed critical facilitators that provide pathways to overcoming these barriers. These facilitators offer actionable strategies for promoting the implementation of community-oriented care models in resource-limited settings

Chapter 6

PRESENTATION OF FACILITATOR DATA

This chapter explores the facilitators that support the implementation of community-oriented care models in rural and Tribal communities in Georgia and Oklahoma. Facilitators are examined across capacity-building, collaborative, systemic, cultural, and economic dimensions, highlighting actionable pathways for addressing barriers and promoting sustainable engagement. Appendix G provides detailed Grounded Theory coding that aligns these facilitators with the SEM framework, offering insights into how community-centered care initiatives can leverage existing strengths and resources to overcome systemic challenges and enhance healthcare delivery. These findings are summarized in Table 2. Each number count presented represents the unique time each facilitator was identified by interviewees.

Table 3

Identified Facilitators to Community Engagement, Georgia and Oklahoma Interviewees

Facilitator Category	Initiative	Georgia Count	Oklahoma Count	Total Count
Capacity-Building	Provider Training/Education (telemedicine, culturally sensitive care)	74	67	141
	Workforce development	35	34	69
	Community education	29	91	120
	Leadership development	16	27	43
Collaboration	Joint initiatives (state and Federal level)	102	87	189
	Partnerships (schools, faith-based groups, community health workers)	70	155	225
	Coalition building	39	48	87
Systemic Infrastructure Improvements	Funding stability	58	46	104
	Preventive care programs	50	9	59
	Infrastructure development	42	202	244
	Telehealth expansion	21	33	54

Cultural Strategies	Culturally tailored programs	68	46	114
	Respecting cultural traditions	25	18	43
	Multilingual health education	18	11	29
	Traditional practices integration	2	25	27
Economic Solutions	Funding support	65	57	122
	Medicaid expansion	7	9	16
	Policy innovation	6	8	14
	Subsidies	2	10	12

Capacity-building and collaboration emerged as the most frequently mentioned facilitators for community engagement, as detailed in Table 3. highlighting the essential elements needed to strengthen rural and Tribal healthcare systems. Within capacity-building, provider training and education, such as culturally sensitive care and telemedicine, was emphasized as a key facilitator, with 141 mentions. Respondents noted that equipping providers with these skills improves both access to and the quality of care, fostering trust and engagement within the community. Similarly, community education was highlighted as critical to empowering individuals with the knowledge and resources to take an active role in their health, with interviewees noting this 120 times, underscoring its importance in improving outreach and preventive care efforts. Collaboration initiatives, particularly joint efforts between state and federal levels, were the most frequently cited facilitator overall, with 189 mentions. These initiatives were seen as instrumental in addressing systemic gaps, fostering shared goals, and streamlining resource allocation to support underserved populations. Partnerships with schools, faith-based groups, and community health workers also emerged as a powerful strategy, noted 225 times by interviewees. These partnerships were praised for their ability to leverage existing local relationships and infrastructure to deliver more effective, culturally aligned care. Other facilitators included systemic infrastructure improvements, such as funding stability (104) and telehealth expansion (54), both of which were recognized as critical to sustaining long-term

community engagement and addressing geographic barriers. Cultural strategies, such as culturally tailored programs (114), further underscored the importance of respecting local traditions and providing care that aligns with the unique needs of rural and Tribal communities. These facilitators highlight actionable pathways for implementing community-oriented care models and addressing barriers at multiple levels.

Georgia Facilitators to Community-Centered Care Implementation

Facilitators identified by interviewees included capacity building, collaboration, systemic/infrastructure improvements, culturally responsive strategies, and economic solutions. Capacity-building initiatives were consistently identified as facilitators for successful community engagement. Interviewees highlighted the need for training in telemedicine, trauma-informed care, and cultural humility to address the diverse and complex needs of their patients. Interviewees noted the essential need for bridging geographic and technological divides and improving patient-provider relationships in culturally sensitive ways. Workforce development programs were an effective method of addressing provider shortages in the context of high turnover rates, and interviewees described limited staff availability as a solution for rural communities. For example,

“Telemedicine training has been transformative for delivering care in isolated areas, but there’s still so much potential to expand its use. Training Medical Students in telemedicine delivery should be a priority for all medical schools.”

Interviewees identified leadership development and continuing education as facilitators for empowering providers to advocate for resources, foster cross-sector collaborations, and address community-specific health disparities. Collaboration with community stakeholders emerged as a cornerstone for implementing community-centric primary care models by all interviewee categories. Partnerships with schools, faith-based organizations, and community groups were repeatedly cited as vital for overcoming systemic gaps and fostering trust. Faith-

based organizations were noted for their ability to serve as trusted intermediaries between providers and community members,

“Faith-based groups and schools are pivotal in bridging gaps. They know the community and have earned their trust, which is invaluable for outreach and education efforts. We can always count on our churches to support health fairs or step up when a community member is in need, even if they are not a part of their congregation.”

Interviewees noted coalition building and stakeholder engagement play critical roles in fostering coordinated, multi-sectoral approaches to addressing health disparities, describing the use of collaborative frameworks to enable and incentivize providers to share resources, align goals, and enhance program sustainability. Interviewees emphasized partnerships not only improve the reach and effectiveness of health initiatives but also build lasting trust and credibility within the community.

Systemic improvements, including telehealth expansion and infrastructure upgrades, were frequently noted as pivotal for addressing logistical barriers and expanding access to care. Interviewees also highlighted the importance and impact of stable funding mechanisms to ensure the sustainability of health and social care programs. Preventive health initiatives, such as vaccination drives and free screenings, were identified as effective entry points for community engagement and improving health outcomes.

“Stable funding and telehealth expansion have made a real difference in reaching patients who would otherwise have no access to care.”

Cultural responsiveness was identified as a critical facilitator for engaging Georgia’s diverse rural communities, noting that culturally tailored programs and multilingual health education were essential for fostering trust and improving participation in local programming. Interviewees noted that efforts to respect cultural traditions and address language barriers have positively impacted health outcomes. Interviewees also noted the utilization of culturally

informed approaches fosters a sense of ownership and alignment with community values. One interviewee noted,

“Incorporating bilingual outreach has significantly increased participation in our programs. We have gained trust, but we do not have enough bilingual employees to meet the demands of the community.”

Economic support, including ongoing efforts to expand Medicaid, transportation subsidies, and targeted funding initiatives, were consistently cited as key facilitators of engagement. Interviewees noted that expanded economic support allows systems to expand outreach, education, prevention, and engagement efforts. Interviewees highlighted the transformative impact of financial assistance programs in reducing economic barriers for both patients and providers. Initiatives to subsidize transportation costs were noted as particularly effective in addressing geographic barriers and ensuring consistent participation in health programs. One interviewee shared,

“Limited Medicaid Expansion for women and children and the non-profit based transportation subsidies we have right now have been game-changers for increasing access and reducing no-show rates.”

Interviewees noted initiatives, such as training in telemedicine, trauma-informed care, and cultural humility, were effective facilitators in equipping providers to address the needs of their patients. Workforce development programs were also identified as critical in addressing provider shortages and high turnover rates in rural areas. Collaboration with community stakeholders is another critical enabler. Partnerships with schools, community organizations, and faith-based groups were highlighted as instrumental in fostering trust, enhancing community engagement, and addressing systemic inequities by all interviewee categories. Stable funding mechanisms and preventive health programs were also identified as key facilitators.

Oklahoma Facilitators to Community-Centered Care Implementation

Oklahoma interviewees noted effective community engagement in rural and tribal settings is reliant upon a blending of strategies to address systemic inequities, foster collaboration, and build capacity. Across all interviewees, facilitators for working directly within the community included infrastructure development, partnerships, prevention efforts, community education, and culturally tailored programming. Interviewees identified these facilitators as essential for the successful implementation of community-centered health and social care activities. Interviewees noted the ability to navigate the intricate socioecological barriers in rural communities was essential to effectively sustain health improvement efforts. By focusing on capacity building, partnerships, infrastructure development, and culturally responsive approaches. Interviewees indicated these facilitators provide actionable pathways to bridge systemic gaps, foster trust, and promote sustainable health outcomes in rural and tribal communities.

“Without capacity-building initiatives, particularly telemedicine training and leadership development, we can’t hope to bridge the gap in underserved areas.”

Capacity-building initiatives, particularly in professional training, emerged as a significant facilitator for promoting community engagement across all interviewees. All interviewees highlighted the pressing need for telemedicine training, culturally sensitive care programs, and leadership development initiatives. Interviewees emphasized the importance of these opportunities in overcoming geographic and resource constraints. Telemedicine training was identified as a mechanism to bridge the care delivery gap in areas where physical infrastructure is limited. Similarly, leadership training was identified as a tool to equip providers to effectively foster partnerships, advocate for resources, and address community-specific health disparities across all interviewees. Workforce development programs, including recruitment and retention strategies, were identified as critical for sustaining health initiatives, addressing high provider turnover, and mitigating burnout. One participant shared,

“Telemedicine training has been a game-changer, especially for those of us working in remote areas. It allows us to deliver care efficiently despite physical barriers.”

“We need to expand mobile imaging services to reach isolated populations.”

Collaboration with community stakeholders was identified as fundamental to effectively implementing community-centered care models. Partnerships with schools, faith-based organizations, and community health workers were repeatedly cited by all interviewee categories as instrumental in bridging systemic gaps and enhancing trust. The value of grassroots partnerships was noted as a facilitator for advancing and tailoring health initiatives to community needs. Interviewees detailed,

"Our partnerships with schools and churches have been vital. They help us reach the community where they already feel safe and supported."

“Cross-sector collaboration training, particularly on integrating healthcare with social services, would help staff better address the complex needs of clients.

Cultural competency training specific to Tribal populations is also critical.”

“My organization collaborates with local health departments to advocate for policy changes, such as increasing funding for community health worker programs. We also serve as an intermediary, translating state-level initiatives into actionable strategies that resonate with rural populations. “

Systemic and infrastructural facilitators, such as telehealth expansion and stable funding, were identified by all interviewees as playing a vital role in promoting and sustaining community engagement. Telehealth was identified as an indispensable tool for reaching geographically isolated populations, offering both acute and preventive care. Interviewees also highlighted the need to ensure reliable funding streams to sustain health and social care initiatives. Preventative care programs, including free health screenings and vaccination drives, were identified as effective in fostering mechanisms to establish, build, and sustain community trust and improve health outcomes across all interviewee types. Interviewees noted these

initiatives not only provide direct benefits but also serve as entry points for addressing broader social determinants of health, such as access to care and early intervention. Interviewees noted,

“Telehealth not only makes care accessible but also builds trust with patients who see it as a reliable and consistent option. We can also begin to address other underlying social and economic issues impacting their health.”

“Navigating fragmented funding streams limits our ability to provide comprehensive services.”

Cultural responsiveness emerged as a critical facilitator in working with rural and tribal communities across all interviewees. Interviewees noted the importance of integrating culturally tailored programs, bilingual health education campaigns, and traditional practices into health and social care delivery systems. Interviewees stressed the need to respect cultural traditions and engage trusted community leaders in overcoming historical mistrust. Initiatives incorporating traditional wellness practices and multilingual outreach were highlighted as effective in increasing community participation and ensuring the cultural relevance of health programs. Interviewees noted that the use of culturally informed strategies would not only enhance accessibility but also foster a sense of ownership and alignment with community values. Interviewees shared,

“When we respect and integrate cultural practices, it shows the community that we value their traditions and are here to support, not impose, that is vital to true change.”

“Tribal councils, elders, and community health workers are key stakeholders. Hosting culturally relevant events like health talks during ceremonies has improved engagement.”

Economic facilitators, such as historic Medicaid expansion activities, subsidies, policy innovation, and targeted funding initiatives, were consistently identified as enablers of community health engagement. Interviewees noted financial assistance programs are critical in reducing economic barriers that inhibit both patients and providers from fully participating in health or social care initiatives. Targeted funding mechanisms, particularly those addressing

transportation barriers, were seen as transformative in improving access to care across all disciplines of interviewees. Initiatives to provide transportation services or subsidies for travel expenses were frequently noted as instrumental barrier removal mechanisms to overcoming logistical constraints and enhancing participation in preventive health programs. Interviewees shared,

"Medicaid Expansion and transportation vouchers have helped us ensure that patients not only get to appointments but also feel financially supported in accessing care. We have eliminated a huge barrier."

"Expanding Medicaid eligibility through Medicaid Expansion, increasing funding for rural health initiatives, and supporting mobile healthcare programs has closed gaps in rural Oklahoma, the value-added Medicaid benefits don't hurt either, it gets patients to the clinic."

Infrastructure development and collaboration emerged as the most significant facilitators for implementing COPC-like primary care models. Training in telemedicine and culturally sensitive care was identified as a critical tool for addressing the geographic and cultural barriers to care. Workforce development initiatives, including leadership training programs, further enhance the capacity of direct care providers to deliver comprehensive community-centered primary care. Collaborative frameworks, such as partnerships with schools, faith-based organizations, and community health workers, play a pivotal role in fostering trust and bridging systemic gaps. Interviewees noted local partnerships enable providers to deliver targeted, culturally relevant interventions that address the unique needs of their communities. Systemic improvements, including the expansion of telehealth services and the establishment of stable funding mechanisms, are also critical facilitators. Interviewees noted efforts not only improve access to care but also create sustainable pathways for addressing socioecological drivers of health. Culturally responsive strategies, such as multilingual health education and the integration of traditional practices, were noted as effective methods of

overcoming historical mistrust and enhancing community engagement in rural and tribal communities.

Geographic Comparative Analysis of Facilitators, Georgia and Oklahoma

The facilitators identified by interviewees in Georgia and Oklahoma highlight similar pathways for advancing community-centered primary care models, while also revealing state-specific opportunities for adaptation. Capacity-building, collaboration, and systemic improvements emerged as critical pathways to utilize in promoting and sustaining community engagement.

Capacity Building

Georgia interviewees highlighted telemedicine training, trauma-informed care, and cultural humility skill building as critical tools for addressing identified barriers. Oklahoma interviewees noted workforce development programs, including recruitment and retention efforts, were effective in addressing provider shortages. Leadership development initiatives are also highlighted by Oklahoma interviewees as a pathway for empowering Direct Care Providers to advocate for systemic change and build cross-sector partnerships within their clinical environments. In Georgia and Oklahoma interviewees noted capacity-building initiatives are effective in building individual skill and the knowledge of resources to address health and social care challenges, including navigating health systems. One Georgia interviewee shared,

“Advocacy is the key to addressing systemic inequities. Policymakers need to prioritize rural health workforce development as a central component of broader public health strategies, with input from those most affected.”

Collaboration

Collaboration with community stakeholders was noted by Georgia and Oklahoma interviewees as an effective facilitator in implementing community-centered health and social care. Georgia interviewees highlighted partnerships with schools, faith-based organizations, and community groups as being instrumental in fostering trust and addressing systemic inequities in

rural communities. Oklahoma interviewees described coalition-building efforts as facilitator for strengthening collaborative frameworks and developing cross-sector partnerships. Oklahoma respondents note collaboration facilitators include extending considerations for the Tribal Health Systems, including Tribal Leaders, grassroots organizations, while acknowledging the state's unique socio-cultural makeup. In Georgia and Oklahoma interviewees each noted the effectiveness of utilizing community health workers in delivering culturally informed health and social care. Oklahoma interviewees said,

“Community members appreciate the sense of partnership and empowerment.”

“Including community members in program design ensures that initiatives are family-centered and address real-life barriers. This approach creates a foundation for generational change, particularly in childhood health and wellness.”

Systemic and Cultural Strategies

Interviewees from Georgia and Oklahoma noted the importance of systemic improvements, such as telehealth expansion, infrastructure upgrades, and stable funding mechanisms, when developing health interventions. In Georgia, Community Health Leader interviewees described complementary system-level health improvement efforts (Family Connections, KidsABC, Project ECHO), across the lifespan. Oklahoma interviewees described similar systemic facilitator efforts (Managed Care, Oklahoma Family Resource Network, CATCH-UP Oklahoma) while offering additional highlights of Tribal/Non-Tribal partnerships focusing on integrating traditional cultural health practices into the current delivery system. Oklahoma interviewees noted these facilitators are vital to improving health outcomes in Oklahoma, where cultural mistrust of health providers is still prevalent. Georgia interviewees noted,

“Community members are more likely to engage when they see their cultural values and practices respected and integrated into these activities.”

“Community members often express frustration with activities that feel top-down or disconnected from their everyday realities. However, when they see healthcare providers collaborating with schools, churches, or local businesses, they are more likely to view these initiatives as accessible and relevant.”

“Collaboration fosters trust and ensures that services are culturally relevant. Long-term benefits include higher patient engagement, improved health outcomes, and a stronger alignment of healthcare practices with community values and traditions.”

Cross-Cutting Themes Across States

Facilitators for implementing community-oriented care models in rural and Tribal communities emphasize actionable pathways to address socioecological barriers and promote sustainable engagement. These facilitators highlight the critical role of capacity-building initiatives, collaborative frameworks, and culturally responsive strategies in enhancing healthcare access and equity. By examining cross-cutting themes, this analysis underscores the shared approaches that can strengthen systems of care and foster community-driven solutions.

Capacity Building through Training and Education

A significant facilitator identified by respondents was **provider training and education** (141). Training in telemedicine, culturally sensitive care, and leadership development equips healthcare providers to address the diverse needs of rural and Tribal communities. These efforts not only enhance clinical skills but also foster stronger patient-provider relationships, contributing to increased trust and engagement. Additionally, community education (120) empowers residents to take an active role in their health, creating a foundation for sustained community involvement.

Collaboration as a Cornerstone for Engagement

Collaboration was frequently cited as a key facilitator, particularly **joint initiatives at the** state and federal levels (189) and partnerships with schools, faith-based groups, and community health workers (225). These collaborative frameworks leverage local knowledge and infrastructure to deliver culturally relevant and effective health interventions. Stakeholders emphasized that partnerships not only address systemic gaps but also build trust and credibility within communities, enabling long-term success for health initiatives.

Systemic Infrastructure and Cultural Strategies

Facilitators such as telehealth expansion (54) and stable funding mechanisms (104) were highlighted as critical for improving access and sustaining health initiatives. In addition, culturally tailored programs (114) were emphasized as essential for overcoming historical mistrust and increasing participation in health programs. Strategies respecting cultural traditions and incorporating multilingual health education were recognized as particularly effective in addressing social and logistical barriers, fostering a sense of ownership and alignment with community values.

These themes illustrate interconnected pathways for overcoming barriers and implementing sustainable community-oriented care. Capacity building, collaboration, and systemic strategies provide actionable insights for addressing rural and Tribal healthcare challenges while respecting and leveraging the unique cultural contexts of these communities.

Socioecological Model Alignment

Appendix G provides detailed Grounded Theory coding that supports the alignment of identified facilitators with the SEM framework utilized in this study. This Appendix offers a comprehensive breakdown of the capacity-building, collaborative, systemic, cultural, and economic facilitators identified by Georgia and Oklahoma interviewees, highlighting actionable pathways for addressing barriers and advancing community-oriented care models.

Individual & Interpersonal Level

Provider Roles and Responsibilities: Family physicians and allied health providers describe balancing multiple duties, including clinical care and patient advocacy. Specialized providers (e.g., psychiatry) express a need for expanded skillsets, such as telemedicine training.

Organizational Level

Collaboration with Institutions: Positive engagement with state departments and local non-profits helps in supplementing gaps, particularly in underserved areas. Limited infrastructure within healthcare organizations hinders the scaling of innovative practices like telehealth.

“Cherokee Nation Health Services and local non-profits are essential partners in our efforts to provide care.”

Community Level

Leveraging Local Partnerships: Tribal coalitions and school nurses are instrumental in addressing community health challenges, including monitoring chronic conditions. Grassroots-level collaborations are seen as critical to successful interventions.

“Mistrust of healthcare providers among some community members stems from historical mistreatment.”

“Tribal coalitions are instrumental in promoting trust and delivering culturally sensitive care.”

Societal Level

Advocacy for Systemic Change: Providers advocate for structural changes, such as consistent funding streams and policies to address transportation challenges.

“Addressing historical trauma is key to improving health outcomes and rebuilding trust in healthcare systems.”

This SEM alignment highlights how facilitators across socioecological levels can create actionable pathways to overcome barriers and promote the implementation of community-oriented care models. By leveraging strengths in capacity-building, collaboration, and culturally responsive strategies, these facilitators can support sustainable, community-driven solutions that improve health outcomes and equity in rural and Tribal communities.

Research Question Analysis

What are the facilitators for successful implementation of community-oriented care models in these communities?

Interviewees consistently noted investments in infrastructure development ultimately promoted increased engagement. Interview data emphasized the importance of fostering community trust, expanding telehealth services, and strengthening collaborative partnerships as critical pathways to facilitate implementation of community-based primary care models. Reliable, consistent funding streams, culturally sensitive care programs, and workforce development initiatives were also highlighted as key enablers.

Chapter 7

PROVIDER VARIATION DATA

This chapter explores the variations in barriers and facilitators experienced by different provider groups in Georgia and Oklahoma when implementing community-oriented care models. Understanding these variations is critical to tailoring interventions that address the unique challenges and opportunities faced by healthcare, public health, and social care health professionals in rural and Tribal communities. By analyzing provider-specific perspectives, this section highlights the socioecological factors influencing their ability to engage with and deliver care to underserved populations effectively. Appendices D and E contains the detailed Grounded Theory coding, for Georgia and Oklahoma, that provides additional context for understanding the provider-specific variations in barriers and facilitators.

Georgia & Oklahoma Provider Category Breakdown

Direct Care Providers (n=15, Georgia; n=14, Oklahoma)

Roles: Family Medicine, Internal Medicine, Pediatrics, Emergency Medicine, OB/GYN, Clinical Psychology, Psychiatry, Nurse Practitioner, EMT, Community Health Worker

Gender Representation:

Georgia: Male: n=8, Female: n=7; Oklahoma: Male: n=8, Female: n=6

Health Systems Administrators (n=4, Georgia; n=3, Oklahoma)

Roles: Nonprofit Administrator, State Agency Administrator, Tribal Administrator

Gender Representation:

Georgia: Male: n=2, Female: n=2; Oklahoma: Male: n=2, Female: n=1

Population Health and Public Health Experts (n=3, Georgia; n=1, Oklahoma)

Roles: Epidemiologist, Public Health Analyst

Gender Representation:

Georgia: Male: n=1, Female: n=2; Oklahoma: Male: n=1

Community Health Leaders (n=3, Georgia; n=7, Oklahoma)

Roles: Coalition Leader, Community Organizer

Gender Representation:

Georgia: Male: n=2, Female: n=1; Oklahoma: Male: n=3, Female: n=4

Provider Demographics and coding frequencies are located in Appendix H (Georgia) and Appendix I (Oklahoma).

Provider Variations- Georgia

Georgia Direct Care Providers

Direct Care Providers represented Georgia's largest group of interviewees. This category included a wide spectrum of medical and allied health professionals. Direct Care Providers, including physicians, nurse practitioners, and other direct care professionals, identified high patient volumes and burnout as significant challenges in their practice. Many Direct Care Providers emphasize the compounding impact of resource constraints and the scarcity of specialists, which forces them to adopt complex roles that span chronic care, acute care, and patient advocacy. One interviewee noted,

"We're often juggling multiple responsibilities—managing chronic conditions while trying to address immediate health crises. It feels like a constant balancing act."

Male Direct Care Providers (8 of 15) in Georgia were more likely to focus on operational efficiency and the need for infrastructure improvements, including telehealth expansion, to alleviate their heavy workloads. Female Direct Care Providers, (7 of 15) highlighted the importance of integrating health services and addressing cultural mistrust and social barriers to care, particularly among minority populations. Both genders underscored the logistical challenges of serving geographically isolated communities, where access to care is further hampered by transportation barriers. An interviewee detailed,

“Cultural and language differences make it difficult to connect with certain populations. It’s not just about translating words—it’s about understanding cultural contexts.”

Logistical challenges, such as the lack of transportation options for patients and the fragmented nature of service delivery systems, further exacerbate the difficulties faced by Direct Care Providers. Despite these barriers, these professionals consistently emphasized their role in bridging gaps between healthcare systems and communities, often leveraging grassroots connections to foster trust and engagement.

Georgia Health System Administrators

Health System Administrators offered perspectives on the organizational and policy-level challenges impacting the ability to implement community-centered models of primary care in Georgia. Health System Administrators identified overlapping systemic barriers, including organizational, policy, and financial barriers. A lack of integration between health and social care services was identified by Health Systems Administrators as a limiting factor impacting patient engagement and program participation. Funding constraints and transportation barriers were also highlighted as barriers by Health System Administrators. Interviewees underscored the need for systemic investments in infrastructure, community-based programs, and financial support mechanisms to mitigate these issues. Interviewees noted,

“Bringing groups together to respond to funding opportunities is challenging, the budgets are never big enough, so we always ask ourselves are we hurting or helping the delivery system grow? It is a difficult position to be in as a health administrator for a rural community...”

“Funding instability is the primary barrier to community engagement. Without consistent resources, it’s difficult to build trust and maintain long-term engagement with the community.”

Georgia Population Health & Public Health Experts

Population Health & Public Health Experts highlighted systemic barriers, legislative challenges, and data inconsistencies as critical issues limiting their efforts to address population-level health disparities. Male experts noted the need and requirement for collaboration with direct care and social care providers while describing the unique obstacles stemming from fragmented public health infrastructure and jurisdictional and political complexities. Interviewees detailed,

“Inconsistent data reporting and the lack of collaboration between public health and direct care make it challenging to plan effective interventions.”

“We’ve received funding from local foundations for pediatric mental health programs. However, these funds are often short-term and don’t cover operational costs, which limits scalability.”

The interviewees noted integrating public health data into community-level care planning remains a significant hurdle. These barriers identified by the interviewees showcase the challenges experienced in the public health section to effectively monitor disease trends, implement preventive care strategies, and foster systemic solutions that address the root causes of health disparities. Female respondents highlighted the intersection of public health with direct health and social care delivery systems.

Georgia Community Health Leaders

The interviewees (2 Male, 1 Female), offered insights into the need to grow capacity for health and social care partners, noting the need to develop metrics and measurable outcomes to report on local activities. Community Health Leaders noted local data could be used in seeking additional funding opportunities. One interviewee noted,

“If communities knew how to tell their stories through data, we might be able to attract different funders into the community.”

Female Community Health Leaders reinforced the need to develop local approaches that make community engagement an expectation and measure of success. The Male leaders noted the need for collaboration outside of traditional healthcare partners, the interviewee emphasized the need for nonprofits to focus on metrics and measurable outcomes. Female leaders highlighted the need to advocate for stakeholder engagement and culturally tailored outreach initiatives. One interviewee shared,

“If we don’t make community engagement a requirement to get paid, no one will sustain the effort, we will do it once, talk about it, and then forget about it.”

Georgia Key Provider Differences

Georgia Direct Care Providers frequently noted high patient volumes, burnout, and a lack of specialists, which limited their capacity to engage in community health initiatives. Direct Care Providers, Health System Administrators, and Community Health Leaders emphasized the impact of cultural and language barriers, logistical challenges, and inadequate infrastructure on their ability to deliver comprehensive care. Population Health & Public Health Experts and Health System Administrators noted systemic barriers, legislative challenges, and jurisdictional issues as primary impediments to their work. Despite these role-specific challenges, shared systemic issues such as stigma, mistrust, and funding constraints emerged across all interviewee categories.

Oklahoma Provider Variations

Oklahoma Direct Care Providers

Oklahoma Direct Care Providers formed the largest group of interviewees, representing a range of clinical specialties essential to patient care in rural Oklahoma. Direct Care Providers, including physicians, psychologists, and nurse practitioners, are heavily influenced by high patient loads and the scarcity of resources. Male providers (8 of 14) were more likely to emphasize the need for operational efficiency, resource management and workforce support, whereas female providers (6 of 11) highlighted the importance of integrating mental health and

chronic disease management into primary care settings. Both genders similarly stressed the logistical challenges of delivering care in geographically isolated areas. Direct Care Providers noted high patient volumes and insufficient funding constrained their ability to participate in broader community initiatives. Female providers were particularly aware of the cultural mistrust faced by minority populations, underscoring the need for culturally sensitive training. Male providers were more focused on expanding telemedicine capabilities as a means of addressing rural healthcare disparities. Male interviewees noted,

“We’re constantly balancing between acute and chronic care demands, and the sheer volume of patients makes it difficult to focus on community outreach efforts. We can’t get away from the clinic, and sometimes we wish we could.”

“Funding is a persistent issue, particularly for maintaining mobile clinic services and hiring additional staff.”

Population Health & Public Health Experts

Public Health experts, represented solely by a male epidemiologist, revealed unique insights into systemic disparities in rural Oklahoma, offering critical insights into systemic barriers affecting health outcomes. Represented by a single male epidemiologist, the interviewee emphasized the underdevelopment of public health infrastructure and the impact of inconsistent data reporting from rural clinics. The interviewee highlighted how this barrier ultimately limits the ability to effectively design local intervention. The interviewee detailed the critical role of disease surveillance systems while also acknowledging the difficulty of maintaining accurate data without collaboration between public health and direct care providers. The interviewees perspective showcased the challenges that often exist when creating grassroots data-driven solutions. The interviewee emphasized the need for collaboration between public health and direct care providers to bridge gaps in health equity and improve access to preventive care.

“Without accurate and consistent data, it’s nearly impossible to tailor interventions that address the specific health needs of rural populations. Getting that data in real-time is another challenge we don’t have a true solution for...”

Health Systems Administrators

Health Systems administrators provided perspectives on organizational and systemic challenges, ranging from funding constraints to siloed service delivery. Administrative interviewees (2 male, 1 female) collectively approached community engagement through a systems-based lens. Male administrators prioritized financial solvency and operational efficiency, while the one female administrator was more likely to advocate for trauma-informed care and community-based partnerships. Tribal administrator interviewees emphasized the value of integrating cultural elements into healthcare delivery systems, showcasing the importance of cultural sensitivity in fostering trust and improving outcomes. Nonprofit administrators highlighted the challenges of fragmented funding streams and the siloed nature of healthcare and social services. Female administrators emphasized the need for long-term investment in trauma-informed care and systemic solutions, while male administrators were more likely to propose innovative funding and policy models and public-private partnerships. Interviewees noted,

“Collaboration across sectors is vital, but fragmented funding creates unnecessary barriers to building sustainable solutions. It is frustrating because we are all working towards the same common goal, we just have different pots of money we are pulling from to do it, so it creates competition and not collaboration in the end. We need to fund things differently if we ever think we will make an impact.”

“Tribal health services frequently apply for federal grants but face challenges in meeting stringent reporting requirements. Additional administrative support would make it easier to secure and manage these funds.”

“Advocacy is the key to addressing systemic inequities. Policymakers need to prioritize rural health as a central component of broader public health strategies, with input from those most affected.”

Community Health Leaders

Interviewees identifying as health leaders, (3 male, 4 female), provided a strategic perspective on cross-sector collaboration. Leaders stressed the importance of breaking down silos between healthcare, education, and social services but the inability to bridge structural differences. The male leaders emphasized data-driven approaches and metrics as a priority in developing localized health interventions, while the female leaders advocated for stakeholder engagement and culturally tailored outreach. Interviewees shared,

“When we bring diverse stakeholders together, we can create solutions that are not only effective but also resonate deeply with the communities we serve, those are the ones that last, the ones that keep our communities at the center of everything.”

“The geographic isolation of rural communities makes community engagement logistically complex.”

“Our patients are geographically isolated”

“Mobile healthcare solutions hold immense potential for rural areas.”

“When community members are involved in designing healthcare initiatives, the programs are more relevant, sustainable, and effective. Long-term collaboration fosters trust, reduces duplication of efforts, and creates a sense of ownership that encourages ongoing participation and advocacy.”

Oklahoma Key Provider Differences

Oklahoma Direct Care Providers often reported high patient loads and resource constraints limiting their ability to engage in broader community health efforts. Female providers emphasized the importance of addressing cultural mistrust, while male providers focused on the expansion of telemedicine as a strategy to mitigate rural healthcare disparities. Public Health Experts highlighted systemic disparities and the critical need for data-driven solutions to inform intervention planning and advocated for trauma-informed care and community-based partnerships. Health System Administrators underscored the challenges of fragmented funding streams and the bureaucratic challenges providers face within health systems. Community Health Leaders stressed the importance of breaking down silos between healthcare, education, and social services, while emphasizing the need for a combination of data-driven approaches and culturally tailored outreach.

Geographic Comparative Analysis of Provider Differences, Georgia and Oklahoma

Interviewees from Georgia and Oklahoma provided insights into the specific challenges and opportunities faced by varying health or social care roles (Direct Care Provider, Health System Administrator, Population Health & Public Health Experts, and Community Health Leaders). Interviewees from each location noted systemic barriers crossing socioecological (individual, family, organization, community, and societal) boundaries. Through the identification of barriers, interviewees noted leverage points for facilitating strategic health and social care improvements.

Direct Care Providers

Direct Care Provider interviewees in Georgia and Oklahoma reported high patient volumes, burnout, and resource constraints. Interviewees in Georgia noted the limited availability to specialists, combined with geographic isolation is a complex challenge in delivering rural health or social care services. Female Direct Care Provider interviewees in Georgia noted the importance of integrating expanded health and social care services in primary

care settings. Direct Care Providers in each location noted significant challenges related to cultural and language barriers, limited infrastructure, and socioecological constraints. In Georgia, interviewees described logistical challenges such as transportation barriers and housing instability, and food insecurity are real-time challenges to delivering health and social care. Direct Care Provider interviewees in Oklahoma described the added complexity of serving Tribal communities.

Health System Administrators

Health System Administrator interviewees in Georgia and Oklahoma described systemic barriers limiting patient engagement and participation in local health improvement activities. Systemic barriers identified by Health Systems Administrators from each state were also described by interviewees to have overlapping impacts across socio-ecological boundaries. Oklahoma interviewees described how successful Medicaid Expansion has supported offering incentives to Medicaid recipients for seeking and receiving primary care, completing vaccine schedules, and participating in educational activities. Georgia based Health System Administrator interviewees noted the importance of engaging in developing and promoting community-based partnerships when designing rural health interventions.

Population Health & Public Health Experts

Interviewees in Georgia and Oklahoma described common challenges, including systemic barriers, and legislative and policy constraints. Georgia interviewees noted a lack of integration between health and social care services, although Community Health Leaders interviewees described integration of services. In Oklahoma, Population Health & Public Health Experts interviewees described the underdevelopment of public health data infrastructure, particularly in tribal areas. The need for robust disease surveillance systems and improved data reporting was described as an infrastructure limitation by Georgia Population Health & Public Health Expert interviewees.

Community Health Leaders

Community Health Leaders interviewees in both states emphasized the importance of breaking down silos and fostering cross-sector partnerships to address systemic barriers. In Georgia, interviewees described the importance and effectiveness of grassroots engagement with schools, faith-based organizations, and community stakeholders to enhance health equity. In Oklahoma, interviewees detailed the impact of collaboration through local coalitions and partnerships with Tribal leaders and organizations. Oklahoma Community Health Leader interviewees noted their desire to focus on expanding and leveraging data-driven approaches and culturally tailored outreach to build trust and engagement.

Cross-Cutting Themes, Provider Variation

The analysis of provider-specific variations in barriers and facilitators to implementing community-oriented care models in Georgia and Oklahoma reveals shared challenges and opportunities that transcend individual roles. These cross-cutting themes highlight critical socioecological dynamics and the unique contributions of Direct Care Providers, Health Systems Administrators, Population Health & Public Health Experts, and Community Health Leaders.

Capacity Strain and Resource Limitations

Across all provider categories, high patient volumes and inadequate resources were consistently cited as significant barriers to effective community engagement. Direct Care Providers in both states highlighted burnout and the scarcity of specialists as key factors limiting their ability to deliver holistic care. Health Systems Administrators emphasized the impact of fragmented funding streams on program sustainability, while Community Health Leaders noted the challenges of coordinating cross-sectoral efforts with limited infrastructure. These findings underscore the need for systemic investments in workforce capacity and operational efficiency.

Cultural Mistrust and Community Engagement

Cultural mistrust emerged as a recurring barrier across provider groups, particularly in rural and Tribal communities. Female providers were more likely to highlight the importance of addressing stigma and building culturally informed care strategies to foster trust and engagement. Population Health & Public Health Experts and Community Health Leaders noted that integrating culturally tailored programs and engaging trusted community stakeholders are critical to overcoming historical trauma and ensuring the relevance of health initiatives.

Logistical and Geographic Barriers

Providers across all roles identified geographic isolation and limited transportation infrastructure as major logistical challenges to accessing care and implementing health programs. Direct Care Providers emphasized the role of telemedicine in mitigating these barriers, with male providers frequently advocating for its expansion. Community Health Leaders and Health Systems Administrators highlighted the importance of mobile health solutions and local collaboration to address the unique logistical constraints of rural communities.

Collaborative Frameworks for Sustainable Solutions

Collaboration was a unifying theme across provider categories, with interviewees consistently identifying the value of partnerships between healthcare, education, and social services. Community Health Leaders stressed the importance of breaking down silos to create integrated, community-centered solutions. Health Systems Administrators and Population Health & Public Health Experts emphasized the need for data-driven approaches and policy advocacy to align goals and foster long-term sustainability.

Data and Metrics for Impact:

A shared emphasis on the importance of data collection and reporting emerged across provider categories. Population Health & Public Health Experts highlighted the challenges of inconsistent data reporting and its impact on planning effective interventions, while Community Health Leaders and Administrators advocated for developing localized metrics to demonstrate program impact and attract funding. This theme underscores the critical role of data-driven decision-making in addressing health disparities and scaling community engagement efforts.

These cross-cutting themes illustrate how the perspectives and experiences of diverse provider groups intersect to shape the implementation of community-oriented care models. By addressing these shared challenges and leveraging provider-specific strengths, tailored strategies can be developed to improve health outcomes and equity in rural and Tribal communities.

Socioecological Model Alignment

The SEM provides a structured lens to understand how provider-specific variations in barriers and facilitators operate at multiple levels, shaping the implementation of community-oriented care models. This alignment integrates the perspectives of Direct Care Providers, Health Systems Administrators, Population Health & Public Health Experts, and Community Health Leaders to highlight actionable strategies across levels of the SEM.

Individual and Interpersonal Levels-Provider Roles, Relationships, and Trust

Providers across all categories noted the dual challenges of managing high patient volumes and fostering trust with underserved communities. Direct Care Providers highlighted their responsibilities in juggling chronic care management, acute care delivery, and patient advocacy. Cultural mistrust and stigma, particularly in Tribal and minority populations, emerged as critical interpersonal barriers, with female providers emphasizing the importance of

culturally sensitive care to build relationships. Community Health Leaders and Population Health & Public Health Experts noted that consistent engagement with trusted community stakeholders is essential for overcoming historical trauma and strengthening connections.

“We’re often juggling multiple responsibilities—managing chronic conditions while addressing immediate crises.”

“Cultural and language differences make it difficult to connect with certain populations. It’s not just about translating words—it’s about understanding cultural contexts.”

Organizational Level-Operational Efficiency and Resource Management

Organizational challenges, such as fragmented funding, siloed service delivery, and limited workforce capacity, were emphasized by Health Systems Administrators and Public Health Experts. Male administrators often focused on financial solvency and operational efficiency, advocating for telemedicine and innovative funding models. Female administrators prioritized community-based partnerships and trauma-informed care to address patient needs more holistically. Across roles, providers stressed the need for better workforce retention strategies and infrastructure investments to alleviate organizational strain and improve service delivery.

“Collaboration across sectors is vital, but fragmented funding creates unnecessary barriers to building sustainable solutions.”

“Funding instability is the primary barrier to community engagement. Without consistent resources, it’s difficult to build trust and maintain long-term engagement with the community.”

Community Level- Cross-Sector Collaboration and Localized Interventions

Providers frequently emphasized the importance of community-centered approaches, including partnerships with schools, faith-based organizations, and grassroots coalitions. Community Health Leaders and Population Health & Public Health Experts advocated for breaking down silos between healthcare, education, and social services to develop integrated solutions tailored to local needs. The use of data-driven approaches and metrics was highlighted as a priority for demonstrating impact and securing funding for community initiatives.

“When we bring diverse stakeholders together, we create solutions that resonate deeply with the communities we serve.”

“If communities knew how to tell their stories through data, we might be able to attract different funders into the community.”

Societal Level- Advocacy and Systemic Change

Policy-level barriers, including inconsistent funding streams, Medicaid limitations, and regulatory complexities, were identified as systemic challenges across provider categories. Public Health Experts and Health Systems Administrators advocated for reforms to address rural healthcare inequities and improve access to preventive care. Tribal administrators emphasized the need to integrate cultural practices into healthcare policy to foster trust and engagement among Tribal populations. Across all roles, providers called for long-term policy solutions to address transportation challenges, funding inconsistencies, and systemic inequities in rural and Tribal communities.

“Advocacy is the key to addressing systemic inequities. Policymakers need to prioritize rural health as a central component of broader public health strategies.”

“Tribal health services frequently apply for federal grants but face challenges in meeting stringent reporting requirements. Additional administrative support would make it easier to secure and manage these funds.”

Through analyzing provider responses through a SEM lens, we are able to see the alignment and interconnectedness of provider-specific perspectives across levels of the socioecological model. Addressing these dynamics through tailored strategies will empower providers, foster trust, and enhance care delivery, ultimately advancing health equity in rural and Tribal communities.

Research Question Analysis

How do the socioecological barriers and facilitators differ among various provider types?

Population Health & Public Health Experts in Georgia and Oklahoma frequently encounter societal-level barriers such as regulatory/reporting and funding/data inconsistency barriers more than other provider types. Direct Care Providers face logistical barriers like high patient volumes and limited resources, while Health System Administrators and Community Health Leaders often grapple with policy constraints and fragmented funding mechanisms.

Organizational Barriers

Interview findings indicate Direct Care Providers face more organizational-level barriers to implementing community-oriented care models than other provider types (Health System Administrators, Population Health & Public Health Experts, and Community Health Leaders) in rural and tribal communities. Responses Georgia and Oklahoma interviews indicate societal barriers, such as funding limitations, poverty, and jurisdictional conflicts exacerbate organizational challenges. Societal-level barriers identified include systemic inequities, resource alignment, and culture heavily impact Health System Administrators. Strengthening community trust, increasing reliable funding, and improving transportation infrastructure were key

facilitators identified by interviewees to overcoming organizational barriers by Community Health Leaders.

Societal Barriers

Population Health & Public Health Experts report encountering more community and societal-level barriers to implementing community-oriented care models than other provider types, in rural and tribal communities. Due to the low number of interviewee participants in this category there is not adequate evidence to truly investigate this research question. Across all interviewees in this category, (4) reported regulatory/reporting requirements, funding/data inconsistencies, and resource alignment limit their ability to engage communities effectively and address preventive care needs. Health System Administrators in Georgia and Oklahoma reported facing societal-level challenges more frequently than other interviewee provider types. Community Health Leaders in Georgia and Oklahoma described the impacts of community level barriers more often than all other interviewee categories.

Individual and Interpersonal Barriers

Direct Care Providers experience fewer individual and interpersonal level barriers when implementing community-oriented care models than for other provider types. Georgia and Oklahoma interview responses highlight societal factors, such as stigma, overall trust, and mistrust of healthcare institutions, indirectly create individual and interpersonal-level barriers by limiting community engagement. These barriers are particularly pronounced for Direct Care Providers and Community Health Leaders when attempting to foster patient participation in health programs. Interviewees overwhelmingly highlighted the Sociological factors, such as mistrust of healthcare institutions, which indirectly create relational barriers by limiting community engagement. In Georgia and Oklahoma, Direct Care Providers less frequently described interpersonal barriers such as stigma when compared to all other interviewee categories from both states. In Georgia and Oklahoma, Community Health Leaders more often highlighted interpersonal barrier impacts.

Chapter 8

DISCUSSION

A community-centered healthcare delivery model established in the mid-1900s, COPC is an approach to healthcare delivery designed to blend elements of primary care, community, public health, and epidemiologic or patient data (Abramson & Kark, 1983; Mullan & Epstein, 2002). This study sought to elicit the actual or perceived social ecological barriers and facilitators to implementing a community-centered model of care, while exploring the variation between various provider types. In fall 2024, a series of fifty qualitative interviews were conducted to explore the multifaceted socioecological barriers and facilitators to initiating, promoting, and sustaining community engagement/participation. The study additionally sought to discover the shared and state-specific challenges and opportunities to design community-centered care delivery models.

Summary of Findings

Study findings highlight multiple systemic barriers, including funding constraints/limitations, workforce and transportation challenges, and socio-cultural mistrust, influencing the feasibility and sustainability of community-centric care models. Interviewees identified several facilitators, capacity-building, collaboration, and system improvements which support community engagement efforts. Georgia and Oklahoma interviewees reported these facilitators are often underutilized due to fragmented funding streams and inconsistent policy support.

Interviewees in Georgia and Oklahoma noted community engagement remains largely transactional rather than transformational. Direct Care Providers often rely on short-term grants and episodic initiatives that fail to address the root causes of socioecological drivers of health. Georgia and Oklahoma interviewees described common barriers such as funding shortages and mistrust. Interviewees from each state expressed variations, for example tribal healthcare considerations in Oklahoma and the logistical barriers caused by geographical

isolation in Georgia. In Georgia, Community Health Leaders detailed geographic isolation through mobile clinics and telehealth demonstrates innovative approaches, but these remain under-resourced and inconsistently applied.

Population Health & Public Health Experts, along with Health System Administrators noted legislative/policy challenges and Tribal healthcare system policies impact the delivery of care. All interviewee categories expressed frustrations with system-level inefficiencies that ultimately impact the ability to implement community-centered care models at the local level. Tribal Health System Administrators noted the innovative nature of health delivery in Tribal settings despite Federal funding restrictions or barriers. Health System Administrators noted Federal-level policies and funding mechanisms often fail to account for local variations, Community Health Leaders interviewees from Oklahoma detailed how tribal healthcare systems offer a distinct opportunity to integrate traditional practices with modern healthcare delivery, Health System Administrators described how local efforts are frequently limited by fragmented funding and regulatory misalignment.

Local cross-sector collaboration emerged as a key facilitator in Georgia and Oklahoma, particularly partnerships with schools, faith-based organizations, and community leaders to initiate local health and social care improvement activities. Interviewees noted these relationships are instrumental in building trust, tailoring interventions, and sustaining service delivery. The study findings reveal significant gaps in leveraging these partnerships to their fullest extent, particularly in fostering interdisciplinary collaboration across healthcare and social services.

Findings from this study highlight the need for targeted policy interventions to support such implementation, including sustained funding mechanisms, integrated care models, and community-driven approaches. Interviewees, of all provider types, from Georgia and Oklahoma detail how Policymakers must prioritize investments in capacity-building and collaboration; interviewees acknowledged these as essential components of a robust healthcare system.

Study Limitations

Several methodological and contextual limitations in the study must be acknowledged to critically evaluate the findings and contextualize its contributions to advancing rural and tribal care delivery. First, despite efforts to recruit a diverse set of interviewees across multiple professional categories (Direct Care Providers, Health Systems Administrators, Population Health & Public Health Experts, and Community Health leaders) there was a reliance on convenience and purposive sampling strategies, introducing potential biases. Recruitment for the study primarily occurred through existing professional networks and rural, tribal, and public health convenings, which may exclude perspectives from less networked or resourced provider types or organizations. This could skew findings toward the experiences and challenges of more engaged or well-resourced participants, limiting the representativeness of the sample. All 25 Oklahoma interviewees were recruited from two convenings of rural and tribal healthcare professionals. All 25 Georgia interviewees were recruited through relationships with academic medicine, public health, and health administration organizations.

The study's focus on two specific states, Georgia and Oklahoma, limits the generalizability of its findings. While the inclusion of both rural and tribal communities adds depth, it does not fully capture the diversity of challenges and facilitators present in other regions of the United States with different healthcare infrastructures, policies, or demographic compositions.

The use of incentives, such as gift cards, to encourage participation, though minimal, may have introduced response bias. Participants who agreed to interviews may have been more inclined to provide favorable or socially desirable responses, particularly regarding the effectiveness of existing programs or initiatives. This could potentially downplay criticisms or oversimplify systemic challenges. Further, the Author is well-integrated and known with the rural health community of Oklahoma, increasing the potential for response bias.

While the study categorizes findings by professional roles, such as direct care providers, public health experts, and administrators, this research methodology may inadvertently reinforce silos between these groups. The interrelatedness and overlapping responsibilities between provider types could be minimized, limiting the study's ability to fully explore integrated or systemic solutions. The singular representation of Population Health & Public Health Experts (e.g., a sole male epidemiologist in Oklahoma) may limit the robustness of findings related to barriers, facilitators, and provider differences from a public health perspective. This study was intended to explore the socioecological barriers and facilitators to implementing community-centric primary care in rural and Tribal geographies, this study does not seek to explore the perception of these barriers or facilitators from the role of a community members. Through the inclusion of community-based data in future studies, researchers could more effectively explore the design of sustainable community-oriented primary healthcare and social care interventions.

The study relies singularly on the socioecological model, a well-known framework for analyzing barriers and facilitators across multiple levels (individual, interpersonal, organizational, community, and societal). The limitation of only using one framework (SEM) may result in an oversimplification of complex, multi-layered barriers and facilitators. In addition, although the study highlights the importance of cultural responsiveness and tribal engagement, the analysis does not fully integrate the unique sociohistorical contexts and governance structures of Tribal communities and Tribal healthcare systems into its findings. The complexity of working within Tribal healthcare systems, which may differ significantly from state-run systems, could have been explored more comprehensively, particularly in Oklahoma. This study does not explore the generational health and social care impacts of Tribal populations removed from across Georgia and forced to relocate in Oklahoma throughout the mid-1800s.

Study Strengths

By capturing the voices of diverse providers across two distinct geographic settings, this study offers an actionable understanding of the barriers and facilitators impacting the implementation of community-centric care models. The study seeks to obtain a balanced focus on barriers and facilitators ensuring findings are not solely problem-oriented but also highlight actionable pathways for improvement. This dual focus underscores the potential for systemic and community-level interventions to address existing challenges and build capacity for sustainable COPC implementation.

Through the utilization of a socioecological framework, this study provides a comprehensive framework for understanding multi-level barriers and facilitators affecting the implementation of community-centric care models. By examining individual, relational, organizational, community, and societal factors, this study captures the complex interplay of factors influencing health outcomes in rural and underserved communities.

Another notable strength of this study is its incorporation of a wide range of provider perspectives. By interviewing/surveying licensed healthcare providers, social care providers, public health professionals, health administrators, and community collaboration leaders, the study highlights the distinct challenges and opportunities faced by different provider types. This diversity enhances the richness of the data and allows for a more diversified understanding of the interprofessional dynamics necessary for delivery community-centered care in a rural or Tribal setting.

The focus on Georgia and Oklahoma, states with distinct demographic, cultural, and healthcare landscapes, this study offers valuable insights into how local and regional contexts shape the implementation of community-centric care. The inclusion of Tribal communities in Oklahoma adds an additional layer of detail, providing important perspectives on the unique needs and strengths of these populations.

The study seeks to obtain a balanced focus on barriers and facilitators, ensuring findings are not solely problem-oriented but also highlight actionable pathways for improvement. This dual focus underscores the potential for systemic and community-level interventions to address existing challenges and build capacity for sustainable COPC implementation.

The use of direct quotes and thematic coding enhances the credibility and depth of the findings. Interviewees' voices are authentically represented, providing compelling, first-hand accounts of barriers like funding inconsistencies and social mistrust, as well as facilitators such as capacity building and collaboration potentials. These narratives ground the study's conclusions in lived experiences, making them more relatable and actionable.

By identifying specific facilitators, or pathways for improvement, such as telemedicine training, stakeholder collaboration, and culturally responsive care, this study provides actionable insights for healthcare providers, policymakers, and community leaders. These practical recommendations contribute to its translational potential, offering pathways for improving community-oriented care model implementation in similar contexts.

Study Replication Considerations

Replicating this study in different settings/geographies or across varying populations would require several considerations to maintain the relevance of the research. Methodological considerations include an analysis of open-ended questions utilized in the interview process; future interview questions would need to be designed to elicit information specific to the unique geographic health and social care delivery infrastructure being studied. Similar to adaptations of the interview questions, future study interview guides would need to be restructured to ensure local cultural and context sensitivities, including political landscapes. To ensure homogeneity of the sample in future studies, sampling strategies will require tactics to recruit diverse provider types, who serve diverse populations, in a non-rural or Tribal environment, this would include expanded eligibility criteria to capture the diverse array of providers delivering health and social care services in urban or non-Tribal areas.

Future researchers considering replication of this study will need to evaluate the current policy and funding landscapes, alongside any health care delivery advancements that may have changed the way care is delivered. For example, expansion of broadband services to rural or Tribal areas may support the adoption of telehealth services by providers in these spaces, facilitating the transformation of telehealth as a tool to for providing care geographically hard to reach populations. Additional examples of contextual adaptations including increased legislative-based funding for provider recruitment and retention efforts

This study offers great potential for comparative research through replication in multiple regions or diverse populations offering insights into shared barriers and facilitators to community-oriented care model implementation, while offering insights into the local delivery system contexts. By identifying shared barriers and facilitators, decision makers are better positioned to advocate for wide-spread systemic action through policy and societal level interventions, while still honoring local variations in delivery systems.

Alignment of Findings with Current and Future Community-Oriented Care Approaches

Study findings both confirm and challenge existing theories in community-oriented care and socioecological health and social delivery, particularly the systemic challenges of funding, workforce shortages, and transportation issues highlighted by prior studies (Gofin et al., 2015; Longlett et al., 2001). The persistent barriers identified throughout the interviewees, such as funding fragmentation, mistrust, and logistical challenges, align with established literature that highlights systemic inefficiencies in health systems and the disconnect between clinical care and community services (Gofin et al., 2015; Mullan & Epstein, 2002). Interview findings reinforce the notion that siloed systems and fragmented funding streams are detrimental to sustained community engagement.

However, the findings also complicate these theories by demonstrating how state-specific and provider-specific systems influence the implementation of community-centered models. For example, the innovative use of Tribal health systems (IHS) in Oklahoma highlights opportunities to blend traditional and contemporary care models, which challenges the universal application of standardized approaches to delivering health or social care. This suggests a need for new frameworks that integrate culturally tailored, locally driven strategies within broader systemic policies. They also challenge the broader assumption that policy-level interventions alone can resolve disparities. For example, despite federal initiatives like the ACA and models such as AHC, interviewees emphasized persistent gaps in practical, localized solutions that align with community needs (RTI International, 2023).

Further challenging the implementation of community-oriented care models is the role of cultural and historical contexts. For example, the mistrust among Tribal populations toward non-HIS healthcare providers in Oklahoma, rooted in historical trauma, this is an added layer of complexity that is often inadequately addressed in current health and social care improvement frameworks. Study findings suggest a need for new approaches that integrate culturally tailored solutions, such as blending traditional practices with modern healthcare, to build trust and enhance effectiveness.

Study Applications

This study offers a critical understanding of the systemic and localized strategies necessary for implementing and sustaining community-centered care models. While this study highlights that while funding/resources are foundational to successful implementation of community-oriented care models, it also reinforces the success of the model is centered on intentional community engagement, culturally tailored interventions, and sustained systemic support that aligns with the expressed needs of rural and Tribal communities. Findings from this study challenge traditional approaches to health and social care investments, suggesting the

need to shift towards investing in structures that center local stakeholders as the co-designers, planners, budgeters, decision-makers, implementers, and evaluators of health and social care interventions intended to serve them. This approach aligns those with lived experience, diverse professional skills and expertise, and those with roles, responsibilities, accountability, and authority to influence change over how health and social services are governed, funded, and sustained.

Actionable Study Insights for Policymakers

Findings from this study offer Policymakers a framework for conceptualizing health and social care policy impacts with interviewees reinforcing the need for short-term funding streams to be replaced with long-term, integrated, flexible funding streams that center preventive care and intentional community engagement/participation strategies. Interviewees reported significant need for integrated solutions, at the policy level, solutions that center localized collaboration across healthcare, public health, and social services to address socioecological barriers holistically and in a culturally competency manner. In response, Policymakers should work to institutionalized funding streams that only build infrastructure for implementation but responsive and flexible in nature to ensure ongoing alignment with locally expressed need and changing socioecological contexts, particularly when working on behalf of rural and Tribal constituents in resource limited environments. The suggested policy strategies reflect opportunities to actively, and collaboratively, dismantle political level barriers limiting an organization or community's ability to address the upstream social drivers of health impacting an individual or family unit well-being, including housing and food insecurity, access to transportation, through intentional, community-centered policy and budget development.

Other policy level strategies for consideration are centered in workforce development that consider investments in training, recruiting, retaining, and enriching culturally-informed providers, especially those with competency in telemedicine and a passion for serving in rural or

Tribal communities. To advance the practice of these providers and maximize return on their return on investment for policy-driven workforce activities, Policymakers must consider innovative approaches to directing legislatively-appropriated health and social care funding to community-based entities working to create various forms of social, human, cultural, financial, and physical capital to attract and retain a diverse healthcare workforce. To advance the ability of a state or community to overwhelmingly improve its health and social care outcomes, Policymakers should explore tax incentive programs for community-based organizations and local businesses working to support workforce development efforts locally, these programs could include opportunities for funded mentorship and professional development programs at the provider and clinical level. These types of incentivization structures support a long-term perspective shift from considering workforce development as a recruitment challenge, to centering it as an opportunity for communities to create sustainable, locally-designed systems of health and social care delivery, while working to ensure workforce investments are not only targeted at improving health and social care outcomes, but are working to create a more sustainable community overall.

Actionable Study Insights for Providers

Health and social care providers play a vital role in bridging the gap between delivery systems and the communities they serve, this study reinforces the importance of engaging providers not only as a workforce, but as advocates and community leaders focused on actionable change. This requires providers adopt an approach to delivering care that moves past a traditional brick and mortar or virtual environment and centers the delivery of care in the community, in collaboration with interprofessional colleagues with aligned goals and clinical measures. Study interviewees emphasized the positive impact of Providers acting as connectors in their communities, especially when building partnerships with local organizations addressing broader socioecological drivers of health. These findings reinforce how Providers, are not only health professionals, but trusted voices of the community that are uniquely positioned to

advocate for collaborative, cross-discipline activities, community-informed policy development, and to leverage their credentialing and clinical expertise to act as a community champion driving discussions around systemic solution development.

Study findings highlight, Providers are not being called on to act as a community champion alone, instead are being called upon to act as a member of a collaborative team of experts, that includes community subject matter experts (persons with lived experience), to initiate and sustain health and social care improvement efforts, through collective action. Providers through serving on Advisory Boards, Boards of Directors, and through contributing informed clinical and community insights into policy discussions, Providers are well-positioned to align and support the institutionalization of community-centered care principles, ultimately addressing the socioecological factors driving health disparities at the local level. Through embracing this expanded view of a Providers roles and responsibilities within their community, Providers are positioned to move past a transactional relationship towards a transformational one built on authentic, sustained trust.

Actionable Insights for Health and Social Care Stakeholders

Health and social care stakeholders must prioritize and commit to breaking down silos and fostering interdisciplinary collaborations between primary care, public health, and social services, in order to effectively address upstream socioecological drivers of health. These stakeholders should champion the establishment, or endorse models of cross-sector collaboration that centers the inclusion of diverse voices, from Providers to utilizers of services. Stakeholders should work to create pooled-funded mechanisms that allow for the braiding and blending of funds to create an implementation infrastructure to identify shared goals, design interventions and evaluation mechanisms, and collaboratively establish sustainable, shared resource approaches through Partnership Agreements (Elder, 2023) (See Appendix J). Partnership Agreements support mutually accountability, shared decision-making, and

transparent communication structures that long-term support the movement towards Data Sharing Agreements and technology system integration (EMR, EHR, HIE), between primary care, public health, hospital services, and social care, as intended but never fully maximized with Federal efforts such as Beacon or AHC. Through the development of highlighted Agreements, stakeholders are positioned to more effectively align and amplify their community impact while developing a more cohesive, integrated care delivery model for the community (Elder, 2023).

To move past a transactional approach to community engagement and towards a transformational approach to addressing the root cause of health disparities, stakeholders must champion genuine, sustained engagement strategies with the communities they serve. Supporting the movement away from one-time, episodic encounters with the community (e.g., focus groups, key informant interviews, health fairs, social media impressions, newsletter distribution), and towards intersectional engagements where community members lead or co-lead intervention efforts alongside health and social care professionals, stakeholders are supporting the placement of those with lived experience in positions of power through planning, decision-making, implementation, and evaluation activities. Stakeholders are well-positioned to work alongside Policymakers, as they work to initiate systemic change efforts, to serve as advocates and expert thought leaders helping to shape policy agendas. Community-based stakeholders are often able to position themselves more effectively to advocate for and implement flexible funding models, lead bipartisan discussions around policy reforms, and provide data and community insights that support aligning legislative investments with community-centered care principles. Interviewee findings reinforce the power of health and social care stakeholders in championing the allocation of resources towards entities with the deepest understanding of their communities.

A critical insight for health and social care stakeholders to act upon are efforts to expand the capacity of the community to utilize data to attract additional funding streams, build public

trust, and motivate Policymakers and Providers to engage in community-based activities. Stakeholders need to work towards building infrastructure for the collection, analysis, translational, and dissemination of data to inform local efforts. By using locally collected data on community identified needs, stakeholders can work to develop metrics that capture the short-term outcomes and long-term impacts of health and social care improvement efforts. Further, to promote trust in the data collection and interpretation of the data, stakeholders must insist on involving studied individuals and organizations in a participatory, inclusive, process that reinforces transparency while ensuring confidentiality.

Broader Racial, Structural, and Political Factors Impacting Study Results

The findings of this study are deeply rooted within broader racial, structural, and political contexts that perpetuate health inequities, particularly in rural and Tribal communities. These factors provide explanatory frameworks for understanding the barriers and facilitators to implementing community-centered care models in rural and Tribal areas of Georgia and Oklahoma.

Systemic Racism & Historical Inequities

Systemic racism remains a pervasive force shaping the health and social care landscape in both states, influencing access/entry to care, funding allocation, and community trust in healthcare systems. Historical injustices, such as the forced displacement of Indigenous communities and the enduring effects of segregation, have created structural inequities that persist today. For instance, interviewees in Oklahoma highlighted the unique challenges faced by Tribal health systems, including federal funding mechanisms that fail to account for the sovereignty of Tribal nations and their distinct governance structures. Similarly, in Georgia, historical legacies of slavery and racial discrimination continue to shape health disparities, particularly for Black communities, by limiting access to economic opportunities, educational attainment, and health resources. These systemic inequities are reflected in the barriers

identified by study participants, including social mistrust, historical trauma, and systemic discrimination.

Fragmentation of Health and Social Care Systems

The siloed nature of health and social care systems in the United States represents a significant structural barrier to the implementation of community-centered care models. Interviewees consistently reported challenges related to the lack of coordination between healthcare providers, public health entities, and social service organizations. For instance, the disconnect between telehealth services and social care delivery noted by interviewees reflects broader systemic inefficiencies. While telehealth has the potential to address access barriers in rural communities, its effectiveness is undermined by the absence of integrated care models that connect patients to socioecological drivers of health interventions, beyond a primary care setting. These study findings emphasize the need for structural reforms that promote interdisciplinary collaboration and data sharing across sectors to holistically address socioecological barriers.

Federal and State Policy Limitations

Federal and state policies play a crucial role in shaping the health and social care landscape, yet they often fail to account for the unique challenges faced by rural and Tribal communities. For example, inequitable, varied Medicaid expansion policies/efforts in Georgia and Oklahoma have left significant portions of their populations uninsured, limiting access to preventive and primary care services. This policy gap disproportionately affects rural residents and communities of color, exacerbating health disparities and placing additional strain on under-resourced healthcare systems. While well-intentioned, Federal funding mechanisms are frequently inflexible and misaligned with expressed community need. The tribal-based interviewee highlighted the restrictive nature of Federal grants, which often come with stringent reporting requirements and limited scope for adaptation. These limitations hinder the ability of

Tribal stakeholders to design and implement care models that align with their cultural practices and governance structures. Similarly, state-level policies often overlook the geographic and demographic variations between rural areas, leading to one-size-fits-all solutions that fail to address localized barriers.

Identified Research Gaps and Considerations for Future Research

Building upon the findings of this study, several opportunities for future studies exist to expand the knowledge base supporting the utilization of community-centric care models. Futures studies are also necessary to address the limitations identified in this study, deepen the analysis of barriers and facilitators, and create actionable frameworks for the implementation of community-centric care models. First, to address the limitation of geographic and demographic constraints, future research should expand beyond Oklahoma and Georgia to include diverse rural, urban, and tribal settings. This expansion would provide comparative data across regions with varying healthcare infrastructures, demographic compositions, and socio-political contexts.

Future research should also investigate the role of technology, such as telehealth, in addressing access barriers and fostering collaboration in rural and Tribal settings. Future studies should consider the exploration of explore how digital tools, such as mobile health applications and data-sharing platforms, may enhance the delivery of community-centric care models. Georgia and Oklahoma interviewees noted these digital tools have the potential to address logistical challenges, improve data transparency, and foster greater collaboration across stakeholders. By focusing on the interventions designed to address the barriers to technology adoption, such as lack of broadband access and resistance to telehealth, particularly in rural and Tribal settings, future researchers can gain a deeper understanding of factors influencing how a rural or Tribal community could bridge the digital divide and increase equitable access to healthcare innovations for isolated populations. Future research should explore the long-term impact of culturally tailored, community-driven interventions on health outcomes. These

studies should intentionally examine how factors such as race, ethnicity, gender, socioeconomic status, and geographic location influence barriers and facilitators not captured in the socioecological framework. By including these factors, future studies can examine local disparities and inform targeted interventions for marginalized populations

There is a need for future studies that incorporate community member perspectives, as this study focused primarily on provider viewpoints. Future research efforts should employ CBPR frameworks to ensure community members are actively involved in all stages of the research process, a limitation of this study. Utilizing a community-engaged/participatory approach to designing and implementing local interventions would enhance trust, relevance, and cultural alignment, addressing many of the socio-cultural barriers identified in this study.

This study also exposes gaps in understanding the systemic disconnect between policy-level initiatives and community-specific need, particularly in rural and Tribal health systems. Future studies should examine the policy environments in Oklahoma, Georgia, and beyond to identify systemic barriers, such as funding inconsistencies and regulatory requirements hindering community-centric care implementation. Future analyses of this type would provide the evidence base needed to advocate for policies that promote sustained funding, interdisciplinary collaboration, and equitable resource distribution.

Critical Findings & Contradictions

Several unexpected findings emerged during this study, offering critical insights into the complexities of implementing community-centered care models in rural and Tribal settings. These findings, along with notable contradictions and tensions, highlight the intricate interplay between systemic barriers, underutilized facilitators, and the disconnect between policy intentions and practical realities.

Transactional vs. Transformational Community Engagement

A surprising finding was the recurring theme of transactional rather than transformational community engagement/participation strategies. While models like COPC have shown theoretical and practical promise, interviewees consistently described current and historical engagement strategies as episodic, grant-funding dependent, and focused on short-term programmatic goals, not long-term systemic, structural change. This tension reflects a broader misalignment between funding structures and the principles of sustainable, community-centered care. While grant cycles and pilot programs aim to address immediate needs, they often fail to tackle the root causes of health disparities, perpetuating a cycle of temporary fixes rather than fostering lasting change. Interviewee comments underscore the urgent need for funding mechanisms and programmatic designs that prioritize deep, sustained community participation as a cornerstone of health and social care delivery improvement.

Tribal Healthcare Systems: The Duality of Barriers and Facilitators

Tribal healthcare systems were identified as both a barrier and a facilitator to support community-centered care model. Interviewees thoughtfully detailed how Tribal systems have worked to thoughtfully integrate traditional practices into modern delivery, often in innovative ways while still being constrained by restrictive Federal funding policies and burdensome reporting requirements that further limit the flexibility of funds to address community need. This duality highlights the resilience and resourcefulness of Tribal communities, particularly in leveraging cultural knowledge and community-driven approaches to address health disparities. This contradiction suggests a critical need for policy reform that enables Tribal nations to fully harness their strengths while reducing systemic barriers to community engagement. Flexible funding streams and reduced administrative burdens could enable Tribal healthcare systems to act as leaders in integrated, culturally competent care.

Underutilization of Cross-Sector Collaborations

Despite their potential to foster trust and improve overall service delivery while addressing upstream socioecological barriers to health improvement, cross-sector collaborations were surprisingly underutilized by interviewees. While partnerships with schools, faith-based organizations, and civic groups were identified as facilitators, many interviewees noted these collaborations remain sporadic and poorly coordinated. Interviewee findings suggest a disconnect between the acknowledged value of cross-sector partnerships and the structural supports needed to sustain them. Addressing this gap will require intentional investment in collaboration-building initiatives that develop and value implementation infrastructure to support, shared funding pools, formal Partnership Agreements, and integrated data systems. By addressing the underutilization of cross-sector collaborative mechanisms through an infusion of sustained resources, Policymakers could move towards institutionalizing cross-sector collaborations as a standard practice rather than an afterthought.

Tensions Between Barriers and Underutilized Facilitators

A notable contradiction emerged between the barriers identified by interviewees and the underutilization of potential facilitators. For example, while telehealth was frequently cited as a key strategy for overcoming geographic isolation and improving service integration, interviewees also highlighted significant underinvestment in broadband infrastructure, particularly in rural and Tribal areas. This tension underscores the misalignment between policy-level priorities, such as promoting telehealth adoption, and the on-the-ground realities of implementation. Similarly, while interviewees acknowledged the importance of culturally competent care and community engagement, they reported limited resources and systemic support to operationalize these principles effectively. These findings point to a critical disconnect between high-level goals and practical realities, emphasizing the need for integrative, community-informed approaches to align policy intentions with local contexts and capacities.

SEM Focused Recommendations and Translational Applications Examples

This study offers a critical foundation for understanding the barriers and facilitators for varying provider types when considering the implementation of community-centric care models in rural, Tribal, and underserved settings. While interviewees identified significant barriers, the identified facilitators and provider insights offer actionable pathways for improvement.

Interviewees noted future funding, interventions, and policies should foster deeper community engagement, integrate care across disciplines, and address systemic inequities, to transform healthcare delivery and improve health outcomes for rural and Tribal populations.

Recommendations are based on available COPC literature and align with interview findings.

SEM-aligned efforts from Georgia and Oklahoma are highlighted to offer the reader examples of translational activities with interplay between, interpersonal, community, organizational, societal, and policy levels; highlighted examples from each state center the removal of barriers or maximization of facilitators to increase community engagement/participation in health or social care improvement activities.

Individual Level

Individual-level SEM focuses include personal health behaviors, knowledge, and attitudes (McClay, Schaefer, Max, Sedivy, & Garrido, 2023; Abramson & Kark, 1983). COPC-practicing providers and programmatic design focus on tailoring interventions to meet the individualized needs of patients, through education, prevention/promotion activities, and addressing personal health risks, including mental health, substance use, and chronic disease management (Hunter et al, 2024, Gofin et al, 2015, Mullan & Epstein, 2002). Study participants highlighted implementation strategies at the individual SEM level to support patients through interventions to improve health literacy and navigation capacities and equip patients to manage their own health conditions effectively. Given the provider-specific barriers identified by Georgia and Oklahoma interviewees, study findings can be utilized in developing targeted interventions to address the unique needs of rural and Tribal healthcare providers. For example, continuing

education programs on rural health care delivery, telemedicine and culturally competent care could mitigate skill gaps, while burnout mitigation strategies could improve workforce sustainability.

Aligning provider education with community need, quality improvement feedback mechanisms like those utilized by OPHEs (Oklahoma Primary Health Care Extension System) and PHIO (Public Health Institute of Oklahoma) through their Community Partnership Program (see Appendix K) to financially incentivize engaged local stakeholders/community members, known as Community Subject Matter Experts, for providing real-time feedback to providers, organizations, State Agencies, and others in order to refine training needs and intervention design (OSCTR, n.d.). The quality improvement feedback mechanism, designed by Elder & Ross (2021), see Appendix L for variables included in feedback mechanism) was integrated into the County Health Improvement Organization (CHIO) system process model to support the strategic development of local health improvement opportunities and continue work to institutionalize the mechanism within the associated academic-based Monitoring, Feedback, and Evaluation Core supporting CHIO activities, see Appendix M (Ross & Elder, 2024; OSCTR, n.d.).

Interpersonal Level

Interpersonal level SEM attributes focus on relationships, including those with family, friends, and social support networks; health behaviors are influenced by relationship and social interactions, including access to care timing and overall adherence to medical advice (McClay et al., 2023). Interviewees noted that implementation strategies at the interpersonal SEM level work to further engage families and social networks in care planning and health interventions, describing how interpersonal efforts effectively create supportive environments for patients to receive care. (Baum et al., 2024; Patrik et al., 2020). COPC implementation strategies at the interpersonal SEM levels support a community's ability to further engage families and social

networks in care planning and health interventions; COPC interpersonal efforts aim to create supportive environments for patients to receive care (Gofin et al., 2015). Multi-county efforts such as South Georgia Healthy Start, a multilingual community-based maternal and newborn health program designed to coordinate and connect services, enhance individual and family level health knowledge, support access to prenatal and newborn care, offer father-focused programming, and provide essential health and safety items for moms and babies; these efforts are intended to remove barriers to care while working to improve birth outcomes for women and children (South Georgia Healthy Start, n.d).

Interviewees expressed the need to engage community members in local initiatives to ensure alignment of perceived versus actual needs and to increase trust in the delivery system in order to increase utilization of services. Oklahoma's coalition-based work to engaging coalition members to develop trusted, networked systems of health interventions through localized COVID-19 emergency response strategies highlights the power of coalitions in addressing community-need; during 18-month project period coalitions conducted over 450 community-designed COVID-19 testing or vaccine distribution events, administering over 8,000 tests state-wide (Rural Health Information Hub, 2022, Janitz et al, 2023; Bray et al, 2024). Coalitions were incentivized for their efforts through PHIO's Community Partnership Program, over \$1.2 million dollars was distributed back into the community for coalitions to re-invest in activities to address the complex socioecological challenges facing rural Oklahoman's during a global pandemic (Rural Health Information Hub, 2022, Janitz et al, 2023; Bray et al, 2024). Incentives funds were used as seed funding by the coalition to develop localized interventions, including the creation of infrastructure-based policy efforts focused on increasing funds for Family Resource Centers (Rural Health Information Hub, 2022). The functionality of the Community Partnership Program, administered by PHIO, extends across multiple SEM levels, supporting

individuals and the relationships individuals have with local entities delivering health or social care services.

Organizational Level

Organizational level SEM focuses on providers of care, workplaces, schools, and community organizations (non-profits) to support overall accessibility and quality of care (McClay et al., 2023). At the organizational SEM level, COPC implementation strategies aim to align healthcare organizations with identified community needs, including the need for the community to increase or diversify available services, community-wide training on specific health or social care needs, and championing of cross-sector collaborations to enhance, expand, and sustain local services while building trust in the system (Braum et al., 2024; Ceccarelli et al., 2023). Interviewees expressed the overwhelming need to address workforce issues, both in the present and future, when considering the current landscape of rural healthcare access.

Rural community efforts to increase academic medical partnerships should be considered as a mechanism to increase partnership and trust while increasing the overall capacity of a community to serve (Savage-Hoggard et al., 2023; Gofin et al., 2015). The Mercer University School of Medicine in Macon, Georgia has institutionalized their commitment to expanded rural health and social care workforce by not only embedding associated goals in their Strategic Plan (i.e., increasing underrepresented minorities in healthcare, increasing number of primary care providers, diversifying community-minded leaders) but through their commitment to building policy-driven infrastructure capacity for future rural healthcare innovation across Georgia, centered in authentic community engagement (Mercer University, School of Medicine, n.d.; GRHIC, n.d.)

Conceptualized, designed, and tested with Oklahoma coalitions and local community members, the “Communities in Motion: Six Relational Strategies for Addressing Health Disparities,” (see Appendix N) serves as a framework for organizations to utilize in initiating

improvement activities, while continuously engaging community members (Elder & Ross, 2022). The six-part process allows communities to move along the development continuum at their own pace, while continuously working to build multi-level infrastructure elements (i.e., workforce, Partnership Agreements, peer support mechanisms, shared data and reporting structures, and quality improvement feedback loops) that support a community's ability to translate and integrate existing and future programming into local landscapes.

Community Level

Community-level SEM focuses on the relationships between organizations and local context, which influence health, including social cohesion, economic stability, and cultural factors (McClay, et al., 2023). At its core, COPC aims to understand a community's specific needs, resources, and assets to support the co-design of an effective health and social care delivery system; COPC implementation strategies support active community participation, offering COPC stakeholders ongoing engagement opportunities to continuously evaluate a community's evolving needs and design interventions that address broader, upstream social and structural determinants of health (Abramson & Kark, 1983). Interview findings support the need to create a meaningful, sustainable community engagement/participation framework to foster trust in the overall delivery system while designing culturally tailored and community-informed interventions to address health inequities. Utilizing frameworks such as the CHIO/OPHES model utilized for community-engaged COVID-19 testing and vaccine work may serve as a model for other communities to consider when considering community-centered care delivery (Bray et al., 2024; Janitz et al., 2023).

A tool utilized by CHIOs across Oklahoma is the "Umbrella of Relational Strategies," (see Appendix O) a collaboratively designed framework offers communities a relational-based, cross-sector, multi-level concept for communities considering developing and sustaining efforts to strengthen overall well-being for families and communities; the co-designed framework,

conceptualized in 2023 by Elder, Ross, PHIO, the Oklahoma State Department of Health, the Oklahoma Parent Partnership Learning Community, and the Oklahoma Turning Point Council, is centered anchoring activities in the voice of the community. The umbrella schematic offers stakeholders a pictorial representation of what building coordinated, sustainable efforts at the local level might look like through layering infrastructure and opportunity; designed for communities working across the local health and social care landscape the “Umbrella of Relational Strategies” offers communities an integrated framework for local adaption as they work to address locally identified individual, family, community, and structural adversities (Elder & Ross, 2023; PHIO, 2023). The community-centered relational framework, under the direction of its developers (Elder & Ross, 2023), was adapted for educational and technical assistance purposes by the Louisiana Public Health Institute to support local health departments across Louisiana, Missouri, New Mexico, and Texas, in alignment with the Federally funded Public Health Infrastructure Grants administered by Centers for Disease Control and Prevention (PHIG Partners, 2024).

Policy Level

Focusing on local, state, and national level policies and laws, the Policy level of the SEM works to evaluate the impacts on healthcare delivery systems, funding opportunities, drivers of health, communities, and individuals. When considering community-oriented care model implementation at the local level, stakeholders are presented with the opportunity to engage in advocacy efforts at all policy levels, which may influence health or social care policies, including those focused on disparities, infrastructure, healthcare coverage, or innovation (Mullan & Epstein, 2002). Interview findings from this study align with past literature, each detailing how policies can enable or inhibit the success of community-centered initiatives; future efforts should focus on creating environments for authentic dialogue between community members, health and social care decision-makers, and policymakers. To support the initiation of dialogue amongst multi-sector health and social care stakeholders, mechanisms outlined in the ACA can

be leveraged to engage a diverse perspective through activities such as workforce development programs, Community Health Needs Assessments, and Community Health Improvement Plans (ACA, 2010).

MUSM and the GRHIC located in Macon, GA have partnered with Children's Health Care of Atlanta to develop a multi-sector strategy to enhancing the landscape of rural pediatric care in Georgia, the \$200 million investment approved by the Children's Board of Trustees in 2022 is focused on expanding the rural pediatrician and behavioral health (Marriage and Family Therapy) pipelines, rural pediatric emergency room response, telehealth training and infrastructure, school-based access points, and provider capacity building (CHOA, n.d.).

Societal Level

At the SEM Societal Level, the focus is on cultural norms, social attitudes, and inequities, including elements profoundly impacting the health of a community or a population, for example, systemic racism, economic inequalities, and overall healthcare access for rural and Indigenous communities (Erickson, Cermak, Michaels, Lynn, & Benning, 2024). Future community-centered care model interventions should aim to influence delivery infrastructure through collective co-design of interventions and evaluations that address the underlying societal factors contributing to poor health outcomes, including social norms on healthcare utilization, culturally competent healthcare delivery, and stigma associated with mental health and substance use (Abramson & Kark, 1983; Mullen & Epstein, 2002). Interview findings support the belief that through the active participation of community members, community-based care delivery model implementation efforts can work to address systemic and structural inequities in healthcare delivery. Utilizing models such as the CER Model outlined by PCORI (PCORI, 2024) supports the ability of a community to communicate and align expressed need (individual, family, and organizational) with sustainable, long-term funding streams designed to address health inequities.

The ability to impact health outcomes through societal level approaches requires deep, intentional investments aimed at amplifying the voice of community members and the stakeholders. Oklahoma based Metriarch, a women's public health tank focused on normalizing and broadening conversations around women's health through data storytelling, policy evaluation, and interactive community events, works to bridge the gap between the experiences of women and the policy's impacting them (Metriarch, n.d.). Through diverse communication avenues, Metriarch seeks to collaboratively explore multi-layered socioecological factors influencing women's health outcomes; focusing on barriers to care, the carceral system, economic mobility and stability, interpersonal violence, maternal and infant health, mental health, public participation, reproductive health, underserved communities, and youth health, Metriarch works to develop and foster dialogue with communities in which evidence-based, medically accurate information is shared and considered (Metriarch, n.d.). This approach allows Metriarch to link policy action (Legislative Tracker™) with supportive communication tools; through their weekly women's health bulletin (Fierce Facts), a bi-annual Data Lookbook linking data and community action potential, offering a broader index of the health of women in Oklahoma, Data Snapshots offering a digestible analysis of current events, and expansive narrative (Panoramas) highlighting the impact of policy on marginalized populations; through linking policy and the voice of the community, they are working to develop environments where policies remove barriers as opposed to perpetuate systemic inequities (Metriarch, n.d.).

Conclusion

This study offers a comprehensive exploration of barriers, facilitators, and provider-specific variations to implementing community-centric care models in rural and underserved settings, specifically Georgia and Oklahoma. Despite significant Federal investments (e.g., ACA, AHC, ACO, CPC, CPC+), these states consistently rank near the bottom in system-level and individual health outcomes. The findings of this study reinforce that while these initiatives have made strides in improving access and quality, they often fall short in fostering meaningful,

sustained community engagement. This disconnect highlights a broader misalignment between federal-level policies and the community-driven, locally informed principles essential for achieving equitable health outcomes, as emphasized by the WHO's integrated, people-centered systems framework.

A recurring theme throughout this study is the systemic fragmentation undermining community-centered care delivery. Both states face a long history of underinvestment in rural healthcare infrastructure, compounded by systemic inequities in funding, policy, and access to social services. Tribal and rural communities, in particular, encounter unique challenges stemming from historical injustices, geographic isolation, and governance structures complicating care delivery. These structural barriers are further exacerbated by socio-cultural mistrust and the episodic nature of engagement efforts. Yet, study findings highlight significant opportunities to leverage existing strengths, such as the innovative practices within Tribal health systems and the potential for cross-sector collaboration to address upstream socioecological drivers of health.

While study findings underscore systemic challenges, they also provide evidence of the transformative potential of intentional relationship development. Interview findings highlight that successful implementation of community-centered care models depends on fostering authentic, sustained partnerships that center the voices of community members as co-designers and decision-makers. This collaborative approach requires moving beyond transactional, grant-dependent engagements to build long-term trust and accountability between healthcare providers, policymakers, and the communities they serve. Interviewee commentary calls for systemic reform to address key systemic barriers, including fragmented funding streams, siloed care delivery, and workforce shortages. To address this Policymakers must prioritize flexible, integrated funding mechanisms and policy frameworks that remove barriers for local stakeholders to participate in the design of culturally responsive, community-driven

interventions. Building on the transformational potential of relationships, Providers must embrace expanded roles as advocates and community leaders, leveraging their expertise to build interdisciplinary coalitions and champion systemic change. Stakeholders across healthcare and social services must work collectively to dismantle structural inequities and establish infrastructure for data sharing, collaboration, and sustained capacity building.

This study demonstrates that achieving meaningful, equitable health outcomes in rural and Tribal communities is not only possible but also sustainable when systemic reforms are paired with intentional, community-centered engagement strategies. Study findings support the call for a systemic shift: one in which communities are not merely recipients of care but co-designers of their health and social care delivery systems. To address the identified challenges, health and social care stakeholders must increase and tailor mechanisms to address the systemic barriers limiting community engagement/participation in health and social care improvement efforts. It will be imperative for these stakeholders and communities to reimagine health and social care delivery as a collaborative journey full of exploration to continuously adapt to the changing needs of a community. By aligning local strengths, cultural assets, and systemic investments, health and social care stakeholders can co-design delivery systems that address the complex socioecological drivers of health, alongside community subject matter experts.

The success of community-oriented care models hinges on the recognition that communities are not passive recipients of care but active participants in shaping their health future, an achievable and transformative vision, when relationships are prioritized, barriers are removed, and systems are reimaged.

REFERENCES

- Abramson, J. H., & Kark, S. L. (1983). Community oriented primary care: Meaning and scope. *Community Oriented Primary Care: New Directions for Health Services Delivery*.
- Agashe, S., Kumar, S., & Rai, R. (2021). Exploring the relationship between social ties and resilience from evolutionary framework. *Frontiers in Human Dynamics*, 3.683755. <https://doi.org/10.3389/fhumd.2021.683755>
- Alberti, P., Fair, M., & Skorton, D. J. (2021). Now is our time to act: Why academic medicine must embrace community collaboration as its fourth mission. *Academic Medicine*, 96(11). Doi.org/10.1097/ACM.0000000000004371
- American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, & American Osteopathic Association. (2007). *Joint principles of the patient-centered medical home*. https://www.acponline.org/sites/default/files/documents/running_practice/delivery_and_payment_models/pcmh/demonstrations/jointprinc_05_17.pdf
- American Academy of Family Physicians. (2022). *Primary care*. <https://www.aafp.org/about/policies/all/primary-care.html>
- America's Health Rankings analysis of U.S. Census Bureau, American Community Survey, United Health Foundation. (n.d.). AmericasHealthRankings.org.
- Basu, S., Berkowitz, S.A., Phillips, R.L., Bitton, A., Landon, B.E., & Phillips, R.S. (2019). Association of primary care physician supply with population mortality in the United States, 2005–2015, *JAMA Internal Medicine*, 179(4):506–514.
- Baum, N. M., Iovan, S., & Udow-Phillips, M. (2024). Strengthening public health through primary care and public health collaboration: Innovative state approaches. *Journal of Public Health Management and Practice: JPHMP*, 30(2), E47–E53. doi.org/10.1097/PHH.0000000000001860

- Bray, L.A., Jervis, L.L., Janitz, A.E., Ross, L., Tallbull, G., & VanWagoner, T.M. (2024) CATCH-UP vaccines team. Toward trustworthy COVID-19 interventions: Building vaccine trust through community-university partnerships. *PLoS One*, 19(3), e0300872. doi: 10.1371/journal.pone.0300872. PMID: 38536876; PMCID: PMC10971327.
- Brindis, C.D., Decker, M.J., Gutmann-Gonzalez, A., & Berglas, N.F. (2020) Perspectives on adolescent pregnancy prevention strategies in the United States: Looking back, looking forward. *Adolescent Health Medical Therapy*, 12(11), 135-145. doi: 10.2147/AHMT.S219949. Erratum in: *Adolesc Health Med Ther*. 2022 Dec 28;13:107-108. doi: 10.2147/AHMT.S402218
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723–742. doi.org/10.1037/0012-1649.22.6.723
- Buehler, J. W., Snyder, R. L., Freeman, S. L., Carson, S. R., & Ortega, A. N. (2018). It's not Just insurance: The Affordable Care Act and population health. *Public Health Reports*, 133(1), F34–38. doi.org/10.1177/0033354917743499
- Burke, T. (2011). Accountable care organizations. *Public Health Reporter*, 126(6), 875-8. doi: 10.1177/003335491112600614.
- Callaghan, T.H., Ferdinand, A.O., Akinlotan, M., Primm, K., Lee, J.S., Macareno, B., & Bolin, J. (2020). Healthy People 2020 progress for leading causes of death in rural and urban America: A chartbook. *Southwest Rural Health Research Center*, March.
- Ceccarelli, A., Minotti, A., Senni, M., Pellegrini, L., Benati, G., Ceccarelli, P., Federici, A., Mazzini, S., Reali, C., Sintoni, F., Gori, D., & Montalti, M. (2023). Healthcare service quality evaluation in a community-oriented primary care center, Italy. *Healthcare*, 11(17), 2396. doi.org/10.3390/healthcare11172396

- Center for Medicare & Medicaid Services. (n.d.). *Accountable care organizations*.
<https://data.cms.gov/medicare-shared-savings-program/accountable-care-organizations/data>
- Center for Medicare & Medicaid Services. (n.d.). *Accountable health communities model*.
<https://www.cms.gov/priorities/innovation/innovation-models/ahcm>
- Center for Medicare & Medicaid Services. n.d. Comprehensive primary care initiative.
<https://www.cms.gov/priorities/innovation/innovation-models/comprehensive-primary-care-initiative>
- Center for Medicare and Medicaid Services (2024). *CMS, Medicaid & CHIP monthly applications, eligibility determinations, and enrollment reports: January 2014 - August 2024 (preliminary)*.
- Charmaz, K. & Thornberg, R. (2020). The pursuit of quality in grounded theory. *Qualitative Research in Psychology*, 18(3):305-327.
<https://doi.org/10.1080/14780887.2020.1780357>
- Cherokee Nation. (n.d.). *Maps*.
<https://vmgis4.cherokee.org/portal/apps/webappviewer/index.html?id=d890e55c04c04c31a658301f9d020521>
- Children's Health Care of Atlanta. (n.d.). Our commitment to rural health. *Children's Health Care of Atlanta*. <https://www.choa.org/about-us/community/commitment-to-rural-health#:~:text=Children's%20is%20the%20only%20healthcare,includin%20all%20%20rural%20counties>.
- Chiu, L. (2009). Culturally competent health promotion: The potential of participatory video for empowering migrant and minority ethnic communities. *International Journal of Migration, Health and Social Care*, 5(1):5-14.
<https://doi.org/10.1108/17479894200900002>

- Clancy, G.P. & Duffy, D. (2013). Going “All In” to transform the Tulsa community’s health and healthcare workforce. *Academic Medicine*, 88(12). doi: 10.1097/ACM.0000000000000039
- Cole, M.B., Kim, J., Levensgood, T.W., & Trivedi, A.N.. (2021). Association of Medicaid expansion with 5-year changes in hypertension and diabetes outcomes at Federally Qualified Health Centers. *JAMA Health Forum*, 2(9), e212375. doi:10.1001/jamahealthforum.2021.2375
- Conrad-Hiebner, A., & Byram, E. (2020). The temporal impact of economic insecurity on child maltreatment: A systematic review. *Trauma, Violence, & Abuse*, 21(1), 157-178. <https://doi.org/10.1177/1524838018756122>
- Corlett, S., Mavin, S., Cassell, C., Cunliffe, A., & Grandy, G. (2018). *The SAGE handbook of qualitative business and management research methods: History and traditions*. SAGE Publications Ltd.
- Crabtree, B.F., Nutting, P.A., Miller, W.L., Stange, K.C., Stewart, E.E., & Robert Jaen, C. (2010). Summary of the national demonstration project and recommendations for the patient-centered medical home. *Annals of Family Medicine*, 8(1).
- Corbin, J. & Strauss, A. (2010). Basics of qualitative research: Techniques and procedures for development grounded theory. *Canadian Journal of University Continuing Education*, 36(2).
- Creighton University. (n.d.). *Community-oriented primary care*. <https://www.creighton.edu/healthsciences/diversity/community-oriented-primary-care-copc>
- Dantas, I., Santana, R., Sarmiento, J., & Aguiar, P. (2016) The impact of multiple chronic diseases on hospitalizations for ambulatory care sensitive conditions. *BMC Health Services Research*, 4(16)(a), 348. doi: 10.1186/s12913-016-1584-2

- Defining the PCMH. (n.d.). Content last reviewed August 2022. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/ncepcr/research/care-coordination/pcmh/define.html>
- Department of State, United States of America. (n.d.). *Indian Treaties and the Removal Act of 1830*. <https://history.state.gov/milestones/1830-1860/indian-treaties>
- Deuschle, K. W. (1982). Community-oriented primary care: Lessons learned in three decades. *Journal of Community Health*, 8(1). doi.org/10.1007/BF01324393
- Dharani, M. K., & Balamurugan, J. (2024). The financial hardships of single mothers: A review of two decades. *Multidisciplinary Reviews*, 7(8), 2024179. <https://doi.org/10.31893/multirev.2024179>
- Elder, A.B. & Ross, L.M. (2021). Quality improvement feedback mechanism. Public Health Institute of Oklahoma. <https://handlewithcareok.org/parent-partnership-learning-community-survey/>
- Elder, A.B & Ross, L.M. (2022). Communities in motion: Six relational strategies for addressing health disparities. *Public Health Institute of Oklahoma*. <https://publichealthok.org/catch-up-2-0/>
- Elder, A.B. (2023). Partnership agreement. *EBConsulting OKC*. <https://docs.google.com/document/d/1VPDZGyushwFInc6vBp1jeQYAZV4-cIHC/edit?usp=sharing&ouid=100514547843724198793&rtpof=true&sd=true>
- Elder, A.B. & Ross, L.M. (2023). Umbrella of relational strategies. *Public Health Institute of Oklahoma*. <https://io.wp.com/publichealthok.org/wp-content/uploads/2023/09/Updated-Umbrella-with-chio.jpg?ssl=1>
- English, K.C., Fairbanks, J., Finster, C.E., Rafaelito, A., Luna, J., & Kennedy, M. A. (2008). Socioecological approach to improving mammography rates in a tribal community. *Health Education & Behavior*, 35(3), 396-409. doi:10.1177/1090198106290396

- Erickson, P.J., Cermak, A., Michaels, C., Blake, L., Lynn, A., Greylord, T., & Benning, S. (2024,). *Mental health and well-being ecological model*. Center for Leadership Education in Maternal & Child Public Health, University of Minnesota–Twin Cities.
<https://mch.umn.edu/resources/mhecomodel>.
- Erickson, P.J., Cermak, A., Michaels, C., Lynn, A., & Benning, S. (2024). *Societal-level determinants of mental health & well-being: A social-ecological model and report*. Center for Leadership Education in Maternal & Child Public Health, University of Minnesota–Twin Cities.
- Fakeye, O.A., Jsu, YJ, Weiner, J.P., & Martsteller, J.A. (2023) Impact of the patient-centered medical home on consistently high-cost patients. *The American Journal of Managed Care*, 29(12), 680-686. <https://doi.org/10.37765/ajmc.2023.89467>
- Federal Office of Rural Health Policy. (2021). List of rural counties and designated eligible census tracts in metropolitan counties. Federal Office of Rural Health Policy, OMB Bulletin No. 20-01. <https://data.hrsa.gov/Content/Documents/tools/rural-health/forhpeligibleareas.pdf>
- Feng, Y.Y., & Mardon, A. (2022, Apr 15). The importance of culturally competent tailored interventions. <http://dx.doi.org/10.2139/ssrn.4085146>
- Fitzhugh, M. & Epstein, L. (2002). Community-oriented primary care: New relevance in a changing world. *American Journal of Public Health*. 92, 1748_1755, doi.org/10.2105/AJPH.92.11.1748
- Franz, B., & Murphy, J. W. (2015). Electronic medical records and the technological imperative. *Perspectives in Biology and Medicine*, 58(4), 480–492.
- Franz, B., Skinner, D., & Kelleher, K. (2017). The impact of the Affordable Care Act on hospital-led community health evaluation in the U.S. Appalachian Ohio region. *Journal of Evaluation in Clinical Practice*, 23(4), 882–887. doi.org/10.1111/jep.12749

- Gavagan, T. (2008). A systematic review of COPC: Evidence for effectiveness. *Journal of healthcare for the Poor and Underserved*, 19(3). doi.org/10.1353/hpu.0.0061
- Gedikli, C., Miraglia, M., Connolly, S., Bryan, M., & Watson, D. (2022). The relationship between unemployment and wellbeing: An updated meta-analysis of longitudinal evidence. *European Journal of Work and Organizational Psychology*, 32(1), 128–144. <https://doi.org/10.1080/1359432X.2022.210685>
- Georgia Rural Health Innovation Center. (n.d.). Serving Georgia's rural health needs. *Georgia Rural Health Innovation Center*. <https://www.georgiaruralhealth.org/about/>
- Gofin, J., & Gofin, R. (2007). Community-oriented primary care: A public health model in primary care. *Revista Panamericana de Salud Publica/Pan American Journal of Public Health*, 21(2–3). doi.org/10.1590/s1020-49892007000200012
- Gofin, J., Gofin, R., & Stimpson, J. P. (2015). Community-Oriented Primary Care (COPC) and the Affordable Care Act. *Journal of Primary Care & Community Health*, 6(2), 128–133. doi.org/10.1177/2150131914555908
- Green, E.P., Wendland, J., Carver, M.C., Hughes Rinker, C., Mun, S.K., (2012). Lessons learned from implementing the patient-centered medical home. *International Journal of Telemedicine and Application*, 2012, 103685. doi:10.1155/2012/103685
- Helmstetter, C., Brower, S., & Egbert, A. (2010). *The unequal distribution of health in the Twin Cities*. Blue Cross and Blue Shield of Minnesota Foundation.
- Hunter, B., Torrence, K., Keller, L., & Parker, J. (2024). Patients and providers win with a collaborative community-based, health education and wellness program. *Frontiers of Health Services Management*, 40(3), 24–29. doi.org/10.1097/HAP.0000000000000191
- Indian Health Services. (2020). *IHS Profile*. U.S. Department of Health & Human Services. <https://www.ihs.gov/newsroom/factsheets/ihsprofile/>

Institute of Medicine (US) Division of healthcare Services; Connor E, Mullan F, (Eds.). (1983).

Community oriented primary care: New directions for health services delivery.

National Academies Press (US).

Institute of Medicine (US) Committee on the Future of Primary Care; Donaldson, M.S., Yordy,

K.D., Lohr, K.N., et al., (Eds.). (1996). *Primary care: America's health in a new era.*

National Academies Press (US).

Jackson, G.L., Powers, B.J., Ranee Chatterjee, et al. (2013). The patient-centered medical home:

A systematic review. *Annals of Internal Medicine*, 158, 169-178, Epub, 5.

doi:10.7326/0003-4819-158-3-201302050-00579

Jacoby, S.F., Tach, L., Guerra, T., Wiebe, D.J. & Richmond, T.S. (2017). The health status and

well-being of low-resource, housing-unstable, single-parent families living in violent

neighbourhoods in Philadelphia, Pennsylvania. *Health Social Care Community*, 25, 578-

589. <https://doi.org/10.1111/hsc.12345>

Janitz, A.E., Neil, J.M., Bray, L.A., Jervis, L.L., Ross, L., Campbell, J.E., Doescher, M.P., Spicer

P.G., Williams, M.L., Lopez, A.K., Uribe-Frias, C.A., Chen, S., James, J.A., &

VanWagoner, T.M. (2023). CATCH-UP vaccines: protocol for a randomized controlled

trial using the multiphase optimization strategy (MOST) framework to evaluate

education interventions to increase COVID-19 vaccine uptake in Oklahoma. *BMC Public*

Health. 14;23(1), 1146. doi: 10.1186/s12889-023-16077-w. PMID: 37316843; PMCID:

PMC10265558.

Joo, J.Y. & Liu, M.F. (2021). Effectiveness of culturally tailored interventions for chronic

illnesses among ethnic minorities. *Western Journal of Nursing Research*, 43(1), 73-84.

doi:10.1177/0193945920918334

Jørgensen, T.S.H., Allore, H., Elman, M.R., Nagel, C., & Quiñones, A.R. (2022). The importance

of chronic conditions for potentially avoidable hospitalizations among non-Hispanic

Black and non-Hispanic White older adults in the US: a cross-sectional observational

- study. *BMC Health Services Research*, 22(468). <https://doi.org/10.1186/s12913-022-07849-y>
- Leung, C.W., Kullgren, J.T., Malani, P.N., Singer, D.C., Kirch, M., Solway, E., & Wolfson. (2020). Food insecurity is associated with multiple chronic conditions and physical health status among older US adults, *Preventive Medicine Reports*, 20(101211).
<https://doi.org/10.1016/j.pmedr.2020.101211>
- Liu, J.J., Davidson, E., Bhopal, R., White, M., Johnson, M., Netto, G., & Sheikh, A. (2016). Adapting health promotion interventions for ethnic minority groups: A qualitative study, *Health Promotion International*, 31(2), 325- 334,
<https://doi.org/10.1093/heapro/dau105>
- Luxon, L. (2015). Infrastructure-the key to healthcare improvement. *Future Hospital Journal*, 2(1):4-7. doi: 10.7861/futurehosp.2-1-4
- MacQueen, K.M., McLellan, E., Metzger, D.S., Kegeles, S., Strauss, R.P., Scotti, R., Blanchard, L., & Trotter, R.T. (2001). 2nd. What is community? An evidence-based definition for participatory public health. *America Journal of Public Health*, 91(12):1929-38. doi: 10.2105/ajph.91.12.1929.
- Metriarch. (n.d.). Issues. Metriarch, Oklahoma's women's public health think tank.
<https://www.metriarchok.org/>
- Komro, K.A., Flay, B.R., & Biglan, A. (2011). Promise Neighborhoods Research Consortium. Creating nurturing environments: a science-based framework for promoting child health and development within high-poverty neighborhoods. *Clinical Child Family Psychological Review*, 14(2), 111-34. doi: 10.1007/s10567-011-0095-2
- Kukulka, G. (1994). Community-oriented primary care. Implementation of a national rural demonstration. *Archives of Family Medicine*, 3(6), 495-501.
doi.org/10.1001/archfami.3.6.495.

- Lazard, L., & McAvoy, J. (2017). Doing reflexivity in psychological research: What's the point? What's the practice? *Qualitative Research in Psychology*, 17(2), 159–177.
<https://doi.org/10.1080/14780887.2017.1400144>
- Leyns, C., Willems, S., Powell, R. A., Camacho, V., Fabrega, R., de Maeseneer, J., Rawaf, S., Mangtani, P., & El-Osta, A. (2023). From disease- to people-centred pandemic management: organized communities, community-oriented primary care and health information systems. *International Journal for Equity in Health*, 22(1).
doi.org/10.1186/s12939-023-02032-z
- Longlett, S. K., Kruse, J. E., & Wesley, R. M. (2001). Community-oriented primary care: historical perspective. *The Journal of the American Board of Family Practice*, 14(1), 54–63.
- Malatji, H., Griffiths, F., & Goudge, J. (2023). Community-orientated primary healthcare: Exploring the interface between community health worker programmes, the health system and communities in South Africa. *PLOS Global Public Health*, 3(2), e0000881.
doi.org/10.1371/journal.pgph.0000881
- Mathematica Policy Research. (2018). Evaluation of the comprehensive primary care initiative, Forth Annual Report. <https://downloads.cms.gov/files/cmml/CPC-initiative-fourth-annual-report.pdf>
- McCauley, L., Phillips, R. L., Meisner, M., & Robinson, S. K. (2021). Implementing high-quality primary care: Rebuilding the foundation of healthcare (2021). *Implementing High-Quality Primary Care*. [Doi.org/10.17226/25983](https://doi.org/10.17226/25983)
- McClay, A., Schaefer, C., Max, J. L., Sedivy, V., & Garrido, M. (2023). *Increasing our impact using a social-ecological approach*. Administration on Children, Youth and Families, Family and Youth Services Bureau.

- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351- 377.
doi.org/10.1177/109019818801500401
- Mercado, C.I., Bullard, K.M., Bolduc, M.L.F., Andrews, C.A., Freggens, Z.R.F., Liggett, G., Banks, D., Johnson, S.B., Penman-Aguilar, A., & Njai, R. (2024). A shift in approach to addressing public health inequities and the effect of societal structural and systemic drivers on social determinants of health. *Public Health Reporter*. 11:333549241283586.
doi: 10.1177/00333549241283586
- Mercer University School of Medicine. (n.d.). Strategic plan. *Mercer University School of Medicine*. <https://medicine.mercer.edu/about-the-school/strategic-plan/>
- Moore, J.D., Lords, A.M., Casanova, M.P. et al. Exploring healthcare provider retention in a rural and frontier community in Northern Idaho. *BMC Health Services Research*, 24(381). <https://doi.org/10.1186/s12913-024-10807-5>
- Moosa, S. (2022). Community-oriented primary care for National Health Insurance in South Africa. *African Journal of Primary healthcare and Family Medicine*, 14(1).
doi.org/10.4102/PHCFM.V14I1.3243
- Mullan, F., & Epstein, L. (2002). Community-oriented primary care: new relevance in a changing world. *American Journal of Public Health*, 92(11), 1748–1755.
doi.org/10.2105/ajph.92.11.1748
- Naslund, J.A., Aschbrenner, K.A., Marsch, L.A., & Bartels, S.J. (2016). The future of mental healthcare: peer-to-peer support and social media. *Epidemiology and Psychiatric Sciences*, 25(2), 113-122. doi:10.1017/S2045796015001067
- National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on Community-Based Solutions to Promote Health Equity in the United States. (2017). Baciú A,

- Negussie Y, Geller A, et al., editors. *Communities in action: Pathways to health equity*. National Academies Press (US). <https://www.ncbi.nlm.nih.gov/books/NBK425845/>
- National Academies of Sciences, Engineering, and Medicine. (2019). *A roadmap to reducing child poverty*. The National Academies Press. doi: <https://doi.org/10.17226/25246>.
- National Quality Forum. (2014). *Improving population health by working with community-Action Guide 1.0*.
https://www.qualityforum.org/Publications/2014/07/improving_pop_health_guide-1.aspx
- Neary, S. (2014). Professional identity: What I call myself defines who I am. *Career Matters*, 2(3), 14–15. <https://core.ac.uk/download/pdf/46170813.pdf>
- Newsome, F.A., Gravlee, C.G., & Cardel, M.I. (2021). Systemic and environmental contributors to obesity inequities in marginalized racial and ethnic groups. *Nursing Clinics*, 56(4), 619-634. <https://doi.org/10.1016/j.cnur.2021.07.003>
- Nevin, J. E., & Gohel, M. M. (1996). Community-oriented primary care. *Primary Care: Clinics in Office Practice*, 23(1), 1–15. [doi.org/10.1016/S0095-4543\(05\)70257-8](https://doi.org/10.1016/S0095-4543(05)70257-8)
- NORC at the University of Chicago. (2015). *Final report: Evaluation of the Beacon community cooperative agreement program*.
https://www.healthit.gov/sites/default/files/norc_beacon_evaluation_final_report_final.pdf
- Nutting, P. A. M., Wood, M. M., & Conner, E. M. M. (1985). Community-oriented primary care in the United States. *JAMA*, 253(12), 1763.
doi.org/10.1001/jama.1985.03350360089025
- Oklahoma Shared Clinical and Translational Resources. (n.d.). *The Oklahoma primary healthcare extension system*.
<https://osctr.ouhsc.edu/Primary%20Healthcare%20Extension%20System>

Patient Protection and Affordable Care Act (2010). Pub. L. No. 111-148 §3022 (amending §1899 of Title XVIII of the Social Security Act

Patient Protection and Affordable Care Act. (2010). *Primary care definition*, p. 397

<https://www.congress.gov/111/plaws/publ148/PLAW-111publ148.pdf>

Pampel, F.C., Krueger, P.M., & Denney, J.T. (2010). Socioeconomic disparities in health behaviors. *Annual Review of Sociology*, 36, 349-370.

<https://doi.org/10.1146/annurev.soc.012809.102529>

Patrik, J., Devin, N., Maloney, S., Grimm, B., Tibbits, M., Mohammad, S., De Alba, R. A., Lyden, E., Schneider, C., & Jaime, G. (2020). Health professions students' assessment of an interprofessional rural public health-focused rotation: A pilot study based on the community-oriented primary care approach. *Journal of Medical Education and Curricular Development*, 7. doi.org/10.1177/2382120520932549

PHIG Partners. (n.d.). Technical assistance: Supporting public health. *PHIG Partners*.

<https://www.phinfrastructure.org/about/technical-assistance/>

Public Health Institute of Oklahoma, Oklahoma State Department of Health, Oklahoma Parent Partnership Learning Community, & Oklahoma Turning Point Council. (2023). Umbrella of relational strategies. <https://io.wp.com/publichealthok.org/wp-content/uploads/2023/09/Updated-Umbrella-with-chio.jpg?ssl=1>

Radley, D. C. et al. (2023). The Commonwealth Fund 2023 Scorecard on state health system performance: Americans' health declines and access to reproductive care shrinks, but states have options. *Commonwealth Fund*. doi.org/10.26099/fcas-cd24

Rahal, R. M., Mercer, J., Kuziemy, C., & Yaya, S. (2021). Factors affecting the mature use of electronic medical records by primary care physicians: a systematic review. *BMC Medical Informatics and Decision Making*, 21(1), 67. doi.org/10.1186/s12911-021-01434-9

- Rhyne, R., Bogue, R., Kukulka, G., & Fulmer, H. (Eds.). (1998). *Community-oriented primary care: healthcare for the 21st century*. American Public Health Association.
- Robert Graham Center. (n.d.). *History*. <https://www.graham-center.org/about/what-we-do/history.html>
- Robert Graham Center. (n.d.). *Community-oriented primary care (COPC) curriculum*. <https://www.graham-center.org/maps-data-tools/copc-curriculum.html>
- Rodriguez Llorian, E., & Mason, G. (2021). Electronic medical records and primary care quality: Evidence from Manitoba. *Health Economics*, 30(5), 1124–1138. doi.org/10.1002/hec.4249
- Ross, L.M. & Elder, A.E. (2024). A networked system for health care improvement. *Public Health Institute of Oklahoma*. https://www.canva.com/design/DAGeTj1Jry4/8D_fHYs6eLCiSNi_toEogw/view?utm_content=DAGeTj1Jry4&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utm_id=h41d3db772b
- Rifkin S.B (2018). Alma Ata after 40 years: Primary healthcare and health for all-from consensus to complexity. *BMJ Global Health*, 3, (Suppl 3). doi: 10.1136/bmjgh-2018-001188.
- RTI International. (2023). *Accountable health communities (AHC), Second Evaluation Report*. <https://www.cms.gov/priorities/innovation/data-and-reports/2023/ahc-second-eval-rpt>
- Rural Health Information Hub. (2022). *COVID-19 community-designed testing programs benefit rural and underserved communities in Oklahoma*. <https://www.ruralhealthinfo.org/toolkits/emergency-preparedness/case-studies/infectious-disease/catch-up-oklahoma>

- Sano, Y. & Mammen, S. (2022). Mitigating the impact of the coronavirus pandemic on rural low-income families. *Journal of Family Economic Issues*, 43, 227-238.
<https://doi.org/10.1007/s10834-021-09800-5>
- Sano, Y., Mammen, S., & Houghten, M. (2021) Well-being and stability among low-income families: A 10-year review of research. *Journal of Family Economic Issues*, 42(Suppl 1):107-117. doi: 10.1007/s10834-020-09715-7
- Saynisch, P.A., David, G., Ukert, B., Agiro, A., Scholle, S.H., Oberlander, T. (2021). Model homes: Evaluating approaches to patient-centered medical home implementation. *Medical Care*, 59(3), 206-212. doi: 10.1097/MLR.0000000000001497. PMID: 33480657; PMCID: PMC7993910.
- Savage Hoggard, C. L., Kaufman, A., Michener, J. L., & Phillips, R. L. (2023). Academic medicine's fourth mission: Building on community-oriented primary care to achieve community-engaged healthcare. *Academic Medicine*, 98(2).
doi.org/10.1097/ACM.0000000000004991
- Savin-Baden, M., & Major, C. (2023). *Qualitative research: The essential guide to theory and practice*. Routledge.
- Shi., L. (2012). The impact of primary care: A focused review. *Scientifica (Cairo)*, 432892. doi: 10.6064/2012/432892
- Silberman P. (2020). The Affordable Care Act: Against the odds, it's working. *North Carolina Medical Journal*, 81(6), 364–369. [doi:10.18043/ncm.81.6.364](https://doi.org/10.18043/ncm.81.6.364)
- Strasser, R.P. (2010). Community engagement: A key to successful rural clinical engagement. *Rural and Remote Health*, 10, 1543.
https://www.rrh.org.au/assets/article_documents/article_print_1543.pdf
- Solberg, L.I., Crain, L.A., Tilema, J.O., Fontaine, P.L., Whitebird, R.R., Flottemesch, T.J., Hudson Scholle, S., & Crabtree, B.E. (2014). Challenges of medical home transformation

reported by 118 patient-centered medical home leaders. *Journal of American Board of Family Medicine*, (4), 449-57. doi:10.3122/jabfm.2014.04.130303

South Georgia Healthy Start (n.d.). Free maternal and newborn support services.
<https://www.southgeorgiahealthystart.org/>

Susser, M. (1999). Pioneering community-oriented primary care. *Bulletin of the World Health Organization*, 77(5), 436–438

Sweeney, T. (2016). *Prescribing remedies for Georgia’s medical provider shortage*. Georgia Budget & Policy Institute. <https://gbpi.org/wp-content/uploads/2016/06/Medical-Provider-Shortage.pdf>.

The George Washington University, Milken Institute School of Public Health. (n.d.). Community-oriented primary care. <https://publichealth.gwu.edu/community-oriented-primary-care-mph>

The George Washington University, School of Medicine & Health Sciences. (n.d.). *Community-oriented primary care*. <https://physicianassistant.smhs.gwu.edu/community-oriented-primary-care-copc>

The Office of the National Coordinator. (2012). *The Beacon community program*.
<https://www.healthit.gov/sites/default/files/beacon-communities-lessons-learned.pdf>

Tie, Y.C., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE Open Medicine*, 7. <https://doi.org/10.1177/2050312118822927>

Tribal Jurisdiction Areas in Oklahoma. (n.d.). <https://www.justice.gov/usao-wdok/page/file/1303046/dl>

University of Wisconsin Population Health Institute. (n.d.). *County health rankings & roadmaps 2024*. www.countyhealthrankings.org.

UNICEF. (n.d.). Brief on the social ecological model.
<https://www.unicef.org/media/135011/file/Global%20%multisectoral%20operational%20framework.pdf>

- United States Census Bureau. (2023). American Community Survey, ACS 1-Year Estimates Subject Tables, Table, U.S. Department of Commerce.
- United States Census Bureau. (2020). *2020 Census participant statistical areas program (PSP). Quick reference guide: Tribal census tracts*. U.S. Department of Commerce. OMB. No. 0607-1003. <https://www2.census.gov/geo/pdfs/partnerships/psap/G-610.pdf>
- United States Census Bureau. (2024). Urban or rural. <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>
- United States Department of Agriculture. Economic Research Service. (2024). *Gregory, C.A. & Reed-Jones, M. Predicted prevalence of five chronic diseases increased as household food security worsened*. <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail?chartId=108211>
- University of Minnesota School of Public Health. (n.d.). *Mental health and well being ecological model*. <https://mch.umn.edu/resources/mhecomodel/>
- Urban Institute. (2018). *Planning Report. Prevention, treatment, and recovery: Towards a 10-year plan for improving mental health and wellness in Tulsa*. www.urban.org/sites/default/files/publication/97656/prevention_treatment_and_recovery_toward_a_10-year_plan_for_improving_mental_health_and_wellness_in_tulsa_o.pdf
- Wang, M., Perzynski, A., & Ronis, S. (2023). Bringing community -oriented primary care into an academic training setting: A qualitative study. *Preventive Medicine Reports*. 35. Doi:102313.10.1016/j.pmedr.2023.102313.
- Wilson, M., Guta, A., Waddell, K., Lavis, J., Reid, R., & Evans, C. (2020). The impacts of accountable care organizations on patient experience, health outcomes and costs: a rapid review. *Journal of Health Services Research & Policy*. 25(2):130-138. doi:10.1177/1355819620913141

- Willis, J., Antono, B., Bazemore, A., Jetty, A., Petterson, S., George, J., Rosario, B. L., Scheufele, E., Rajmane, A., Dankwa-Mullan, I., & Rhee, K. (2020). *The state of primary care in the United States: A chartbook of facts and statistics*.
- World Health Organization. (2022) *Primary care*. <https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/primary-care>
- World Health Organization. (2022). *Primary healthcare infographic 2*. <https://www.who.int/multi-media/details/primary-health-care-infographic-2>
- World Health Organization. (2022). *PHC is health and well-being*. <https://www.who.int/multi-media/details/phc-is-health-and-well-being>
- World Health Organization. (2023). *Primary healthcare*. <https://www.who.int/news-room/fact-sheets/detail/primary-health-care>

APPENDECIES

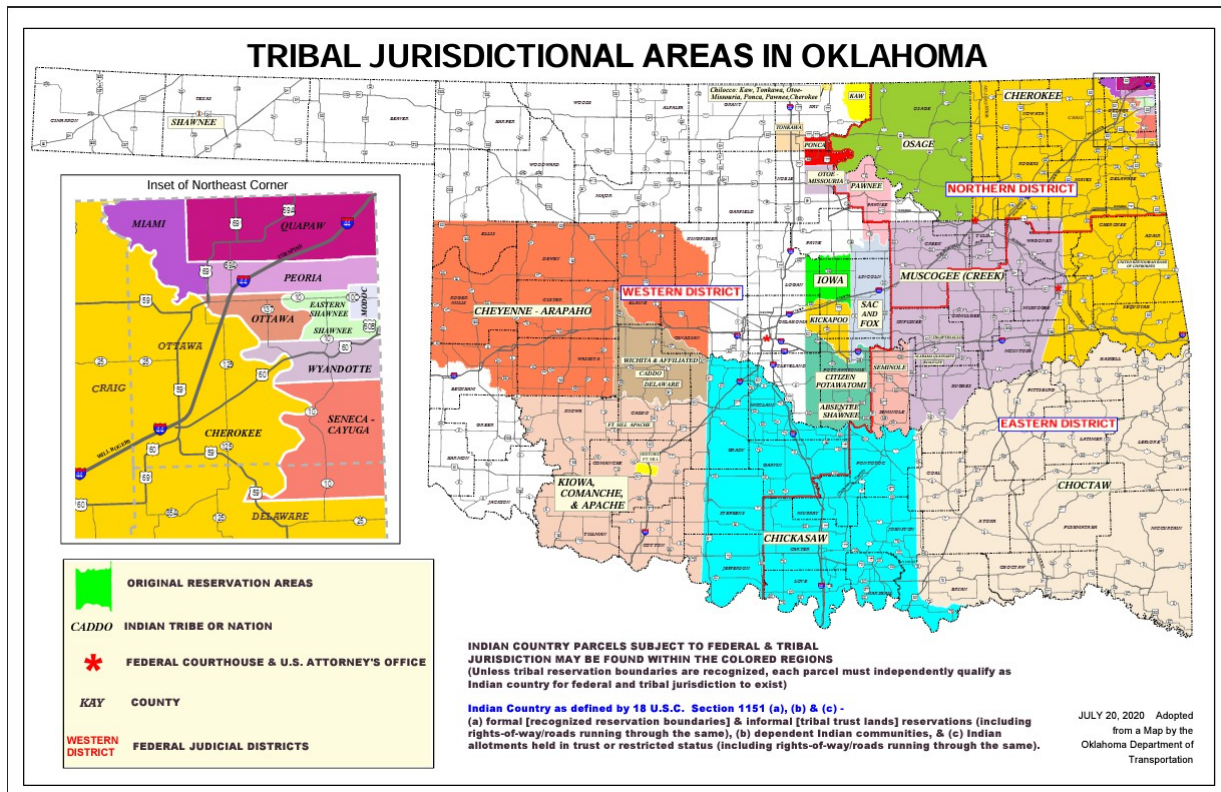
**APPENDIX A STATE-LEVEL CROSSWALK OF PARTICIPATION IN
HIGHLIGHTED PRIMARY HEALTHCARE IMPROVEMENT MODELS**

**APPENDIX A STATE-LEVEL CROSSWALK OF PARTICIPATION IN
HIGHLIGHTED PRIMARY HEALTHCARE IMPROVEMENT MODELS**

	Georgia	Oklahoma
Accountable Care Organizations	X	X
Accountable Health Communities	X	X
Beacon Community Program	-	X
Comprehensive Primary Care Initiative	-	X
Patient Centered Medical Home	X	X

APPENDIX B MAP OF TRIBAL GEOGRAPHIES FOR OKLAHOMA

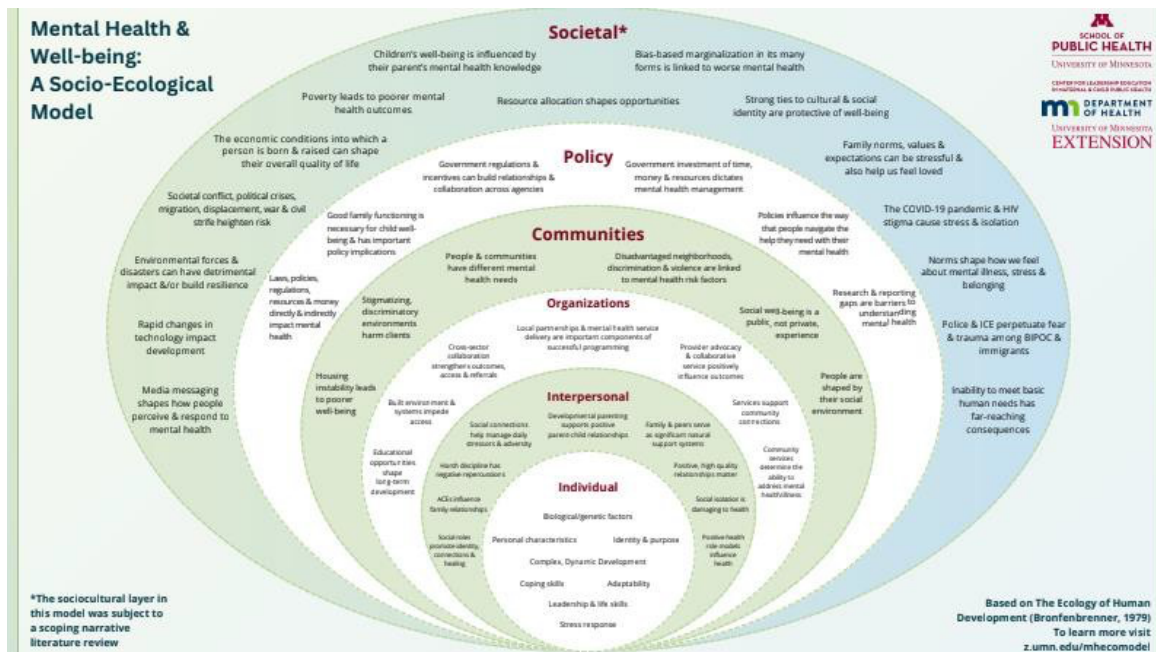
APPENDIX B MAP OF TRIBAL GEOGRAPHIES FOR OKLAHOMA



APPENDIX C MENTAL HEALTH & WELL-BEING MODEL

APPENDIX C MENTAL HEALTH & WELL-BEING MODEL

Mental Health & Well-Being Model designed by the Center for Leadership Education in Maternal & Child Public Health at the University of Minnesota School of Public Health (Erickson, Cermak, Michaels, Blake, Lynn, Greylord, & Benning, 2024).



APPENDIX D QUALITATIVE INTERVIEW QUESTION SET

APPENDIX D QUALITATIVE INTERVIEW QUESTION SET

Demographics:

State of Practice (Georgia/Oklahoma); County of Practice (Drop down list of all counties based on logic); Field of Practice (Drop down list of all types, including other field); Practice Site Type (Clinical, Behavioral, Social Services, Administrative, Research, Health Department/Public Health, other); Years of Practice; Male/Female, Participation in any of the following primary care improvement efforts (ACO, AHC, Beacon, CPC/CPC+, PCMH), choose all that apply,

Section 1: Individual Level

1. How confident are you in applying COPC principles (which will be listed in the survey) in your current practice? (1-5 scale)
 - a. List out each of the 5 and provide scale for each?
2. Has your training and skill development provided you enough preparation to address community health needs, if identified, during patient encounters? (Not at All, Very Little, Somewhat, Mostly, Completely)
3. Do you feel you have sufficient knowledge of the social drivers of health in the community you serve? (Yes/No)
4. How often do you pursue continuing education or professional development focused on community or population health improvement strategies? (Never, Rarely, Sometimes, Often, Always)
5. Do you know where to access data on local health needs, outcomes, and improvement plans? (Yes/No). If yes, where do you access this data? (Blank Field)

Section 2: Interpersonal Level

1. How often do you collaborate with colleagues, in your practice, to address local health challenges? (Never, Rarely, Sometimes, Often, Always)
2. How often do you engage with interdisciplinary teams (e.g., social workers, public health professionals) to address community needs? (Never, Rarely, Sometimes, Often, Always)
3. Do you feel supported by your colleagues in efforts to improve local health outcomes? (1-5 scale) (Never, Rarely, Sometimes, Often, Always)
4. Does your practice have established peer-support mechanisms to support social connections and manage adversity? (Yes/No) If yes, what is the focus area? (Blank field)
5. Have you ever initiated a community health improvement activity with your practice or in the community? (Yes/No)
 - a. If Yes, what was the focus of your efforts? (For example, peer support group)

Section 3: Organizational Level

1. Does your practice support cross-sector collaborative health initiatives? (Yes/No) If yes, describe your support.
2. How frequently do organizational barriers (e.g., bureaucracy, lack of resources) limit your ability to implement COPC-like elements in your practice (list out)? (Never, Rarely, Sometimes, Often, Always)

3. How adequate are the resources provided by your practice (e.g., funding, staff) for addressing identified community health needs for your patients? (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)
4. How adequate are the resources provided by your practice (e.g., funding, staff) for addressing identified social drivers of health needs for your patients? (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)
5. Does your organization offer opportunities for leadership or advocacy or support paid staff time for participation in community health initiatives? (Yes/No)

Section 4: Community Level

1. How would you rate your practice's level of community engagement beyond the practice context? (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)
2. How does your practice engage patients beyond a service-related encounter?
 - a. Provide multiple choice list (advisory committees, patient registries, peer support groups, awareness and education activities, virtual outreach, other)
3. How often does your practice/organization work with other community organizations to improve local health and social care outcomes? (Never, Rarely, Sometimes, Often, Always)
4. What are your practice's limitations to working beyond the context of your practice to engage in local community health improvement activities?
 - a. List of limitations, choose all that apply: workforce limitations, NEED TO BUILD OUT MORE)
5. To what extent do you believe local community stakeholders are ready to support COPC-focused projects in collaboration with your practice (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)
6. How often does your practice collect and use community health data, in addition to practice-level data, to inform care delivery? (Never, Rarely, Sometimes, Often, Always)

Section 5: Public Policy Level

1. Are local or state policies in your practice helpful in promoting health or social care improvement initiatives with some or all of the COPC elements? (Yes/No)
2. To what extent do policy barriers (e.g., funding, regulations) impact the implementation of COPC elements in your practice? List out all and provide scale. (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)
3. How often does you participate in advocacy efforts to influence local or state health policy? (Never, Rarely, Sometimes, Often, Always)
4. Do you believe existing health policies adequately address the needs of rural or Tribal communities in your area? (Yes/No)
5. Do you believe existing health funding adequately addresses the needs of rural or Tribal communities in your area? (Yes/No)
6. To what degree do you believe policy impacts the way patients in your practice navigate the healthcare system 1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)

Section 6: Societal Level

1. To what extent would broader societal factors (e.g., economic inequality, cultural norms) affect implementation of COPC projects in your community? (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)

2. Does your community face challenges like poverty or limited health literacy that impact the success of health initiatives? (Yes/No) If yes, what do you believe are the challenges most impacting these initiatives (blank field)
3. How often does your practice engage in public education or outreach activities to improve broader societal factors (implicit bias, political crises) in your community? (Never, Rarely, Sometimes, Often, Always)
4. To what degree do you believe societal-level factors like discrimination or historical trauma affect healthcare delivery in your community? (Yes/No) If yes, (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)
5. Does your practice experience cultural limitations when delivering services to diverse populations? (1-5 scale) (Never, Rarely, Sometimes, Often, Always)
6. To what extent do you believe resource allocation impacts your practice's ability to address societal factors impacting healthcare delivery? (1-5 scale) (Not at All, Very Little, Somewhat, Mostly, Completely)

APPENDIX E GROUNDED THEORY CODING DETAILS FOR GEORGIA-BASED INTERVIEWS

APPENDIX E GROUNDED THEORY CODING DETAILS FOR GEORGIA-BASED INTERVIEWS

Georgia Open Coding (Initial Concepts)

1. **Role Complexity:** Providers in Georgia frequently take on multiple roles, often blending clinical, administrative, and advocacy responsibilities due to workforce shortages and limited access to specialists.
2. **Training Needs:** Providers emphasized significant gaps in telemedicine utilization, trauma-informed care, and culturally competent communication strategies.
3. **Resource Constraints:** Funding limitations, lack of diagnostic tools, and inadequate telehealth infrastructure were widely reported.
4. **Collaborative Efforts:** Strong reliance on partnerships with local organizations, including schools and churches, to extend care and build trust.
5. **Trust Issues:** Persistent historical mistrust of healthcare institutions among rural and underserved communities complicates patient-provider relationships.
6. **Transportation Barriers:** Geographic isolation and limited public transportation options prevent patients from accessing care and community health resources.
7. **Health Disparities:** Chronic conditions, such as diabetes and hypertension, are exacerbated by food deserts, delayed care, and limited education on preventive health.
8. **Preventive Care Gaps:** Lack of focus on early intervention and screenings due to high patient volumes and funding challenges.
9. **Community Partnerships:** Collaboration with faith-based groups, local coalitions, and community health workers plays a pivotal role in outreach efforts.
10. **Policy Limitations:** Unreliable funding mechanisms and fragmented systems hinder consistent care delivery and program sustainability.

Georgia Axial Coding (Categories)

Category 1: Provider Challenges

- **Role Complexity:** Managing acute and chronic care while fulfilling administrative and advocacy roles.
- **Training Needs:** Critical need for education in telehealth, trauma-informed care, and cultural competence.
- **Resource Constraints:** Persistent lack of funding, diagnostic tools, and necessary infrastructure.

Category 2: Community Engagement

- **Collaborative Efforts:** Partnerships with grassroots organizations to expand reach.
- **Trust Issues:** Addressing historical and cultural mistrust through culturally informed strategies.
- **Community Partnerships:** Leveraging local institutions like schools, churches, and coalitions to engage underserved populations.

Category 3: Structural and Policy Barriers

- **Transportation Barriers:** Physical and logistical barriers that restrict access to care.

- **Policy Limitations:** Funding inconsistencies and bureaucratic inefficiencies in rural healthcare systems.
- **Health Disparities:** Prevalence of chronic diseases tied to systemic inequities, including food insecurity.

Category 4: Outcomes and Opportunities

- **Preventive Care Gaps:** Untapped potential for improving early detection and reducing chronic disease burden.
- **Health Disparities:** Opportunities to address social determinants like food access and education.
- **Trust Building:** Strategies to foster trust through consistent and culturally aligned initiatives.

Georgia Selective Coding (Central Themes)

Theme 1: Multi-Role Providers in Resource-Limited Settings

Providers in Georgia face unique challenges in balancing diverse responsibilities. Many act as "generalists" due to a lack of specialists, addressing both acute and chronic care while managing logistical and administrative barriers.

Theme 2: Specialized Training as a Priority

Interviewees consistently stressed the need for training in telemedicine, cultural humility, and trauma-informed care to improve patient outcomes and engagement.

Theme 3: Community Engagement as a Pathway to Trust

Partnerships with local organizations—schools, churches, and coalitions—are crucial for overcoming historical mistrust and improving access to care. Collaborations provide trusted platforms for health education and interventions.

Theme 4: Structural and Policy Barriers to Equitable Care

Transportation challenges, inconsistent funding, and fragmented systems are significant barriers to care delivery in Georgia. Addressing these systemic issues is vital for improving health equity.

APPENDIX F GROUNDED THEORY CODING DETAILS FOR OKLAHOMA-BASED INTERVIEWS

APPENDIX F GROUNDED THEORY CODING DETAILS FOR OKLAHOMA-BASED INTERVIEWS

Oklahoma Open Coding (Initial Concepts)

1. **Role Complexity:** Providers take on multiple roles due to limited specialists.
2. **Training Needs:** Gaps in telemedicine and rural emergency protocols.
3. **Resource Constraints:** Limited funding, diagnostic tools, and telemedicine.
4. **Collaborative Efforts:** Partnerships with community organizations.
5. **Trust Issues:** Historical mistrust within the community.
6. **Transportation Barriers:** Patients lack access to care due to logistical issues.
7. **Health Disparities:** Prevalence of chronic conditions tied to challenges such as food deserts and delayed care.
8. **Preventive Care Gaps:** Limited emphasis on early intervention and screenings.
9. **Community Partnerships:** Collaboration with schools, churches, and faith-based groups.
10. **Policy Limitations:** Inconsistent funding streams and lack of systemic support.

Axial Coding (Categories)

Category 1: Provider Challenges

- **Role Complexity:** Balancing chronic care, acute care, and advocacy.
- **Training Needs:** Need for telemedicine and emergency protocol education.
- **Resource Constraints:** Insufficient tools and infrastructure.

Category 2: Community Engagement

- **Collaborative Efforts:** Partnerships with local organizations.
- **Trust Issues:** Overcoming historical mistrust.
- **Community Partnerships:** Leveraging local assets for health education.

Category 3: Structural and Policy Barriers

- **Transportation Barriers:** Challenges in accessing care.
- **Policy Limitations:** Lack of consistent funding and systemic inefficiencies.
- **Health Disparities:** Chronic conditions linked to systemic inequities.

Category 4: Outcomes and Opportunities

- **Preventive Care Gaps:** Opportunities for early intervention.
- **Health Disparities:** Addressing food deserts and related challenges.
- **Trust Building:** Using community-based initiatives to foster relationships.

Selective Coding (Central Themes)

1. **Theme 1: Multi-Role Providers in Resource-Limited Settings**
 - a. Providers in rural areas must adapt to diverse responsibilities, managing chronic and acute care with limited tools and support.
2. **Theme 2: The Need for Specialized Training**
 - a. Telemedicine, emergency protocols, and culturally sensitive care are critical for enhancing provider effectiveness in rural contexts.
3. **Theme 3: Community Engagement as a Trust-Building Mechanism**
 - a. Partnerships with schools, churches, and local organizations play a pivotal role in overcoming historical mistrust and improving health outcomes.

4. **Theme 4: Systemic and Policy Barriers to Equity**
 - a. Transportation, funding inconsistencies, and systemic inequities perpetuate health disparities in rural populations.
5. **Theme 5: Prevention and Chronic Disease Management as Priorities**
 - a. Focus on chronic disease management and preventive care, addressing underlying causes like food deserts and lack of access to care.

APPENDIX G SOCIOECOLOGICAL FRAMEWORK GROUNDED THEORY CODING DETAILS

APPENDIX G SOCIOECOLOGICAL FRAMEWORK GROUNDED THEORY CODING DETAILS

SEM Open Coding (Initial Concepts)

1. **Structural Inequities:** Disparities in access to healthcare, education, and economic opportunities.
2. **Policy Gaps:** Insufficient policies to address rural health disparities, especially in mental healthcare.
3. **Transportation Barriers:** Lack of infrastructure affects accessibility to care and community resources.
4. **Cultural Stigma:** Persistent stigma surrounding mental health in rural and tribal communities.
5. **Funding Inconsistencies:** Sporadic funding for health initiatives leads to disruptions in service delivery.
6. **Community Engagement:** Limited efforts in fostering societal trust and participation in health programs.
7. **Economic Instability:** High levels of poverty and unemployment exacerbate mental health challenges.

SEM Axial Coding (Categories)

Category 1: Systemic Barriers

- **Structural Inequities:** Highlight disparities in healthcare and education systems.
- **Policy Gaps:** Point to a lack of targeted support for underserved populations.

Category 2: Logistical Challenges

- **Transportation Barriers:** Emphasize physical and logistical constraints in accessing care.
- **Funding Inconsistencies:** Stress the impact of unreliable funding on long-term health outcomes.

Category 3: Social and Cultural Influences

- **Cultural Stigma:** Focus on societal perceptions and biases against mental health interventions.
- **Community Engagement:** Address the role of trust and collective action in improving outcomes.

Category 4: Economic and Structural Constraints

- **Economic Instability:** Examine poverty and unemployment as underlying causes of poor mental health.

SEM Selective Coding (Themes)

1. Theme 1: Structural and Policy Barriers

- Systemic inequities and inadequate policies restrict the scalability and sustainability of COPC models in rural areas.

2. Theme 2: Accessibility and Logistics

- Logistical issues such as transportation and funding limitations impede access to services and program implementation.

3. Theme 3: Cultural and Social Trust

- Overcoming stigma and fostering community trust are critical for engaging rural and tribal populations in health and social care programs.

4. Theme 4: Economic Constraints

- Addressing the economic underpinnings, including generational poverty and unemployment, is essential for long-term societal well-being.

APPENDIX H GEORGIA DEMOGRAPHICS AND CODING FREQUENCIES

APPENDIX H GEORGIA DEMOGRAPHICS AND CODING FREQUENCIES

Georgia Demographics:

Category	Roles/Provider Types	Male	Female
Direct Care Providers	Family, Internal, Emergency Medicine, Pediatrics, OB/GYN, Psychology, Psychiatry, Nurse Practitioner, EMT, Community Health Worker	8	7
Health Systems Administrators	Nonprofit, State Agency	2	2
Population Health & Public Health Expert	Epidemiology, Public Health Analysis	1	2
Community Health Leaders	Coalition Leaders, Community Health Organizers	2	1

Georgia Barriers to Implementation

Category	Codes	Frequency
Resource Barriers	Limited funding, insufficient staff, limited infrastructure, resource constraints, fragmented care	High
Logistical Challenges	Transportation issues, geographic isolation, limited communication infrastructure, logistical barriers	High
Social Barriers	Mistrust of healthcare providers, stigma, cultural differences, historical trauma	High

Economic Barriers	Financial hardship, poverty, housing instability, limited access to healthy foods	Moderate
Policy Barriers	Funding inconsistencies, fragmented services, regulatory requirements	Moderate

Georgia Facilitators for Success in the Community

Category	Codes	Frequency
Capacity Building	Training (telemedicine, trauma-informed care, cultural humility), leadership development, continuing education, workforce development	High
Collaboration	Partnerships (schools, community organizations, faith-based groups), coalition building, stakeholder engagement	High
System Improvements	Infrastructure upgrades, telehealth expansion, stable funding mechanisms, preventive health programs	High
Cultural Strategies	Culturally tailored programs, bilingual health education	Moderate
Economic Solutions	Funding support, Medicaid Expansion, subsidies	Moderate

APPENDIX I OKLAHOMA DEMOGRAPHICS AND CODING FREQUENCIES

APPENDIX I OKLAHOMA DEMOGRAPHICS AND CODING FREQUENCIES

Oklahoma Demographics of Interviewees

Category	Roles/Provider Types	Male	Female
Direct Care Providers	Family, Internal, Emergency Medicine, OB/GYN, Pediatrics, Psychology	8	6
Health System Administrators	Non-profit, State Agency, Tribal	2	1
Population Health & Public Health Expert	Epidemiology	1	0
Community Health Leaders	Coalition Leader	4	3

Oklahoma Barriers to Implementation Frequencies

Category	Codes	Frequency
Resource Barriers	Limited funding, insufficient staff, limited infrastructure, resource constraints, fragmented care	High
Logistical Challenges	Transportation issues, long travel distances, lack of broadband access, logistical barriers	High
Social Barriers	Mistrust of healthcare providers, stigma, cultural mistrust, historical trauma	High

Economic Barriers	Financial hardship, poverty, housing instability, food insecurity	Moderate
Policy Barriers	Funding inconsistencies, jurisdictional conflicts, regulatory requirements	Moderate

Oklahoma Facilitators for Success in the Community Frequencies

Category	Codes	Frequency
Capacity Building	Training (telemedicine, culturally sensitive care), leadership development, continuing education	High
Collaboration	Partnerships (schools, faith-based groups, community health workers), coalition building, joint initiatives	High
System Improvements	Infrastructure development, telehealth expansion, funding stability, preventive care programs	Moderate
Cultural Strategies	Culturally tailored programs, bilingual health education, traditional practices integration	Moderate
Economic Solutions	Funding support, Medicaid expansion, subsidies	Moderate

APPENDIX J PARTNERSHIP AGREEMENT EXAMPLE

APPENDIX J PARTNERSHIP AGREEMENT EXAMPLE

Instructions: For local coalitions seeking to increase community engagement with underserved populations, problem-solve together, increase collaboration, and use resources effectively, this sample partnership agreement helps multiple partners agree on roles and responsibilities of removing barriers to implement a parent advisory committee (PAC). *(updated 4/26/2023)*

**Sample Partnership Agreement for
_____ Coalition
to include a Parent Advisory Committee (Virtual or In-Person)
in _____ County, _____ (State).**

I. PURPOSE

A “**Parent Advisory Committee**” comprises of 4–10 caregivers with lived experience and previous barriers (e.g., lived in subsidized housing; parents with kids who had chronic absences, suspensions, or expulsions; families who had frequent visits to urgent care/ER and/or 911 calls; families who had a DHS referral; families with a child that received a Handle With Care referral from school partner; families who have recovered from substance use, accessed predatory lenders, etc.).

A Parent Advisory Committee (PAC) brings family voice and experiences to state and local agencies/coalitions to enhance how these agencies/coalitions support families.

II. _____ (PARTNER AGENCY) AGREES TO ONE OR MORE OF THE FOLLOWING:

- Provide a safe location for a PAC meeting one-two hours a month (greater frequency increases critical social connectedness). The location should have a large room where 4-10 families can eat a meal together and where the caregivers meet after the meal.
- Provide childcare during meetings, ideally with trauma-informed childcare specialists.
- Provide attendees transportation to the location, if needed.
- Provide a family meal before each PAC meeting.
- Provide a stipend to all PAC attendees for each group meeting.
- Provide technology needed for virtual PAC meeting; see Appendix A.
- Coordinate with two trained co-facilitators who are trusted by the community, such as case managers, home visitors, peer recovery support specialists, family support providers, community health workers, patient navigators, social workers, family advocates, parent partners, parents as teachers, community attorneys, et al.
- Communicate monthly the date and time for each PAC meeting.
- Create ongoing leadership growth opportunities: connect with mentors and additional resources as requested.
- Provide ongoing training for co-facilitators and PAC members
- Identify flex funds to address emergency needs of PAC participants to continue building trust and support their journeys to stability (housing/utilities support, boxes of food, activities for the kids, tech support, etc.).
- Write collaborative grants for sustainability.

III. _____(PARTNER AGENCY) AGREES TO ONE OR MORE OF THE FOLLOWING:

- Provide a safe location for a PAC meeting one-two hours a month (greater frequency increases critical social connectedness). The location should have a large room where 4-10 families can eat a meal together and where the caregivers meet after the meal.
- Provide childcare during meetings, ideally with trauma-informed childcare specialists.
- Provide attendees transportation to the location, if needed.
- Provide a family meal before each PAC meeting.
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- Provide ongoing training for co-facilitators and PAC members
- Identify flex funds to address emergency needs of PAC participants to continue building trust and support their journeys to stability (housing/utilities support, boxes of food, activities for the kids, tech support, etc.).
- Write collaborative grants for sustainability.

IV. _____(PARTNER AGENCY) AGREES TO ONE OR MORE OF THE FOLLOWING:

- Provide a safe location for a PAC meeting one-two hours a month (greater frequency increases critical social connectedness). The location should have a large room where 4-10 families can eat a meal together and where the caregivers meet after the meal.
- Provide childcare during meetings, ideally with trauma-informed childcare specialists.
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- Provide ongoing training for co-facilitators and PAC members
- Identify flex funds to address emergency needs of PAC participants to continue building trust and support their journeys to stability (housing/utilities support, boxes of food, activities for the kids, tech support, etc.).
- Write collaborative grants for sustainability.

V. SUSTAINABILITY

Partner agencies agree to write collaborative grants to address the following gaps:

- 1) _____
- 2) _____
- 3) _____

VI. TERMINATION, ADDITIONAL AGENCIES, AND LIABILITY

- A) Any agency has the right to cancel this Partnership Agreement with 30 days' written notice to the other parties. Should any agency terminate this Agreement, then the Agreement shall remain in effect as to all other agencies.
- B) Each party shall be responsible for the actions committed by that party and its agents. No party assumes any liability for any actions committed by any other party. However, each party to this Agreement agrees to cooperate fully with the other party in the defense of claims, pursuant to these provisions.

This Partnership Agreement shall remain in effect until terminated as provided herein.

Effective this _____ day of _____ (month), _____ (year).

_____ **Partner Agency**

APPENDIX K COMMUNITY PARTNERSHIP PROGRAM DETAILS

APPENDIX K COMMUNITY PARTNERSHIP PROGRAM DETAILS

Community Partnership Program

Supporting the delivery of focused health and social care funding to communities



Community Partnership Program

Funding health and social care projects across Oklahoma

In 2012 the Public Health Institute created the Community Partnership Program as an innovative pathway to support the delivery of funding to entities supporting health care improvement locally. Researchers, state-agencies, academics, philanthropic funders, and other health care improvement agents partner with PHIO and its stakeholders to design opportunities for communities to participate in health improvement activities while receiving Incentive Funds for their efforts. Incentive Funds are in turn re-invested into the community to address health disparities and inequities and remove barriers for local participation.

Funding communities through diverse, innovative pathways

- CATCH-UP Oklahoma Testing
- IMPACT Grants
- Healthy Hearts for Oklahoma
- CATCH-UP Oklahoma Vaccines
- Oklahoma State Department of Health: Vaccine Hesitancy and Education
- Rural Health Innovation Challenge
- Handle with Care Oklahoma
- Rural Substance Use & Misuse Smartphone Study

PHIO has distributed over \$1.3million in funds since 2012

Community Partnership Program funding in action



The infusion of Incentive Funds through the Community Partnership Program allows communities to respond to health and social care challenges at the local level. Incentive Funds are designed to address funding gaps spark local innovation, and remove barriers to participation.

Examples of efforts funded through the CPP: 5k/Fun Runs, pocket parks, health communication campaigns, food security outreach, opioid response, home-based visiting, community health workers, transportation, youth development, and resource fairs

APPENDIX K (CONTINUED) COMMUNITY PARTNERSHIP PROGRAM DETAILS



Texas County Health Improvement Organization

The Texas County Health Improvement Organization (TxCHIO) established in 1996 supports the improvement of health and social care outcomes in Oklahoma's Panhandle. Working through a diverse, multi-sector approach the TxCHIO has utilized Incentive Funds through the CPP for the following:

- Implementation of the Unite Us platform to increase mental health referrals
- Annual hosting of the Children's Health Fair, Elder Fair, Student Health Fairs, and the Total Body Health Fair
- Delivery of Holiday Household Baskets and International Student Welcome Baskets
- Hiring of staff to guide and sustain the TxCHIO

Delaware County Community Partnership

The Delaware County Community Partnership (DCCP) has long participated in projects funded through the CPP. Reinvesting in their community, DCCP has supported activities like:

- Educator mini-grants
- Red Ribbon Week outreach
- First-responder, community engagement
- Mental Health awareness for youth
- Substance abuse education and training
- Physical inactivity reduction
- Healthy workplace initiatives

Handle with Care Oklahoma

A collaborative response model designed for law enforcement agencies, schools and school districts, mental health providers, and community partners to utilize for children experiencing a traumatic event. Handle with Care Oklahoma participation in the CPP has allowed for:

- Development of Handle with Care Oklahoma website
- Expansion of Handle with Care trainings state-wide
- Hiring of staff to support expansion efforts
- Creation of targeted media campaigns to support utilization

Parent Advisory Councils

A highly effective method of ensuring meaningful client/family engagement, developing leadership skills, and supporting a program's success. Parent Advisory Councils state-wide access funds through the CPP to:

- reduce barriers to participation through compensation, meals, and childcare services while participating in health improvement activities

Tabitha Baptist Church

Building a community of called and committed believers who celebrate the presence of God through Worship, Discipleship, Stewardship, and Fellowship. Tabitha Baptist Church is committed to the health of its congregation and its community. Tabitha Baptist Church works through the CPP to match community need with health improvement activities. Participation in funded project opportunities has allowed for:

- Building of a "pocket-park" on church grounds to enhance community engagement
- COVID-19 relief and response to vulnerable populations

Pathways to a Healthier You

Pathways to a Healthier You works to maximize resources and encourage safe and healthy living in Stephens and Jefferson Counties in Southwest Oklahoma. As Certified County Health Improvement Organization, Pathways, implements health improvement strategies through utilizing CPP Incentive Funds for their local efforts. Funds support:

- Self Healing Community implementation
- Trauma and Early Intervention activities

**APPENDIX L COMMUNITY SUBJECT MATTER EXPERT QUALITY
IMPROVEMENT FEEDBACK TOOLS AND DATA COLLECTION VARIABLES**

APPENDIX L COMMUNITY SUBJECT MATTER EXPERT QUALITY

IMPROVEMENT FEEDBACK TOOLS AND DATA COLLECTION VARIABLES

1) Did the (EVENT) increase awareness of removing barriers to (INTERVENTION SPECIFIC)

- a. ☐ Family Meal
- b. ☐ Childcare
- c. ☐ Stipend
- d. ☐ transportation or virtual technology assistance
- e. ☐ All of the above

2) Did the (EVENT) increase your awareness of:

- a. ☐ Handle with Care
- b. ☐ Peer Support Groups
- c. ☐ Parent Advisory Committees
- d. ☐ Family Resource Centers
- e. ☐ All of the above

3) Are you interested in learning more about any of these interagency efforts?

- a. ☐ Handle with Care
- b. ☐ Peer Support Groups
- c. ☐ Parent Advisory Committees
- d. ☐ Family Resource Centers
- e. ☐ All of the above

4) Did this meeting increase your likelihood of promoting and/or implementing these in your community?

- a. ☐ Handle with Care
- b. ☐ Peer Support Groups

- c. ☐ Parent Advisory Committees
- d. ☐ Family Resource Center
- e. ☐ All of the above

5) Does your (ORGANIZATION) need funding to implement health or social care activities?

- 1. ☐ has funding
- 2. ☐ has limited funding and interested in partnering to address costs
- 3. ☐ does not have funding

6) What does your community need to advance family voice and increase coordination of services?

Additional Variables for Consideration in Collecting Quality Improvement Feedback:

Name of Regional Coordinator who provided you this form:

What county or counties do you live in or work in currently?

Name

Address

Email

Phone

Do you prefer text, phone call, or email?

Race/ethnicity:

We value and welcome ALL diverse members of our community

Has your family experienced any of the following:

Date of meeting/activity that you attended (month, day and year):

Name of activity (meeting, conference, training, etc.):

Length of activity/meeting (including prep time, debriefing after meeting, and this feedback form):

Did you participate "on the clock" or "off the clock"?

Which of the following strategies were discussed in the meeting to address Covid-19 response and recovery?

Building an equitable pipeline for supporting and empowering family leaders/community champions.

Key take-aways from event/meeting:

What went well?

What needs improvement?

Any barriers or solutions identified?

Would you be willing to share feedback with other community leaders to improve Oklahoma systems?

We value your time and want to remove barriers for your participation.

What barriers need to be removed?

Total mileage:

Is this approach family-centered? (we aim to prioritize and champion engaging parents/caregivers as partners and leaders as a central strategy to achieving positive, equitable outcomes for all children and their families)

Is this equity-driven approach helpful to you and your community? (we aim to make it a priority to understand individuals'/families' experiences and break down barriers created by systemic, institutional, and individual racism)

Is this approach collaborative? (we aim to develop strong partnerships with parents/caregivers and parent-led organizations to support families to build their power, develop their leadership, and advocate for their children and community)

Is this approach transparent? (we aim to ensure parents/caregivers/individuals have access to information that allows them to fully participate and influence agency and system-level change processes)

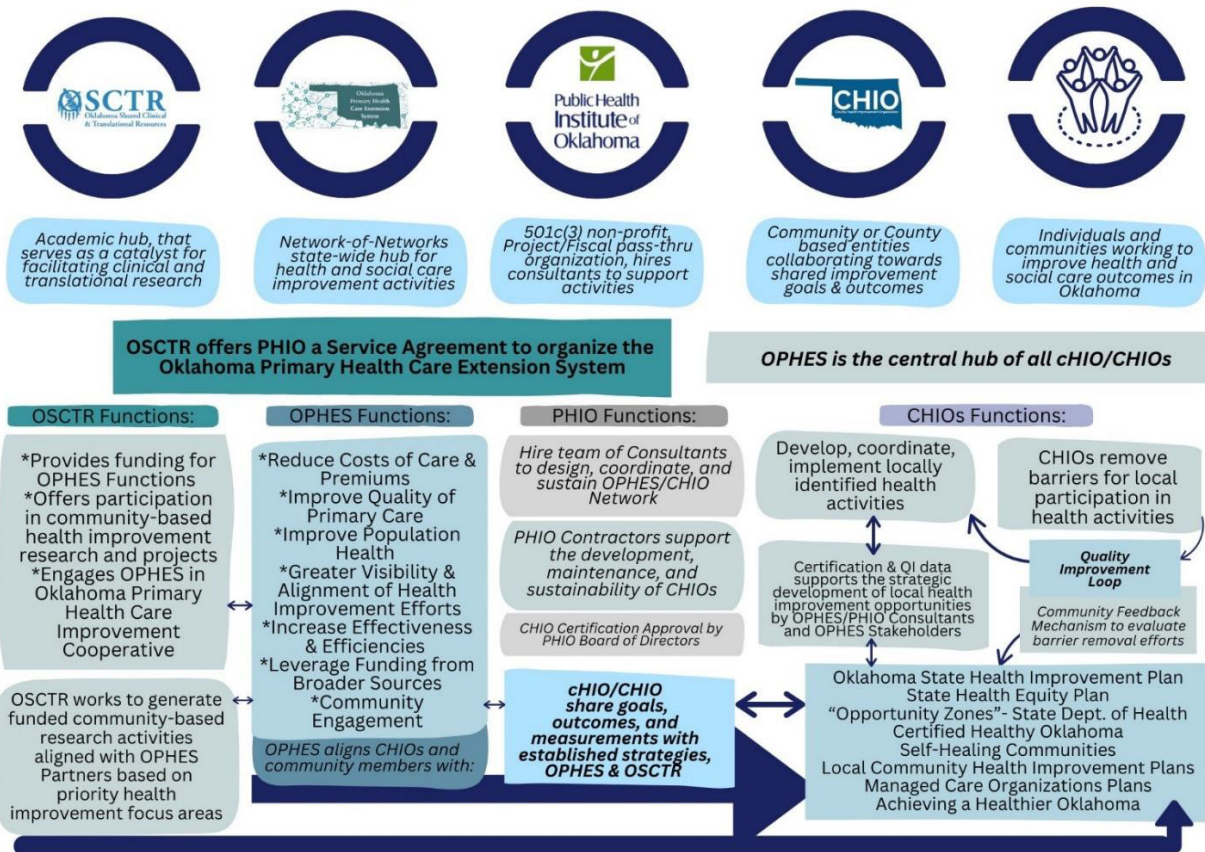
Thank you for your time and valuable feedback.

**APPENDIX M OKLAHOMA PRIMARY HEALTH CARE EXTENSION SYSTEM
PROCESS MODEL**

APPENDIX M OKLAHOMA PRIMARY HEALTH CARE EXTENSION SYSTEM

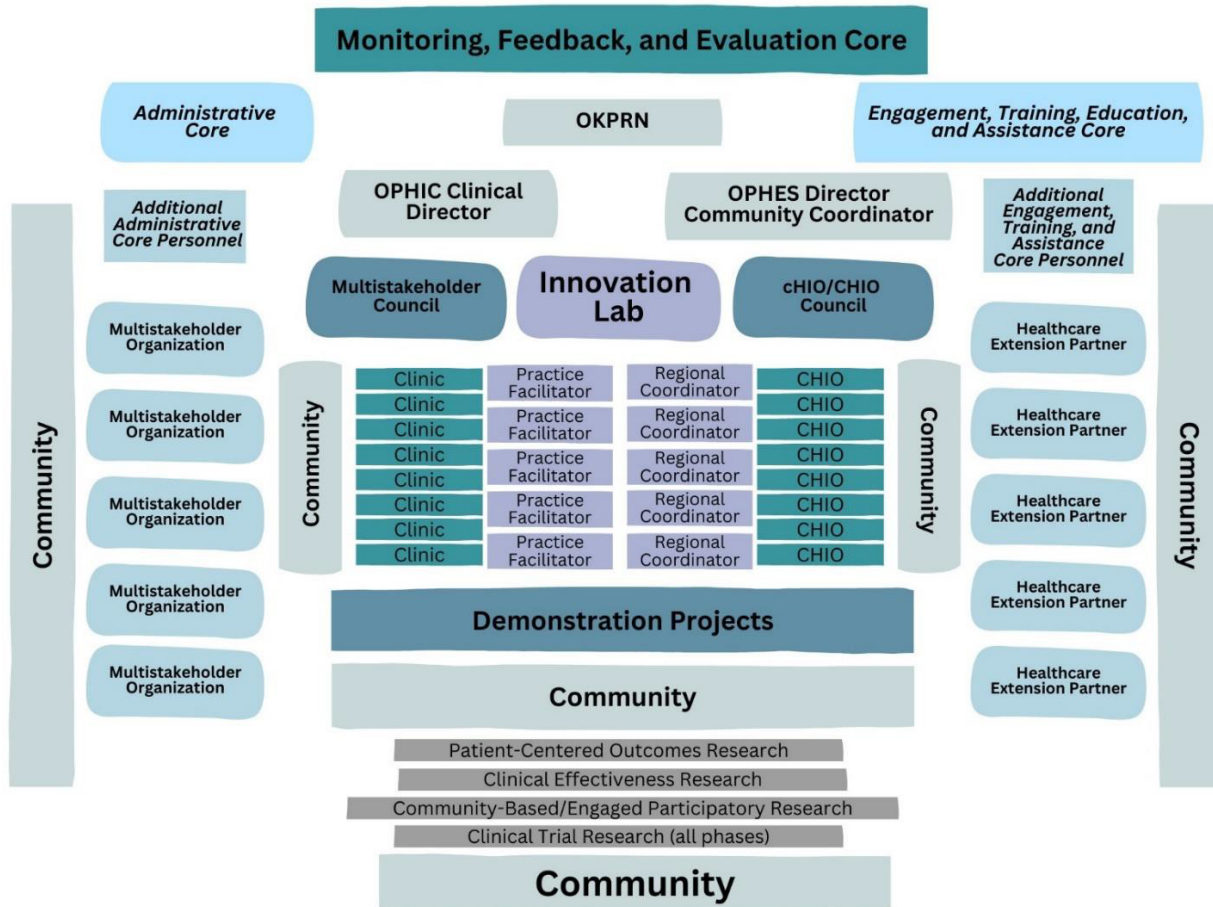
PROCESS MODEL

A Networked System for Health Improvement



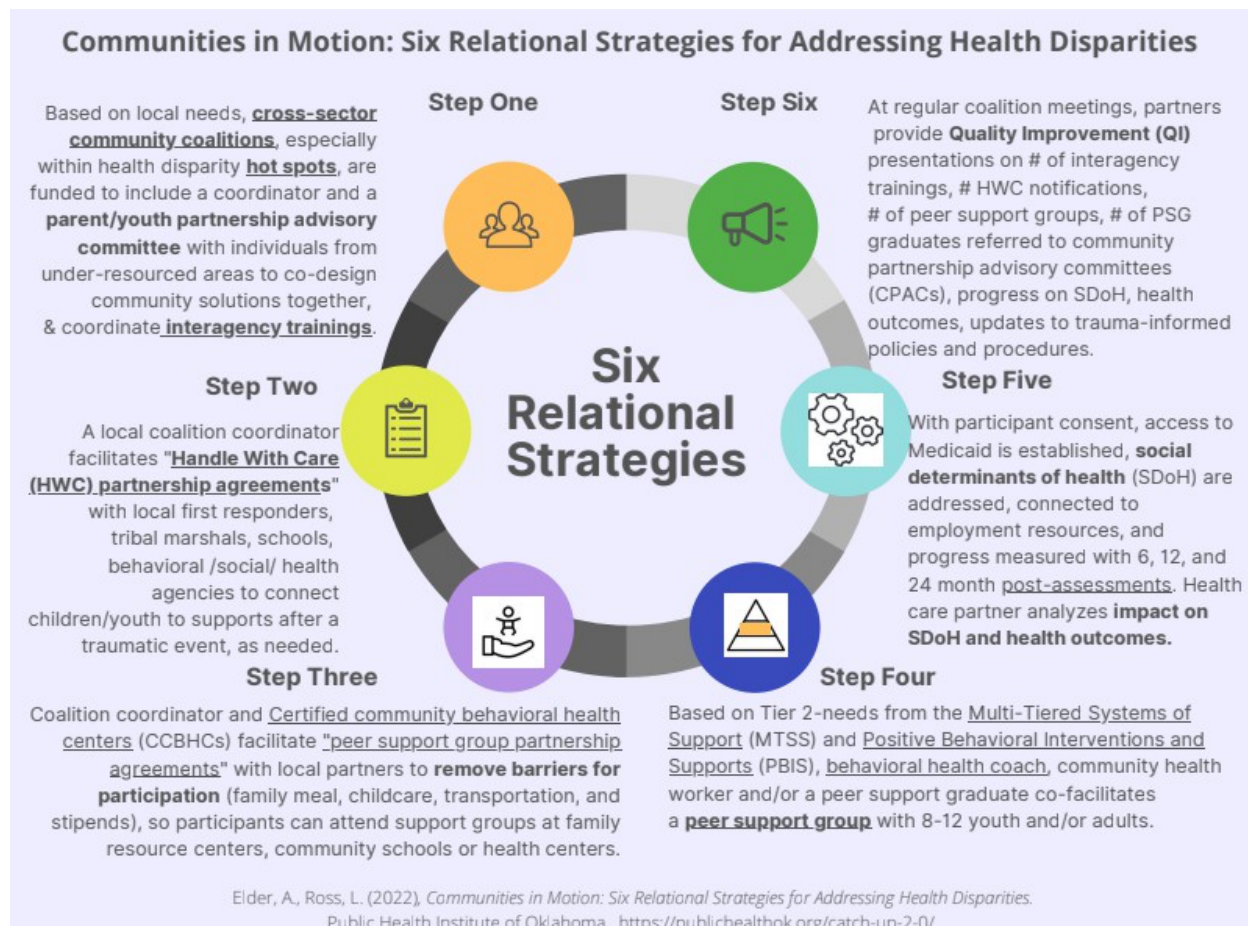
**APPENDIX N OKLAHOMA PRIMARY HEALTH CARE EXTENSION SYSTEM
PROCESS MODEL AND MONITORING, FEEDBACK, AND EVALUATION CORE
ALIGNMENT**

APPENDIX N OKLAHOMA PRIMARY HEALTH CARE EXTENSION SYSTEM PROCESS MODEL AND MONITORING, FEEDBACK, AND EVALUATION CORE ALIGNMENT



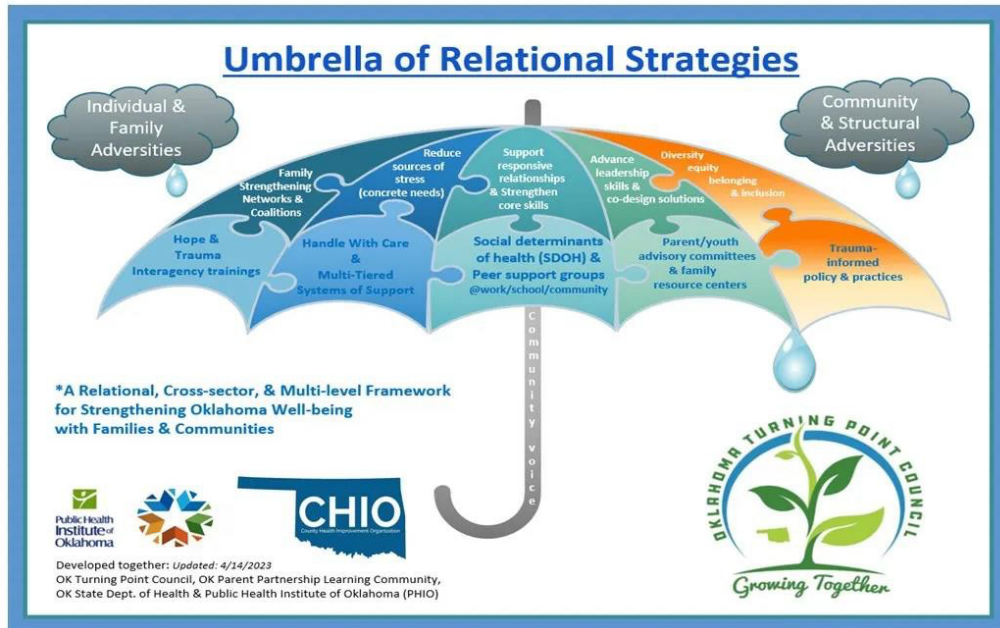
**APPENDIX O COMMUNITIES IN MOTION: SIX RELATIONAL STRATEGIES FOR
ADDRESSING HEALTH DISPARITIES**

APPENDIX O COMMUNITIES IN MOTION: SIX RELATIONAL STRATEGIES FOR ADDRESSING HEALTH DISPARITIES



APPENDIX P UMBRELLA OF RELATIONAL STRATEGIES

APPENDIX P UMBRELLA OF RELATIONAL STRATEGIES



APPENDIX Q INSTITUTIONAL REVIEW BOARD APPROVAL

APPENDIX Q INSTITUTIONAL REVIEW BOARD APPROVAL



Tuesday, November 5, 2024

Dr. S. Laura Ross
School of Medicine

RE: "Barrier to Implementing Community Oriented Primary Care: A Comparative Study of Oklahoma and Georgia" (H24-10D25)

Dear Ms. Ross:

On behalf of Mercer University's Institutional Review Board for Human Subjects Research, your application submitted on 04/05/2024 for the above referenced protocol was reviewed in accordance with the 2018 Revised Federal Regulations [46.104](#) under category (i.e.s), 2 and is exempt from further review, *in final time*.

Any changes to the above protocol MUST be resubmitted for IRB review to ensure that risks to the subject have not changed.

Item(s) Approved (05/05/2024):
PhD Research Project for Dissertation

NOTE: Although this study has been reviewed and exempt under rule 20.8 revision of the code of federal regulations, the IRB may ask that you submit a final report should the study continue beyond one year.

We at the IRB and the Office of Research Compliance are dedicated to providing the best service to our research community. As one of our investigators, we value your feedback and ask that you please take a moment to complete our [Satisfaction Survey](#) and help us to improve the quality of our service.

It has been a pleasure working with you and we wish you much success with your project! If you need any further assistance, please feel free to contact our office.

Respectfully,

Ava Chambliss-Richardson

Ava Chambliss-Richardson, Ph.D.
Director of Research Compliance
Member
Institutional Review Board

"Mercer University has adopted and agrees to conduct its clinical research studies in accordance with the International Conference on Harmonization's (ICH) Guidelines for Good Clinical Practice."

Mercer University IRB & Office of Research Compliance
Phone: 418-301-4111 | Email: [ORC@Mercer.edu](#) | Fax: 478-301-2329
1501 Mercer University Drive, Macon, Georgia 31207-0001

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