Healthcare Modernization Listening Tour Findings and Considerations

In Partnership Between:

Tennessee State Government & NAVIGANT

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Section 1 Executive Summary

Under direction from Governor Lee to develop a comprehensive plan to improve access to healthcare for Tennesseans, the Commissioner of the Tennessee Department of Finance and Administration, Stuart McWhorter, held four Listening Tour sessions across Tennessee focused on critical healthcare topics, including chronic conditions, rural health, price transparency, and innovation.

> *"We will work with patients, providers, and payers to establish Tennessee as a world-class healthcare market for our people using transparency and competition."*
>
> *- Governor Bill Lee, State of the State Address*

Figure 1 below summarizes the identified themes from the Listening Tour and policy options for consideration. This figure also shows potential alignment across the policy options for consideration, since implementation of a particular program or strategy may impact multiple areas. As such, joint stakeholder collaboration will be critical for success.

Figure 1: Summary of Identified Listening Tour Themes and Related Potential Policy Options

Theme & Policy Options for Consideration	Theme				
	Theme 1 – "Transportation"	Theme 2 – "Technology to Support Chronic Care"	Theme 3 – "Access in Rural Areas"	Theme 4 – "Social Determinants of Health"	Theme 5 – "Transparency in Healthcare"
Theme 1 – Transportation is a significant barrier to care.					
Evaluate public and private options to increase access		✓	✓	✓	
Provide more services at home		✓	✓	✓	
Engage all State agency partners in improving access to healthcare services			✓	✓	
Theme 2 – Technology, including telehealth, can be a component of the solution to address access issues and a tool for chronic care management, including in rural areas of the State.					
Assess infrastructure to support telehealth			✓		
Leverage telehealth	✓		✓		
Leverage telemonitoring	✓		✓		
Use telementoring solutions	✓		✓		

Theme & Policy Options for Consideration	Theme				
	Theme 1 – "Transportation"	Theme 2 – "Technology to Support Chronic Care"	Theme 3 – "Access in Rural Areas"	Theme 4 – "Social Determinants of Health"	Theme 5 – "Transparency in Healthcare"
Theme 3 – There are significant healthcare access barriers in rural communities, including the lack of providers.					
Expand healthcare workforce development programs		✓		✓	
Expand capacity of the existing healthcare workforce		✓		✓	
Theme 4 – Social determinants of health will be important to address.					
Align state, private, and public entities	✓		✓		
Promote awareness of and action on social determinants of health and comprehensive care	✓		✓		✓
Theme 5 – Greater transparency in healthcare may improve patient outcomes and experiences.					
Evaluate policy solutions to address surprise billing			✓		
Evaluate solutions to support healthcare purchasing				✓	
Educate Tennesseans on insurance concepts				✓	

In addition, Tennessee can consider county- and community-specific characteristics in its implementation approach. In many cases, communities struggle with multiple healthcare and social determinant challenges simultaneously, such as low provider availability, low rates of vehicle ownership, high rates of adult smoking, and limited access to exercise opportunities.

"One size fits all" approaches that fail to account for these unique community circumstances, such as implementing a ride-share program in a county with low vehicle ownership, may not be feasible programs or strategies for these communities. Additional barriers, including geography and economic stability, could hinder a program or strategy's success.

In this report we present for each theme from the Listening Tour:

1. A summary of the identified theme from the Listening Tour
2. A brief summary of the national and Tennessee landscape
3. Potential options for consideration to address the theme

Section 2 Introduction

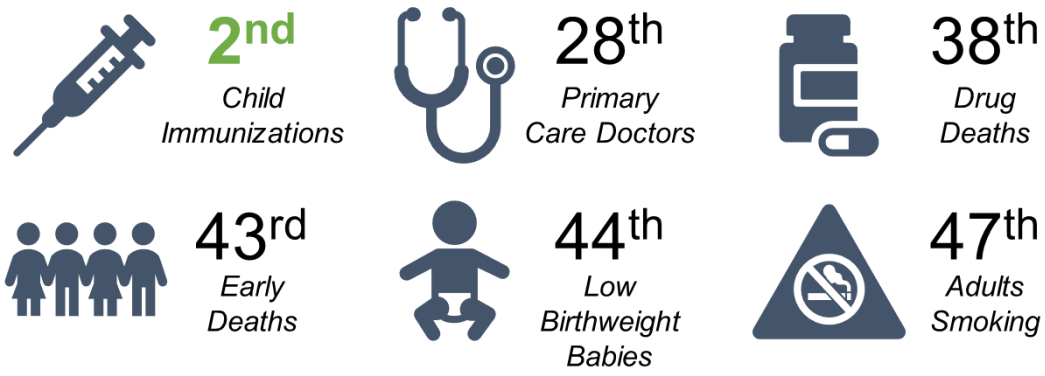
Goals of Tennessee Healthcare Modernization

On March 4, 2019, Governor Lee delivered the State of the State Address and shared a goal for Tennesseans to have affordable access to high-quality healthcare. Tennessee ranks 42nd in the nation in overall state health rankings[1], and has significant room for improvement on a number of health measures in comparison to other states.

The State's goal is to understand the root cause of the issues preventing Tennessee from being a healthier, and therefore more prosperous State.

> *"…every Tennessean should have access to high-quality healthcare they can afford. This is an ambitious goal that no state has accomplished, and Tennessee will not accomplish it overnight. We will work with patients, providers, and payers to establish Tennessee as a world-class healthcare market for our people using transparency and competition."*
>
> *- Governor Bill Lee, State of the State Address*

Figure 2: Significant Room for Improvement for Tennessee on Key Health Indicators[2]



To start the State down a path to high-quality and modernized healthcare, the Governor directed the Commissioner of the Tennessee Department of Finance and Administration, Stuart McWhorter, to work with patients, providers, and payers to prioritize critical short- and long-term strategies to make Tennessee a "world-class" healthcare market. With this in mind, Commissioner McWhorter and other agency Commissioners held four Listening Tour sessions across Tennessee that discussed various topics, including chronic conditions, rural health, transparency, and innovation. The participating Commissioners included:

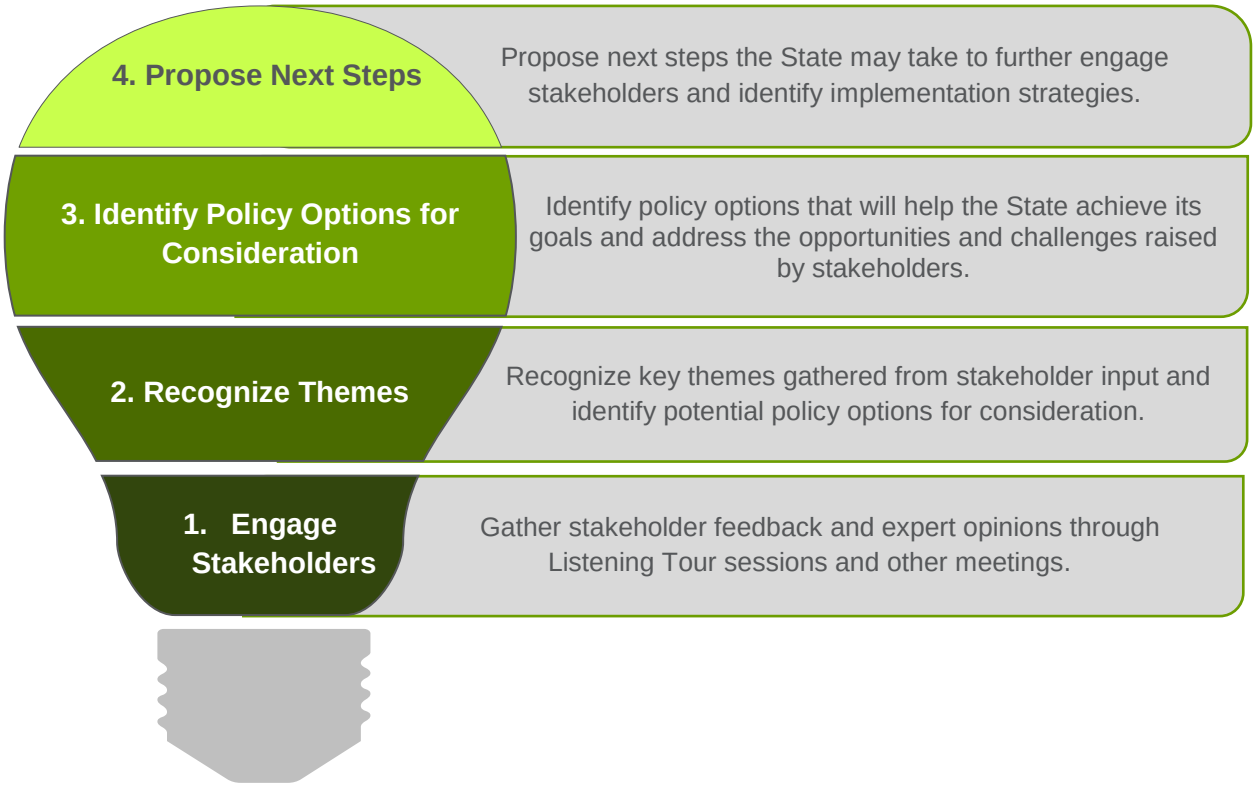
- Commissioner Stuart McWhorter, Department of Finance and Administration
- Commissioner Danielle Barnes, Department of Human Services
- Deputy Commissioner Carter Lawrence, Department of Commerce and Insurance
- Commissioner Jennifer Nichols, Department of Children's Services

- Commissioner Dr. Lisa Piercey, Department of Health
- Director Gabe Roberts, TennCare
- Commissioner Bob Rolfe, Department of Economic and Community Development
- Commissioner Brad Turner, Department of Intellectual and Developmental Disabilities
- Commissioner Marie Williams, Department of Mental Health and Substance Abuse Services

The Listening Tour was a first step to having candid conversations with Tennesseans who are the closest to healthcare's most complex issues.

Purpose of the Listening Tour Findings and Considerations

Stemming from the Governor's mission, the key goals of the Listening Tour Findings and Considerations include:



Overview of Stakeholder Engagement Efforts

In July and August 2019, Commissioner McWhorter hosted four Listening Tour sessions with more than 200 attendees across the State. Each session consisted of three panels tailored to different stakeholders: patients, providers, and payers.

Figure 3: Listening Tour Sessions Held Across Tennessee

Date	Host	City	Time
July 17, 2019	Cleveland State University	Cleveland	10:15 am to 3:00 pm
July 24, 2019	Austin Peay State University	Clarksville	10:15 am to 3:00 pm
July 31, 2019	University of Tennessee Health Science Center	Memphis	10:15 am to 3:00 pm
August 12, 2019	Lipscomb University	Nashville	10:15 am to 3:00 pm

In addition, the State hosted approximately 50 one-on-one or small group meetings with stakeholders to collect in-depth feedback and perspective on opportunities to improve healthcare in Tennessee.

Section 3 Key Themes from Stakeholder Feedback and Related Potential Policy Options

Based on the information and feedback gathered through the Listening Tour and one-on-one meetings with patients, providers, and payers, we identified five themes from the Listening Tour that the State may consider addressing in its healthcare modernization plan:

- Transportation is a significant barrier to care.
- Technology, including telehealth, can be a component of the solution to address access issues and a tool for chronic care management, including in rural areas of the State.

> *"[in regard to crisis services] If you are in Memphis and there is a bed open in Chattanooga, how do you get there? We don't have a way to get a person who has just overdosed into services."*
>
> - *Association Representative*

- There are significant healthcare access barriers in rural communities, including the lack of providers.
- Social determinants of health will be important to address.
- Greater transparency in healthcare may improve patient outcomes and experiences.

This report presents each theme, the national and Tennessee-specific landscape regarding the theme, and potential policy options for consideration. The policy options should *not* be considered exhaustive and are intended to start a dialogue between the Governor's Office, relevant State agencies, and any potential implementation partners.

In addition, we have identified examples of relevant initiatives from the Federal government, other states, and within Tennessee. This report was developed as a review and examination of the Listening Tour and does not necessarily reflect an exhaustive list of existing State resources.

Theme 1: Transportation is a significant barrier to care.

The lack of reliable and affordable transportation has been well established as a barrier to accessing health services, and impacts self-management and health decision-making for individuals with chronic health conditions.[3] Inadequate transportation can also lead to costly hospitalizations. By improving access to reliable and affordable transportation for Tennesseans with complex health needs or those living in rural areas, the State can increase access to health services and potentially reduce health costs.

Transportation was a recurring theme across all Listening Tour sessions. Listening Tour panelists and attendees cited concerns about the impact that the lack of transportation has on the health of patients. For example:

- Patients, providers, and payers have been faced with transportation challenges, including access, long wait times, lack of accountability among transportation vendors, grievances, and patient dissatisfaction.
- The lack of transportation in rural areas hinders hospital discharge planning and timely discharge efforts, which increases the length of stay for patients and costs.
- Substandard transportation causes difficulty for patients to access available care and resources (e.g., a patient cannot travel to a follow-up appointment and, as a result, is readmitted).

During the Listening Tour, the Anti-Kickback Statute[a] was cited as preventing hospitals from arranging transportation to other facilities as it may be viewed as an inducement. However, there are circumstances that allow safe harbor for hospitals and other selected providers that seek to provide transportation to patients, provided that they meet the requirements under 42 CFR 1001.952(bb).

The Listening Tour also suggested potential strategies, such as establishing public-private partnerships with ride-share companies (e.g., Lyft, Uber) to further serve patients, and partnering with relevant state agencies, with the goals of adding flexibility, reliability, and availability to the healthcare delivery system.

[a] The Anti-Kickback Statute provides criminal penalties for individuals or entities that knowingly and willfully offer, pay, solicit, or receive remuneration in order to induce or reward the referral of business reimbursable under Federal healthcare programs.

Policy Landscape – Transportation Policies and Programs

National

Transportation is a focus for states, healthcare providers, hospitals, and private companies:

> ***Putting Strategies into Practice***
>
> One panelist provided an example of working with the local transit authority to add a bus stop in Memphis so pregnant women could attend obstetrical appointments, which reduced the infant mortality rate.

- **States:** States such as Arizona and Florida have implemented programs relating to transportation provider partnerships for non-emergency medical transportation (NEMT) services. These partnerships are gaining traction through business cooperation rather than state legislation. Despite the trend of using ride-sharing companies as a transportation option, there is limited data to demonstrate their effectiveness and impact on health outcomes.[4] With regard to Medicaid, these initiatives have only been implemented in 2019, so it is too early to determine the long-term effectiveness of these programs.
- **Hospitals:** The American Hospital Association is advocating that hospitals are in an ideal position to initiate changes in transportation given their role in the community and their robust community relationships. Hospitals can begin this process by reviewing community health needs assessments and integrating transportation into their own strategic plans. Subsequently, hospitals can partner with community organizations and other stakeholders to provide direct transportation services. The American Hospital Association cites several case studies on hospitals and health systems and their interventions to successfully reduce transportation barriers in their communities.[5]
- **Private Companies:** Private ride-sharing companies such as Uber and Lyft are also contracting directly with state Medicaid programs and private payers serving Medicare and Medicaid enrollees. Lyft has already partnered with several healthcare organizations, such as the Blue Cross Blue Shield Institute and LogistiCare, to bring NEMT to certain Medicare Advantage plans.[6] Uber partnered with MedStar Health in the Washington D.C. area and Hackensack University Medical Center in New Jersey.[7]

  Ford Motor Company is also entering the space, with its GoRide program. The program was initially designed to serve five skilled nursing facilities in Dearborn, Michigan, but within a year, it expanded to serve multiple hospitals in the region. GoRide is currently expanding into Ohio, and plans to expand in several major cities in Florida by the end of 2019 and four other states in 2020.[8]

  Several new technology start-ups, such as RoundTrip, Circulation Inc., and Kaizen Health, are also trying to meet the transportation needs of seniors, low-income patients, and other patients with substance abuse conditions, cancer, and renal disease. Each start-up has created an online portal that complies with federal regulations to make it easy to book and track patient rides.[9]

Mobile crisis programs were also mentioned during the Listening Tour as a strategy that may reduce the number of incarcerated children and children becoming wards of the State. This mirrors the success that New Jersey has experienced, eliminating the need for psychiatric residential treatment facilities (PRTFs) and greatly reducing foster care placements in New Jersey. Mobile crisis units help address transportation issues because the intervention takes place at home. System of Care grants are available to provide mobile crisis services and additional wrap around services.

Tennessee

In Tennessee, the Tennessee Department of Transportation (TDOT) works to promote public transportation by providing both financial and technical assistance to transit agencies and transit projects. Seventeen areas of the State created Coordinated Public Transit – Human Services Transportation Plans that identify the transportation needs of seniors and individuals with disabilities in their area. Each of these Transportation Plans is available on TDOT's website and provide an overview of transportation options for the area. [10]

Finally, Tennessee's Medicaid program, TennCare, covers NEMT for its enrollees. NEMT provides transportation for Medicaid enrollees to access non-emergency medical services such as follow-up doctor appointments.

Access to Transportation – National and Tennessee Data

Access to transportation plays a significant role in the ability for individuals to access healthcare services. Based on publicly available data on travel time and the location of hospitals, we find that a lack of access to transportation has the greatest impact on rural communities.

National

At the national level, many rural and urban residents report that access to good doctors and hospitals is a major problem:[11]

- Rural Americans: 23 percent
- Suburban Americans: 9 percent
- Urban Americans: 18 percent

In late 2018, another Pew Research Center survey identified the average time and distance to the nearest hospital by type of area, as shown in Figure 4.

Figure 4: National Average Time and Distance to the Nearest Hospital for Americans[12]

Type of Area	Average Travel Time	Average Distance
Rural	17.0 minutes	10.5 miles
Suburban	11.9 minutes	5.6 miles
Urban	10.4 minutes	4.4 miles

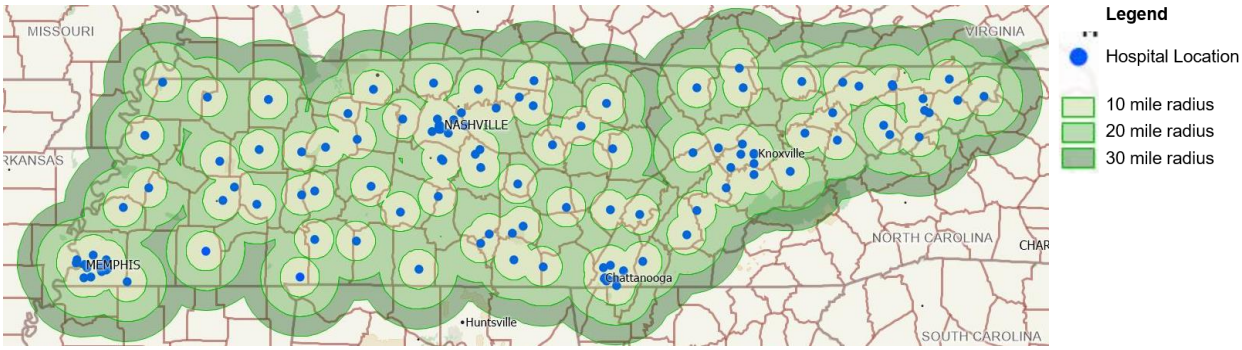
A 2019 study conducted by the University of Kentucky found the mean transport time to a hospital in rural zip codes increased from 14.2 minutes before the hospital closure to 25.1 minutes after the closure, a 76 percent increase. The time increase is greater for patients in rural zip codes over 64 years old. The mean time for these senior citizens increased from 13.9 minutes before hospital closure to 27.6 minutes, nearly doubling the transit time to the hospital.[13]

There is a direct relationship between distance to a hospital and patient mortality in cases of emergency. According to an observational study in the *Emergency Medicine Journal*, "…increased journey distance to [the] hospital appears to be associated with increased risk of mortality… a [six mile] increase in straight-line distance is associated with a one percent absolute increase in mortality."[14] From a national perspective, this association points to an increased risk to rural residents in need of emergency care.

Tennessee

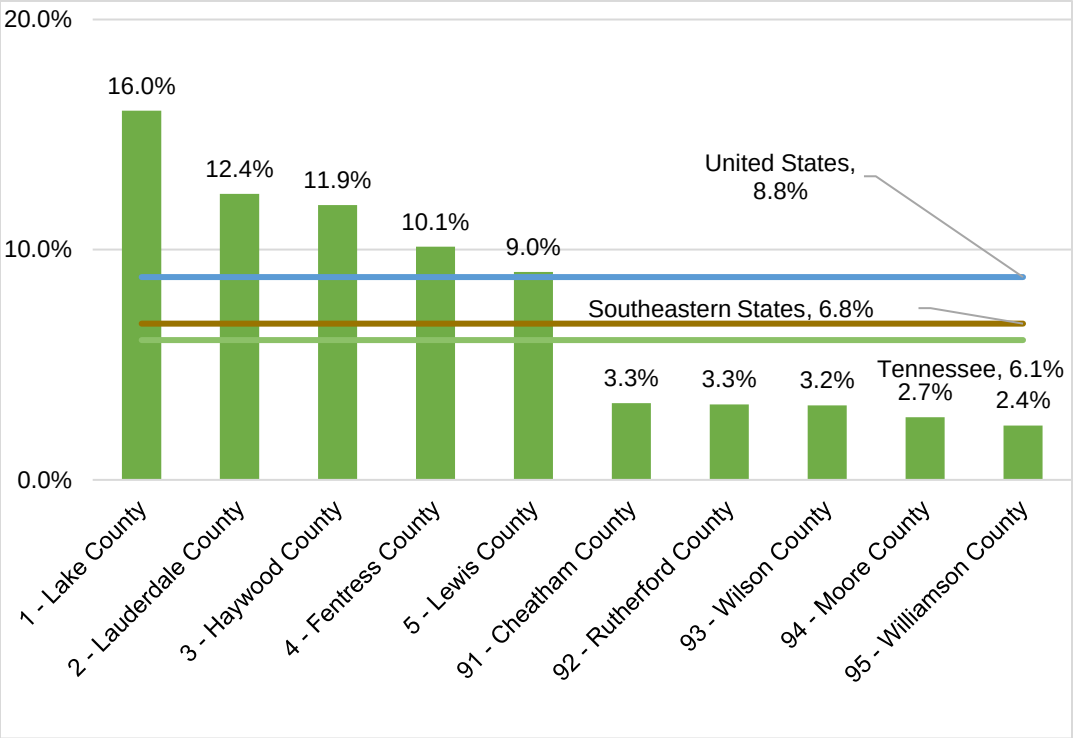
In Tennessee, many residents live farther than 10 miles from the nearest hospital. Nearly all Tennesseans live within 30 miles of a hospital. In Figure 5 below, all Tennessee acute hospitals are represented by a blue dot. This figure shows the distance to the nearest acute care facility within 10, 20, and 30 miles.

Figure 5: Tennessee Acute Care Facility Location as of 2017[15]



Vehicle ownership rates by household help identify Tennessee counties where residents may have difficulty accessing healthcare services. In Tennessee, 6.1 percent of households do not have a vehicle. However, there are counties with significantly higher and lower proportions of households with vehicles. In Figure 6, we show the five counties with the highest and lowest vehicle ownership rates. Counties with the lowest rates of vehicle ownership are predominantly rural – such as Lake County, where 16 percent of households do not own a car. This transportation gap underscores the need for community-specific solutions when addressing access to healthcare. For example, ride-sharing options may not be feasible in communities where residents do not own cars.

Figure 6: County Rankings by Percent of Population with No Vehicle Available in Tennessee, 2017[b, 16]



Potential Policy Options Related to Theme #1

A lack of transportation services can be addressed multiple ways depending on the desired objective and outcome. To address transportation issues, the State does not necessarily need to provide more transportation services itself but rather, allow and support an environment where consumers can access healthcare services at the right time and place with the most appropriate healthcare professional. In Figure 7, we identify three potential policy options for consideration to improve transportation services in the State.

Figure 7: Potential Policy Options to Address Access to Transportation

Policy Option	Rationale for Policy Option
1. *Evaluate public and private options to increase access to transportation services for high need individuals in high need communities*	Increasing access to reliable and affordable transportation can eliminate barriers to health services and enable individuals to make healthy life choices, leading to healthier populations and a reduction in healthcare spending.

[b] Southeastern States are defined as Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, and Tennessee

Policy Option	Rationale for Policy Option
	Public options include increasing the number of bus routes or rerouting public transportation services, so they have stops near health access points, grocery stores, and parks. Private options include partnerships with ride-share and cab companies to provide transportation services for primary care visits, grocery shopping, and recreational events.
2. *Address lack of transportation access by providing more services at home*	Providing health services and delivering healthy foods directly to patients in their homes can improve population health, increase access to healthcare services and healthy food options, and reduce healthcare spending.
3. *Engage all State agency partners in improving access to healthcare services*	Other state agencies have knowledge of current transportation projects and are already working on improving access to healthcare services. Their insight will be valuable when developing potential strategies and coordinating with them will create efficiencies.

Examples of State and Federal Initiatives

Figure 8 below details a sample of current state and Federal initiatives related to transportation. This table is not an exhaustive list of current initiatives.

Figure 8: Examples of State and Federal Initiatives

Examples of State and Federal Initiatives[c]
• ***Tennessee:*** Tennessee Carriers Inc., which brokers NEMT for TennCare members statewide, launched a one-year pilot program with Lyft in August 2019 to address transportation shortages in Shelby County and reduce the burden on the network of conventional transport providers.[17] • ***Tennessee:*** In February 2019, Mental Health Cooperative opened a new facility that houses a crisis walk-in center, a crisis stabilization unit, crisis respite, and will serve as the headquarters for Davidson County's mobile crisis response team.[18] This facility is open 24/7 and is available at no cost to adults and children.[19]
• ***Arizona:*** The Arizona Health Care Cost Containment System announced in May 2019 that it would allow Medicaid recipients to use their benefits to pay for Lyft rides relating to medical appointments. Uber is also applying to become a transport provider.[20]
• ***Delaware:*** The Delaware Division of Substance Abuse and Mental Health offers a crisis intervention service that covers the entire state, is available 24/7, and is for adults 18 years or older. The locations are through crisis intervention service centers, community mental health centers, recovery response centers, and emergency rooms.[21]
• ***Florida:*** Effective July 1, 2019, Florida authorized certain transportation network companies like Lyft and Uber to provide NEMT services for Medicaid recipients under specific circumstances. It passed unanimously in both legislative chambers.[22]

[c] This report was developed as a review and examination of the Listening Tour and does not necessarily reflect an exhaustive list of existing State resources.

Examples of State and Federal Initiatives[c]
• ***Indiana, Kentucky, and Ohio*** developed a Coordinated Public Transit Human Services Transportation Plan together in 2012 to address transportation needs for the elderly and individuals with disabilities living in the Cincinnati region.[23]
• ***Kentucky:*** Taylor Regional Hospital identified a need for transportation after a high number of missed appointments. The hospital initiated a hospitality van service for patients facing transportation issues. The vans pick-up and drop-off patients at the hospital, dialysis centers, cancer centers, rehabilitation centers, and other facilities. Although the vans are owned by the hospital, drop-off and pick-up do not have to be at hospital-owned facilities. Additional community organizations sponsor gas.[24]
• ***Massachusetts:*** Massachusetts has contracted specific providers for Mobile Crisis Intervention, which is the youth-serving (under 21 years old) component of an emergency service program. The Intervention is mobile, short-term, on-site and face-to-face, with the State providing additional guidelines on engagement and follow-up care. Providers are outpatient hospitals, community health centers, mental health centers, and other clinics.[25]
• ***New Jersey:*** New Jersey's Mobile Response and Stabilization Services was created to support youth/children and their families who are experiencing emotional or behavioral issues. The program's support includes an immediate, on-site intervention, resource planning and linkage, and prevention strategies, closing behavioral health gaps in time and distance.[26]
• ***Oregon:*** Since 2012, agency leaders at the Oregon Department of Transportation (ODOT) and the Oregon Health Authority (OHA), which houses the Public Health Division (PHD), jointly began considering ways to improve population health and meet their respective agency goals. The agencies established memorandums of understanding (MOUs) to formalize the relationship, coordinated the use of funds, and developed shared accountability metrics to track progress towards public health goals.[27]
• ***U.S. Department of Transportation's Federal Transit Administration (FTA):*** The agency announced in May 2019 that it is distributing approximately $9.6 million to 37 projects led by transit agencies, government agencies, and nonprofit organizations to "support innovative transportation solutions to expand access to healthcare." FTA's Access and Mobility Partnership Grants focus on solutions to improve access to medical appointments, healthy food, and paratransit services. In Tennessee, the Southeast Tennessee Human Resource Agency will receive funding to "purchase wheelchair lift-equipped vans to transport people with disabilities to work, school, recreation, medical services, and other essential services."[28]
• ***Cigna-HealthSpring:*** Cigna-HealthSpring partners with Lyft to transport select Medicare Advantage members to and from doctors and pharmacies. This partnership began in May 2017 and resulted in 14,500 transports in Alabama, Georgia, Maryland, North Carolina, Pennsylvania, Tennessee, Texas and the District of Columbia between May and November 2017.[29]

Theme 2: Technology, including telehealth, can be a component of the solution to address access issues and a tool for chronic care management, including in rural areas of the State.

Telehealth[d] and telemedicine strategies have the potential to decrease costs and change the way consumers interact with the healthcare system. However, Listening Tour participants indicated that there are several barriers to overcome, including:

- Lack of broadband infrastructure in some communities,
- Interoperability issues, and
- Likelihood of technology quickly becoming out of date.

During the Listening Tour, participants expressed that:

- The State can consider expanding telehealth and telemedicine models to address access issues and support whole-person care management.
- Technology may be leveraged across the State when possible (e.g., Project ECHO (Extension for Community Healthcare Outcomes)), while acknowledging that there are still barriers to overcome (e.g., access restrictions, data interoperability issues, payment issues, and technology quickly becoming outdated).
- Explore the use of realistic technology solutions (e.g., smartphones) to enable the community to take care of itself and to supplement chronic care management efforts by payers and providers.
- Telehealth success is dependent on both administrative and information technology support.

> *"I need telehealth to work well, from a technological and regulatory standpoint. Telehealth is critical and access to broadband infrastructure is critical to multiple industries, not just healthcare."*
>
> - *Provider and Research Institution Representative*

- Information systems across Tennessee are fragmented. The State may focus on how to help organizations receive data and information to make meaningful decisions.

[d] Tennessee Code, Title 56, Chapter 7, Part 10 defines "Telehealth" as "(a) The use of real-time, interactive audio, video telecommunications or electronic technology, or store-and-forward telemedicine services by a healthcare services provider to deliver healthcare services to a patient within the scope of practice of the healthcare services provider when: i) such provider is at a qualified site other than the site where the patient in located; and ii) the patient is at a qualified site, at a school clinic staffed by a healthcare services provider and equipped to engage in the telecommunications described in this section, or at a public elementary or secondary school staffed by a healthcare services provider and equipped to engage in the telecommunications described in this section; and, (b) does not include: i) an audio-only conversation (i.e. phone call) ii) an electronic mail message; or iii) a facsimile transmission.

Two panelists also offered examples of how telehealth enabled schools and law enforcement to provide healthcare and manage behavioral health issues resulting in fewer school absences and reduced jail time.

Policy Landscape – Telehealth Policies and Programs

National

There is significant interest in furthering telehealth initiatives as a tool to combat chronic disease and address barriers to healthcare access at the national level. In July 2019, the Federal Communications Commission approved the Connected Care Pilot Program, a three-year, $100 million initiative focusing on expanding telehealth programs. This pilot focuses on supporting underserved populations, including rural residents and veterans, securing technology and broadband resources to launch remote patient monitoring programs, and will cover up to 85 percent of the costs of broadband enabled telehealth for patients.[30]

There also remains interest in passing additional legislation to support rural providers. For example, in April 2019, the Rural Health Clinic Modernization Act was introduced to classify rural health clinics as distant site providers, enabling them to add more professional services to their telehealth platforms.[31] Tennessee Senator Marsha Blackburn has also proposed the Telemedicine Across State Lines Act which would establish a national telehealth program and a five-year grant to push telemedicine programs into rural communities.[32]

In addition, the American Medical Association recently encouraged Project ECHO and the Child Psychiatry Access Project (CPAP) implementation in academic health centers and community-based primary care physicians.[33] Models such as Project ECHO, which use a partnership model to share knowledge from experts with community providers to provide specialty care, are becoming more common and are currently in use within Tennessee.

Another issue is the broad inconsistency among telehealth programs. Some states incorporate telehealth-related policies into law, while others update Medicaid guidelines through their administrative powers. States have also struggled with developing a cohesive and comprehensive telehealth strategy, showcasing the complexities of addressing statewide healthcare issues.[34]

Tennessee

On January 1, 2019, Tennessee joined the Interstate Medical Licensure Compact along with 29 other states, including Washington D.C.[35] The goal of the Compact is to expand the practice of telemedicine by making it easier for physicians licensed in other states to treat Tennessee patients and for Tennessee physicians to become licensed in other states.

Tennessee includes the following under the definition of eligible sites:

- The office of a healthcare services provider,
- A hospital licensed under Tennessee Code Title 68. Health, Safety and Environmental Protection,
- Rural health clinics compliant with federal Medicare regulations,

- A federally qualified health center,
- A school clinic staffed or at a public elementary or secondary school appropriately staffed and equipped,
- Any facility licensed under Tennessee Code Title 33. Mental Health and Substance Abuse and Intellectual and Developmental Disabilities, or
- Any location deemed acceptable by the health insurance entity.[36]

Three Tennessee institutions have established four Project ECHO programs across the State targeting different focus areas.

Figure 9: Project ECHO Programs Operating in Tennessee

Institution	Focus Area
4 Breath 4 Life	The Helping Babies Breathe framework developed a neonatal resuscitation curriculum for resource-limited circumstances.[37]
East Tennessee State University (ETSU)	The ETSU Quillen College of Medicine, Department of Pediatrics is developing a program based on the American Academy of Pediatrics Project ECHO model to enhance the partnership and co-management of pediatric conditions between primary care and ETSU pediatric specialists.[38]
	ETSU's Project ECHO Buprenorphine Medication Assisted Treatment (BMAT) aims to improve access to patients suffering from opioid use disorder (OUD) through a six-week series consisting of educational sessions and case presentations for family medicine physicians and nurse practitioners.[39]
Vanderbilt University	From June 2017 through November 2017, Vanderbilt's Kennedy Center offered twice-monthly sessions to connect autism specialists with community primary care providers through a virtual learning network called ECHO Autism. Chart review was also conducted at four different points over the project time period.[40] Following these efforts, the Kennedy Center team conducted a 10-site cluster randomized trial (CRT), involving over 140 providers. Through this trial, they observed an increase in autism screening, general developmental screening, autism knowledge, and overall self-efficacy. There was a decrease in number of perceived barriers for caring for children with autism.[41]

Access to Technology and Internet – National and Tennessee Data

The adoption rates of technology and telehealth at the national and State levels highlight a variance between urban and rural areas. As Tennessee considers telehealth initiatives as a way to expand access to care for Tennesseans who lack reliable transportation, it will be critical to ensure technology and internet access in rural areas.

National

Computing devices and internet access are critical to the use of technology to support healthcare and the delivery of telehealth services. The Office of the National Coordinator for Health Information Technology (ONC) states that access to broadband internet is a necessary tool for telehealth programs. Sufficient broadband is needed to transmit imaging technology and peripherals.[42]

In Figure 10, we show that 58 percent of Americans living in rural areas find that access to high-speed internet in their local community is a "major" or "minor" problem. In addition, as shown in Figure 11, adults living in rural areas are less likely to have high-speed internet at home or own a smartphone.

Figure 10: Percent of Adults Indicating that Access to High-Speed Internet is a Problem in their Area, 2018[43]

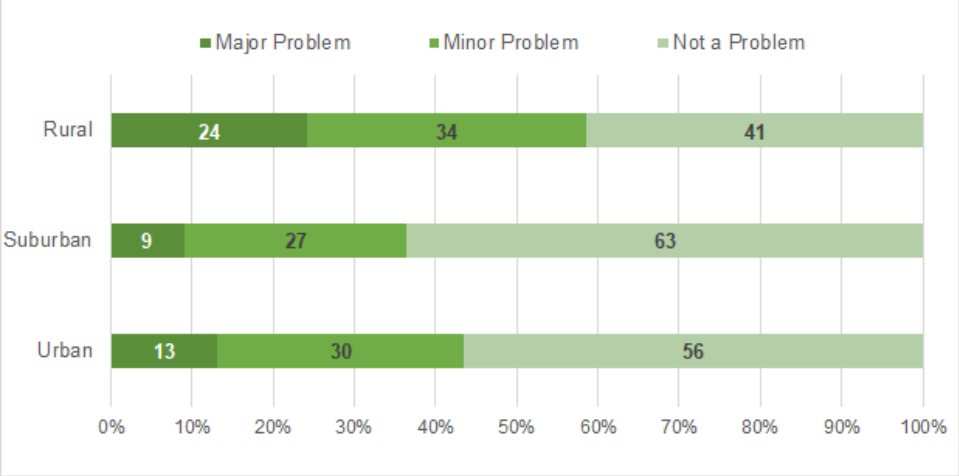
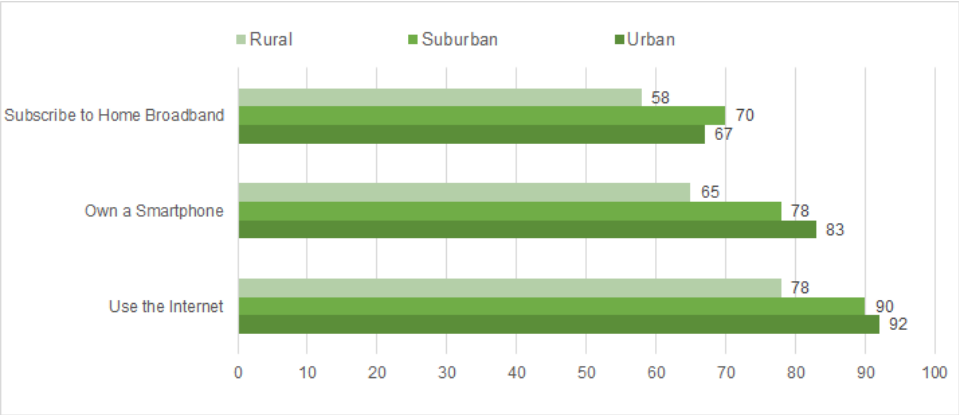


Figure 11: Percent of Adults who Subscribe to High-Speed Internet, Own a Smartphone, and Use the Internet, 2018[44]



Tennessee

Consistent with national findings, rural counties in Tennessee have the greatest internet and computing device shortages. Figure 12 highlights the variabilities in computing device ownership between rural and urban counties. The percentage of the population owning at least one computing device, such as a computer, tablet, or smartphone is highest near major metropolitan areas such as Nashville and Knoxville. Figure 13 shows the five counties with the highest and lowest percentages of the population owning at least one computing device, such as a computer, tablet, or smartphone. The five lowest rated counties for computing device ownership scored approximately 20 percentage points below the national average and more than 15 percentage points below the Tennessee average.

Figure 12: Tennessee County Map by Percent of Population with One or More Computing Devices, 2017[45]

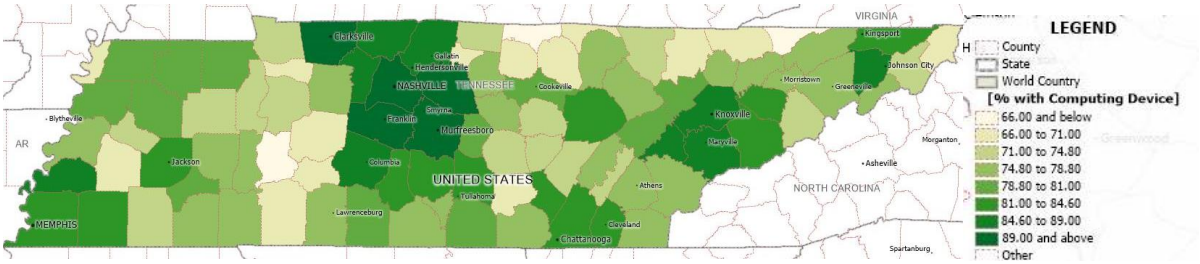
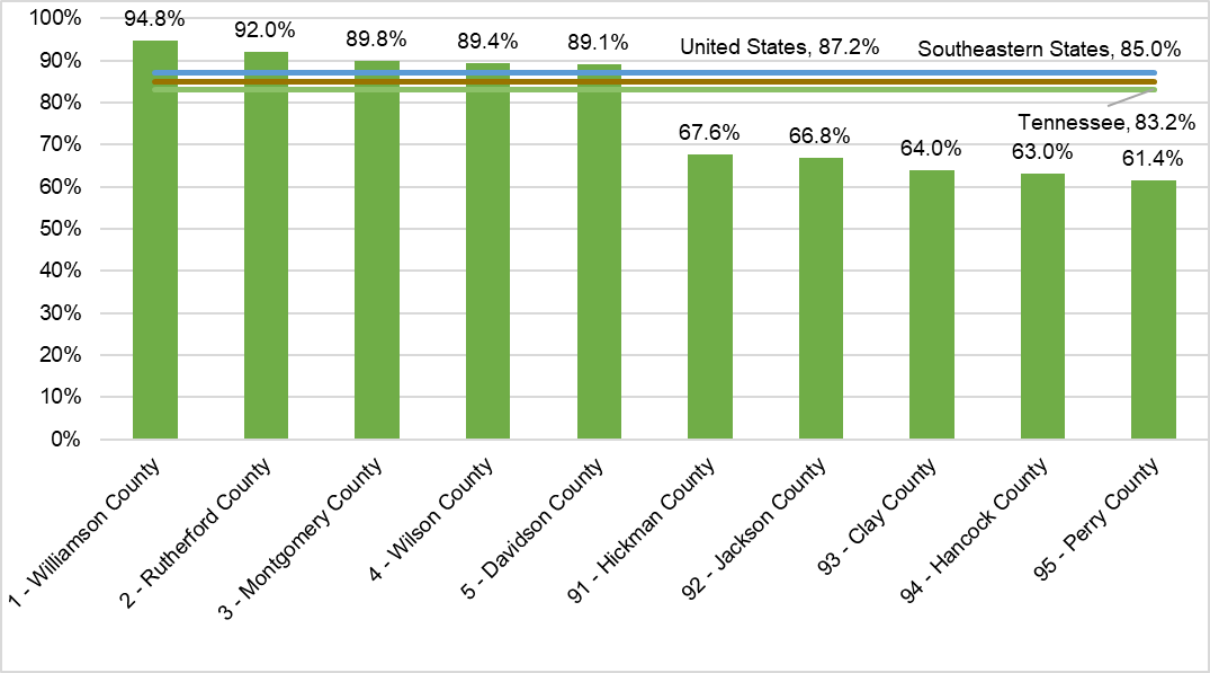


Figure 13: Tennessee County Rankings by Percent of Population with One or More Computing Devices, 2017[e, 46]



In addition, internet subscription rates are lower among rural counties than urban counties, as shown in Figures 14 and 15. For example, Hancock County ranks lowest in Tennessee for the percentage of population with an internet subscription (40.6 percent). This contrasts with the top five counties, in which more than 80 percent of the population has an internet subscription.

[e] Comparison Southeastern states include Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, and South Carolina.

Figure 14: Tennessee County Map by Percent of Population with an Internet Subscription[47]

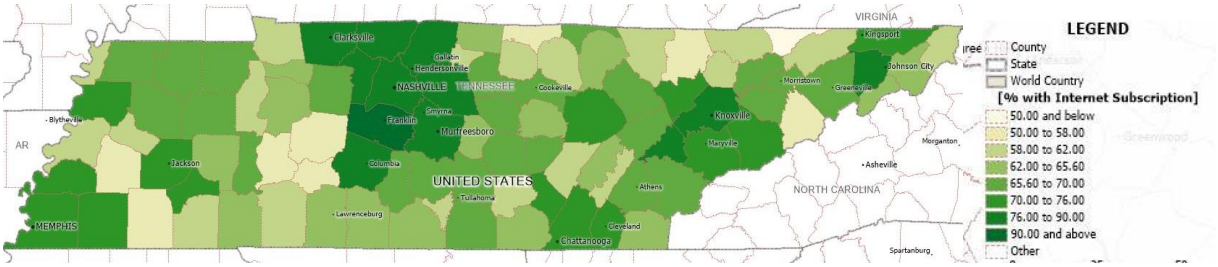
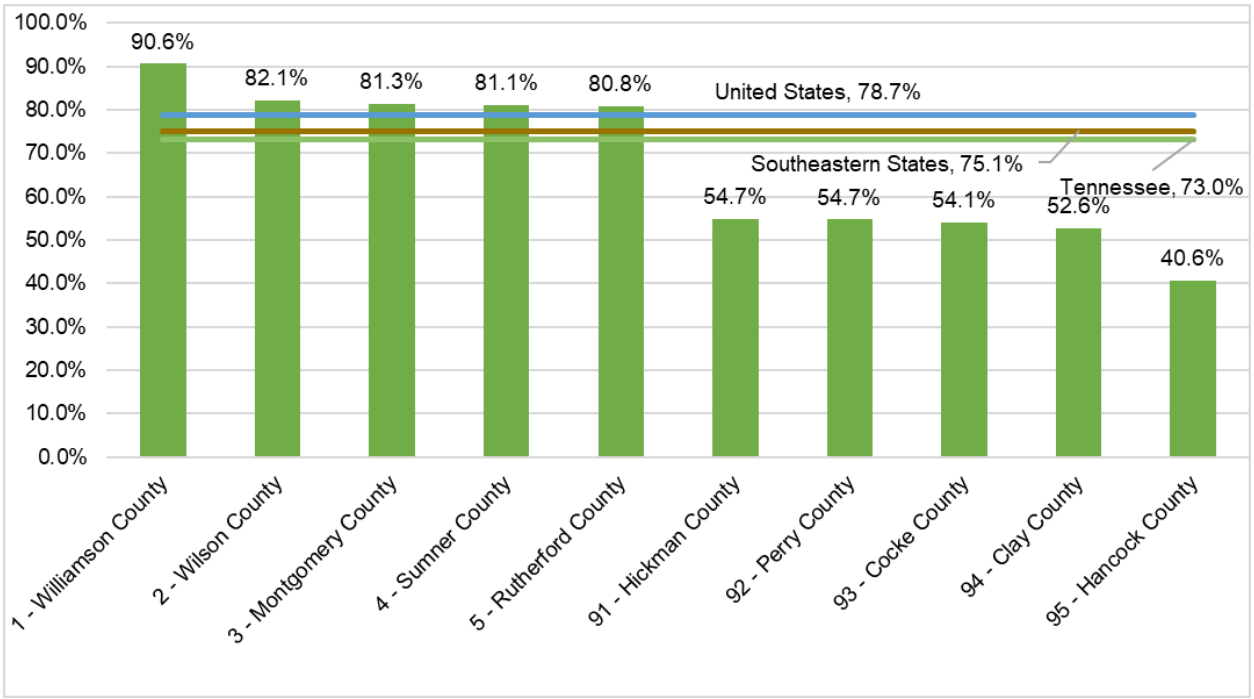


Figure 15: Tennessee County Rankings by Percent of Population with an Internet Subscription[f, 48]



Potential Policy Options Related to Theme #2

Telehealth can be defined in multiple ways and deployed to combat a variety of problems. The three policy options for consideration listed in Figure 16 assume a widely defined interpretation of telehealth that includes telemonitoring patients, telementoring providers, and redesigning care delivery to address access to affordable healthcare.

[f] Comparison Southeastern states include Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, and South Carolina.

Figure 16: Potential Policy Options to Support Technology and Telehealth Solutions

Policy Option	Rationale for Policy Option
1. *Assess supporting infrastructure for telehealth services*	Telehealth solutions rely on a technology backbone and device connectivity to be successful. Understanding which communities have the necessary infrastructure is imperative before implementing telehealth programs.
2. *Leverage telehealth solutions to help patients overcome barriers to access*	Telehealth can increase access to physical and behavioral health services by eliminating barriers to access including transportation issues, availability of local providers, and access to specialty services.
3. *Leverage telemonitoring solutions to help providers and patients manage chronic conditions*	Telemonitoring of vital signs and key health indicators can help patients and providers work more closely on managing an individual's chronic condition, which will lead to fewer emergency visits and high-cost encounters.
4. *Use telementoring solutions to help providers deliver the best care to their patients*	Telementoring can enable providers in rural areas to work with experts that are not located in their communities to provide the highest level of care to their patients. Telementoring can also help to address provider shortages in Tennessee by serving as a support mechanism for providers working in rural communities.

Examples of State and Federal Initiatives

Figure 17 below details a sample of current state and Federal initiatives related to technology and telehealth. This table is not an exhaustive list of current initiatives.

Figure 17: Examples of State and Federal Initiatives

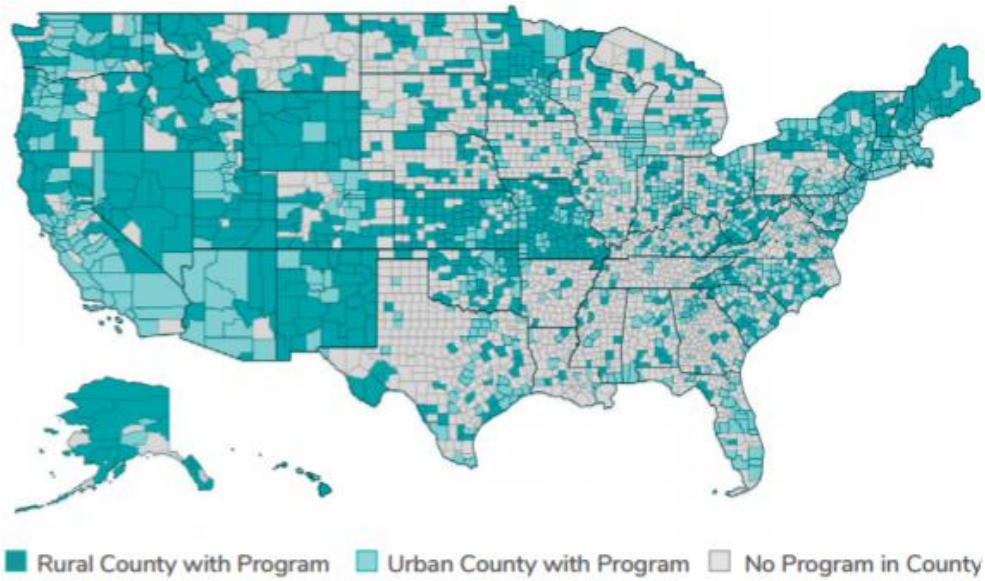
Examples of State and Federal Initiatives[g]
• ***Tennessee:*** The Tennessee Broadband Accessibility Act of 2017 launched efforts to support the adoption of broadband in unserved areas across Tennessee. The legislation focused on three areas: investment, deregulation, and education.[49] The Tennessee Department of Economic and Community Development (TNECD) is working with grantees to expand broadband service to more than 8,300 households and businesses in 17 counties across Tennessee.[50]
• ***Tennessee:*** Google Fiber (high speed internet access) has also been implemented in Nashville. The Google Fiber program brings Google's "…fastest Internet speeds to organizations like libraries, community centers, and nonprofits."[51] There may be opportunities to leverage Google Fiber's infrastructure to bring broadband to rural areas of the State.

[g] This report was developed as a review and examination of the Listening Tour and does not necessarily reflect an exhaustive list of existing State resources.

Examples of State and Federal Initiatives[g]
• ***29 states, including Tennessee, and Washington D.C.*** have adopted the Interstate Medical Licensure Compact which allows for an Interstate Commission to conduct an expedited licensing process for other state license applications.[52] Tennessee is also a member of the Nurses Licensure Compact, Recognition of EMS Personnel Licensure Interstate Compact, and Physical Therapy Compact.[53,54,55] Twelve states are also members of the Psychology Interjurisdictional Compact, which Tennessee does not participate in.[56]
• ***Eight state medical or osteopathic boards*** issue special licenses or certificates for telehealth, allowing out-of-state providers to offer telemedicine services. While Tennessee allows special licenses for osteopathic, the offer is not available to other medical professionals.[57]
• ***Alaska:*** Beginning in September 2018, the State of Alaska partnered with Teladoc to provide non-emergent telehealth services to AlaskaCare employees.[58]
• ***Arizona:*** Medicaid limits remote patient monitoring reimbursement to patients with congestive heart failure and a certain hospitalization history.[59]
• In ***California, Colorado, and Oregon***, Medicaid managed care organizations (MCOs) have voluntarily selected to contract with Project ECHO programs to support effective medication, pain, or chronic disease management.[60]
• ***Illinois:*** Announced by Governor Pritzker on August 15, 2019, Illinois is investing $420 million in broadband infrastructure to stimulate telehealth, education, and economic development in rural areas. Through increased telehealth efforts, Illinois plans to provide additional healthcare options and expanded treatment opportunities (e.g., mental health and opioid addiction) to rural communities.[61]
• ***Kansas:*** Through a HCBS (1915(c)) waiver application, the Frail Elderly waiver provides Kansas seniors nursing home care alternatives and additional services, including home telehealth and nursing evaluation visits. The program can serve as a blueprint for Medicaid-eligible Tennessee seniors over 65 years old that meet the nursing facility threshold score.[62]
• ***Massachusetts:*** A study examined the pre- and post-tele-ICU effects on ICU mortality and ICU length of stay in one academic center and two community hospitals. It found that ICU mortality declined significantly in two hospitals but increased in one of the community hospitals. All three hospitals saw an ICU patient length of stay decrease, and a rapid payback period for financial investments.[63]
• ***Massachusetts:*** Members enrolled in MassHealth, Massachusetts' Medicaid program, can use a virtual care platform to access mental health and substance use services. Behavioral health providers are reimbursed at the same rate as an in-person visit.[64]
• ***Mississippi:*** Mississippi's State Health Insurance Plan expanded access to behavioral health services via telehealth.[65]
• ***Mississippi:*** In 2014, the University of Mississippi Medical Center partnered with a regional high-speed wireless provider to launch a pilot program to bring remote patient monitoring to patients living with Type II diabetes and other chronic conditions in the Mississippi Delta. The remote patient monitoring improved outcomes and reduces costs within the pilot program.[66]

Examples of State and Federal Initiatives[g]

- ***New Mexico:*** Project ECHO has grown significantly since its origins in New Mexico.[67] There are currently 429 Project ECHO programs serving all 50 states. "More than 50 percent of all Project ECHO programs serve rural counties in the United States." A map of all rural and urban counties served by a Project ECHO is below:[68]



- ***U.S. Federal Communications Commission:*** The agency established a new $100 million Connected Care Pilot Program to support telehealth for low-income Americans, including those living in rural areas and veterans.[69]

Theme 3: There are significant healthcare access barriers in rural communities, including the lack of providers.

Rural communities across the nation continually struggle with access issues related to transportation and provider supply. Following the Listening Tour, it was clear that rural communities in Tennessee are no different.

> *"If rural communities could help relieve student debt in less time – four years versus 15, it would attract people."*
>
> *- Provider and Research Institution Representative*

During the Listening Tour, stakeholders emphasized that:

- Workforce development initiatives are necessary to meet the current and long-term healthcare needs of Tennesseans. Tennessee needs to design not only financial incentives, but also highlight non-financial benefits of living in rural areas (e.g., quality of life).
- Provider supply, recruitment, and retention remains a barrier in rural areas. Tennessee needs to recruit providers, but also recognize that providers will need help recruiting support staff and supplement with telemedicine/telehealth. Providers and their staff also need to consider their families (e.g., jobs for their spouses, school systems).
- Physician recruitment in rural areas is even more challenging because of the financial burden of graduate medical education. Multiple stakeholders noted that administrative burdens of working within a rural area provider also makes physician recruitment more challenging.

Stakeholders also indicated a lack of reliable transportation, which is crucial for rural residents to access healthcare services. In addition, the lack of transportation in rural areas hinders discharge planning and timely discharge efforts, which increases the length of stay for patients and costs. Please note that additional findings and guidance related to transportation are discussed in Theme #1 of this document.

Policy Landscape – Rural Healthcare Access Policies and Programs

National

Health professional shortage areas (HPSAs) are found throughout the United States, and states are exploring methods to address provider shortages by combining financial incentives with legislative or regulatory reforms that expand healthcare access to rural areas. Although many states have tried to expand access, policymakers are often restricted by the scope of practice laws in their states. For example, in primary care, 20 states, including Tennessee, require a physician to co-sign a percentage or number of physician assistant charts to be reimbursed for services.[70] Thirty-nine states, not including Tennessee, limit the number of physician assistants that a physician can supervise or collaborate with, known as ratio requirements.[71]

States have also modified the scope of practice for another key rural health provider, dental hygienists:

- Eighteen states recognize and reimburse dental hygienists as Medicaid providers.[72] In Tennessee, dentists can bill for services provided by hygienists under the supervision of the dentist.
- California and Wisconsin allow hygienists to operate independent practices without the supervision of a dentist in select locations.[73]
- Louisiana, North Dakota, and Alabama prohibit hygienists from having direct patient contact until the patient has seen a dentist.[74]

Physician extenders, such as physician assistants and nurse practitioners, could play a vital role in filling in gaps of coverage. As states continue to face healthcare workforce shortages, states must balance the need for physician extenders with the safety of patients and need for formally trained physicians to deliver services.

On the national stage, Tennessee Senator Marsha Blackburn has introduced three bills focusing on closing medical access gaps in rural communities:

1. The bipartisan Rural America Health Corps Act would improve the existing National Health Service Corps (NHSC) loan repayment program by providing new funding for practitioners that serve in rural communities on a sliding scale, and rotate healthcare graduates through rural areas.[75]
2. The Rural Health Innovation Act would establish two five-year grants. One grant program would help support Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs) to become capable of meeting a community's urgent care and triage needs. The second grant would expand rural health departments to meet urgent care and triage needs.[76]
3. The Telemedicine Across State Lines Act introduced on July 31, 2019 would establish a national telehealth program and a five-year grant to push telemedicine programs into rural communities.[77]

In the United States House of Representatives, Tennessee Representative Mark Green (TN-7) introduced the Rural Health Care Access Act in May 2019. The proposed Act would remove the mileage limitation that restricts hospitals from gaining Critical Access Hospital designation.[78]

Tennessee

The Tennessee Department of Health supports the Tennessee State Loan Repayment Program (TSLRP) which provides loan repayment to qualified primary care providers in exchange for two years of service at an ambulatory public, nonprofit, or private nonprofit primary care location in a federally designated HPSA.[79] The program has traditionally focused on primary care physicians, dentists, advanced practice nurses, physician assistants, and, as of January 2019, behavioral health professionals including psychiatrists, clinical social workers, and psychiatric nurse specialists.[80]

Recently, the Center for Rural Health Research (the Center) was established at the East Tennessee State University (ETSU). The public-private partnership will work with Ballad Health

(a large healthcare provider), local healthcare delivery partners, national experts, and the leadership of ETSU to identify new mechanisms to improve health in rural and non-urban communities. The Center will have a specific emphasis on strategies that disrupt inter-generational cycles of behaviors that contribute to poor health outcomes, which ultimately can affect college and career readiness.

Access to Healthcare and Provider Capacity – National and Tennessee Data

Access to healthcare providers presents a challenge for Tennesseans, particularly those living in rural areas. In Tennessee, many of the counties with undesirable ratios of healthcare providers per capita (i.e., high number of individuals per provider) are located in rural areas of the State. Counties with more favorable ratios of access to healthcare providers per capita (i.e., low number of individuals per provider) are located in more urban or suburban areas of the State, which may be in closer proximity to hospitals and other healthcare facilities. National survey data suggests the following barriers for rural residents: affordability, distance to providers, and provider capacity.

National

Individuals living in rural and urban communities are limited by access to providers and provider capacity. As shown in Figures 18 and 19, in a 2019 survey, "Life in Rural America – Part II," approximately one-quarter of rural residents needed healthcare but did not get it.[81] Among those who did not get care, affordability was the primary reason for forgoing care, followed by difficulty getting to the location and inability to schedule an appointment during available hours.

Figure 18: Approximately One-Quarter of Rural Americans Cannot Access Care When Needed[82]

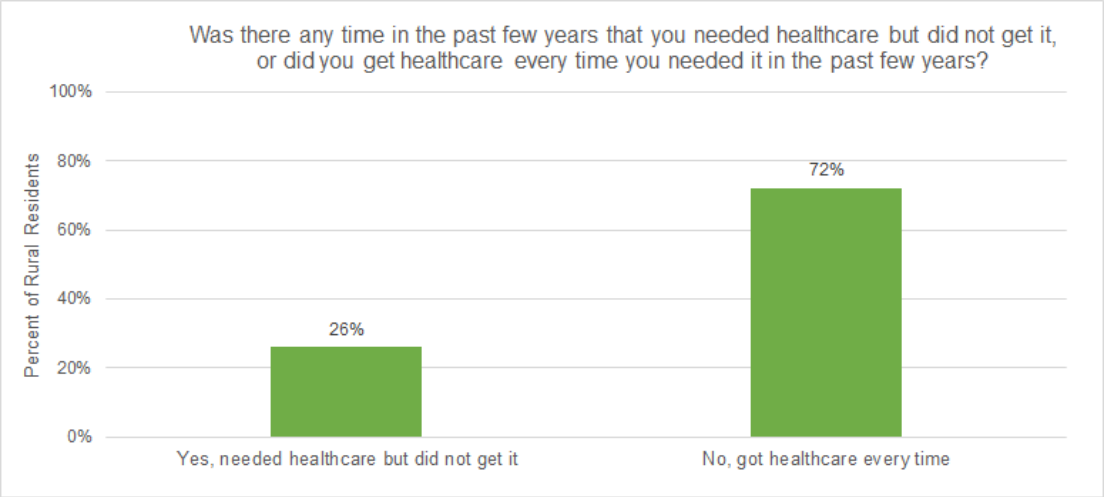
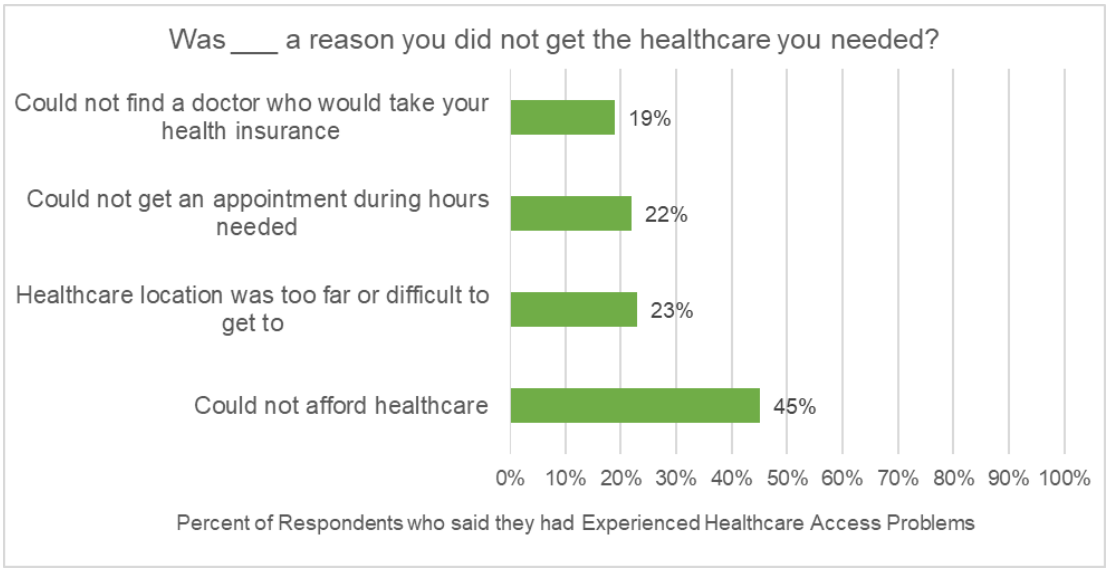


Figure 19: Affordability Is a Common Barrier for Individuals Seeking Care[83]



Tennessee

Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute issue annual County Health Rankings to provide information on vital health factors. This resource ranks counties within each state to "raise awareness about the many factors that influence health and that health varies from place to place."[84] Using the County Health Rankings Data[85], we assessed three measures of access to healthcare providers:

1. The ratio of the population in a county to dentists,
2. The ratio of the population in a county to mental health providers, and
3. The ratio of the population in a county to primary care physicians.

The Tennessee rankings for the three access to health measures are depicted in the maps in Figures 20, 21, and 22.

Figure 20: Ratio of Population to Dentists[86]

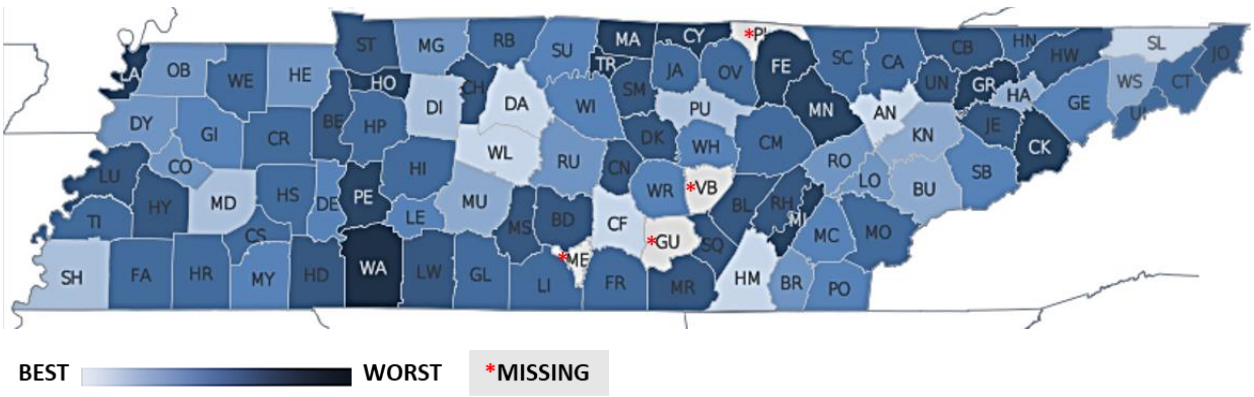


Figure 21: Ratio of Population to Mental Health Providers[87]

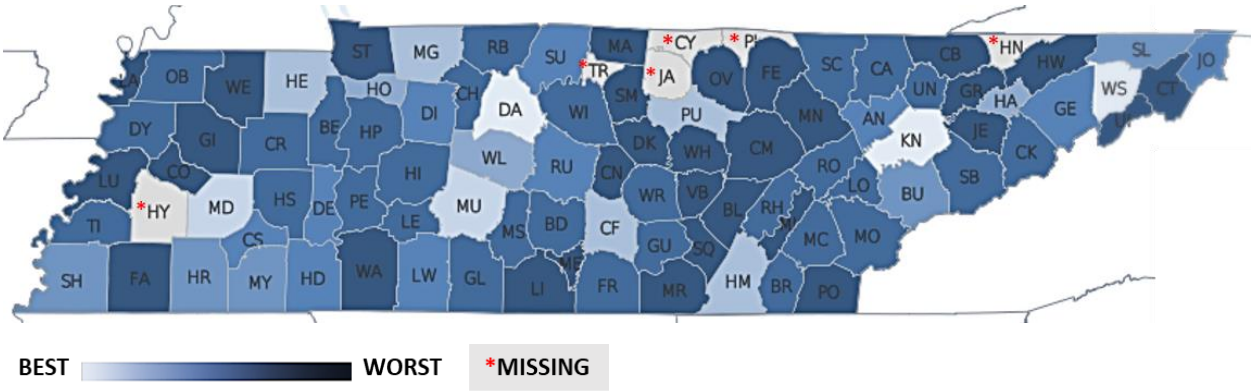
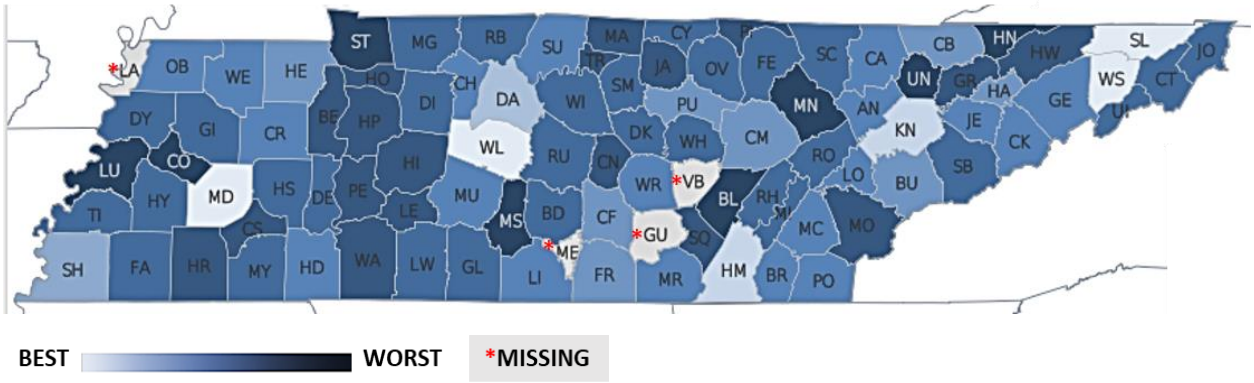


Figure 22: Ratio of Population to Primary Care Physicians[88]



Per Figures 20, 21, and 22, the following counties stand out for having desirable ratios in multiple provider categories – for example:

- *All three provider categories:* Davidson, Hamilton, and Madison counties
- *Two out of three provider categories:* Coffee, Hamblen, Henry, Knox, Maury, Putnam, Shelby, Sullivan, Washington, and Williamson counties

However, several counties have less desirable ratios in multiple provider categories – for example:

- *All three provider categories:* Macon and Morgan counties
- *Two out of three provider categories:* Crockett, Grainger, Lake (data is only available for two provider categories), and Meigs counties

These per capita provider ratios indicate a potential gap in access to care for individuals living in these counties. While several counties (e.g., Lake and Meigs) are in rural areas, the remaining counties are adjacent to urban areas.[h] Since the data presented only counts providers with

[h] For the purposes of this analysis, rural is defined as counties outside of the Office of Management and Budget's core-based statistical areas defined as of September 2018 and available at: https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/delineation-files.html.

offices within the actual county, Tennesseans living in these urban-adjacent counties may be traveling to another urban area (e.g., employment center) in another county to access healthcare services.

Figures 23 and 24 highlight the difference in care capacity between Tennessee counties that have at least one hospital and counties that do not have a hospital.[89] Counties that lack hospitals generally have lower primary care and behavioral health capacity than counties with hospitals. Twelve rural Tennessee hospitals have closed since 2005, potentially leaving rural communities with diminished care capacity.[90]

Figure 23: Population to Primary Care Physician Ratio by County Is Higher in Counties Without a Hospital, 2016[91]

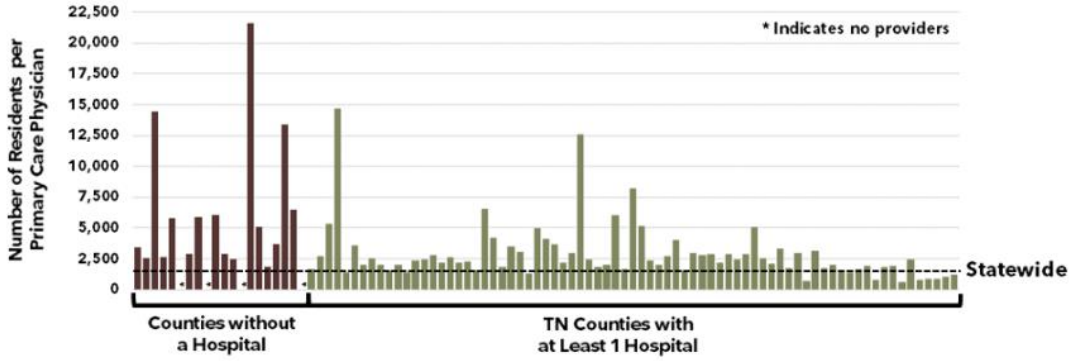
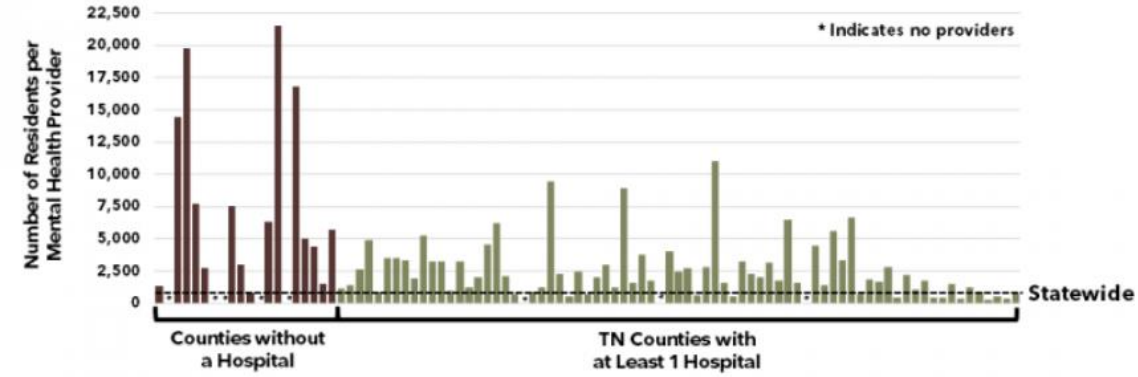


Figure 24: Population to Mental Health Ratio by County Is Higher in Counties Without a Hospital, 2017[92]



Potential Policy Options Related to the Theme #3

In Figure 25, we have identified two potential policy options for consideration to address healthcare access barriers in rural communities:

Figure 25: Potential Policy Options to Address Healthcare Access in Rural Areas

Policy Option	Rationale for Policy Option
1. *Expand healthcare workforce development programs and initiatives*	Rural communities across Tennessee are having difficulty maintaining a sufficient healthcare workforce through recruitment and retention, resulting in decreased access to patient care and insufficient staffing standards for optimal provider operation. In addition, Tennessee's scope of practice regulations may prohibit some professionals from working to the top of their license.
2. *Expand capacity of the existing healthcare workforce*	

Examples of State and Federal Initiatives

Figure 26 below details a sample of current state and Federal initiatives related to workforce development in rural areas. This table is not an exhaustive list of current initiatives.

Figure 26: Examples of State and Federal Initiatives

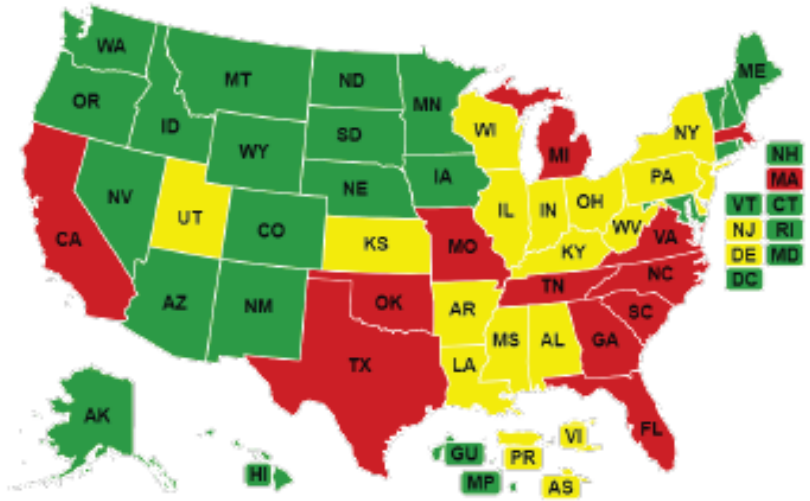
Examples of State and Federal Initiatives[i]
• ***California:*** CalHealthCares is a new program to help physicians pay back up to $300,000 of medical school debt in exchange for dedicating one-third of their caseload to Medi-Cal, California's Medicaid program, patients for five years. The program will disburse a total of $340 million and its first round of awardees will benefit 247 physicians and 40 dentists. The State hopes the program will help address California's 4,700 primary care physician shortfall projected by 2025, which greatly impacts the Medi-Cal population and rural communities.[93]
• ***New Mexico:*** In April 1993, the Legislature of the State of New Mexico enacted the Pharmacist Prescriptive Authority Act, which granted authority to pharmacist clinicians for prescribing medications. Pharmacist clinicians are pharmacists with additional training required by New Mexico regulation.[94]
• ***Rhode Island:*** The State passed legislation in July 2019 that would allow physician assistants to work collaboratively with physicians rather than under their supervision, giving them additional freedom and allowing them to see more patients. Additionally, doctors are no longer liable for a physician assistant's work within their practice, but they must always be accessible.[95]
• ***International Association of Chiefs of Police (IACP) and the Childhood Violence Trauma Center at the Child Study Center at the Yale School of Medicine:*** The IACP and Yale School of Medicine, supported by funding from the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, implemented a program to increase the capacity of law enforcement to identify and respond to child exposure to violence and childhood trauma. The initiative includes toolkits, classroom and online training programs, and webinars.[96]

[i] This report was developed as a review and examination of the Listening Tour and does not necessarily reflect an exhaustive list of existing State resources.

Examples of State and Federal Initiatives[i]

- ***National Nurse Practitioner Practice Authority:*** Several rural states have changed scope of practice laws to allow physician extenders to practice more independently. Nurse practitioners, for example, have full practice authority in 23 states as seen in the map below.[97]

Several Rural States Have Expanded Nurse Practitioner Scope of Practice to Address Healthcare Workforce Shortages[98]



Full Practice: State practice and licensure laws permit all NPs to evaluate patients; diagnose, order and interpret diagnostic tests; and initiate and manage treatments, including prescribing medications and controlled substances, under the exclusive licensure authority of the state board of nursing. This is the model recommended by the National Academy of Medicine, formerly called the Institute of Medicine, and the National Council of State Boards of Nursing.

Reduced Practice: State practice and licensure laws reduce the ability of NPs to engage in at least one element of NP practice. State law requires a career-long regulated collaborative agreement with another health provider in order for the NP to provide patient care, or it limits the setting of one or more elements of NP practice.

Restricted Practice: State practice and licensure laws restrict the ability of NPs to engage in at least one element of NP practice. State law requires career-long supervision, delegation or team management by another health provider in order for the NP to provide patient care.

- Medical schools, including the ***University of California – San Francisco*** (UCSF), have developed specialized rural health tracks that promote the appeal of rural life.[99] UCSF's San Joaquin Valley PRIME program is a tailored medical education track for students who commit to spending 1.5 years at the UCSF campus, and 2.5 years clinical training at the UCSF Fresno campus.[100]

Theme 4: Social determinants of health will be important to address.

When providing treatment and care, it is essential to consider social determinants of health such as housing, income, transportation, food security, employment/workforce development, education, childhood experiences, behavior, access to care, and environment. Panelists referenced that social determinants accounted for a significant percentage of a patient's health outcomes, and the literature indicates that these determinants can account for up to 80 percent of a patient's health outcomes.[101] With the transition from fee-for-service to value- and outcome-based care, it is becoming more and more essential for policymakers across the nation, and in Tennessee, to recognize the critical role that social determinants play when providing whole-person care.

> *"When we think about how to prevent chronic conditions, we can't ignore that 10 percent is due to healthcare and the main factors are behavior and zip code."*
> *- Provider and Research Institution Representative*

Stakeholders also believe that Tennessee agencies, providers, and payers will need to work together to address social determinants of health that create gaps in care. There are existing initiatives (e.g., Building Strong Brains: Tennessee Adverse Childhood Experiences (ACEs) Initiative, Tennessee Recovery Navigators, Lifeline Peer Project) that, with the right level of education and involvement across the State agencies, could help improve healthcare across the State.

Policy Landscape – Social Determinants of Health Policies and Programs

National

States, the private sector, and the Federal government continue to consider and implement various programs to address social determinants of health. For example:

- **States:** Given that Medicaid is a large component of state budgets, states continue to innovate by addressing social determinants, aiming to comprehensively address healthcare outcomes and access. As a result, states have used multiple tools at their disposal to uniquely address social determinants:
  - Seventeen states, including Tennessee, are using Medicaid managed care contracts, and six states (Hawaii, Maryland, New York, North Carolina, Rhode Island, and Washington) are using Medicaid Section 1115 demonstration waivers to cover housing-related services.[102] North Carolina is using the Section 1115 demonstration waiver authority to implement Health Opportunities Pilots within their managed care system. The pilots will integrate non-medical SDoH services, such as food or transportation into healthcare delivery services.[103]
  - Thirty-five states now require or encourage Medicaid MCOs to screen enrollees for social issues and provide referrals to services. North Carolina and Rhode Island specifically require MCOs to track referral outcomes and provide additional help to MCO members as needed.[104]

- **Private Sector:** Companies such as CVS Health and Aetna have recently invested more than $40 million in affordable housing, and will collaborate with Unite Us, a social care coordination platform, to further address social determinants of health.[105] Anthem also launched a "social determinants of health benefits package" for seniors enrolled in its Medicare Advantage plan, and UnitedHealthcare has invested over $400 million in new affordable housing communities across the country.[106,107]

Social determinants of health are "the root cause of so much of our health spending."

- Alex M. Azar II
Secretary, United States Health and Human Services

- **Federal Government:** A bipartisan group of representatives introduced the Social Determinants Accelerator Act in July 2019.[108] The Act makes up to $25 million in grants available to state, local, and Tribal governments to develop Social Determinants Accelerator Plans that, among other goals, include a plan to link data across programs to achieve better outcomes through health and non-health service coordination. The Act also calls for the formation of a technical advisory board that includes experts from state and local governments, private and community-based organizations, and across the federal government, including the Department of Labor, the Department of Agriculture, and Department of Housing and Urban Development (HUD).[109] In addition, the Department of Health and Human Services is encouraging states and health plans to participate in new models of care designed to address social determinants of health. These models include Accountable Health Communities, Maternal Opioid Misuse, and Integrated Care for Kids.[110]

Tennessee

Social determinants are addressed by several governmental agencies within the State, including the Department of Transportation, the Department of Health, and the State's Department of Labor and Workforce Development. Tennessee's Department of Health offers a wide scope of program areas related to social determinants of health, such as healthy homes (a comprehensive approach to preventing diseases and injuries that result from housing-related hazards and deficiencies), farmers market nutrition programs, and Project Diabetes.[111] The State's Department of Labor and Workforce Development manages several initiatives through the Workforce Innovation and Opportunity Act, including Eligible Training Provider List, Senior Community Service Employment Program, Jobs for Veterans State Grant Program, and Re-Employment Services and Eligibility Assessment.[112]

In addition to operating the Section 1115 demonstration waiver that governs TennCare, Tennessee also operates several 1915(c) Home- and Community-based Services (HCBS) waivers, including the Self-Determination Waiver Program which serves children and adults with intellectual disabilities and children under the age of six with developmental delays who would otherwise qualify for and require placement in a private intermediate care facility for individuals with intellectual disabilities. Under the waiver, enrollees have access to services that support integration into the community and address social determinants that greatly impact the enrollee's ability to remain independent. The waiver program provides employment services,

supported employment for individuals and small groups, nutritional services, transportation services, and environmental accessibility modifications.[113,114]

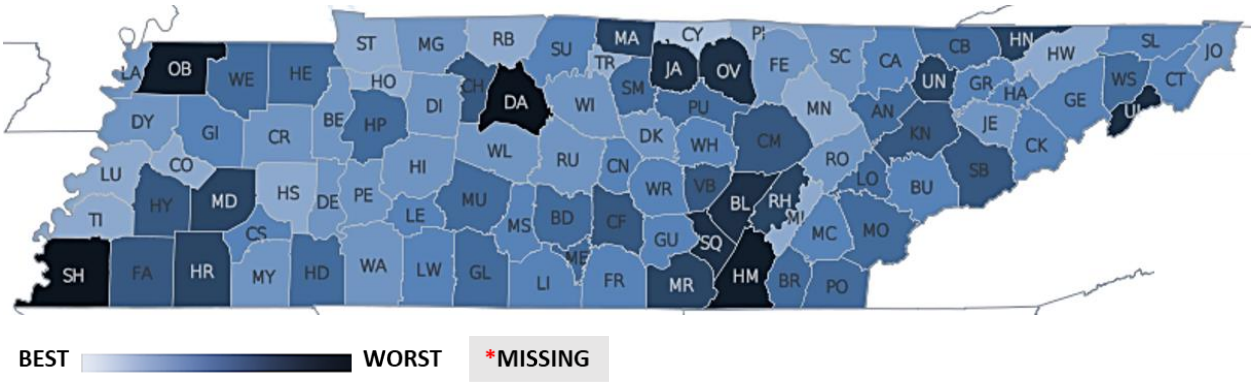
Social Determinants of Health – National and Tennessee Data

Trends in social determinants of health and the prevalence of chronic conditions across the State suggest that initiatives to address health outcomes will need to be tailored based on county characteristics.

Tennessee

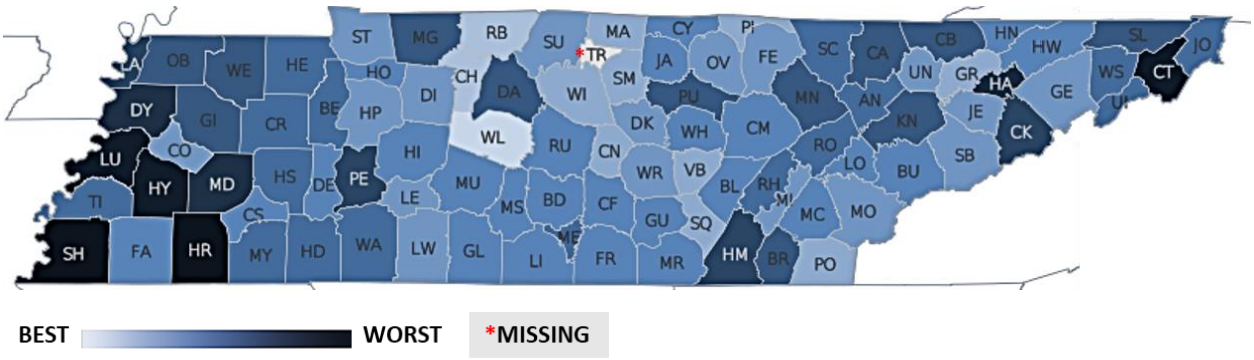
Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute issue annual County Health Rankings to provide information on vital health factors. This resource ranks counties within each state to "raise awareness about the many factors that influence health and that health varies from place to place."[115] Using the County Health Rankings Data[116], we reviewed measures to assess social and economic factors, as well as individual health behaviors that influence the health of individuals and communities, such as obesity and smoking.

Figure 27: High School Graduation Rates in Tennessee[117]



Higher educational attainment is associated with better physical and self-reported health. The overall four-year high school graduation rate in Tennessee is 90 percent, ranging from 80 percent in the poorest performing counties to 100 percent in the highest performing counties. Urban counties such as Davidson County and Shelby County have the lowest high school graduation rates within four years.

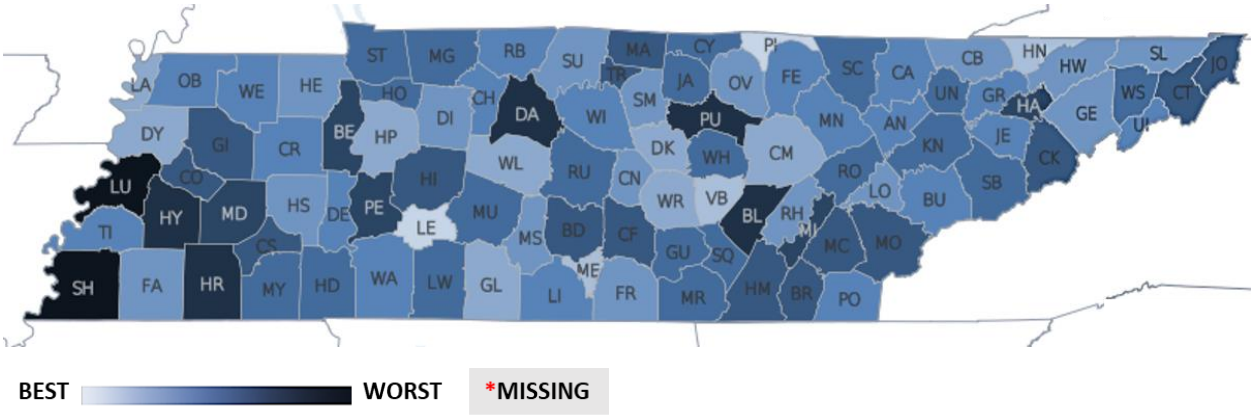
Figure 28: Eastern and Western Edges of Tennessee Face Food Insecurity[118]



Another social determinant of health measure is the Food Environment Index, which is an indicator of access to healthy foods. The index ranges from 0, the worst, to 10, the best. This index equally accounts for proximity to a grocery store or supermarket and the percentage of the population facing food insecurity. Across Tennessee, the average Food Environment Index is 6.3, ranging from 5.3 in the poorest performing counties to 9.2 in the highest performing counties. The eastern and western edges of Tennessee have the lowest Food Environment Index scores, whereas the middle area of the State tends to score higher.

In addition, food insecurity challenges affect both rural and urban areas of the State. The counties with the lowest Food Environment Index scores include a mix of metropolitan (e.g., Shelby, Carter), micropolitan (e.g., Haywood), and rural (e.g., Lauderdale, Hardeman) counties.

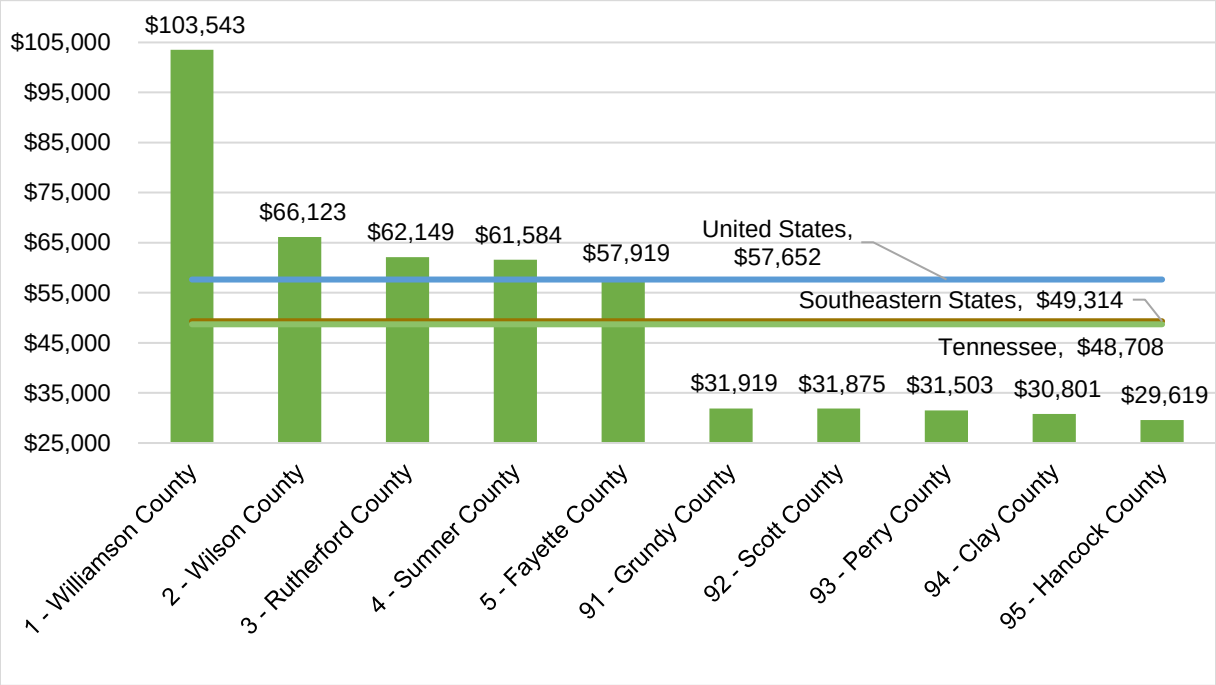
Figure 29: County Health Rankings Indicate Several Counties Face Severe Housing Problems[119]



Adequate and safe housing is associated with positive health outcomes. The Severe Housing Problems factor measures the percentage of households that have one or more of the following problems: lacks complete kitchen facilities, lacks complete plumbing facilities, is overcrowded, is severely cost burdened. Overcrowding and severe housing cost burden (i.e., monthly housing costs, including utilities, exceed 50 percent of monthly income) drive the high rates of severe housing problems. Housing issues affect both rural and urban areas of the State; rural counties, such as Bledsoe and Lauderdale, and urban counties, such as Davidson and Shelby, rank among the most unfavorably within Tennessee.

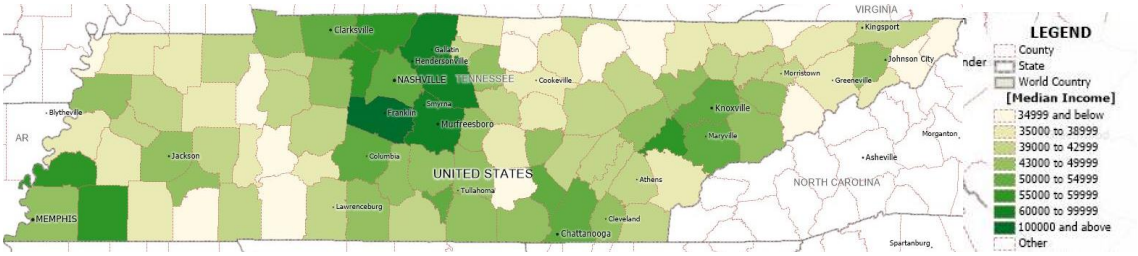
As seen in Figure 30, Tennessee falls below the United States average for median household income. Only eight counties exceeded this average in 2017. The five counties with the lowest incomes had median household incomes below $32,000.

Figure 30: Tennessee County Rankings by Median Household Income, 2017[j, 120]



Generally, median household income is highest in major cities and their surrounding areas.

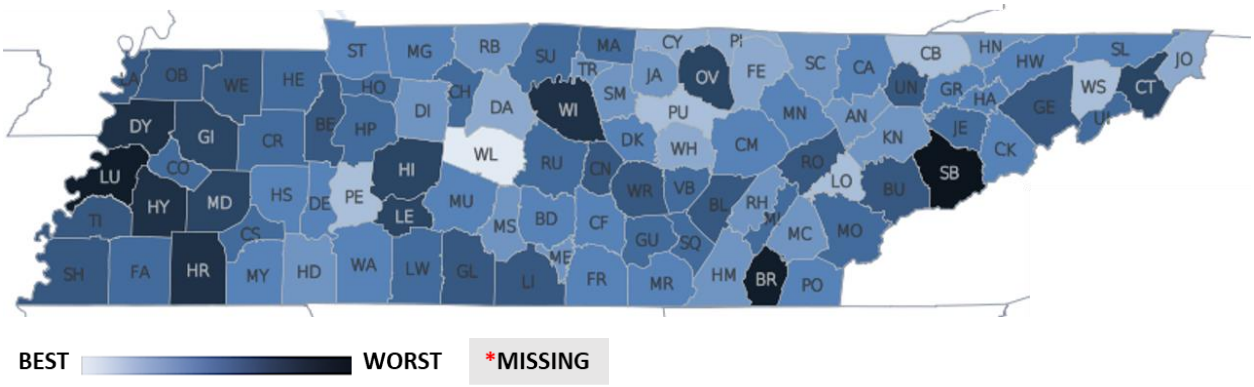
Figure 31: Median Household Income, 2017[121]



In addition to social and economic factors, individual health behaviors influence the health of individuals and communities. In Figures 32 and 33 below, we use the County Health Rankings Data to identify trends in key risk factors, including adult obesity and adult smoking.

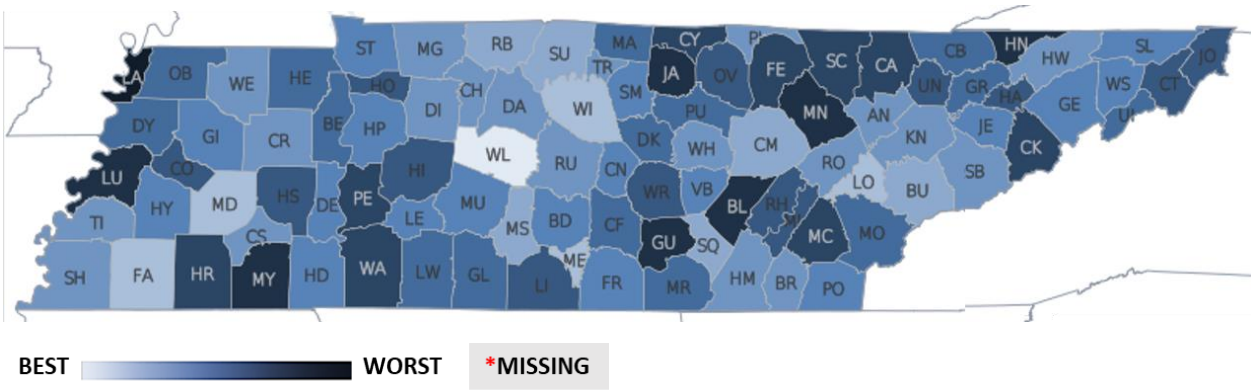
[j] Comparison Southeastern states include Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, and South Carolina.

Figure 32: Tennessee's Adult Obesity Prevalence Is Above the National Average[122]



Obesity prevalence is defined as the percentage of adults that report a body mass index (BMI) greater than or equal to 30. The overall obesity rate in Tennessee is 33 percent, ranging from 39 percent in the poorest performing counties to 25 percent in the highest performing counties. Thirty-one counties perform above the national average, which is 32 percent.[123] Only one county, Williamson, scores within the highest performing 10 percent of counties nationally.

Figure 33: Smoking Prevalence Is Above the National Average Across Tennessee Except for One County[124]



Smoking prevalence (or the percentage of adults that reported currently smoking) is a notable risk factor for the State. The average percentage of smokers across all Tennessee counties is 22 percent, with percentages ranging from 27 percent in the poorest performing counties to 15 percent in the highest performing counties. Only two counties in Tennessee, Loudon and Williamson, perform equal to or better than the national average of 18 percent.[125]

Potential Policy Options Related to the Theme #4

In Figure 34, we have identified two potential policy options to focus on initiatives that address social determinants of health.

Figure 34: Potential Policy Options to Address Social Determinants of Health

Policy Option	Rationale for Policy Option
1. *Align state, private, and public entities to comprehensively address a social determinant*	Social determinants such as housing, education, socioeconomic status, employment/workforce development, and access to care can largely be improved through partnerships between local, state, and federal agencies and private organizations.
2. *Promote awareness of and action on social determinants and comprehensive care approaches*	While it is important to focus on developing and implementing initiatives related to social determinants of health, it is equally important to make patients, providers, and payers aware of the initiatives and provide appropriate education on comprehensive care approaches.

Examples of State and Federal Initiatives

Figure 35 below details a sample of current state and Federal initiatives related to social determinants of health. This table is not an exhaustive list of current initiatives.

Figure 35: Examples of State and Federal Initiatives

Examples of State and Federal Initiatives[k]
• ***Tennessee Health Care Innovation Initiative:*** As part of the Tennessee Health Care Innovation Initiative, TennCare established the Patient Centered Medical Home (PCMH) & Health Link programs. Both programs focus on primary care transformation and promote the delivery of preventive services and the management of chronic illnesses over time. These programs have a large emphasis on the coordination of physical and behavioral health and offer incentives to providers through performance outcome payments that encourage adherence to performance improvement.[126]
• ***California:*** The Medically Tailored Meals Intervention program is a three-year, $6 million project funding six nonprofits in eight counties. The nonprofits deliver three medically tailored daily meals for 12 weeks to Medi-Cal beneficiaries with ongoing congestive heart failure. The results of the program so far indicate reduced readmission rates and hospitalizations.[127]
• ***Colorado:*** Through a collaborative effort between Reach Out and Read Colorado, the Colorado Governor's Office, and the Colorado Department of Public Health and Environment, 200,000 books are "prescribed" annually by approximately 330 clinics and 1,700 healthcare professionals. These books reach 125,000 children between the ages of six months and five years old in 62 out of 64 Colorado counties. Studies show that children's language development in such programs improve within three to six months.[128]
• ***Maryland:*** The Maryland Governor's Office for Children collaborated with a national nonprofit, Share our Strength, to introduce the Partnership to End Childhood Hunger. The Partnership aims to connect eligible children and families to federal nutrition programs, such as the School Breakfast and Summer Food Service Programs.[129]

[k] This report was developed as a review and examination of the Listening Tour and does not necessarily reflect an exhaustive list of existing State resources.

Examples of State and Federal Initiatives[k]
• ***New York:*** The Medicaid Redesign Team (MRT) Supportive Housing Initiative provides funding for rental subsidies, support services, and capital projects. The Initiative serves multiple populations through many partnerships with entities, including the Department of Health's Office of Health Insurance Programs and the Office for People with Developmental Disabilities. Over 13,000 high acuity Medicaid patients have been served since 2012, resulting in a 40 percent reduction in inpatient stays, 26 percent reduction in emergency department visits, and a 15 percent reduction in overall Medicaid health expenditures post-enrollment. As of September 2017, the Initiative had developed 19 rental subsidy and supportive services programs statewide.[130,131]
• ***North Carolina:*** NCCARE360 is an electronic coordinated care network that enables providers to send and receive electronic referrals and share resource data with community partners. Through the online platform, providers can refer patients to nonmedical services including healthy food, safe and affordable housing, and employment programs. The platform also serves as a data repository that monitors accountability, service delivery, and closes the loop on completed referrals.[132]
• ***Oregon:*** The Act to End Hunger began in 2004 and was extended for another five years in 2009. The Act involved a significant outreach program, established a state food policy council, and increased the number of vendors that accept Supplemental Nutrition Assistance Program (SNAP). Program participation increased SNAP participation to 80 percent among eligible people and brought over $1 billion a year to Oregon's economy.[133]
• ***Pennsylvania:*** The Governor, along with various other departments, formed the Governor's Food Security Partnership. The Partnership promotes coordination, communication, and joint planning between public and private sector entities to provide nutrition and food assistance to residents. The Governor also proposed increasing cash grants to counties to purchase and distribute food to low-income individuals.[134]
• ***Texas:*** The BookSpring ReadWell program supports pediatric literacy through partnerships between providers and parents with children up to the age of six to develop critical reading skills. This program is restricted to clinics for low-income populations in central Texas, consisting mainly of families on Children's Health Insurance Program (CHIP), Women, Infants, and Children (WIC), Medicaid, or who have no insurance. Financial support comes from the United Way of Greater Austin, and other organizations. ReadWell serves over 20,000 children annually.[135]
• ***Medicaid Case Management Programs:*** 36 states, including Tennessee, currently provide targeted case management as a Medicaid State Plan benefit. Certain programs involve cost-sharing (e.g., Georgia requires a $3 copay), and other programs have service limits (e.g., Arizona limits its program to the Developmental Disabilities population and Delaware to pregnant women with prior authorization).[136]
• ***Medicaid Health Homes (Section 2703):*** All states have an opportunity to obtain 90 percent Federal match funding to develop Medicaid "health homes" for patients who have chronic conditions. The law defines these as teams of "primary care clinicians, nurse practitioners, or physician assistants who work with other healthcare professionals to provide comprehensive care management, care coordination and health promotion, transitional care between hospital and primary care, referral to community and social services, patient and family engagement, and use of IT to link services."[137]
• ***Northwell Health's Social Health Alliance to Promote Equity (SHAPE) program:*** This program was developed to address social determinants of health in clinical practice by screening patients across multiple social categories. At two internal medicine and pediatric primary care clinics at Northwell Health in New York, facility-based patient navigators screen for and address patient needs through a referral process. Navigators assist physicians with referrals to child care, hunger and homeless services, and legal services.[138]

Examples of State and Federal Initiatives[k]
• ***Sutter Health Advanced Illness Management (AIM) Program:*** This initiative positions registered nurses or social workers in hospital, community, and tele-support settings to assess the clinical and social needs of patients with terminal conditions and limited prognoses and help them navigate physical and emotional challenges.[139]
• ***UnitedHealthcare and American Medical Association:*** The American Medical Association and UnitedHealthcare are collaborating to support 20 new International Classification of Diseases (ICD)-10 codes related to social determinants of health. The codes aim to more effectively address nonmedical issues, such as food, housing, transportation, and the ability to afford medicine, utilities, and other services.[140]

Theme 5: Greater transparency in healthcare may improve patient outcomes and experiences.

Price transparency is an issue receiving national and statewide attention. Several public and private tools are available through government entities and payers to assist consumers in making cost effective healthcare choices. For most goods and services, consumers can shop around, compare prices, and select the best product that fits their needs and budget. In healthcare, consumers are undereducated about the product they are buying and the appropriate price to pay for the product. This has led many leaders in the healthcare industry and government to support price transparency initiatives.

> *"The average person doesn't comprehend the concept that there is absolutely no rhyme or reason to what a provider can bill. There's no regulation and there's no barometer in any sense."*
>
> - *Payer Representative*

Surprise billing (i.e., balance billing) can be the result of a specific market failure when hospital-based providers can bill patients directly for their services, and is another issue receiving national and statewide attention. In some cases, including in rural areas, provider groups contract with hospitals to deliver necessary ancillary services, but are not considered hospital employees and, therefore, are out-of-network. Patients are often unaware of these arrangements and do not have a choice in provider, resulting in a "surprise bill" after services are provided.

Several states are attempting to address surprise billing through legislation, regulation, and contracting standards to decrease the likelihood of placing additional financial pressure on consumers. However, the most effective policy may require federal action to address self-funded plans that are exempt from state insurance requirements.

During the surprise billing and price transparency Listening Tour, multiple panelists emphasized the need for useful pricing data that connects the provider, price, and related quality outcomes. The panelists indicated that making pricing data publicly available will not be enough to engage consumers in a meaningful way. Consumers must be educated about what they are buying and have an "anchor" to establish a comparison.

Policy Landscape – Price Transparency and Surprise Billing Policies and Programs

National

There is significant interest and activity at the national level to improve price transparency and reduce surprise billing, as shown in Figure 36.

Figure 36: Examples of Initiatives to Address Price Transparency and Surprise Billing

Organization	Description of Initiatives
Executive Branch	• President Trump has signed executive orders and used the administration's executive powers to advance its drug pricing and transparency efforts. However, on July 8, 2019, the U.S. District Court for Washington D.C. blocked the administration's new rule that requires drug manufacturers to disclose list prices in direct-to-consumer advertisements. The ruling stated that the Department of Health and Human Services (HHS) lacked the authority to impose such a requirement.[141]
U.S. Congress	• There are pending proposals within the Senate and House to address surprise billing including the Lower Health Care Costs Act, sponsored by Tennessee Senator Lamar Alexander, the STOP Surprise Medical Bills Act, and the No Surprises Act.[142,143]

States have also introduced price comparison websites that rely on multiple data sources and vary widely in the scope and detailed level of price comparison. Figure 37 compares the states currently using price-comparison websites, their data sources, and functionality.

Figure 37: Recent Price Transparency Vary by States[144]

State | **Website** | Launched	Type of price	Procedure or bundled price	Searchable services	Price by: Insurer	Medical group	Hospital	Free-standing surgical center
Colorado | **Shop for Care** | 2018	median	both	38	✘	✔	✔	✔
Florida* | **Florida Health Price Finder** | 2018	average	bundle	295	✘	✘	✘	✘
Massachusetts | **CompareCare** | 2018	median	procedure	~300	✔	✔	✔	✔
Maryland | **WearTheCost** | 2018	median	bundle	4	✘	✘	✔	✘
Maine | **CompareMaine** | 2015	average	procedure	233	✔	✔	✔	✔
New Hampshire | **NH HealthCost** | 2007	median	both	124	✔	✔	✔	✔
Washington | **WA HealthCareCompare** | 2018	median	procedure	100	✘	✘	✔	✔

*Statewide averages per service
Sources: Freedman HealthCare; New Hampshire Department of Insurance (N.H. searchable services; excludes dental); Center for Improving Value in Health Care; and other states

Tennessee

In Tennessee, the "Right to Shop" bill passed in 2019, which will create a statewide database that publicizes service prices and includes prices of in-network services.[145] This is similar to price transparency measures taken by several other states.

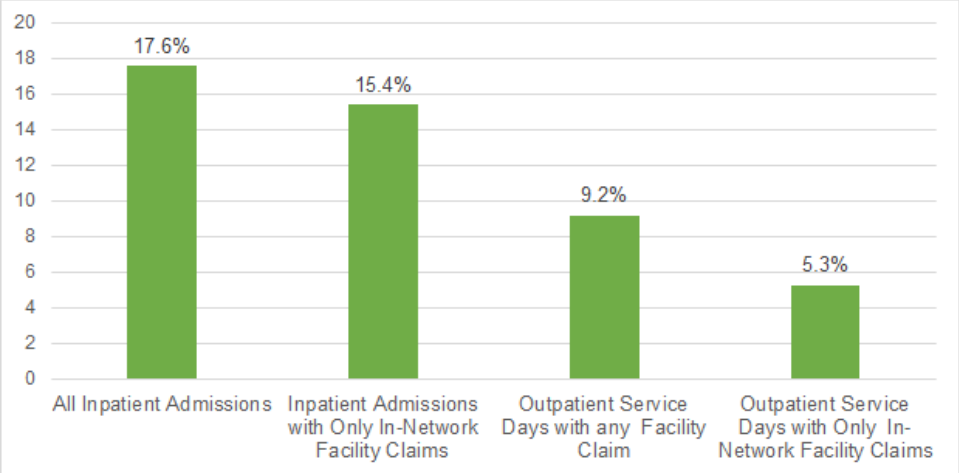
Trends in Out-of-Network and Surprise Billing – National Data

Surprise out-of-network billing and the associated costs to patients have increased in recent years, particularly among inpatient admissions and emergency department visits to in-network hospitals. According to a study from the Journal of American Medicine, out-of-network billing increased from 26.3 percent to 42.0 percent between 2010 and 2016 for privately insured patients.[146] For patients, this meant an average increase in out-of-pocket costs for a given inpatient stay rose from $804 to $2,040, a 154 percent increase.

In another national study, the Kaiser Family Foundation found that among people with large employer coverage, one in five inpatient admissions includes a claim from an out-of-network provider.[147] More than seven percent of patients receiving care in an outpatient setting also received bills including claims from an out-of-network provider.

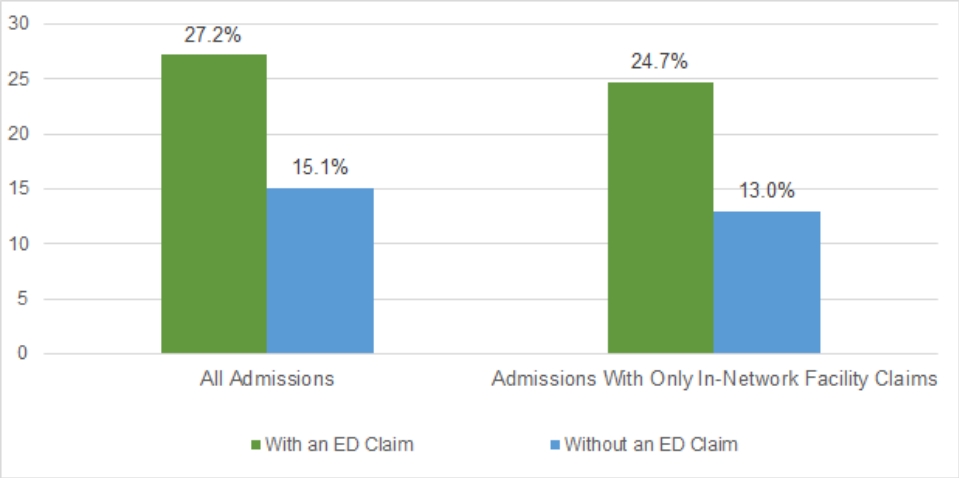
Patients seeking healthcare services at in-network facilities are not necessarily protected from paying out-of-network rates. Figure 38 indicates that even when patients use in-network facilities, they can still be billed by out-of-network providers.

Figure 38: Percentage of Admissions or Outpatient Service Days that include a Claim from a Non-Network Provider, by Service Location and Facility, 2016[148]



The same Kaiser Family Foundation study also considered the reason for admission as part of the analysis. Inpatient admissions for behavioral health conditions, such as substance use treatment, and surgery are associated with higher rates of claims from out-of-network providers.[149] Moreover, a quarter of inpatient admissions that include an emergency department-related claim were found to include claims for an out-of-network provider, as shown in Figure 39.

Figure 39: Percent of Inpatient Admissions Including a Claim from an Out-of-Network Provider by Facility and Emergency Department (ED) Claim[150]



Patients may face high out-of-pocket costs associated with these out-of-network claims, and in cases of emergency, patients often lack choice in which doctor they see or how they are transported to the hospital.

Potential Policy Options Related to the Theme #5

The urgency to address surprise billing stems from the substantial downstream impacts on consumer out-of-pocket costs and finances, as well as physical health. Price transparency has also been highlighted as a potential tool to bend the overall healthcare cost curve. In Figure 40, we have identified three potential policy options for consideration that address surprise billing and price transparency.

Figure 40: Potential Policy Options to Support Surprise Billing and Price Transparency

Policy Option	Rationale for Policy Option
1. *Evaluate policy solutions to address surprise billing*	Eliminating and reducing surprise billing will protect Tennesseans from high-cost bills for emergency and ancillary services and can reduce medical debt and bankruptcy.
2. *Evaluate solutions to help individuals make good healthcare purchasing decisions*	The decision on where to receive healthcare services is not easy to discern. Costs can shift significantly based on deductibles, insurance, in-network, and out-of-network providers. Cost is not associated with quality; and sometimes the best option is unknown to the consumer. Price transparency inclusive of quality benchmarks made available to consumers can help individuals make better decisions and reduce overall healthcare spend.

Policy Option	Rationale for Policy Option
3. *Educate Tennesseans on insurance concepts including deductibles, co-insurance, and premiums*	An educated consumer is a better consumer of healthcare resources which will ultimately drive down the cost of healthcare.

Examples of State and Federal Initiatives

Figure 41 below details a sample of current state and Federal initiatives related to surprise billing and price transparency. This table is not an exhaustive list of current initiatives.

Figure 41: Examples of State and Federal Initiatives

Examples of State and Federal Initiatives[I]
• ***California:*** California adopted Assembly Bill 72 in 2017 that set limits on the amount that can be charged by out-of-network physicians for non-emergency services at in-network hospitals. Patients pay only their in-network cost sharing obligation. Health plans reimburse the out-of-network professionals the greater of the health plan's local average contracted rate or 125 percent of Medicare's fee-for-service rate.[151]
• ***California:*** California Assembly Bill 2706 requires public schools to add information about healthcare coverage to enrollment forms. The State provides schools with educator toolkits to help schools enroll families and children in healthcare coverage.[152]
• ***Massachusetts:*** In 2012, Massachusetts required health insurers to develop online cost estimators, which have become more user-friendly and comprehensive over time. These tools are used by a small fraction of the market and have other limitations, including the lack of cost data on behavioral health procedures.[153]
• ***Minnesota:*** In July and August 2019, two bipartisan laws went into effect that required large hospital systems to post facility fees, and for clinics to disclose the prices of their 25 most common procedures, respectively. The new laws are intended to address out of control healthcare costs by educating the public on procedures.[154]
• ***New Hampshire:*** NH HealthCost is an online service developed in 2007 to compare approximately 120 medical services, including blood tests, emergency room visits, and biopsies, and compare prices by hospital, medical group, and insurance company.[155]
• ***New York:*** New York's surprise billing law limits surprise billing for out-of-network providers in emergency and non-emergency situations. The State provides a state-run arbitration process to determine billing payment but only applies to state-regulated health insurance plans, not including Employee Retirement Income Security Act (ERISA) self-funded plans.[156]
• ***Texas:*** Senate Bill 1264 goes into effect on September 1, 2020 and allows insurance companies and medical providers to enter into arbitration to negotiate a payment. State officials will oversee the arbitration process.[157]
• ***U.S. House Resolution 3502:*** The legislation would prohibit balance billing for surprise out-of-network services and limit consumer cost sharing for standard in-network services. Additionally, the bill proposes an arbitration process to determine payment to out-of-network providers.[158,159]

[I] This report was developed as a review and examination of the Listening Tour and does not necessarily reflect an exhaustive list of existing State resources.

Examples of State and Federal Initiatives[I]

- The ***Office of the President of the United States*** is proposing requiring hospitals to publicly post the standard charge information for services, supplies, or fees billed by the hospital or provided by employees of the hospital.[160]

Section 4 Alignment of Potential Policy Options and Themes

The Listening Tour revealed many successes and opportunities to improve healthcare for Tennesseans. As we consider which themes and potential policy options to prioritize and implement, Tennessee will also need to consider the following:

- County- and community-specific characteristics, and
- Alignment of selected programs and strategies.

Finally, as we consider the various policy options within this document, Tennessee will also need to review any limitations such as available resources, operational support required by State agencies, and budget.

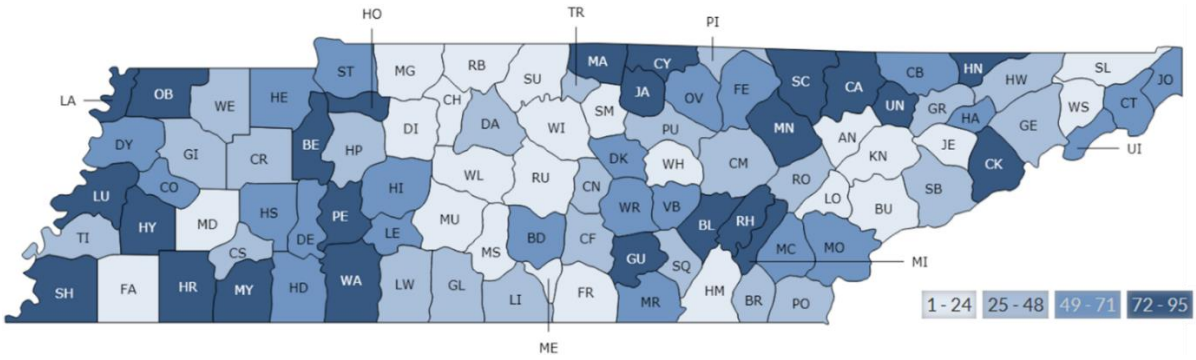
County- and Community-Specific Characteristics

In many cases, communities struggle with multiple healthcare and social determinant challenges simultaneously, such as low provider availability, low rates of vehicle ownership, high rates of adult smoking, and limited access to exercise opportunities. “One size fits all” approaches that fail to account for these unique community circumstances, such as implementing a ride-share program in a county with low vehicle ownership, may not be feasible strategies for these communities. Additional barriers, including geography and economic stability, could hinder a strategy’s success. The State will likely need to promote and/or implement strategies tailored to the communities’ needs and available resources to make meaningful improvements in healthcare.

To help identify areas of the State where there may be the largest room for improvement, we used County Health Ranking’s health factors composite.[m] Figure 42 below shows each county’s rank within the State divided into four quartiles with lighter colors indicating better performance. This figure can help the State identify which areas of Tennessee have multiple healthcare-related challenges.

[m] The Health Factors composite calculates a weighted average of the scores for individual measures. Examples of these measures include: (1) Health behaviors (e.g., adult smoking, access to exercise opportunities, food environment index, alcohol-impaired driving deaths); (2) Clinical care (e.g., ratio of primary care physicians, ratio of dentists, flu vaccinations); (3) Social and economic factors (e.g., unemployment, children in poverty, injury deaths); and (4) Physical environment (e.g., drinking water violations, severe housing problems, and long commute – driving alone).

Figure 42: Areas of Similar County Performance Tend to Be Clustered[161]



The western third of the State has almost half of the lowest ranking counties in the health factor composite. Several northern counties (east from Macon to Hancock counties) also have low health factors composite scores. In addition to community-specific approaches, the State may also have an opportunity to work with regional associations and other partners to identify and address regional barriers to healthcare.

Alignment of Potential Policy Options and Themes

Specific strategies the State and its partners may consider to address potential policy options and themes can impact multiple areas. For example, increased leverage of telehealth technologies may also ease transportation challenges and access barriers in rural areas. The State may jointly collaborate on strategies with stakeholders, as appropriate.

To assist the State in its prioritization, Figure 43 outlines opportunities for alignment across the identified potential policy options and themes.

Figure 43: Alignment of Potential Policy Options and Themes

Theme & Potential Policy Options for Consideration	Theme				
	Theme 1 – "Transportation"	Theme 2 – "Technology to Support Chronic Care"	Theme 3 – "Access in Rural Areas"	Theme 4 – "Social Determinants of Health"	Theme 5 – "Transparency in Healthcare"
Theme 1 – Transportation is a significant barrier to care.					
Evaluate public and private options to increase access		✓	✓	✓	
Provide more services at home		✓	✓	✓	
Engage all State agency partners in improving access to healthcare services			✓	✓	

Theme & Potential Policy Options for Consideration	Theme				
	Theme 1 – "Transportation"	Theme 2 – "Technology to Support Chronic Care"	Theme 3 – "Access in Rural Areas"	Theme 4 – "Social Determinants of Health"	Theme 5 – "Transparency in Healthcare"
Theme 2 – Technology, including telehealth, can be a component of the solution to address access issues and a tool for chronic care management, including in rural areas of the State.					
Assess infrastructure to support telehealth			✓		
Leverage telehealth	✓		✓		
Leverage telemonitoring	✓		✓		
Use telementoring solutions	✓		✓		
Theme 3 – There are significant healthcare access barriers in rural communities, including the lack of providers.					
Expand healthcare workforce development programs		✓		✓	
Expand capacity of the existing healthcare workforce		✓		✓	
Theme 4 – Social determinants of health will be important to address.					
Align state, private, and public entities	✓		✓		
Promote awareness of and action on social determinants of health and comprehensive care	✓		✓		✓
Theme 5 – Greater transparency in healthcare may improve patient outcomes and experiences.					
Evaluate policy solutions to address surprise billing			✓		
Evaluate solutions to support healthcare purchasing				✓	
Educate Tennesseans on insurance concepts				✓	

Section 5 Next Steps

The State will continue to facilitate discussions with agency partners, patients, providers, payers, and other interested stakeholders to improve the health outcomes for Tennesseans. To do this, the State is announcing the Healthcare Modernization Task Force.

Figure 44: Next Steps for Tennessee Healthcare Modernization

Appendix 1 Representative Quotes for Overall Themes[n]

Representative Quotes – Transportation

- "We identified a community within Memphis where there was a lot of infant mortality and a lot of low birth weight babies, and we brought in some people from the Department of Transportation. When they put a bus stop in that community so that those young women [could] get to the doctor, there was a change. So, I bring that up not only because of the success but it definitely shows that sometimes healthcare partners are not those that deal in healthcare every day."

  – *Provider*

- "I think transportation is one of the biggest things and it blocks people from getting the care that they need, the medications that they need, getting physical therapy, everything that you can imagine. They're really just stuck inside that house, and that leads to so many more issues."

  – *Provider*

- "We're finding that sort of over and over that if we can just get people connected to the right spot that many times without necessarily new programs and new dollars that we can improve their health. . . transportation is a big problem in our [community]. And you can see big holes where people just can't get to the doctor's appointments and so on. And so they end up getting emergency transportation to the ER. But I think there's a long way to go with the resources we have."

  – *Provider*

- "Community health is where we see most of our families engaging in healthcare unless they go to an emergency room. And that is not where we want them going. And so really bringing the services to them in their community, where they can access them without barriers to transportation, or without just fear of entering a place that's that big and intimidating. That's something that we had historically been a part of, and that we really encourage."

  – *Community Partner*

- "Even with insurance and an education, I'm not accessing care at that one place where maybe I should be accessing care. I go to where it's convenient. And that's what our families need more than anything."

  – *Community Partner*

[n] The Listening Tour session notes, rather than a recording, served as the primary source material and we indicated these cases with an asterisk (*).

- In regard to crisis services: If you're in Memphis and there's a bed open in Chattanooga, how do you get there? We don't have a way to get a person who has just overdosed into services.*

  – *Provider Association*

- There is a health system out of Minneapolis that created Hitch Health, which is targeted for clinics with high no-show rates. Their product combs through their scheduling data, sends automated text messages to confirm the appointment, and asks if the patient has transportation.*

  – *Commercial Corporation*

Representative Quotes – Technology and Telehealth

- Eventually we will have to lose our grip on the concept of a brick and mortar clinic.*

  – *Provider*

- "We are entering an era where we can create personalized experiences virtually and I think we need to continue to be thoughtful about that."

  – *Provider*

- "I think 11 years ago [regarding] the population we served, I would have told you they don't have a phone, but they do today, and they own a smartphone phone at that. I think looking at technology solutions to . . . get the word out and scale our ability to serve people is important. I think there's some research coming out. . . that shows that technology can make positive improvements in a person's overall health, and then if you add a person on top of that, like care coordination, that creates the individualized touch that's engaging. I think that could be a win-win if you partner the two together."

  – *Provider*

- "We are currently serving prisoners, or incarcerated individuals, through telehealth throughout the State of Tennessee. We're also engaging some of the American Indian tribes and very rural populations in that same way. I think the technology is there. There are still some interoperability challenges around [getting] medical records to talk to each other, but once we solve some of those problems, I think there's going to be a way of reaching individuals."

  – *Provider*

- "We have to get lawmakers to understand that it costs money in the short-term to save money in the long-term. To the extent that we can get lawmakers to invest in supporting the infrastructure so the providers don't have to worry about that; that's going to benefit everybody and save money for everybody."

  – *Provider*

- "Above all else, we are dedicated to improving human life. And telehealth just goes right along with that because telehealth [is] an enabler. [It] allows us a connectivity to provide access to high quality care."

  – *Provider*

- "Believe it or not, there is still a lot of challenge with connectivity. I had one of my neurologists that moved from Hendersonville to Cottontown…and he said 'I'm not sure I can do telemedicine anymore because I can't get a good connection out here. I've tried Sprint, I've tried Verizon, I've tried AT&T.' And so, we were scrambling around trying to figure out what wireless and cellular service is out there. And so, it's still really challenging, and I wouldn't even consider that location a particularly rural area when we compare [it] to some of our other counties in the State. . . So, anything that the State can do to help support that broadband connectivity, assess where those gaps are, look at our community profiles, those community health assessments and prioritize these spaces where broadband is still a major issue."

  – *Provider*

- "The idea is that all technology surrounding healthcare delivery should share information to improve patient care. Right now, you have medical devices, electronic health records, billing systems that all have proprietary data sets, and hardware that do not share information with the caregivers to provide better care or the patients to know what they're receiving or to tell their next doctor, 'look [at what] I got the last time they went in.'"

  – *Research Institution*

- I need telehealth to work well, from a technological and regulatory standpoint. Telehealth is critical and access to broadband infrastructure is critical to multiple industries, not just healthcare.*

  – *Provider*

Representative Quotes – Barriers to Healthcare Access in Rural Communities and Workforce Development

- "I think a lot of people conflate insurance with access. There are people who are insured who are woefully lacking access, and I think the opposite can be true too. I spent some time in Houston where they had a pretty robust safety net system, and in Denver as well where the uninsured did have pretty decent access. So, I think it is important to understand that you've got to give people access via everyone getting insurance. That's great, but you have to acknowledge that a subset population may never [have insurance], and you need to ensure [access to healthcare] whether it's through a safety net or through community programs."

  – *Payer*

- "It took me nine months to get a pharmacist embedded in one of my clinics. I had to sell it and resell it and resell it and come up with the money. And I will say [an embedded pharmacist] has made such a difference in that one practice's population on medication adherence. That [pharmacist] can talk anybody into anything as far as being compliant with their medicines and understanding them and the providers are so busy…. His value in the clinic is unreal. But to keep his position, I am constantly having to move people and justify his pay. Although he's very valuable, he's not seeing patient's every 15 minutes. It is such a needed resource when you look at this aging population to have that person that they can talk to."

  – *Provider*

- "So, as we may on occasion, ask ourselves, what if we are in the midst of a medical emergency where if we were traveling with a pregnant woman that was in labor, in 20 communities across this State, health or a hospital is not a heartbeat away. These are in communities where hospitals are closed, either recently or in the past. So, having the ability to provide services in these situations has become very critical. In some situations, the next nearest hospital could be more than 25 miles away, can be through mountainous terrain. So, trying to access care in some of these areas can be very challenging."

  – *Provider Association*

- "Our hospitals are the cornerstones of the communities they serve, they're huge economic engines. If you look at our 65 rural hospitals, they have about a billion-dollar economic impact on the communities they serve. Certainly having a community without a community-based healthcare system or hospital, it becomes extremely challenging to recruit business and industry there."

  – *Provider Association*

- "What was really interesting and encouraging for us is the providers that we have placed in our incentive-based program. We have a retention rate of over 80 percent beyond that initial application period. So, most of the providers that we're placing, they're being placed in areas that they have interest in staying long-term."

  – *Provider Association*

- "The biggest thing that I want to say today is Tennessee is the epicenter of rural health closure or rural hospital closures. . . That's big. We may be a little bit behind Texas. . . We have lost more per capita than any other state in the nation. Nationally, we have seen over 100 rural hospitals close. This is a crisis that is being felt most prominently here in our State, but it's certainly not without impact to other rural communities in other states. And so, I think that that's why it is imperative that we really focus on 'our why' and come up with a solution that is viable for Tennessee. But it can also hopefully be spread out throughout other areas throughout our nation and the epicenter for a solution."

  – *Provider Association*

- "We have 15 counties that are currently classified as economically distressed. There are an additional 29 counties on top of that, that are at risk. Those are all located in rural areas of our State. In addition, when you look at poverty, our highest rural counties have 84 percent poverty. And that's not just a few, that's actually quite a few that are very impoverished."

  – *Provider Association*

- "One of the best ways to recruit to rural areas is to have people come back home, in their home areas. So, let that inform us about how to identify and incentivize people from rural areas to come back and practice there because they are more likely to stay."

  – *Tennessee State Government Agency*

- "Being a physician is not the only way to practice healthcare. And I think our State has certainly been one of the leaders in the past and coming up in particular with things like nurse practitioners, advanced nurse practitioners, and PAs. And I think, given the competition, we're going to have to continue to look at those ways and continue to help young people see . . . there are other ways to practice medicine, to have that fulfilled life."

  – *Provider and Research Institution*

- If rural communities could help relieve student debt in less time - four years vs. 15, it would attract people.*

  – *Provider and Research Institution*

- "What kind of message are we sending to people, when we say we want [direct support staff] to come work in this field, however, we feel your value of work is less than that of your favorite barista? So we strike and we fought to get the rates up to where we can pay direct support staff a living wage. We're at $10 an hour. We appreciate all the support we've gotten on that, but we still have a long way to go."

  – *Provider Association*

- "There's a nursing shortage, the average age of a nurse is over 50. And they'll be exiting the field much quicker than people can come in. So now we have a supply and demand issue. The supply is low, the demand is high, which increased provider calls, which aren't substantiated by rates. So they may end up in almost this point of a lack of access, because we can't compete to get the staffing that we need to provide the services."

  – *Provider Association*

- "We also have aging caregivers. I see more and more people in their 50s and 60s be supported by parents in their 80s, who quite honestly, many, many years ago probably never expected that they would outlive their child. And they haven't made plans. They haven't made preparations."

– *Provider Association*

- "For example, I have to do this with Johnny, because this is who pays for Johnny's services. But for the exact same thing, I have to do [it] a little differently for Susie because somebody else pays for Susie's services. So anytime we can streamline those types of training and reforms, it's more beneficial to the person supported. I recognize that we have finite resources. And again, if we focused on the efficiencies, and we've reduced the redundancies, we're saving money for the State. We're saving money for providers, and ultimately increasing access."

  – *Provider Association*

- "The psychiatric shortage is a big issue for us. We have extended our use of nurse practitioners and we are heavily reliant on our nurse practitioners but, obviously, nurse practitioners have to be under the supervision of a physician to provide those services so that is a constant challenge for us."

  – *Provider*

- "It became clear that as our population's actually declining over the past five years, and as our admissions were declining, and our population was getting older, and the payer mix was changing, that we weren't going to be able to continue to do the same things that we had done in the past. And we decided that maybe we should stop fighting each other and start worrying more about improving the community's health, that includes trying to keep open a lot of the rural health facilities in the region that simply were not sustainable."

  – *Provider*

- "A third of our hospitals in that area were in danger of closing. We had a closure in the past few years when we were unmerged, and it's obvious why. We have a market where we've got three hospitals in a county of 40,000 people, one that's 15 percent full, one that's 17 percent full, one that's 20 percent full. And so, the boards of the organizations came together and went to the states and asked for a very special solution known as a certificate of public advantage to try to bring these systems together. And the whole purpose of that merger was really to change the model of healthcare in the region, to instead of worrying about putting heads in beds, we were going to be more worried about creating community health and improvement."

  – *Provider*

- Getting people connected to a regular source of care has the strongest effect. . . When you connect with vulnerable populations, you have to do as much as you can when they are in front of you because you don't know when you will see them again.*

  – *Provider*

- As we do a better job with educating the community and reducing the stigma about mental health issues, we see more people in need of care. What concerns me long-term

– we will hit a brick wall, where we don't have enough providers, and some would say we are already there.*

– *Provider Association*

Representative Quotes – Social Determinants of Health

- "Our children[‘s health] is not getting better. We are seeing a decline. And there's an increase in obesity. I was talking to one of the people that was a former chair of our board …and she is a coordinated school health professional. She said that this year is the very first year that she is seeing children heading into kindergarten, that over 30 percent of her incoming class is classified as obese coming into kindergarten. So that is just frightening and profound. But I believe that our food deserts and our lack of access [to healthy foods] is a huge part of that. So, we have to come around those communities with a solution to get an increase in access to healthy foods, but then also to increase of knowledge of how to prepare healthy foods."

  – *Provider Association*

- "Beginning to break down those walls and force discussions and sort of collisions and interactions from non-traditional stakeholders who absolutely need to have a seat at the table I think will begin to promote the things we all know matter, but really, it's all about alignment and I don't think that's happened well today."

  – *Payer*

- "We know the list of social determinants of health, but I think you have to go to the community. If you're looking to make an impact on this focus group because you can have the data that tells you to go a certain way but if that's not their value and if that's not what they see as their issue, it'll never work….Letting the community tell you what their issue is I think is huge."

  – *Provider*

- "We're beginning to find out that collaboration and a coordinated care plan is probably the magic key to keeping people out of the hospitals and giving them hope in their lives."

  – *Consumer Association*

- "Education is a strong predictor of health. [For] men and women, there is a five to seven-year difference in life expectancy between someone who hasn't finished high school and someone who has finished college. And what that tells you is if you care about improving health as I do, we're not going to be successful in Tennessee until we start getting more people through K-12 system, community college, universities and so on."

  – *Provider and Research Institution*

- Probably the most important thing I've learned in the last 13 years is if we want to improve healthcare, we're going to have to change behavior, and we also have to

reduce poverty through jobs and education. The key is you cannot achieve any one of those three without the other two. We will not improve our health in Tennessee if we don't have education. We can't improve our education if we don't have healthy teachers – it's all interrelated.*

– *Provider and Research Institution*

- "We do still have a very high rate of smoking . . . Currently, we have a law that is called pre-emption. This was passed in 1994, and what it says is the tobacco laws that were in place at that time could not be changed. You in state government are the only ones who can change them. Local government cannot change them. So, what does that mean? Well, it means that you're going to have a really hard time, if you [are] in local government, every year at the state legislature, we have legislators that come and say, "You know I have a park, and we don't want people to smoke there, because we are trying to encourage people to exercise, get their kids out and be in the fresh air. But if you're in any city in this State, you can't really put out that sign that says, "Don't smoke." You can say, "Please don't smoke, it's not courteous" but "don't smoke" is illegal, because of this law. Because of this law, we can't touch any of the licensing or promotion or display of tobacco products. That hurts us."

  – *State Legislator*

- "Not everybody has a place to exercise, and so if we are trying to helping local governments do what they do in providing opportunities for people to exercise and making sure that it's a smoke-free environment, not only do we protect people from second-hand smoke, but the big reason for doing that is that it moves the needle on what is the social norm. As long as people think that it's ok to smoke everywhere, kids see that."

  – *State Legislator*

- "Being healthy is not the absence of disease. It's much more than that. It has to do with your mental well-being, social well-being. As you've heard, healthcare only accounts for ten percent of being healthy. As a matter of fact, there are some organizations that believe that number should be more like five percent. The really major factors in determining how healthy you are your ZIP code and your behaviors. In fact, there are some parts of the country where your ZIP code is the best predictor of your health status. That includes some counties in the State of Tennessee. And we need to accept that fact and act on it if we're going to improve the health of our citizens."

  – *Provider*

- "There's no patient that thinks that their life is inpatient or outpatient, they just live their life across the continuum. And that's what they do. And we need to think about patients in that way."

  – *Provider*

- "Third-grade reading is one of the best predictors of health in the region. And so instead of spending all that money on failing hospitals, where we're fighting each other, we said, 'okay, let's actually start to work together under this merger, and start to redirect these dollars into things that the community actually needs.'"

  – *Provider*

- "It's amazing how many people are just not connecting with services that exist right now, in order to help them out. We've done such a bad job of taking ownership of this and putting the tools in place to connect them. Just one example are navigators. A high-risk female patient indicated that her family had high food insecurity risk, they were running out of money for food the third week every month. And so, in conversations with the navigator, the navigator found out that she was spending $400 out of pocket a month on her insulin and other drugs to treat her diabetes. And so, she got her connected into prescription drug assistance programs and so on, wiped out that $400 expenditure, now she's got $400 extra month to spend on food. We didn't have to create a new program. Those are existing programs. And we're finding that over and over. That if we can just get people connected to the right spot that many times, without necessarily new programs and new dollars, that we can improve their health."

  – *Provider*

- "I will mention, research shows that homelessness drives healthcare costs. 5 percent of patients make up 50 percent of our healthcare costs. And of those 5 percent, all of them are either considered living at the poverty level or unstably housed. So, if we can get at homelessness, and if we can start to solve for that problem, we might have a lot more money available in healthcare, to address some other needs. Boston Medical Center recently launched an initiative where they're partnering with state and local entities. They're investing $6.5 million in this initiative, and it's really focused on affordable housing. But what they found when they started looking at the numbers of healthcare costs for their company, 3 percent of their patients were making up 40 percent of the cost. So pretty consistent with national averages."

  – *Community Partner*

- "And we look at addressing their education, employment, of course, housing needs, and then we also look at social capital and what type of connections and supports they have within the community that are going to strengthen them and give them some opportunities that they maybe haven't had in the past. So, we advocate as United Way, in bringing multiple service providers together to coordinate care. And we know, based on what we've seen with our clients, that it really does accelerate the success of the clients. . . This starts with navigation. But it also allows a family coach or a case manager to hold the hand of the family member and really walk with them through whatever it is they're doing. When I talked about this, and I tell people some of things we offer, they kind of think, 'Well, there's no way we could do that for everybody.' But we will pay for a person to go back to school and earn their bachelor's degree. We will pay for a

person to earn a GED so that then they have other options to think about whether it's a certification or something like that. What you have to be able to do while you're doing that is also pay for their living expenses. Because I don't know about you guys, but if I quit my job tomorrow to go back to school, someone would have to pay the mortgage, and someone would have to buy the food. And so, it's not as easy as saying, 'Hey, go back to school.' Well, that's great, most people don't have that opportunity. So, we not only help them find the path back to school, but we also support them during that journey to make sure that they have every support in place that's going to help them be successful."

– *Community Partner*

- "Benefit cliff hinders a family's ability to move out of poverty. We can talk about moving families out of poverty for the next 20 years, but if we don't find a way to close the gap with the benefits cliff, we're never actually going to make it happen. A family making less than $7.25 [an hour], is eligible for a lot of benefits. The minute they make $7.25 [an hour], they start to lose benefits that are essential to their families functioning, they don't actually make up that gap until they're making $15 [an hour] or more. And so that's a huge gap. And a minimum wage worker with little to no experience or education, it's going to be hard for them to be making more than $15 an hour, especially quickly. So being able to still figure out how we can close that gap and support families as they move up that trajectory is really important."

  – *Community Partner*

- "We're in an agricultural state. Why in the world when we have produce across Tennessee, in every single county being grown, is it impossible or difficult for patients with little or no income to access fresh produce? That's illogical to me."

  – *Provider*

- "I would say it's not directly healthcare that seems to be the main problem we all focused on. We talked a lot about food, we talked a lot about education, we talked about homelessness, and other things that are these indicators of a lack of health later on. It just seems like there's a big opportunity to lean on data as it's something that's becoming more and more available to us as a state, as a society, to track what are my highest indicators of poor health outcomes and how can I attack those things in a more preventative way, instead of allowing it to become a problem and having to deal with a bigger task later on."

  – *Community Partner*

- "It has been proven that it takes five generations to get out of the cycle of poverty."

  – *Provider and Research Institution*

- "Commissioner Barnes has really started looking at the two generational approach. What that means is when you used to come into our offices, we would sign you up for SNAP,

which is what a lot of you think of food stamps, and we'd send you on your way. Well, now you're going to come in and we're going to ask more questions. We're going to see, can we get you to college? Can we use some of these resources that the State has to really break those cycles of poverty and look at the whole family instead of just the one person who's coming into our office?"

– *Tennessee State Government Agency*

- We have to take a much more holistic approach to the person and to the family. When you are looking at behavioral factors and social factors making up 55 to 60 percent of a perfect person's health condition, that can't be ignored.*

– *Tennessee State Government Agency*

Representative Quotes – Surprise Billing, Price Transparency and Health Literacy

- "The more we can do to raise the collective health literacy of our society is probably going to pay off pretty well in the long-run."

– *Payer*

- "For your national numbers where about one in five trips to the emergency department you're going to be seen by out-of-network physician as part of that care, even when the hospital's in-network."

– *Research Institution*

- "The key factor that I want to drive home, which I touched on a little bit, is that this really is at its fundamental levels a market failure."

– *Research Institution*

- "I think this is one of those issues where you can't really rely on the patient to initiate and figure this out for themselves. Transparency alone is not really going to solve the issue. Try picking your anesthesiologist. Even the hospital [said] 'half my anesthesiologists are in-network and half are out-of-network.' The anesthesiologist you see is whoever's on call and doing the rounds."

– *Research Institution*

- "I think it's hard to imagine patients going to shop. No one knows what happened to choose their anesthesiologist."

– *Research Institution*

- "When states act on this issue, it seems to be restricted by a federal law called ERISA, which basically pre-empt states from regulating self-insured employer plans, and most large employers self-insure, and are therefore responsible for the medical risk. The state is basically not allowed to tell [self-insured plans] what to pay. However, I think it's worth noting that the state does have overview over provider regulation. So if you are trying to

actually solve this problem, states have restricted themselves to just dealing with a fully insured part of the market. But there's no actually legal reason not to address this."

– *Research Institution*

- "Almost all care when a patient seeks medical care, almost every single time they are seeking out in-network care because it comes with lower cost sharing, etc. It is very rare that patients purposely go out-of-network. . . And they're not purposely going out-of-network in these situations we're talking about… I think if you [should] make it effectively illegal to be an out-of-network anesthesiologist. . . Patients don't choose, you're not selecting the anesthesiologist, you are selecting the surgeon or the hospital."

  – *Research Institution*

- "This is a market failure because we allow the anesthesiologist to contract independently. For other physicians you have to be part of a network to see patients. And it is lucrative to be out-of-network."

  – *Research Institution*

- We don't let nurses bill separately. They are integral to the care but don't bill separately. Anesthesiology should not be able to bill separately either.*

  – *Research Institution*

- "The average person doesn't comprehend the concept that there is absolutely no rhyme or reason to what a provider can bill. There's no regulation, there's no barometer in any sense."

  – *Payer*

- "And when you get a market, like in some pockets of Tennessee, where you could literally have one, two, maybe three provider organizations that dominate a certain specialty like Emergency Room Services . . .they are essentially setting their own reimbursement."

  – *Payer*

- "This was an industry failure, that we are creatures of incentives. And as an industry, we failed, and we set all the wrong incentives for this phenomenon to occur. As payers, when a bill came in and was emergency service wrapped around it, we insulate the customer, insulate the patient. The person making the consumer decisions now is completely insulated to what's going on behind the scene until they get a bill. And luckily, they started getting bills, because I think that's probably the only reason we're sitting here. Because patients starting to get pulled into this."

  – *Payer*

- "From my perspective, we've long insulated the customer from too much of this. Just make it go away, right? Make the bill go away, and for too long, we just scrambled to make the bill go away. And this is not providing the right incentives for us to truly fix the

underlying issue. I shouldn't be able to tell a consumer that a hospital is in-network, if every provider practicing in the hospital is not in-network."

– *Payer*

- As an industry, healthcare payers and providers are experienced negotiators, but the incentives must be in place for a negotiation to be fair and arrive at a rate the works for both parties.*

  – *Payer*

- "So for transparency, it sounds good. And you had to be careful with that term, I think because it's very nebulous. We want more transparency. Most everyone here has talked about price transparency, and cost transparency and empowering consumers to be better shoppers. If they know the quality and the price, then they can generate this other nebulous term - value. And that's what everyone wants to drive our healthcare system towards - delivering more value. I think you have to be careful how you define value, because it can mean different things to different people."

  – *Research Institution*

- "Estonia, small, Eastern European country that 1.3 million people that . . .have a card. That's your ID, and it's got everything you get from government services on it, including your healthcare, if you go to a doctor, they don't have your record, on Cerner or Epic systems. You have it on your card. Once you give them your card, or your credentials, which you can access without a card, they can then access your data and every doctor you've been to. And it just works."

  – *Research Institution*

- "The notion that I would know my neighbor's price and my ability to act on that in a network negotiation are two wildly different things. The vast majority of providers in the U.S. are not price makers, they're price takers. So they don't have the leverage. If I know what the person across the street is paying, I can't turn around and just tell you, 'Hey, I want that price.' That's not how that negotiations works. It can in some circumstances, but small markets where there's only a handful of providers within the larger metropolitan areas, that's not the case."

  – *Research Institution*

- "They are not in the dark about what their competitors are getting paid. In fact, we just brought in a contracting specialist because we're doing some direct contracting on behalf of some of our larger municipal employers. And they already know what the prices across the street is. So the notion that this would be additional information that might otherwise shift the market, I think is economically an overblown concern."

  – *Research Institution*

- You can't manage what you can't measure. . . First, understand your data and what it is costing you. The next piece is benefit design and education . . . structure benefits that include shared saving incentive or shared risk and build education around that.*

  – *Research Institution*

- Transparency is about a program and not a single price. You need to be in a plan long enough to know how to shop. Price transparency is nothing without an anchor. $2,000 or $8,000 for a procedure, how do you know what to pay without knowing what you should pay.*

  – *Research Institution*

- As a purchaser across state programs, to provide flexibility to employers, I think about payers being able to deploy a range of tools that improve enrollee experience and provide cost and quality transparency so consumers can shop for healthcare program.*

  – *Payer*

- "We are doing things like digital navigation, we are also implementing a new advocacy resource. We don't have it yet. But we are getting there. Because I can tell you even on my enterprise healthcare teams who deal with this every day, we just had an individual who had complications related to a premium, and she has spent hours and hours and hours trying to get those goals taken care of. And that's somebody who's educated in our healthcare."

  – *Commercial Corporation*

- "27 hospitals rank as top on one ranking and at the bottom of the another one, so that makes it a little bit harder for consumers to understand what exactly they're paying for."

  – *Provider and Research Institution*

- "[Price transparency tools] can be used and harnessed in good ways. But it really relies on a way to make it usable and navigable. . . if you just publish the charges, that's a long list. And that is not usable to anybody. . . the evidence isn't that direct where more data means better decision-making. [Data] a necessary condition, but it's not a sufficient condition."

  – *Provider and Research Institution*

- "When you buy yourself a big screen TV, you're thinking in 10 years, it's going to get better, and competition is going to drive down that price. So it's a better value product and lower costs for you. But it seems sometimes in healthcare, we can have a lot of data out there and it just becomes even more and more confusing. The ability to make the right decision becomes more complex. So how do we keep trying to figure that out? where we either make the data manageable that everyone can read it? Or we tailor some of that data to the folks that need it and they understand it based on their needs."

  – *Tennessee State Government Agency*

- "When we're talking about the State of Tennessee and you all are talking about plan design and having a very educated consumers . . . I'm a very educated person, and I look at it and it makes no sense to me. I feel like I've done everything right. You've educated me. I've seen red. I've seen green. I've seen stats and I still have to sit down and pick up the phone to ask how to maneuver through that. But when we're talking about people who are in crisis, who show up at the emergency room, and that's their single point of healthcare, how are we educating these folks who show up and say, 'I need this fixed, I have a problem. I have a healthcare issue I need fixed.' How do we let those people know what they're walking out of the door with?"

  – *Tennessee State Government Agency*

- "It's the idea that patients and … others will know prospectively and up front what the cost of care is. What the services are … so they can make informed decisions. . .In most other industries you can create a product by design, called user-centered design. . . It's the idea that you create a product, or a service based on what the end user is going to do with that product or service. That's why your iPhone is so slim. It wasn't designed for those they weren't asking. There's a full process when you ask [consumers] and usually in healthcare that doesn't exist. Healthcare is designed for me [a physician], the end user, the surgeon. When is my clinic open? When are my appointments? Those are physician-centric, provider-centric, and that's historically how healthcare has been raised and designed. So, it was important to us that we flipped that, that we really make it central that this work is a patient-centered experience."

  – *Provider and Research Institution*

- "One of the things we come to the realization of is we can have great programs, but the public is not educated in how to make the best lifestyle choices . . . and they are not going to have optimal health."

  – *Community Partner*

Representative Quotes – Other Compelling Quotes

- "The bottom line with engagement is you've got to build trust. It's all about building trust and relationships with these folks, and what we've found is that when we're able to effectively do that, they come back to us, and begin to utilize us as a trusted resource for helping them shape and guide their healthcare experience."

  – *Payer*

- "75 percent of our members actually trust us to help make recommendations for which providers they should see and where they should seek care, and when we do make recommendations, 90 percent would recommend that provider that we [recommend] to them to a friend or colleague."

  – *Payer*

- "Putting a face with a person and giving them someone they can contact can make a change."

  – *Provider*

- "I think as long as communication is good, it doesn't have to be one particular person, but as long as everyone is clear about what care coordination is and what the gold star of what that looks like is, I think that's ok. I do think there is an importance piece to our population about seeing them in-person and in their home that helps with social determinants of health. I think our members benefit from a lot of different types of care coordinators."

  – *Provider*

- "If there's not any shame and there's not any stigma associated with both mental health and addiction, I think it would be much easier for someone to go to someone and say, 'I really need help.'"

  – *Consumer Association*

- "We could build all the buildings, we could build all the homes, we can have facilities and resources available but until we can give that person hope and confidence and give them encouragement to accept responsibility, of being responsible, I think we're going to be still experiencing homelessness."

  – *Consumer Association*

- "We blame or shame people who cannot stay off of drugs or alcohol when we don't have a system of care in place that will actually support their continued sobriety and their continued relationship with the community."

  – *Provider Association*

- "When people get to the point of titrating off that medication-assisted treatment, very often the thing that leads to a relapse or to some different management is their fear of pain. And because they did not have good pain management in the past, the fact that we're taking them off an opioid or even an opioid through medication-assisted treatment is a huge barrier to them being able to stay clean, sober, and off medication."

  – *Provider Association*

- "One thing I would add about the safety net is that it's been a lifesaver for people who need mental health services and I've been in the system a long time and I've seen the evolution of it and when the safety net began there were a certain group of core services that were available through that funding source, and this is a state-funded program to help people who have no other means. There were some core services made available and over time, as stakeholders have become more and more involved in the situation and the conversation, the Department has been very amenable to adding services that the community thought were important, such as psychosocial rehabilitation. It's one of those services that you may not know a whole lot about but it's really key. It's one of the

services that addresses the social determinants of health. It's something that gives people a place to go."

– *Provider Association*

- "Every one of us knows that no matter what your condition is, whether it's a heart condition, whether it's diabetes, whether it's mental health, whether it's substance abuse, you've got a better outcome if someone somewhere somehow is there to help you."

  – *Tennessee State Government Agency*

- Our providers have often said that if they can use the time that it takes to fill out all of the different forms to actually do care, that we would see 50 percent more production of services. I really grapple with that. I know you have to have data and show what you're doing, but at the same time, I'm hopeful through these conversations that we incentivize outcomes and not so much process.*

  – *Tennessee State Government Agency*

- "The data pointed out that, I was a little surprised even as a pediatrician to find out, that half of the adults with a mental illness had their symptoms before they were 14 [years old]. So, these were pediatric condition, but this knowledge and train of integrating these services is the one thing I would change."

  – *Provider and Research Institution*

- "We have really strong research evidence now that if you can detect and get kids into treatment [for Autism Spectrum Disorder] before the age of three that you can change their outcome[s] by one standard deviation of IQ points over their lifespan. That's the difference between being supported in employment and independent in employment."

  – *Provider and Research Institution*

- "So, it's not that there's one thing that's causing us to die young, it's [that] Tennessee is less healthy across the board for all of the leading causes of death. So that doesn't give us a lot of guidance for what we need to do to change things."

  – *Provider and Research Institution*

- "One of the challenges that we have here is the Governor has tasked us with how do we figure out what works across the State? What might work in Nashville, doesn't work in Knoxville. What works in Knoxville, doesn't work in Chattanooga. So why don't we figure out how to tackle some of these challenges that are not only locally-based and locale-based, but some of these multi-generational challenges we have around poverty, whether it's socioeconomic, whether its race. So, in the different challenges that we might see, are there ways that we can better tackle from a patient perspective to provide better outcomes and really see healthcare take off in a positive way?"

  – *Tennessee State Government Agency*

- "It appears sometimes [that] services are formulated and designed more around highly-concentrated population areas, more urban areas. And we've already heard the conversations about the challenges with rural areas. There's the technology connectivity challenges, there's the decreased community options and employment options. And then we've got the transportation challenges. And I know it's been mentioned already today, but I'm going to bring it up again, and that is regulations. We operate under some very specific, detailed and strict regulations and sometimes mandates. And essentially what this does is it takes the focus away from that person and puts it on the paperwork."

  – *Provider Association*

- ". . . the emphasis shouldn't be on the regulations, but the quality. And I would ask that we ask ourselves when we're looking at new roles and new policies, does this rule, this policy, does it do something to promote quality of care? Is it doing something to improve the lives of the people who we're serving? is it doing something to protect this person? Or is this going to be yet another checklist on a survey when somebody comes in to look at your compliance?"

  – *Provider Association*

- "So you have your Commissioner in Nashville, but we're trying to talk about our problems that are both in East Tennessee and West Tennessee. And your problems in East Tennessee and Western Tennessee are going to be very, very different from each other. So this is what I've really enjoyed, we've been talking a lot about partnering, those partnerships really, really come in handy."

  – *Tennessee State Government Agency*

- "Everybody in the room knows that just because they [foster children] hit their 18th birthday, you can't open the door and put them out and expect them to survive when they don't have the tools and they're ill equipped."

  – *Tennessee State Government Agency*

- In regard to the ACEs Initiative: There's a whole body of research that's over 20 years old that shows by creating an awareness about your adverse childhood experiences, you can improve a person's outlook on their physical and mental health. If you layer on treatment, the outcome is even better. If all system-serving entities got on board with this initiative, it could really push the needle forward.*

  – *Community Partner*

- We need to take the long view—this work will impact our children's children.*

  – *Community Partner*

- Transformation can be successful when you bring together diverse stakeholders with the ability and authority to implement change. When state funding comes available a level of synergy is only possible because of local ownership.*

– *Local Government Agency*

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