Leveraging Science to Advance Health Equity: A Regional Health Policy Research Center's Approach

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Advancing health equity and reducing disparities through evidence-based policy research requires the expertise, insights, and active participation of various policy stakeholders – particularly those representing vulnerable populations who may be disproportionately affected by such policies. Unfortunately, there are few sustainable settings for these diverse stakeholders to convene, share their knowledge, develop and execute research in a collaborative fashion, and effectively translate evidence-based findings. The development of a health policy-focused center supports the collaborative structure needed to present a unified, multi-disciplinary approach toward informing health policy. The Transdisciplinary Collaborative Center for Health Disparities Research (TCC) at Morehouse School of Medicine (U54MD008173) was funded in 2012 by the National Institute on Minority Health and Health Disparities (NIMHD) as an innovative approach for conducting health policy research and disseminating evidence-based science to diverse stakeholders. This article provides an overview of the research projects, pilot project programs, infrastructure cores, communications, and strategic dissemination activities supported by the TCC. *Ethn Dis*. 2019;29(Suppl 2):323-328; doi:10.18865/ed.29.S2.323

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Introduction

Equity in health implies that ideally everyone should have a fair opportunity to attain their full health potential; and more pragmatically, that no one should be disadvantaged from achieving this potential. Addressing multi-faceted health needs of ethnically and culturally diverse individuals in the United States is a complex issue that requires inventive strategies to reduce a myriad of risk factors and buttress protective factors to promote greater well-being among individuals, families, and communities. With growing diversity relative to various ethnicities and nationalities and with significant changes in the constellation of multiple risk factors that can influence health outcomes, it is imperative that we delineate strategic efforts that encourage better access to quality comprehensive primary care, focused community-based programs and interventions, multi-disciplinary clinical and translational research methodologies,

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multi-sectoral health education prevention approaches, and health policy initiatives that may improve individuals' longevity and quality of life.

The strategic design, implementation, and evaluation of policy is crucial to establishing the conditions necessary to advance health equity and ultimately reduce health disparities. In a CDC review of the 10 greatest public health achievements of the 20th century, each achievement was influenced by an evidence-informed policy change such as fluoridation of drinking water, seatbelt and motor vehicle safety laws, and local/state tobacco control and cigarette smoke exposure policies.[1] Policy informed by evidence-based science has effectively moved the needle in addressing health disparities. For example, in 1999, as a result of extensive research demonstrating the effectiveness of folic acid supplementation in reducing the occurrence of neuro tube deficits, Congress passed and enacted legislation requiring the fortification of meal and flour with folic acid. Dramatic declines in neuro tube defects (especially spinal bifida) among newborns have been observed since the implementation of the legislation.[2] Several researchers have stressed the need for more evidence-based sci-

ence to inform sound policy decisions and critically evaluate the impact of established health policies.[3,4]

Advancing health equity and reducing disparities through evidence-based policy change requires the expertise, insights, and active participation of various policy stakeholders – particularly those representing vulnerable populations who may be disproportionately affected by such policies. Unfortunately, there are few

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sustainable settings for these diverse stakeholders to convene, share their knowledge, develop and execute research in a collaborative fashion, and effectively translate evidence-based findings. The development of a health policy-focused center supports the collaborative structure needed to present a unified, multi-disciplinary approach toward informing health policy from a research-based lens.

The Transdisciplinary Collaborative Center for Health Disparities Re-

search (TCC) at Morehouse School of Medicine (U54MD008173) was funded in 2012 by the National Institute on Minority Health and Health Disparities (NIMHD) as an innovative approach for conducting health policy research and disseminating evidence-based science to diverse stakeholders. The Morehouse School of Medicine TCC was founded on the principle that collaboration is the most effective method of accomplishing change. Therefore, the TCC operates as a "center without walls" comprising researchers, academicians, clinicians, health practitioners, and policy experts housed within several research centers and institutes at Morehouse School of Medicine (Figure 1).

The base of the TCC's research occurs in Health and Human Services (HHS) Region 4 (Southeast US). HHS Region 4 is the largest of all HHS regions and includes the eight southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. This region is often referred to as the "belts" of our nation – infant mortality belt, stroke belt, obesity belt, diabetes belt, poverty belt, cancer belt, among others. This region of the country most often has the greatest disparities in chronic disease mortality and morbidity.[5] An additional key geographic area of the TCC's work includes partners that are members of the Centers for Disease Control and Prevention (CDC) Racial and Ethnic Health Disparities Actions Institute (REHDAI) coalition. These additional states include Maryland, Minnesota, Missouri, Oregon, and Texas.

RESEARCH SUBPROJECTS

Morehouse School of Medicine TCC aims to conduct ethical, methodologically sound, evidence-based health policy research to: 1) elucidate the impact of policies on vulnerable populations; and 2) evaluate the feasibility and effectiveness of policy-driven innovations designed to achieve equity and reduce health disparities among persistently vulnerable populations. To that end, TCC has funded five research subprojects since its inception. These diverse research projects involve critical policy analyses and original data collection facilitated by academic and community investigators at multiple institutions (Table 1).

FOSTERING DISCOVERY VIA A PILOT PROJECT PROGRAM

The TCC Pilot Project Program was created to cultivate community-academic partnerships that focus on critically exploring and addressing health policy issues. The goal of the pilot project program is to fully engage current TCC partners and identify additional partners to expand the reach and scope of TCC's health policy research portfolio. Pilot Project Program grantees were identified through a competitive request for applications (RFA) for three award mechanisms: Pilot Project Implementation ($50,000), Developmental Seed Awards ($10,000), and Dissemination Awards ($7,500). Additionally, pilot project grantees are provided robust capacity-building opportunities such as training webinars, workshops and
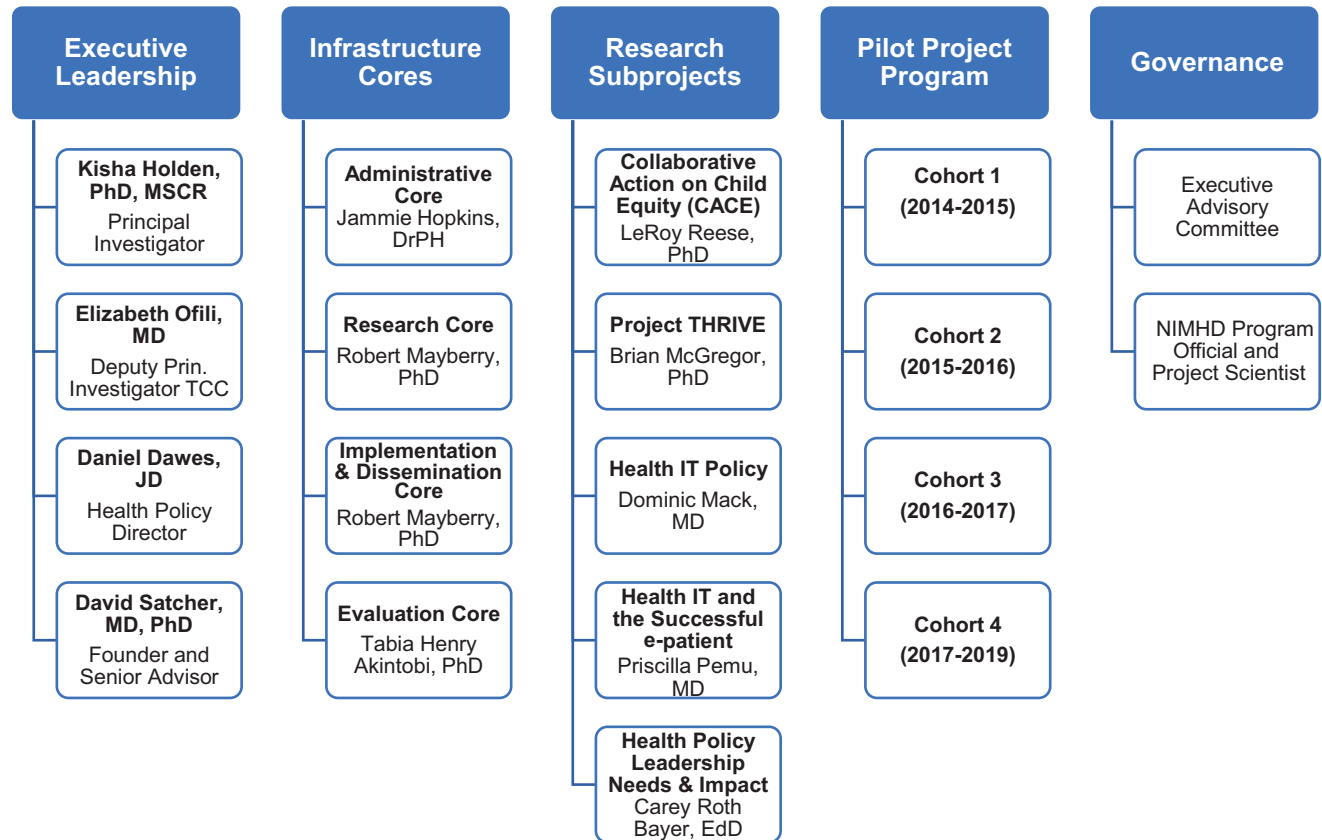
Executive Leadership	Infrastructure Cores	Research Subprojects	Pilot Project Program	Governance
Kisha Holden, PhD, MSCR Principal Investigator	**Administrative Core** Jammie Hopkins, DrPH	**Collaborative Action on Child Equity (CACE)** LeRoy Reese, PhD	**Cohort 1 (2014-2015)**	Executive Advisory Committee
Elizabeth Ofili, MD Deputy Prin. Investigator TCC	**Research Core** Robert Mayberry, PhD	**Project THRIVE** Brian McGregor, PhD	**Cohort 2 (2015-2016)**	NIMHD Program Official and Project Scientist
Daniel Dawes, JD Health Policy Director	**Implementation & Dissemination Core** Robert Mayberry, PhD	**Health IT Policy** Dominic Mack, MD	**Cohort 3 (2016-2017)**	
David Satcher, MD, PhD Founder and Senior Advisor	**Evaluation Core** Tabia Henry Akintobi, PhD	**Health IT and the Successful e-patient** Priscilla Pemu, MD	**Cohort 4 (2017-2019)**	
		Health Policy Leadership Needs & Impact Carey Roth Bayer, EdD		

Figure 1. Transdisciplinary Collaborative Center organizational structure

shared resources to expand their health policy research skill set and maximize the impact of their funded projects. Pilot project grantees are empowered to translate their research findings through the dissemination of scholarly papers, issue briefs and white papers, conference presentations, and other high-impact products. Grantees are also strategically positioned to leverage preliminary data gleaned from their funded projects to secure additional funding to expand the scope of their burgeoning research activities. To date the TCC Pilot Project Program has awarded $1.5 million to 21 academic and community-based grantees. Pilot projects research aims have

been diverse, covering critical topics such as quality parenting and child psychosocial development; healthy eating and exercise in school settings; cancer literacy and screening; kidney transplantation; heart failure; LGBT health and care access; breastfeeding; HIV prevention; maternal care coordination; asthma; Black men's health; and care coordination for individuals with developmental disabilities.

TCC INFRASTRUCTURE CORES

TCC supports all research activities using a multidisciplinary sup-

portive core infrastructure and shared resources. The TCC cores (Administrative, Research, Implementation & Dissemination, and Evaluation) work collaboratively to ensure all TCC research, outreach, and evaluation activities are methodologically rigorous, aligned with the unifying theme of the TCC, and are sufficiently supported to achieve maximum impact:

The **Administrative Core** supervises and provides direction, leadership, and fiscal support to the individual subprojects and cores of the overall TCC. The Administrative Core maintains crosscutting communication

Table 1. TCC research subprojects

Title of project	Policy focus area	Research partners
Collaborative Action for Child Equity (CACE)	Child Health and Parental Engagement: Assessing how quality parenting leadership and the involvement of parents in child health policy matters may impact child mental/psychosocial development and parental stress outcomes	MSM, CACE Coalition[a]
Toward Health Recovery and Integrated Vital Engagement (THRIVE)	Mental and Behavioral Health: Impact of integration of culturally centered mental and behavioral health integrated health model on minority patients at risk for co-occurring depression and chronic disease morbidities.	MSM, Grady Health Systems
Leveraging Health IT Policy to Reduce Health Disparities	Health Information Technology: Examining the barriers faced by and benefits to health care providers serving rural and/or minority communities in adopting and yielding meaningful use from health information technologies.	MSM, GA-HITEC, Georgia Health Connect, The Health Initiative (GA), HELEN
Leveraging Health IT to Create the Successful Minority e-Patient	Health Information Technology: Examining the impact of a culturally centered consumer health information technology and care coordination intervention (e-healthystrides) on diabetes-related health outcomes among ethnic minority patients in an accountable care organization network setting.	MSM, Morehouse Choice ACO-ES, Sutherland Group
Health Policy Leadership Needs & Impact	Health Policy Leadership: Assessing the impact of health policy leadership training on the career trajectory of transdisciplinary health professionals (eg, physicians, public health practitioners, attorneys, psychologists, etc).	MSM

MSM, Morehouse School of Medicine; GA-HITEC, Georgia Health Information Technology Extension Center; HELEN, Health Equity Leadership and Exchange Network; Morehouse Choice ACO-ES, Morehouse Choice Accountable Care Organization and Education System
a. CACE Coalition is collaborative network of community and local government research partners representing the 13 states where CACE quality parenting program implementation and local policy analyses occurred.

channels to ensure vital information is disseminated across the entire TCC and all deliverables are met with the highest degree of quality and fidelity.

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The **Research Core** guides the principal investigators in study conceptualization and design, sampling, statistical analyses planning and methodologies to generate evidence to support policy decisions. The Research Core also provides technical support and consultation in data collection, database development, bio-statistical analysis, mentored research training, and assistance with developing independently funded research and/or demonstration projects to sustain policy research efforts.

The **Evaluation Core** assesses and monitors TCC processes and outcomes by sharing technology and resources with TCC partners to collaboratively design, implement, evaluate, and disseminate innovative transdisciplinary health policy research programs. It provides technical assistance and guidance in evaluation planning and implementation of subprojects, assesses the health policy innovations of pilot projects, and monitors the implementation and dissemination of a regional model for health policy research supported and guided by local and national leaders in both public health and policy. The Evaluation Core also develops outcome measures for the TCC.

The **Implementation and Dissemination Core** identifies and organizes the subprojects' activities in order to promote the utilization of each project's research findings and the widest dissemination of knowledge translation. The core operates in two directions: 1) toward the

project activities in order to enhance the potential of the projects to reduce or eliminate health disparities; and 2) toward the notification of the research findings to the academic, community, health and human service settings within the target region.

The cores are integrally connected in their efforts to support the evidence-based rigor of each research project in assessing its specific outcomes (research) as well as their collective contributions to the overarching goals of the TCC (evaluation). They also collaborate to inform the selection and management of meritorious pilot projects, procure and sustain supportive resources, and facilitate technical assistance across all stages of the research lifecycle. Their conjoint efforts ensure sound assessment and integral to documenting the strengths, opportunities and unique health policy lens unique to the Morehouse School of Medicine TCC model.

KNOWLEDGE TRANSLATION AND STRATEGIC DISSEMINATION

Morehouse School of Medicine TCC is also committed to strategically translating evidence-based research for diverse populations and disseminating findings to a broad audience. To advance the science, TCC strives to make timely, meaningful contributions to the academic literature through peer-reviewed publica-

tions and other scholarly works. To advance practice and inform policy stakeholders, TCC supports the development of evidence-based issue briefs, white papers and other grey literature, summary documents, and innovative informational resources (eg, infographics, multimedia presentations, etc.). Additionally, TCC supports academic and public discourse surrounding key health policy issues by presenting scholarly work at conferences and symposia, making contributions through social media (ie, Twitter, health policy blogs), disseminating content electronically (email, website), and facilitating regional health policy forums.

MILESTONES AND FUTURE DIRECTIONS

The Morehouse School of Medicine TCC demonstrates how an equity-driven minority serving academic institution may successfully unify a diverse collaborative network of multisector research stakeholders to conduct meritorious research specifically designed to inform policy and address health disparities. To date, TCC has supported collaborative relationships with more than 80 partners in 17 states across the United States. Some research findings have already been published.[6-12] The articles published in this supplement add to this body of knowledge. A comprehensive TCC outcomes and impact evaluation is currently underway and will be published upon its completion. The results of TCC research will be used to inform policy stake-

holders and enrich the scientific evidence base for years to come.

CONFLICT OF INTEREST

No conflicts of interest to report.

AUTHOR CONTRIBUTIONS

Research concept and design: Holden, Hopkins, Belton, Butty, Tabor, Satcher; Acquisition of data: Hopkins, Belton, Butty, Satcher; Data analysis and interpretation: Hopkins, Tabor; Manuscript draft: Holden, Hopkins, Belton, Butty; Acquisition of funding: Satcher; Administrative: Holden, Hopkins, Belton, Butty, Tabor, Satcher; Supervision: Holden, Hopkins, Satcher

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