Consequences of Administrative Burden for Social Safety Nets that Support the Healthy Development of Children

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Abstract

Through the lens of administrative burden and ordeals, we investigate challenges that low-income families face in accessing health and human services critical for their children's healthy development. We employ a mixed methods approach—drawing on administrative data on economically disadvantaged children in Tennessee, publicly available data on resource allocations and expenditures, and data collected in purposive and randomly sampled interviews with public and nonprofit agencies across the state—to analyze the distribution of resources relative to children's needs and provide rich descriptions of the experiences of organizations striving to overcome administrative burdens and support families. We also scrutinize the place-based resource deserts and environmental contexts of resource gaps and deficiencies in public policies governing the distribution of public resources that exacerbate administrative burdens and inequities in access to public resources. Our insights into the costs imposed on individuals and organizations and how they impede or spill over into other aspects of organizational work point to specific state and local program and policy changes that could be implemented to address resource constraints and alleviate burdens on organizations and poor families.

Introduction

While waiting for the state worker to confirm if his qualified children had their healthcare benefits reinstated, Mr. Garcia[1] asked, "What do they have against poor people? I submitted my applications *four* times. The last time they asked me to submit proof of income, I sent them a bank statement with four dollars in my account." Mr. Garcia, a Tennessee father of three young children in a working-poor[2] family, relies on public programs, such as Medicaid (TennCare) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), for his children to receive services and supports that are critical to their healthy development. Yet for a nearly two-year period, Mr. Garcia's children went without these critical, health-enhancing benefits, while their eligibility for the programs was contested by state re-certification and application processes. The consequences of their denial of access to these services were both immediate and likely longer-term: the elementary-age child missed months of therapy, the younger children fell behind on immunizations and well-child checks, and the five-year old failed his kindergarten readiness screening and was delayed a year in starting school.[3]

Unfortunately, this family's experience with the state's Medicaid and other public benefits programs was not exceptional. In 2018, the number of children with public health insurance fell sharply, and Tennessee led the nation in the decline, with 9.7 percent fewer children on TennCare, as reported in an analysis conducted by *The Tennessean* (Kelman & Reicher, 2019). Investigations of the substantial loss of public health insurance coverage for Tennessee's low-income children in recent years point to an opaque, cumbersome, and outdated

[1] We use pseudonyms to protect the confidentiality of those who we interviewed or whose case information we present in this research.
[2] This term is used to describe people who spend 27+ weeks either working or looking for work and their income, regardless of employment, falls below the poverty level in one year.
[3] Lee et al. (2000) showed that children participating in WIC were about 36 percent less likely to be diagnosed with "failure to thrive" and 74 percent less likely to be diagnosed with nutritional deficiencies than eligible children who had not received WIC.

process for verification and re-verification of children's eligibility for TennCare, (Alker & Pham, 2018; Kelman & Reicher, 2019). Tennessee disenrolled more children from Medicaid than any other state, primarily because of late, incomplete, or unreturned eligibility forms, which often left children's coverage status undetermined. Some parents, like Mr. Garcia, did not find out that their children were without coverage until they sought health care for them, at times in urgent circumstances. Mr. Garcia showed one letter he received with a request for additional information about his TennCare application that arrived *after* the deadline indicated in the letter for responding. When he contacted the state agency, he was told that he would have to begin the process anew, even though this was not his first application attempt to get his children reinstated that had been lost or delayed by the state. In the literature, these types of onerous experiences or difficult encounters with bureaucracies that erect barriers to accessing public services and supports are known as administrative burden or ordeal mechanisms (Schuck & Zeckhauser, 2006; Burden et al., 2012; Moynihan et al., 2015; Heinrich, 2016; Herd & Moynihan, 2018).

This study draws on the concepts of administrative burden and ordeal mechanisms to investigate the challenges that many low-income families face in accessing health and human services critical for the healthy development of their children, as well as the constraints that individuals and organizations encounter when trying to help vulnerable children and families gain access to resources and supports. We aim to make three primary contributions with this research. First, while the administrative burdens framework focuses on *individual experiences* of policy implementation as "onerous," and ordeal mechanisms are characterized as burdens placed on *individuals* that "yield no direct benefits to others" (Krogh Madsen et al., 2021), we illuminate how the burdens or ordeals encountered by individuals also impose broader public and societal costs on government and a range of nonprofit and private organizations that play a key

role in sustaining the health and social services safety net. We also document how efforts by these organizations to overcome administrative burdens impede their core functions and spill over into other aspects of their organizational work.

A second objective of our research is to describe how place-based resource deserts and deficient policies governing the distribution of public resources exacerbate administrative burdens and the costs they impose on all parties. Accordingly, we scrutinize the place (e.g., urban vs. rural) and environmental contexts of resource gaps and their implications for equity in access to public resources, recognizing that they reflect sociopolitical factors and legacies of systemic discrimination in the South (Bell et al., 2020; Camacho & Henderson, 2020). Krogh Madsen et al. (2021) argue that the concept of administrative burdens allows for both objective measures and subjective interpretations of how they are experienced, and our research also aims to advance both qualitative and quantitative description of these experiences. To that end, we employ a mixed methods approach and draw on administrative data on economically disadvantaged children in the state of Tennessee, publicly available data on resource allocations and expenditures, and data collected in purposive and randomly sampled interviews with public and nonprofit agencies across the state. The quantitative analyses enable the mapping of subpopulations of children in need and the distribution of resources to serve them, while the qualitative analyses provide rich descriptions of the experiences of organizations striving to overcome administrative burdens or cobble together supports that are lacking for families.

We conclude by compiling recommendations for addressing resource gaps and alleviating burdens on poor families through state and local program and policy changes that emerged from our interviews, but that also have broad relevance beyond Tennessee for those working on the front lines in health, education and community-based organizations to serve children and

families. States in the South and others that have not expanded Medicaid to adults under the Affordable Care Act have seen the largest increases in uninsured children (Alker & Roygardner, 2019), exacerbating historical inequities and making it critical to study Southern states like Tennessee in greater depth. Furthermore, all 10 states with the highest child poverty rates, including Tennessee, are in the South (Children's Defense Fund, 2020),[4] and Tennessee children have also been disproportionately affected by the opioid epidemic that places them at greater risk for a range of adverse consequences (Winstanley & Stover, 2019).[5]

Administrative Burden and Ordeals as Policy Tools

In *Targeting in Social Programs,* Schuck and Zeckhauser (2006) describe "ordeals" as a policy tool in social programs to screen out potential program beneficiaries who are "bad bets"—i.e., those who benefit too little to warrant the public expenditures—and "bad apples," who are undeserving for reasons of irresponsible, immoral, or illegal behavior. The objective, they argue, is to impose costs (nonmonetary) on participation, such as queuing in long lines or other ways of requiring greater outlays of effort—that induce applicants to reveal or signal "their true preferences and needs" via their persistence through an arduous application process (p. 105). Their underlying premise is that in the context of limited public resources that have to be rationed, these types of ordeal mechanisms are effective policy tools for increasing targeting efficiency by screening out the less needy and undeserving, or prioritizing access to benefits for the "good apples" and "good bets." Schuck and Zeckhauser also recognize that social programs

[4] Children are defined as poor if they live in a family with an annual income below the Federal Poverty Line of $25,701 for a family of four, which amounts to less than $2,142 a month, or extremely poor if they are at 50% or less below the FPL. In 2018, Tennessee had the 6th highest poverty rate (at 26.2%) for children under six years.
[5]Tennessee has one of the highest opioid prescription rates in the country as well as a high drug overdose death rate. See data dashboards at the Centers for Disease Control and Prevention and Tennessee Department of Health: https://www.cdc.gov/drugoverdose/data/index.html and https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html

(that are not entitlements) are often "pitifully limited" in resources or availability relative to the eligible needy, yet they suggest that this strengthens the argument for ordeals, which increase the chances that those who ultimately receive program benefits are "good bets."

The use of ordeals in public programs is also intended to shift some of the costs of screening and assessment from program managers to applicants. Because the costs of collecting ample and accurate information to determine who is most in need and likely to benefit from public programs are not trivial, the shifting of these burdens to the applicants serves a secondary purpose of reducing program administration costs. Another approach to reducing the screening costs would be to simplify them (e.g., the screening criteria and quantity of information collected)—making the experience less onerous, as administrative burdens theory would suggest—but Schuck and Zeckhauser argue that there is a tradeoff in a likely increase in errors of classification or determination with reduced information for making these judgments. Linos and Riesch (2020) found in their experimental study of police officer recruitment that simplification of the application process reduced organizational efficiency and increased costs for some applicants, who spent a longer time in the process and otherwise would have been screened out earlier. Schuck and Zeckhauser argue that if a simplified process to screening (that could increase risk of errors) is pursued, it would be better for decisions to "tilt toward denial", because those who are denied access unfairly or wrongly to programs or other desired ends are more likely to appeal and to persist in a challenging appeals process. In fact, they suggest that a system with an appeals process will not only reduce errors, but it can also reduce operational costs as it increases targeting efficiency, "since so much is learned on the cheap" from the applicants (p. 113). As Deshpande and Li (2019) show, however, in their study of the closing of Social Security Administration field offices that provided assistance with filing disability applications,

and as we find in our research, the shifting of burdens from the state to those apply for services or supports (and organizations that endeavor to help them) does not come cheaply.

While Schuck and Zeckhauser were primarily concerned with improving the targeting efficiency of public programs, researchers drawing on the lens of administrative burden have employed a more expansive conceptual approach to investigating how these ordeals or burdens are enacted, experienced and distributed, with both intended and unintended consequences. For some who encounter them, as Herd and Moynihan (2018:5) illustrate, "burdens are a matter of life and death," or as we saw in our research in Tennessee, they can profoundly shape one's life chances. Moreover, Moynihan et al. (2015:2), Heinrich (2016) and Herd and Moynihan (2018) describe how policymakers or "street-level bureaucrats" (i.e., those working on the front lines of policy implementation) can construct administrative burdens as a form of "policymaking by other means," particularly when legislation allows for procedural discretion in implementation. These and other studies (Soss et al., 2011; Watson, 2014; Vargas & Pirog, 2016; Heinrich, 2018) expose how resulting delays in access to program benefits or "bureaucratic disentitlement"—in which eligible individuals or families are denied access entirely—can lead to long-term and devastating consequences that go well beyond the program administration costs that Schuck and Zeckhauser were concerned with minimizing. Below, we briefly review some of the literature on administrative burden to explicate this conceptual framing as applied in our study of low-income children and families in Tennessee and the organizations that navigate a myriad of bureaucratic, resource, and other contextual constraints in their efforts to address their needs.

Administrative burden conceptual frame and research base

As Schuck and Zeckhauser (2006) and Herd and Moynihan (2018) point out, administrative burdens can serve legitimate purposes in administering public programs, such as

requiring applications that facilitate assessment of the veracity of claims on public funds and specifying rules and procedures that enable more efficient rationing of limited resources. At the same time, these objectives impose what Moynihan et al. (2015) categorize as learning costs—for example, the time and effort applicants need to invest to understand if they qualify for and will benefit from a program—as well as costs associated with complying with the rules and requirements for accessing the benefits or services (e.g., producing required documentation for applications). Schuck and Zeckhauser argued that these burdens should weigh more heavily on the applicants seeking access to public services and supports in order to minimize public program administration costs, and also that they should err on the restrictive side as means to single out those most deserving or in need among those who apply. Yet the growing research base on administrative burden and ordeals alternatively finds that more often, these costs tend to be more difficult to bear for those who are most in need of the public programs (Cherlin et al., 2002; Alvarez et al., 2008; Brodkin & Majmundar, 2010; Sekhon, 2011; Burden et al., 2012; Heinrich, 2016, 2018; Nisar, 2017; Herd & Moynihan, 2018; Deshpande & Li, 2019; Christensen et al., 2020). Furthermore, legacies of discrimination against poor and minoritized groups have exacerbated the costs they incur, given their less ready access to information, transportation, and financial resources for covering the out-of-pocket costs of learning and compliance (Heinrich, 2016, 2018; Nisar, 2017). As Herd and Moynihan (2018:6) contend, the distribution of administrative burdens realized in policy and program implementation tends to "reinforce inequalities in access to rights" and perpetuate discrimination.

A third category of burdens or costs identified by Moynihan et al. (2015) include psychological costs that are experienced with the intrusiveness of application processes and requirements, such as having to turn over personal records for public scrutiny, or that may come

with the denial of benefits or appeals, e.g., feelings of rejection or stigma experienced in these encounters with the public sector. Again, these costs may weigh disproportionately more on the poor and other excluded or isolated groups in society. In a stark example from South Africa, Heinrich (2016) showed how subgroups of the poor (i.e., disproportionately negatively affected by the legacies of apartheid) faced considerably greater administrative burdens in accessing South Africa's cash transfer program. Historically marginalized by the color of their skin, those who were pushed away from urban centers and into informal settlements (often without utilities) were ostracized when their applications were rejected after being required to bring additional documentation (beyond program rules), such as proof of residence, electricity, or water, that they were least likely to have. Although the setting of this study in Tennessee is very different from the South African context, there are parallels in regard to how barriers to program access are erected, i.e., in how they reflect longstanding racial or social hierarchies that discriminate with intent. For example, in the case of Mr. Garcia, highlighted in the introduction, he was told (discriminatorily) at the WIC office that he needed to return with a current passport in order to get his infant son connected with WIC benefits, even though he had presented his son's birth certificate and Social Security card and a passport was not officially required.

Furthermore, these burdens can also extend to individuals and organizations, even if they are not interacting directly with public agencies (Heinrich, 2016). Heinrich (2018) and Nisar (2017) pointed to the roles that other public and nonprofit organizations frequently play in helping to mitigate administrative burdens, especially those that fall disproportionately on the poor and disadvantaged. Nisar, for example, studied the historically marginalized Khawaja Sira of Pakistan and described how nongovernmental organizations have sought to reduce administrative burdens that prevent the Khawaja Sira from securing legal identification, such as

arranging special teams of "frontline workers" to brief them about rules and regulations and guide them through the process, reducing both learning and socio-psychological costs. As we show in our current study, however, the diversion of these organizations' resources to breaking through administrative burden can detract from their core work and impose additional costs beyond those experienced by the individuals seeking services and supports. For instance, county health department staff described how diverting social workers to address paperwork problems associated with client access to public insurance strained their capacity in other areas, such as family counseling services.

Research Setting and Policy Context

Before describing our research samples and data analysis, we present some important policy background and contextual information about Tennessee that has both motivated and informed our study. As Fox et al. (2020: 105) point out, social welfare policy at the federal level "is governed by a labyrinthine set of rules that define program eligibility, enrollment procedures, and the cash value of benefits received," and states layer on additional rules and procedures that exacerbate the administrative burdens experienced by citizens. In this research, we focus in particular on policy and administrative actions at state and local levels that may have affected the accessibility and functioning of programs for children and families seeking health and social services supports.

TennCare background

In the 1990s, Tennessee secured a waiver from the Secretary of Health and Human Services (under Section 1115 of the Social Security Act, 42 U.S.C. § 1315) that allowed it to replace the state's conventional Medicaid program with TennCare, a demonstration program. The waiver was subsequently repeatedly renewed, and although Tennessee did not expand

Medicaid coverage under the Affordable Care Act, any laws and rules not explicitly waived still applied to TennCare. For example, the state is required determine Medicaid eligibility within 45 days of an application submission (or within 90 days if eligibility is based on a disability, 42 C.F.R. § 435.912(c)(3)), and those found eligible are required to receive benefits "without any delay caused by the agency's administrative procedures" (*Id.* § 435.930(a)). In addition, beneficiaries' coverage is subject to renewal and reverification of their eligibility every 12 months (42 C.F.R. § 435.916).[6]

Until January 1, 2014, individuals typically applied for TennCare in person at their local Department of Health Services (DHS) offices, assisted by social workers and DHS eligibility workers who entered their data directly into the eligibility system and could address problems with the applicant. DHS also operated the Family Assistance Service Center, a call center that helped TennCare applicants navigate the application process and resolve any issues affecting eligibility. In conjunction with the rollout of the Affordable Care Act (ACA), states received funding to develop new information technology (IT) systems or revamp existing systems to meet ACA IT requirements by October 1, 2013. Drawing on this funding, Tennessee had contracted for the development of a new IT system, the TennCare Eligibility Determination System (TEDS) that was intended to be operational by the October 2013 target date. However, it was more than five years later (in 2019) before TEDS was finally launched to process applications, determine eligibility for TennCare, and interface with the federal government's online marketplace.

[6] To enroll in Medicaid, individuals have to meet "categorical eligibility" rules by providing evidence that they are aged, blind, disabled or pregnant, or that they are children or parents of dependent children. They also have to meet income and/or asset eligibility requirements that depend on their categorical eligibility group. In addition, newborns born to mothers receiving TennCare are, under federal law, eligible to receive medical assistance under a state plan that begins on the date of the child's birth (if found eligible for Medicaid) and remain eligible for a period of one year." 42 U.S.C. § 1396a(e)(4). Tennessee has opted to extend coverage to unborn children whose pregnant mothers meet the income limitations specified by the state and who are not otherwise eligible for Medicaid.

In the interim, starting on January 1, 2014, the state suspended the option that allowed individuals to apply directly to TennCare and instead required applicants to go through the federally-facilitated marketplace (healthcare.gov) for health insurance benefits.[7] The state also sought to equip each of its DHS offices in the 95 Tennessee counties with computer kiosks and telephones for applicants without access to technology. In addition, TennCare entered into a contract with the Tennessee Department of Health, which operates local health departments in 89 of the counties, to provide enrollment assistance statewide (and separately through subcontracts with the six metropolitan counties). However, as we describe below, Tennesseans applying for public health insurance during this period encountered numerous challenges, and renewals were processed primarily on hard-copy forms that had to be mailed to the state agency.

This background information also illustrates the importance of the time period in which we are examining individual and organizational experiences interacting with state agencies in Tennessee. The data we use in resource mapping are primarily from the most recent years available, 2018 and 2019, and we also use the most recently available data on children (from the 2018-19 school year). We now turn to describe our research samples and methods of data analysis, before presenting the study findings.

Research Samples

Our study focuses on the public and nonprofit infrastructure in Tennessee that is designed to make health and social services available to its economically disadvantaged children and families. The state agencies that address the needs of children and families include the Departments of Children's Services, Education, Health, Human Services, Mental Health and

[7] According to a class action lawsuit, the federal marketplace was not designed to process all categories of Medicaid eligibility, leaving Tennessee and its citizens without an operating system for generating eligibility decisions from the state, as was their right (Case 3:14-cv-01492 Document 1 Filed 07/23/14).

Substance Abuse Services, and TennCare. Through the Policies for Action Research Hub at Vanderbilt,[8] we have a research partnership with the Departments of Education, Health and TennCare to link children's health, education and public insurance data over time, with the goal of improving children's health and education outcomes. Among children in low-income families, we are particularly concerned with those made vulnerable by the opioid (and other drug) crises and other adverse childhood experiences, as well as children of immigrants.

In examining how low-income families (and those who assist them) navigate the public infrastructure to help them meet their children's healthcare and related needs, we constructed a sample frame and designed instrumentation to collect data from individuals working at local and regional levels in community mental health centers, county health departments, federally qualified health centers (FQHCs), school-based health centers (SBHCs)[9], community anti-drug coalitions, and opioid treatment programs across the state of Tennessee. There are 95 counties and 137 school districts in Tennessee, and we used purposive and random sampling to prioritize and select organizations within counties or school districts for interviews. In purposively sampling, we focused on indicators corresponding to the populations of vulnerable children of interest in our study: (1) distressed counties, i.e., those that rank in the bottom 10 percent in the nation based on an index that factors in poverty rates, per capita market income, and unemployment rates[10]; (2) counties with high rates of neonatal abstinence syndrome (NAS, in which babies withdraw from drugs to which they were exposed to in the womb before birth); and (3) the percent of Hispanic and immigrant students in the county. We also purposively selected

[8] For more information on the Policies for Action Research Hub, see: https://www.policiesforaction.org/hub/vanderbilt-university

[9] In Tennessee, school-based health centers (SBHCs) are a primary source for meeting the basic health care needs of many low-income children.

[10] For more information on distressed counties, see: https://www.tn.gov/transparenttn/state-financial-overview/open-ecd/openecd/tnecd-performance-metrics/openecd-long-term-objectives-quick-stats/distressed-counties.html#:~:text=The%2011%20distressed%20counties%20in,counties%20to%2010%20by%202025.

two counties with the highest incidence of NAS, and separately, with the highest rates of Hispanic/immigrant children to interview.

In conducting the random sampling, we used administrative data to first stratify the sample based on CORE region (west, middle, east)[11] and urbanicity (town, city, suburb, rural).[12] Mahalanobis distances were calculated using the percent of students in each county that were economically disadvantaged, immigrant or Hispanic, and diagnosed with NAS.[13] Within each core-urbanicity region, the two observations closest to the average Mahalanobis score of the core-urbanicity region were selected. Table 1 describes the number and types of organizations interviewed in each county selected and the number of interview participants in each of the categories. Figure 1 presents a geographical map of the (more than 80) completed interviews that also indicates those that were conducted in distressed counties.

Study Data and Instrumentation

We draw on administrative data from longitudinal, statewide (Tennessee) student population data files (2006-2018) that include student-level information from the Tennessee Department of Education (TDOE) on enrollment, attendance, discipline, assessments, demographics, economic disadvantage[14] and special education needs, foreign-born or migrant status, and English language learners, and publicly available, statewide TennCare population data on Medicaid enrollment. These data were used in our sample selection for interviews, as

[11] CORE regions are a designation used by the TDOE to delineate areas of the state by geographic region. There are 8 regions, each with its own regional field office.
[12] Urbanicity designations were obtained from NCES data. These locale designations are created using census data on the area's urbanicity, geographic size, and population. More information on these designations can be found here.
[13] Ties were settled using a rank function that calculates the unique rank of the Mahalanobis distances and arbitrarily breaks ties. For core-urbanicity regions that only contained multiple observations from one county, observations were randomly ordered and two observations were selected
[14] In the data, a student is in economic disadvantage if she is eligible for federal assistance programs (TANF, SNAP, FDPIR) or if she has been identified as homeless, runaway, migrant or in foster care.

described above, and also for describing students and their supportive service needs, as well as their geographic distribution across school districts in Tennessee. For instance, we used TDOE data to identify counties or districts with high percentages of children who are economically disadvantaged, homeless, or eligible for special needs services. In addition, these statewide education data files include information on school staffing that we used to construct measures of staff resources (e.g., counselors, social workers, special education teachers, etc.) relative to the size of the student population at the district or county level.

To construct additional measures of children's needs and the resources available for serving children across the state, we also extracted data from the Tennessee Department of Education's Annual Statistical Report; KIDS COUNT data (from the Annie E. Casey Foundation); the Health Resources and Services Administration; the Centers for Disease Control; Housing and Urban Development (HUD), and the Homeless Shelter Directory. These data were linked to the administrative data on children and used to develop indicators by school district or county of the resources available for serving student needs, including by relevant subgroups of children such as students with special educational needs (see Table 2). Spreadsheets with detailed information on all measures constructed using these data, including the timeframe and where to access them, are available from the authors.

We began conducting interviews with individuals working in community mental health centers, county health departments, FQHCs, SBHCs, community anti-drug coalitions, and opioid treatment programs in Spring 2019 to collect original data on the infrastructure intended to help children and families meet their health, mental health, and social service needs. Through the interviews, we aimed to: (1) document gaps in access to health services and supports for poor children and their families, (2) learn about administrative barriers that impede access to services

and challenges organizations face in attempting to meet the needs of children and families, and (3) identify actionable findings for policymakers to improve children's outcomes. Prior to developing our interview questions, we engaged in informational interviews with individuals from these types of organizations to aid in the instrumentation design and to ensure that we were not missing important topics. The general topics covered in the interviews include: individual roles and history in the organization; populations served; outreach and collaborations; public assistance policies and procedures; barriers to service awareness and receipt; policy levers and promising strategies for improving service access and effectiveness; resource and capacity needs; and adaptations to resource deficits. We then designed four case scenarios that guide interviewees through a case situation posed by a caregiver or other adult with a child (based on actual experiences of Tennessee residents) to probe and understand their capacity to assist in the situation and what resources they would draw on to overcome administrative burdens in serving the child or family. Interviewees were presented with a subset of the four case scenarios, distinguishing cases for clinicians and providers at health departments and FQHCs from those created for school-based personnel and SBHCs. The interview protocol (online Appendix A) was also designed to allow for probes and tailoring of questions based on interviewee responses, for example, to pursue more information about an outreach strategy used by an organization or about challenges its staff experience in serving a particular subgroup, and to encourage rich descriptions of their experiences in serving children and families. Permission to tape the interviews was obtained from respondents, and the recordings were professionally transcribed.

Method of Data Analysis

All of the analyses that we undertake are descriptive and are not intended to assert any causal relationships between state policies and experiences of administrative burden. In addition,

the mapping of the distribution of resources available across the state for serving children is undertaken to illuminate gaps between need and resources for addressing need, as well as to observe what characteristics of counties and school districts are associated with those gaps.

Resource mapping

The administrative data and data collected from publicly available sources that were used to construct measures of children's and family needs and resources available for meeting those needs were compiled in spreadsheets and categorized into domains of student needs and resources. We define need primarily by economic disadvantage (at the child and county level) but also examine educational needs, while resources domains include economic, health, education and family or community resources. Next, we identified key indicators within these need and resource domains and generated scatterplots to depict the variation in children's needs relative to resources at the county level across the state. In Table 2, we present information on these measures, including the correlation coefficients and corresponding p-values that describe the relationships between levels of available resources and the indicators of student need.

Qualitative analysis of interview data

The interviews, transcribed verbatim, were analyzed using a qualitative software program (NVivo). Categories and a priori themes were first derived from the interview protocol and used to frame the analysis (through the lens of administrative burden). Deductive codes emerged within the categories and in relation to the theoretical frame. The codebook for the qualitative analysis was piloted three times by two members of the research team, using the same five interviews. Codes were modified until there was a 90 percent agreement when coding a sample of responses. After establishing intercoder agreement, each interview was coded twice. (See the codes in online Appendix B).

Study Findings

In presenting our study findings, we begin with insights and excerpts from our qualitative research that describe the experiences of individuals and families in accessing public benefits in Tennessee, particularly healthcare (TennCare), and primarily through the lens of public and nonprofit providers who serve them. We connect these experiences to the administrative burdens and ordeals concepts discussed above and consider the purpose and costs of the burdens imposed on individuals and organizations. We next draw on both qualitative and quantitative data to illuminate the contextual or environmental factors that exacerbate these burdens. We present the findings of our resource mapping to illustrate how resource deficits vary across Tennessee and compound the costs associated with administrative burdens for individuals and organizations.

Experiences with administrative burden in accessing public benefits

As discussed above, learning and compliance costs are two pervasive types of administrative burden, which as we describe here, arise in the form of documentation demands and entangle individuals and organizations in protracted processes for assessing eligibility and compliance that too often result in disconnections and disenfranchisement.

Documentation. While prospective buyers are typically advised to follow the maxim "location, location, location" in choosing a residence, the corresponding aphorism for individuals beginning a quest for access to public program benefits might be "documentation, documentation, documentation." The documentation required in applying for public benefits such as Medicaid, WIC, and food and housing assistance ostensibly serves a legitimate purpose—it is used to verify eligibility for receipt (or continuation) of program benefits and to minimize the potential for fraudulent access and use. Yet a key question raised by Schuck and Zeckhauser (2006) concerns the *extent* to which the burdens of compiling the information and

documentation should weigh on the program applicants or on the public organizations that will process their information and determine eligibility. Schuck and Zeckhauser argue, rather simplistically, that administrative costs to the public sector can be minimized by shifting more of the learning and information burdens to the applicants. Moynihan et al. (2013) point out that public agency staff can affect the level of burden that is experienced by applicants through their decisions about how much information and assistance they provide to applicants and the amount and types of documentation they demand. Our research and prior studies suggest, however, that placing greater burdens on applicants may increase costs for all parties—the government, those in need of public supports, and other public and private organizations that play a role in sustaining the social services safety net.

In addition to documents for proof of income and residence, the birth certificate is one of the most essential documents required for accessing public benefits. The cost to obtain a copy of one's birth certificate varies across U.S. states, from a low of $7 (ND) to high of $34 (MI), with Tennessee coming in (at $15) just under the average of $17.69 (in 2018).[15] In our interviews with staff in county health departments, FQHCs, school-based health centers and other community-based organizations, we heard over and over (as illustrated in these excerpts) about how the cost of a birth certificate was a limiting factor to accessing public benefits.

> *The birth certificates, the Social Security cards... you've got to think, these families are low income, so they're always in crisis mode. They're trying to solve: do I have enough food tonight, and do I – can I keep my electricity on? And that's the two things that they're worried about at that time. They don't care about birth certificates or Social Security cards, and they move a lot.*

> *We see kids all day long for, you know, immunizations, for our WIC program, people coming in for birth certificates. A lot of the problems we see with homelessness, you know, people don't have the $15 to get their birth certificates.*

[15] Birth certificate cost data obtained here: https://ballotpedia.org/Birth_certificate_costs_by_state,_2018,

> *They'll always need the birth certificates to register for school. We print those here [but they have to pay that fee]. You know, most – all of our fees will slide based on family size and income... [but] that doesn't slide, and that can be a barrier sometimes. They're $15.*

When paying the fee for a birth certificate or undertaking other efforts to help a child or family secure requested documentation, sometimes a nonprofit would cover the costs from program funds or a staff member's pocket. One coordinator of school-based health described a situation where a student who was turning 18 in two days needed health care and a birth certificate, so school staff rushed to print a school ID for her, drove her to the county vital records office, and an outside organization paid the fee for the birth certificate. Another interviewee described how this was a problem for a local Head Start organization, because they had to take program funds to pay for birth certificates, but the fees had to be paid before a child was enrolled (coming out of someone's pocket first). For nonprofits whose funding and missions were often stretched beyond capacity, the costs of helping their clients secure necessary documentation added up, as did the frustrations:

> *…so many of the programs, you have to have documentation of residence in the county or residence in the state, and if you are like living out of your car or you're family living in a homeless shelter, you don't have a gas bill for two months to show the Department of Health and Human Services… Yesterday the director of our community access program, the one who does the eligibility, he came to my office, and he's like, "this is killing us," because he just – he's like, "I just need to vent, because there are people who just can't get on. They qualify and everything, but they can't –… you can't even apply for food stamps without proof of residency."*

Protracted processes. We also heard in a large majority of the interviews that even when the documentation for TennCare, WIC or other public programs was submitted, the problems in processing the applicant information were often only just beginning. Sometimes documents were lost, and it was typical for TennCare, for example, to send a form requesting additional information from the applicant. With the correspondence taking place primarily via the U.S.

postal service and with short timelines (e.g., 10 days) for replying or complying with the request, steps in the process were frequently missed, which could result in termination of the process.

> *It seems that accessing TennCare is more difficult, navigating the system is very difficult. You know, I've heard stories that the applications go out and they send back the information to a residential address, but families move frequently, so then they miss that in the mail, and just getting hooked up with the system itself, even if you're qualified, there seems to be some barriers that are hard to overcome.*

This is what happened in Mr. Garcia's case (described in the introduction), and he went through this cycle four times before he was able to get his children connected with public health insurance (even though the family's residence had not changed). This was not only a cost experienced by the father in repeatedly completing and submitting an application that is 15 pages long with instructions and addendums (that had to be completed separately for each child), but it also consumed the time of TennCare staff in processing the applications again and again, as well as staff in an FQHC that intervened to help restore his children's access to health care services. In fact, one interviewee in an FQHC explained that they have one employee that works solely on TennCare enrollment issues:

> *And they deal with them just about insurance, and they can actually help them sit down and fill out an application with them. Or file appeals; it's really nice that we have an employee that just deals with just that… They [the clients] are having a really hard time.*

Staff in county health departments, FQHCs and school-based health centers also made it clear that the use of their staff for addressing bureaucratic barriers to their clients' access to public health insurance was time-consuming, and time away from their roles in delivering health care and social service supports.

> *I would say that we spend a lot of time trying to manage assisting individuals with having TennCare and/or other, you know, payments for services, and again, there are hoops. I think the challenge for most individuals is that they don't know how to navigate those systems, and so having someone really assist them and kind of help them through that process is important. And so, we spend a lot of time administratively doing that, and we*

could be using those other resources in other places... we're already underfunded and utilizing a lot of resources –

Herd and Moynihan (2020), in fact, point to numerous studies that confirm application assistance is key to increasing Medicaid enrollment rates. Yet recall that in 2014, the State suspended direct applications to TennCare, sending applicants instead to "self-service" computer kiosks and telephones in DHS offices. This not only added to the learning costs of individuals, but it also placed additional burdens on the local organizations helping them:

And like I said, the [county] department of health, we can help prenatal women enroll in TennCare, so that their pregnancy is covered and their delivery is covered, but you know, like I say, I don't think that DHS helps anyone anymore enroll. It's just those kiosks, and so that's kind of like a disservice because there's no one to assist folks when they do have problems, like in the school. So, it puts the burden back on the school system to try to help the child, because the child needs to be able to learn to get through life and things like that, and there's just such a disconnect. And so like I said, I was getting e-mail after e-mail, you know, what about this child, what about this child, and like I said, we can't see – we just see end dates or whatever, and so I can say, hey, the TennCare ended on, you know, whenever, but you know, that doesn't – that's not really that helpful.

I don't think the local DHS office helps anyone. I think there's a computer system in their lobby, and I think you are on your own. When you're dealing with literacy rates as low as they are, and then disorders of any sort, and all those other things in there – and it's a big population of kids, you're thinking too many probably are raised by grandparents as much as anything, and – heaven forbid it's an elderly trying to navigate the system…

These barriers to applying for programs also contribute to both short-term and longer-term costs to the health and well-being of individuals who go without health care while trying to access benefits for which they are eligible. One interviewee in a FQHC described how critical the time lost to a bureaucratic TennCare application process was for a pregnant mother for whom they were trying to get medical treatment for her addiction to opiates:

We have to use Subutex, because you can't use like regular suboxone for pregnant women. But guess what, you cannot use Subutex without prior approval from TennCare, from the MCO. So, you get the form, and you fill out the form… You have to go through the protocol, and then you put a note, patient is pregnant. And you send it in, and you wait, and the patient is here, and you don't hear back, you don't hear back, and then this happens – this is our standard. We just say, they're here; we will absorb the cost (and

> *they're expensive meds). So, we start the induction, and I would say within 12 to 40 hours we get the denial, denied. Why? Did not go through other medications, did not try this first, this, this, this. But then we're like, well, we can't try it. Did you not see they're pregnant? And we send it back. And sometimes it's two and three times, and then we have to call, and then we say it's because they're pregnant. And I have begged, and we've talked to TennCare. But somehow there's this bureaucracy, whatever, convoluted whatever it is, and nothing happens. To this day, nothing has happened. This has been going on for almost three years with TennCare.*

Staff in this organization were working hard to prevent a baby being born with neonatal abstinence syndrome (NAS). Children born to opioid-addicted mothers are more likely to be low birthweight, and children with a history of NAS are at greater risk of developmental delays and educational disabilities (Jarlenski et al., 2020; Oei et al., 2017; Patrick et al., 2015).

Disconnections from benefits. As indicated above, Tennessee recently gained notoriety for the number of children who lost their public health insurance coverage. An audit conducted by the Tennessee Comptroller of the Treasury from 2016-2019 found that two-thirds of the children who lost access to TennCare did so *not* because they were determined ineligible, but rather because of incomplete or unreturned paperwork.[16] While TennCare officials denied that the documentation problems signaled any systemic flaws in their work processes, a State Senator pointed out that even if TennCare was following the law, the fact that children were losing access to public insurance and health care because of "burdensome paperwork" and a "bureaucratic quagmire" reflected poor quality governance (Kelman, 2020). In fact, as suggested above, the costs to government and society go beyond those of administrative inefficiency; the literature on administrative burdens has empirically linked this type of "bureaucratic disentitlement," which results in the loss of access to public benefits, to worse health and education outcomes for children (Heinrich and Brill, 2015). Rigorous research also specifically relates children's receipt of public health insurance to higher reading scores, increased schooling

[16]See the performance audit report at: https://www.documentcloud.org/documents/6770443-TennCare-Audit.html.

and improved labor market outcomes later in life (Levine and Schanzenbach, 2009; Cohodes et al., 2016; Brown et al., 2020). One frustrated community health coordinator described her nonprofit clinic's efforts to help a mother get her preemie baby, who qualified for TennCare, onto the program, so that they could offer specialized care to avoid a respiratory infection:

> *Like I mean, we can't like allot, 30 minutes, right, to sign people up [for TennCare]. We do have people that we could schedule them to come back, but again, scheduling somebody to come back to do their TennCare…I mean, we have a baby right now that qualifies for TennCare. A preemie baby that needs Synagis. I can't figure out what her [the mother's] barrier is to not get the TennCare for the baby. So right now, we're sitting on not being able to provide Synagis to a high risk baby that needs it because she's a preemie and she's going to end up with RSV and she's going to end up in the hospital and we're going to end up with an uninsured…*

While the responses of TennCare officials appeared to ascribe fault to individuals for not submitting paperwork, the perceptions of organizational staff in county health departments, FQHCs, schools and other community organizations was that the agency needed to take responsibility for both the disconnections and application challenges:

> *You know, so that's something that I feel like should be addressed… the massive disenrollment with TennCare; there needs to be an easy pathway for schools with children who have – you know, major issues, that there is a direct line where they can assist, or help, or something like that.*
>
> *They're not getting them [recertification packets], and then they're automatically disenrolled -- and maybe that's okay for adults, but children should not have been done that way, because now you've got these parents or they're [the children] with someone else and they can't complete the forms.*
>
> *It seems like within the last year they'll be on it, and then all of a sudden for, you know, no reason and kind of no even warning, all of a sudden they've lost their TennCare, and they don't – you know, it's just been – it's a very lengthy and frustrating process. And complicated. I saw that with someone getting dropped for no reason, and then them making a mistake and then taking months to get it back – and even when they fill out the application with their workers, sometimes – or you know, it either takes a really long time or all of a sudden they just don't approve it for no reason.*

As suggested above, the TennCare disenrollment and barriers to reconnecting children were placing considerable strain on those working in local organizations to address the gaps in

children's health care insurance and access to services. One rural nonprofit that serves children in five counties hard hit by the opioid crisis described what a "nightmare" it was when they tried to help an eligible child who went without TennCare for a year and a half to get services. Even a county health department employee explained that they sometimes had to ask a provider for a favor, like when an uninsured child had a fractured elbow and needed to see a specialist. "Specialists are probably the hardest thing for somebody that's uninsured," she noted. These insights resonate with the findings of Masood et al. (2020), who pointed to the importance of social networks in successfully navigating administrative burdens, as well as the investments of time that building this type of social capital required. While some larger FQHCs were better positioned to endure these added financial and personnel burdens of serving the uninsured, others, especially in rural areas, were unable to sustain programs or services for children in families that couldn't pay and had to refer them to organizations and providers in other counties.

> *What can we do? So, what ends up happening is a tremendous amount of energy trying to piece together some coverage, and then you know, there are many – I'm sure you have talked to many organizations who just – part of what they do, I mean, they just absorb it as part of their cost of care. They know that they'll have a lot of uncompensated care.*

The location of service providers and lack of access to specialty care were also contextual factors that aggravated administrative burdens, as described in the next section.

Contextual and environmental factors that exacerbate burdens

We found that many of the contextual and environmental factors that exacerbate administrative burdens—including economic isolation and place-based resource deficits, the opioid crisis and family deprivation—were overlapping in communities that were being drained of resources and assets over time, compounding the costs or externalities associated with administrative burdens. The 2020 Economic Report to the Governor of the State of Tennessee (Murray et al., 2020) pointed out that despite the fact that the state economy had recently gone

through a 10-year "unprecedented and record-breaking growth streak," Tennessee ranked 42 of the 50 states in its overall health outcomes and was also among the worst for access to clinical care, mental health providers, and preventable hospitalizations.

Place-based resource deserts. Among the contextual or environmental factors that constrain the efforts of health professionals, social workers, school-based health coordinators, counselors, and others on the frontlines of serving vulnerable families in Tennessee, rural, place-based factors appeared to be some of the most challenging to overcome, in part because of their intersection with other economic, social, and population dynamics. The South has seen the largest rural to urban populations transitions among U.S. regions, leaving behind an older, poorer and sicker populace.[17] Barriers such as the absence of public transportation options, for example, coincide with declining rural populations that are insufficient to sustain medical practices (e.g., primary care providers and pediatricians) and local hospitals and clinics. Between 2013 and 2018, nine rural hospitals closed in Tennessee, with a loss of more than 350 beds; overall, the rural South has suffered the greatest recent deterioration of healthcare capacity.[18] Combined with dwindling area employment opportunities, this requires families to travel farther to get health care, find work and meet other basic household needs. Furthermore, the deepening poverty in some rural areas, particularly in those hit hard by the opioid and other substance abuse crises, means that even if a vehicle is available, gas money may be in short supply.

> *I would say our biggest challenge is transportation. There is no public transportation within the county. Sometimes people will have a car, but they don't have gas money. Or they won't have gas money until the first of the month when they receive their check.*
>
> *It's a huge issue. A lot of people who are in poverty, and I'm talking about the people who are working, have just enough gas to get to work and back. And so, the problem they're having is they are not able to take a day off work for one thing, and then they*

[17] www.nihcm.org/categories/rural-health-in-america-how-shifting-populations-leave-people-behind
[18] http://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/

> *can't afford the gas to pick them up, bring them back and you know, take them to get mental health services or dental health services.*

Interviewees also pointed out that Medicaid rules only allowed coverage of the cost of transportation to a healthcare provider for a parent and one child.[19] For a single parent with multiple children, the parent has to find childcare for the other children when taking one child to get healthcare services; it also implies multiple trips and childcare coordination to meet the needs of each child in the family. In addition, another constraint to parents transporting their children for health care services was a lack of access to car seats. In multiple interviews, we heard about a program that had at one time provided county health departments and FQHCs with free car seats to give out when needed. After this program was cut, it created immediate challenges for organizations striving to connect families with healthcare services. One FQHC official described trying to locate a car seat for a baby while in a meeting out of state:

> *One day, I got a phone call saying this family showed up, the mom brought the baby on the bus and there is no car seat, and – We don't want the mom to go back on the bus with no car seat…You know, so what are we going to do? And it used to be that there was that program where you, through Children's Hospital or the sheriff's department, could get free car seats. Well, that program got cut. So literally, we're like texting everybody and one of our staff… he ran home, and he got his and brought it in.*

The FQHC official ordered a rideshare and the staff member rode in the car with the mother and baby and showed her how to use the car seat. "I will just tell you," she added, "there are so many holes in the safety net for children and families; it is just – we're doing our best, but we are not enough, and we don't have enough, and we can't do everything. Nobody can do everything." This plea for a stronger safety net—i.e., more public (federal and state) support for low-income

[19] The Code of Federal Regulations requires States to ensure that eligible, qualified Medicaid beneficiaries have non-emergency medical transportation to take them to and from providers. States may develop Medicaid waiver programs to provide coverage for additional transportation needs. See www.CMS.gov.

families—was echoed by staff in another rural FQHC, who shared this example of how they had to go well beyond their scope of services to help a family in a medical emergency:

> *I mean, we just had somebody yesterday that had a newborn baby… they came in and the baby is not maintaining his temperature, his body temperature. The mom had a C section, so she didn't come… The dad came with two older children, and the baby had to be transported via ambulance to Children's [Hospital]. The dad didn't have any money, any gas money. So, everybody opened up their wallet, and we gave dad enough money to get down to the hospital, and he was able to arrange for somebody to come pick up the other children, but then, of course, we had to babysit, you know, and then that kind of puts you in a little bit of a liability issue. What if they don't come and pick up the children?*

The children's hospital referenced in the above example was in a metropolitan area a long distance away from the rural FQHC. In fact, the lack of nearby health care providers and hospitals was an issue raised in every interview conducted in a rural area. It was not unusual to hear, for instance, that there was a single primary care doctor serving a multi-county area.

> *Don't have a hospital. We don't have a 24-hour urgent care. We don't have any optometrists. I mean, we are very isolated when it comes to healthcare. So, a lot of times we do have to send students out of county.*

In one interview, a doctor who was past retirement age described how he continued his primary practice in a rural county because there was no other doctor in the area. They once had a thriving hospital, but it had closed down years ago. In the most recent year, only 20 percent of his patients had commercial insurance, about half were on Medicaid, and the rest were uninsured and paid for care on a sliding fee scale. He explained that he worked part-time as a medical center director so that he could draw a salary to continue supporting his family, but he was concerned about his ability (financially) to meet even the most basic health care needs of children (e.g., vaccinations), not to mention their growing behavioral health needs:

> *If I had to say where we're definitely lacking, it's in the behavioral health issues such as childhood depression, ADHD, you know, having something other than just falling back on stimulants and medicines; very scarce here. I can't even begin to say, you know, where are we going to get help for this child? And those resources are usually more [metro area name] based, which is an hour away and getting them in sometimes takes*

> *three, four months. You get on a waiting list. I have used the [specialty name] department down there. Usually it takes about, you know, eight or nine months or so to get a child in.*

Indeed, for many rural, low-income families, county health departments and SBHCs are relied on as a "medical home," even though these organizations are not funded or equipped to serve in these roles. One coordinator of school-based health pointed out that state funding (in dollars) for school-based health centers has not changed since 2006, even though the demand for and use of their services has increased exponentially.

> *The need is just continuing to grow, and our school counselors, most of them are actually teaching in the classroom a portion of the day because we only have so many warm bodies to go around and so many dollars… Our school counselors feel very stressed so much of the time, because they recognize there's so many needs, and they feel that they're not meeting those in a way that they actually can go home and feel good.*

In addition, the lack of transportation options has further compounded family's reliance on these local organizations for regular healthcare:

> *We [county health department] just don't have the – you know, the equipment or the meds to treat these people, and we treat them the best they can, because even if we refer them to an ER or even to [name], I mean, people are walking to us. Around here a lot of people walk. They don't have a mode of transportation.*

> *A, there's a transportation issue, especially in your high poverty school districts, and B, if parents have a car, they're at work, and they don't have – you know, these low-paying jobs do not offer sick days and, you know, time off and all that kind of stuff. So, parents cannot really take off and take the child to therapy…*

While a few school districts have been fortunate to receive federal grants such as AWARE (Advancing Wellness and Resiliency in Education) to expand school-based mental health services, a director of coordinated school health explained how three new employees hired through this grant were immediately overwhelmed with the extent of unmet student needs in the county, saying, "this is honestly the first year we have been capable of serving [mental health needs]… and their caseloads are more than they can handle."

A perceived stigma (or psychological cost) associated with being uninsured and having to use school-based health or mental health services, particularly for older children, may also limit the ability of school-based supports to compensate for the lack of access to services in the community. As one school-based health coordinator explained:

> *Some of especially our older teenage kids, who know enough about the house or what's going on, they're like, I'm not going to say anything because A, we don't have insurance, or B, even if we do, I know my parents can't afford this, and so instead of trying to go and get help, they self-medicate.*

For children in immigrant or mixed status families, we frequently heard about how fears related to another contextual factor, the public charge rule[20]—i.e., that accepting public or social welfare assistance from any source would make family members ineligible to become a U.S. citizen in the future—were deterring them from requesting help. As one county health department interviewee described it, "There are fears, there are obstacles, and sometimes fears are the obstacle." She provided the following example:

> *At the health department we have a safety net program called children's special services (CSS), which you know, allows a child under 21 who is undocumented, uninsured or uninsurable or underinsured to get on our program for chronic medical needs, an eye exam, etc. That does require a TennCare application to get on the program, and I've had parents straight up refuse that program… because of those fears, that accepting those programs for their documented citizen children would adversely affect them.*

Another county health department employee likewise reiterated concerns about fears (psychological effects) of the public charge rule and their consequences for children's health:

> *And normally the people that we are hearing those stories from are the families with the sickest children that need the CSS services, and so they're desperately coming in, like a child needs a surgery, and they're trying to weigh should my child get this surgery or not, and that's just a horrible predicament to be in.*

[20] Immigration law in effect during our study states: "an alien who is likely at any time to become a public charge is generally inadmissible to the United States and ineligible to become a lawful permanent resident." See: https://www.uscis.gov/news/public-charge-fact-sheet

Opioid crisis and family deprivation. Another important set of contextual factors that have increased burdens on public and private organizations on the front lines of serving low-income children and families stem from the ravages of the opioid and other drug crises on Tennessee families and communities. While opioid prescribing and dispensing on are a downward trend in Tennessee, the negative health and social impacts of the drug crisis continue to escalate, and in many areas, heroin, synthetic opioids (e.g., fentanyl) and meth are growing in use. Overdose deaths and cases of neonatal abstinence syndrome continue at high rates, and data from the Centers for Disease Control and Prevention show that about half of Tennessee's 51 rural counties rank in the top 5 percent of all U.S. counties for disease prevalence associated with illicit drug use (e.g., hepatitis C and HIV).[21] Numerous interviews with county health departments, community anti-drug coalitions and other community-based organizations identified the lack of treatment facilities and recovery program supports as an ongoing barrier to helping families affected by addiction. One county prevention program coordinator explained that there were no recovery beds or homes nearby, and so they relied on a "lifeline coordinator" (funded through the Tennessee Department of Mental Health and Substance Abuse Services) to help people in crisis identify treatment options, but they were often a long distance away:

> *In our area there are no recovery, you know, homes or – I mean, there's nothing here. We had an A&D [alcohol and drug] ward here at our hospital, but they closed, but [lifeline coordinator name] will find somebody – you know, he finds the resources they need… You know, it's –I mean, Memphis is two hours from us. Nashville's, what, about three or four hours from us… And it depends on insurance or no insurance, whether you can get into those places that are close.*

Another challenge with assisting families with treatment and recovery is that parents fear being separated from their children, as very few treatment programs are structured to allow children to reside with their parents (and they are not in close proximity). Or they fear losing custody of

[21] cdc.gov/chronicdisease/data/surveillance.htm; University of Tennessee Institute of Agriculture

their children, so they do not reach out for help. Often, next of kin became the caretakers of children in these families (formally and informally), which amplified the challenges for schools and health and community organizations trying to meet the needs of the children.

In fact, we repeatedly heard in interviews that grandparents, and even great-grandparents, were assuming parental responsibilities in families troubled by addiction, which created new challenges for organizations helping to assist with children's connections to public benefits and essential supports. Grandparents and great-grandparents were less likely to use technology and to be able to complete TennCare applications or other benefit program paperwork online, and they often lacked the documentation required to apply on behalf of the children. And as indicated earlier, the self-service kiosks installed in DHS offices were challenging for them. One member of a community-based organization who worked with schools to coordinate health care for these children expressed frustration at how they "fell through the cracks":

> *It shouldn't be that hard if somebody is having an issue and you get custody or placement, that they aren't helping you to make sure these kids are transitioning, you know, and the same thing with TennCare. It's kind of like, well, they had it, but you know, what happens, mama don't show up, grandmother, whoever – guardian isn't going to the visit, so they lost their TennCare.*

School-based health coordinators also reported difficulties in communicating with grandparents and great-grandparents about the children's health and education needs.

> *So, we just need more and we need more support for our grandparents and great-grandparents that are raising families. I mean, it would be nice if we had a way to get information to them or if we had any sort of funding that they – I don't know, we could provide transportation for them to come to school for meetings. A lot of them, they don't drive, or they don't drive at night, or they don't drive when it's raining, and I totally understand that. And unfortunately, that's when we hold most of our parent meetings or our parent involvement is in the evenings or at night.*

Grandparents also struggled to understand and cope with some of the mental health and substance abuse problems that were more prevalent among children in families grappling with

addiction. One school health official explained that grandparents often do not understand why children need to be given medications for mental health needs, or they do not want to acknowledge them because of the stigma that they perceive is associated with mental health issues. Alternatively, a director of a community anti-drug coalition described how they have to regularly convey the dangers to grandparents—and give them lock boxes—to keep their own medications out of the hands of their grandchildren:

> *…let them know, you know, that grandparents are very important in the role of, you know, their grandchildren coming over, making sure that you're not the next drug dealer.*

With the holes in the public safety net described above, along with declining per pupil funding because of population loss (that does not take into account the greater need among families left behind), community-based organizations were constantly looking to their private, nonprofit partners and networks for support (and digging into their own pockets) to meet the basic needs of children and families. The following quote is from an interview prior to the 2020 pandemic:

> *[We] use our own money to buy new clothes and books and things of course. Of course, and I'm sure that's everywhere. We do get supplement funding from United Way of [name]. We do a lot with them throughout the year and we – and we apply for their funding and we do receive some yearly from that, and that's helpful, but like we were way over budget last year and can't even do simple things…*

Below, we present the findings from our final set of analyses that use administrative and publicly available data to depict the geographical distribution of resource deficits relative to the needs of Tennessee children and families and to show how this exacerbates the burdens placed on the organizations working on the front lines to help them.

Mapping resource distributions relative to economic need in Tennessee

The discussion of contextual factors above shed light on the intertwining of place-based resource deficits and economic and social isolation. We undertook resource mapping to visually

depict how the availability of school and community resources varies by county relative to children's needs. As described earlier, we are primarily defining children's needs by economic disadvantage,[22] although we also examine the percentage of children with special educational needs and the percentage of children of immigrants.[23] Table 2 presents the correlation coefficients from our analyses that describe the strength and direction of the relationships between the levels of resources available to meet students' needs and the prevalence of student needs; the rows in boldface (along with p-values) indicate statistically significant relationships. The patterns in these relationships are largely all consistent, unfortunately, in showing that where there are more economically disadvantaged children or children in need of services, resources are inadequate and stretched more thinly. For example, the first four statistically significant relationships shown in Table 2 are positive, indicating that there are more students per social worker where reported cases of child abuse are higher; higher percentages of immigrant children where there are more immigrant children per teacher of English language learners (ELLs); more special needs students per teacher where there are higher percentages of students needing special education, and more students per mental health staff member in communities with higher percentages of economically disadvantaged students. Alternatively, where there are higher percentages of economically disadvantaged students, community services expenditures and food services expenditures per student are significantly lower (reflected in a negative coefficient), and there are fewer Family Resource Centers.

We also depict a subset of these relationships graphically, distinguishing the distressed counties, i.e., those that rank in the bottom 10 percent in the nation based on poverty rates, per

[22] A child is economically disadvantaged if she is eligible for federal social services (TANF, SNAP, FPDIR), or if she has been identified as homeless, runaway, migrant or in foster care.
[23] We define a children of immigrants as having at least one immigrant parent and speaking a non-English native language in the home or being an English language learner.

capita market income, and unemployment rates, from non-distressed counties. The resources mapped in these graphs include community service expenditures per student, food expenditures per student, number of students per mental health staff at school, the number of students with special educational needs per special education teacher, and the number of children of immigrants per ELL teacher. As indicated above, we would hope to identify linear patterns in these graphs, showing that greater levels of financial and personnel resources were allocated to communities with more children identified with needs and place-based deficits that limit their capacity to meet those needs.

Figures 2 and 3 present the graphs mapping community service and food expenditures per student by the percentage of students in the county who are economically disadvantaged. While it is challenging to identify any linear association between students in economic need and the community service expenditures per student in Figure 2, in fact, the direction of the relationship is negative (correlation coefficient=-0.204) and statistically significant (p=0.047), showing lower community service expenditures per student where there are greater percentages of economically disadvantaged students. The stronger negative correlation between the percentage of economically disadvantaged students and food expenditures per student (-0.570) is likewise troubling. It can also be seen that distressed counties (labeled with a circle in the figures) have some of the highest rates of economically disadvantaged students and relatively low expenditures per economically disadvantaged student.

Figure 4 focuses on mental health staffing, depicting the availability of mental health staff per student (relative to student economic disadvantage). For the correlation between student economic disadvantage and mental health staffing, a negative correlation is desirable, as it would indicate that with higher percentages of economically disadvantaged students, there are fewer

students per mental health staff member. The correlation coefficient for this relationship, however, is positive (0.242), with a p-value (0.018) that indicates statistical significance. As shown in Table 2, the correlation between the percentage of children with a mental disorder and students per mental health staff member was likewise positive (albeit not statistically significant), consistent with school-based health coordinators' perceptions that their caseloads of students with mental health needs were overwhelming SBHC resources. This was also perceived among mental health staff working in county health departments and social service organizations in these communities:

> *We have a high rate of suicide and mental illness in the region...I feel like that money should be allocated to areas that are in most need. But what I'm seeing a lot of times is, oh, we're going to give it to the bigger places, and what you have there is places that have more money, they have more resources, and then of course your impoverished areas, your small rural areas where nobody wants to come, we can't even afford to hire anybody at this time because the money has been given to bigger places.*

In Figure 5, we show the number of special education students per special education teacher relative to the percentage of special education students in the county. Again, a lower ratio or negative association would be desirable, indicating that there are fewer special education students per teacher where the need is greater. However, the correlation coefficient in this relationship is likewise positive and statistically significant (0.294, p-value=0.004), suggesting that instructional resources for students with special education needs are fewer where there are more students in need of those services. Figure 6 illustrates a similar but even stronger relationship (0.606, p-value=0.000) between the percentage of children of immigrants in counties (learning English or speaking another native language in the home) and the number of children of immigrants per ELL teacher, pointing to an acute need for more educational resources for children of immigrants. Overall, the patterns across each of the depictions of student need vs. resources (Figures 2-6) are consistent in showing that in counties where there are greater

percentages of students likely to be needing more supports, there are fewer public and community resources available for them.

Limitations

It is important to reiterate that the analyses presented above are descriptive and are not intended to imply causal linkages between federal, state and local policies and the relationships and circumstances we observe. Our interviewees were both purposively and randomly selected, and it was our intent to understand administrative burdens encountered by individuals and organizations in areas facing especially challenging circumstances, such as economic distress and the opioid crisis. We also recognize that social safety nets in the South have been historically underfunded at state and local levels, particularly where marginalized populations reside, which intensifies the challenges of closing resource gaps and eradicating the burdens we described.

Conclusion

As Herd and Moynihan (2020: 5) point out, debates or contrasting perspectives about administrative burdens are often "fights about political values, such as access or program integrity or the deservingness of recipients." As described in the research presented here, however, administrative burdens may have far-reaching individual and systemic consequences—they generate substantial negative externalities, or harmful effects on third parties. They not only appear to impede children's and families' access to public benefits and social service supports that affect their healthy development and well-being, but they also place additional strain on the capacity of public and private nonprofit organizations that serve as the health and social safety net for those in most need, particularly in communities with more limited resources and social service infrastructure.

The growing research base on administrative burdens and our interviews with those working on the "front lines" of health and social services delivery in Tennessee point to an array of relatively straightforward policy and program changes that could be implemented to reduce administrative burdens and their negative consequences for individuals and communities. Early in 2020, Tennessee state leaders convened to consider how they could best expend more than $700 million in unspent federal Temporary Assistance for Needy Families (TANF) program funds that the state had amassed, the highest in the nation (and $200 million more than New York, the next highest state) (Wadhwani et al., 2020). Based on our interviews, we compiled a long list of specific suggestions that we shared with state officials at that time (for the use of TANF or other available state funds), including: (1) increase transportation support in rural areas (not limited by mileage to the nearest service); (2) revive programs to purchase car seats and expand car seat certification programs to increase safe transportation for children; (3) improve communications, translation capabilities and record keeping between state agencies, the vulnerable populations they serve, and the local organizations serving them; (4) remove impediments to accessing services for those without a physical address; (5) increase assistance in enrolling in Medicaid (TennCare) through more qualified navigators who could also bolster the administrative capacity of local organizations, and (6) streamline the 15-page TennCare application and eligibility determination process. In fact, there are proven models that Tennessee can look to in streamlining its Medicaid application and eligibility determination processes, such as ACCESS (Automated Community Connection to Economic Self Sufficiency) Florida, which won the 2007 Innovations in American Government award.[24] ACCESS Florida replaced its 15-

[24] For more information on ACCESS Florida innovations, see https://www.businesswire.com/news/home/20070925005057/en/ACCESS-Florida-Honored-Innovations-American-Government-Award

page application for assistance with a four-page, simplified application and adopted new information technology (developed "in-house")—electronic imaging, web-based eligibility determination, and linked database systems—that significantly reduced paper documentation and processing time. The resulting modernized, paperless workflow led to a decline in the average number of days to process a client from more than 40 days to 17 days, with less than one-fourth the staff required to handle the processing. In addition, re-certifications and other routine changes are now processed electronically within hours.

In addition, states should consider waiving or substantially reducing the fees for obtaining essential documents such as birth certificates for low-income families. Birth certificates are a "gateway" document to nearly every basic health and social support for children, including Medicaid, WIC, HeadStart, preschool and K-12 education. Although $15 may appear to be a minor cost to some, research on the effects of small (e.g., $2-3) increases in copays for prescription medications have shown that they can significantly deter the ability of vulnerable populations (e.g., the economically disadvantaged) to fill their prescriptions, affecting both healthcare utilization and patient health (Sinnott et al., 2013). Furthermore, existing research on administrative burdens (Heinrich, 2018) has shown that states have enacted policies and administrative rules with politically-motivated intent to restrict access to birth certificates for particular subgroups—specifically, children of immigrants—with negative consequences for their access to health, education and social services. Indeed, Tennessee legislators (following on Texas and North Carolina) proposed a bill in 2018 that included a ban on consular identification cards commonly used by Mexican and Central American immigrants in establishing the parental-child relationship for their citizen children, but this provision was removed during the final day of the legislative session (Ebert, 2018).

The serious gaps between the level of unmet children's need and public supports, particularly in rural, high poverty counties that have also suffered the turmoil of the opioid and meth epidemics, will not be bridged by some of the straightforward policy and program changes suggested above. We heard repeatedly in our interviews about the urgent need for more healthcare providers and specialists for underserved rural populations and more resources like the federal AWARE grants to expand the number of school counselors, psychologists and other mental health services staff to respond to the rising mental health needs among PK-12 students. Our mapping of public expenditures or resources relative to student needs across the state—including the most basic needs of children for food—suggested that current allocations are inadequate to ameliorate these gaps in the health and social safety nets. Federal and state funding formulas based on per-student or per-capita calculations that fail to recognize changes in population characteristics other than size or the intersection of social, political, and economic factors that exacerbate risks for children will likely to continue to shortchange communities that are experiencing concentrations of poverty or place-based resource deficits (Camacho and Henderson, 2020). The many compounding contextual factors identified in this research, such as the lack of state-funded detox beds, the scarcity of emergency and transitional housing support, poor internet access and more, further suggest that these resource disparities will not be readily overcome, as the COVID-19 pandemic has already worsened the chasms.[25] In the face of these new challenges, it may be even more imperative to grasp some of the clear-cut options for reducing administrative burdens, such as simplifying the TennCare application or waiving birth certificate costs. This would also lessen the load on individuals and organizations on the front

[25] For example, a proposed allocation of more than $6 million in state funding for a pilot program that would have extended TennCare coverage for low-income mothers from two months through one year after giving birth was cut from the state budget due to the economic crisis precipitated by the pandemic.

lines, who are “worn out of asks” and calling on policymakers to move beyond politically-fraught considerations of “good vs. bad apples” or overwrought concerns about fraud and simply remove these barriers to more effectively serving those in need.

Table 1: County, Number of Interviews, Number of Participants and Types of Organizations Interviewed

County	**Interviews**	**Participants**	**Organization**
01 Anderson	2	3	CSHD
04 Bledsoe*	1	1	CSHD
05 Blount	1	1	CAO
14 Clay*	1	3	COADC
19 Davidson	8	11	CAO (3), NHC (2), OTP (1), TEIS (1), MED (1)
24 Fayette	1	1	CSHD
31 Grundy*	1	2	SBCH
32 Hamblen	5	5	COADC (1), CMHC (1), CSHD (1), CHD (1), FQHC (1)
34 Hancock*	1	2	CMHC
41 Hickman	1	1	CMHC
44 Jackson*	1	1	CSHD
45 Jefferson	1	1	CAO
47 Knox	4	4	COADC (1), CHD (1), FQHC (1), NCH (1)
48 Lake*	1	1	CSHD (1)
49 Lauderdale*	2	11	COADC (1), CSHD (1)
50 Lawrence	1	9	COADC (1)
53 Loudon	1	1	CSHD
63 Montgomery	1	1	CMHC (1)
65 Morgan*	3	3	CHD (1), FQHC (1), SBCH (1)
66 Obion	1	3	COADC
76 Scott*	3	8	COADC (1), CSHD (1), CHD (1)
78 Sevier	1	1	CSHD
79 Shelby	2	3	COADC (1), CSHD (1)
83 Sumner	1	2	CHD (1)
85 Trousdale	1	1	CSHD (1)
86 Unicoi	1	1	CSHD (1)
Total	47	81	

Community Advocacy Organization (CAO)
County Health Department (CHD)
Community Mental Health Center (CMHC)
Community Anti-Drug Coalition (COADC)
Coordinated School Health Directors (CSHD)
Tennessee Early Intervention Program (TEIS)
Federally Qualified Health Center (FQHC)
Medicaid (MED)
Neighborhood Health Center (NHC)
Opiod Treatment Program (OTP)
School Based Health Center (SBHC)

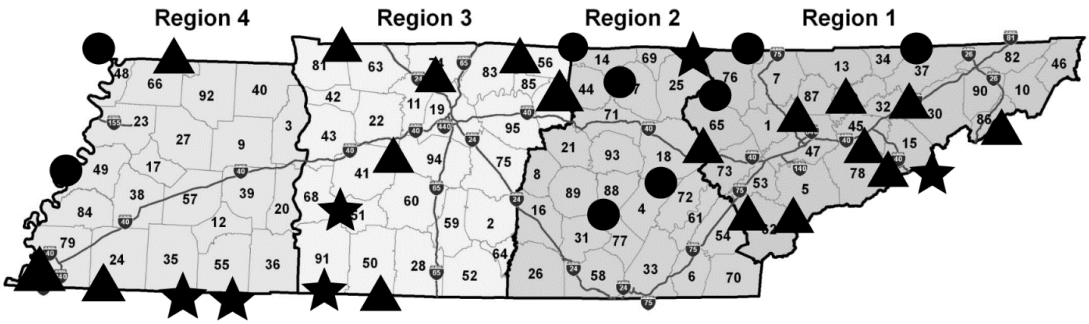
Table 2: Data for Geographical Mapping of Children's Needs and Resources

Needs		**Resources**		**Relationship**	
Indicator	**Data source**	**Indicator**	**Data source**	**Correlation coefficient**	**p-value**
Child Abuse (reported cases)	**Kids count**	**Students per social worker**	TN Education Research Alliance (TERA)	**.492**	**.019**
Child Abuse (reported cases)	Kids count	Students per psychologist	TERA	.134	.304
Child Abuse (reported cases)	Kids count	Students per mental health staff	TERA	.074	.477
% Children of Immigrants	**TERA**	**Children of Immigrants per ELL teacher**	**TERA**	**.606**	**.000**
% Special Education students (SPED)	**TERA**	**Sped students per sped teacher**	**TERA**	**.294**	**.004**
% students econ. disadv. (ED)	**TERA**	**Students per mental health staff**	**TERA**	**.242**	**.018**
% students ED	**TERA**	**Family Resource Center**	**TERA**	**-.359**	**.003**
% students ED	TERA	Students per counselor	TERA	.173	.094
% students ED	TERA	Students per social worker	TERA	-.046	.840
% students ED	TERA	Students per psychologist	TERA	.164	.207
% students ED	**TERA**	**Expenditures in community services per student**	**TDOE Annual Statistical Report (ASR)**	**-.204**	**.047**
% students ED	TERA	Students per school nurse	TDOE ASR	.073	.483
% students ED	TERA	Students per health personnel	TDOE ASR	-.090	.467
%students ED	TERA	Expenditures in health services per student	TDOE ASR	-.162	.117

Needs		Resources		Relationship	
Indicator	**Data source**	**Indicator**	**Data source**	**Correlation coefficient**	**p-value**
% students ED	TERA	Students per school bus	TDOE ASR	-.182	.077
% students ED	TERA	Pct students transported 1.5M or greater	TDOE ASR	.088	.396
% SPED students	TERA	Expenditures in sped per sped student	TDOE ASR	-.123	.236
% students in foster care	TERA	Family Resource Center	TERA	-.193	.124
Children with NAS	Kids count	Community anti-drug coalition and opioid treatment program	RWJF qualitative sampling	-.197	.561
% students disciplined	TERA	Expenditures in alternative programs per disciplined student	TDOE ASR	-.190	.065
% students ED	**TERA**	**Expenditures in food services per ED student**	**TERA and TDOE ASR**	**-.570**	**.000**
% students with a mental health disorder	TennCare Medicaid data	Number of students per mental health staff	TennCare and TERA	.097	.350
Youth drug and alcohol abuse	Kids count	Community anti-drug coalition and opioid treatment program	State of TN	.157	.645
% homeless students	TERA	Homeless shelters	Homeless Shelter Directory	.040	.702
% homeless students	TERA	Emergency food programs	Homeless Shelter Directory	-.079	.445

Notes: Sped denotes Special Education. ED denotes Economically Disadvantaged.

Figure 1: Map of Interviews Completed in Tennessee



Alphabetical List of Counties in Tennessee

01 Anderson	17 Crockett	33 Hamilton	49 Lauderdale	65 Morgan	81 Stewart
02 Bedford	18 Cumberland	34 Hancock	50 Lawrence	66 Obion	82 Sullivan
03 Benton	19 Davidson	35 Hardeman	51 Lewis	67 Overton	83 Sumner
04 Bledsoe	20 Decatur	36 Hardin	52 Lincoln	68 Perry	84 Tipton
05 Blount	21 DeKalb	37 Hawkins	53 Loudon	69 Pickett	85 Trousdale
06 Bradley	22 Dickson	38 Haywood	54 McMinn	70 Polk	86 Unicoi
07 Campbell	23 Dyer	39 Henderson	55 McNairy	71 Putnam	87 Union
08 Cannon	24 Fayette	40 Henry	56 Macon	72 Rhea	88 Van Buren
09 Carroll	25 Fentress	41 Hickman	57 Madison	73 Roane	89 Warren
10 Carter	26 Franklin	42 Houston	58 Marion	74 Robertson	90 Washington
11 Cheatham	27 Gibson	43 Humphreys	59 Marshall	75 Rutherford	91 Wayne
12 Chester	28 Giles	44 Jackson	60 Maury	76 Scott	92 Weakley
13 Claiborne	29 Grainger	45 Jefferson	61 Meigs	77 Sequatchie	93 White
14 Clay	30 Greene	46 Johnson	62 Monroe	78 Sevier	94 Williamson
15 Cocke	31 Grundy	47 Knox	63 Montgomery	79 Shelby	95 Wilson
16 Coffee	32 Hamblen	48 Lake	64 Moore	80 Smith	

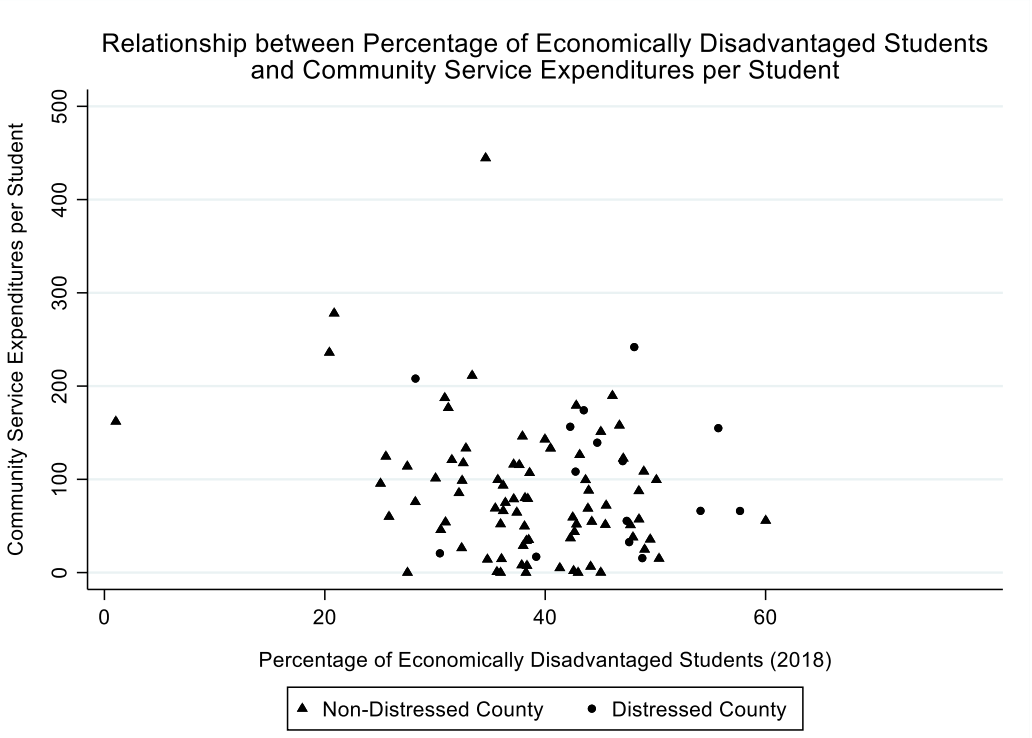
Map Key

Interview Conducted| Non-Distressed County

Distressed County | Interview Conducted

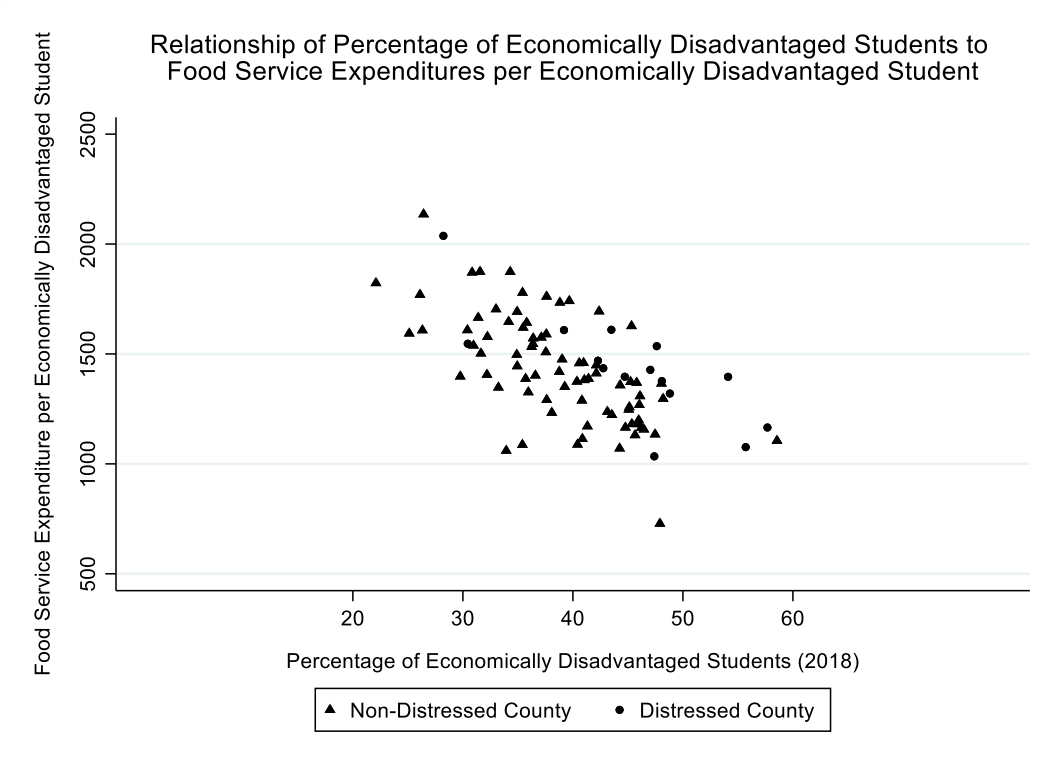
Distressed County | Not Yet Interviewed

Figure 2



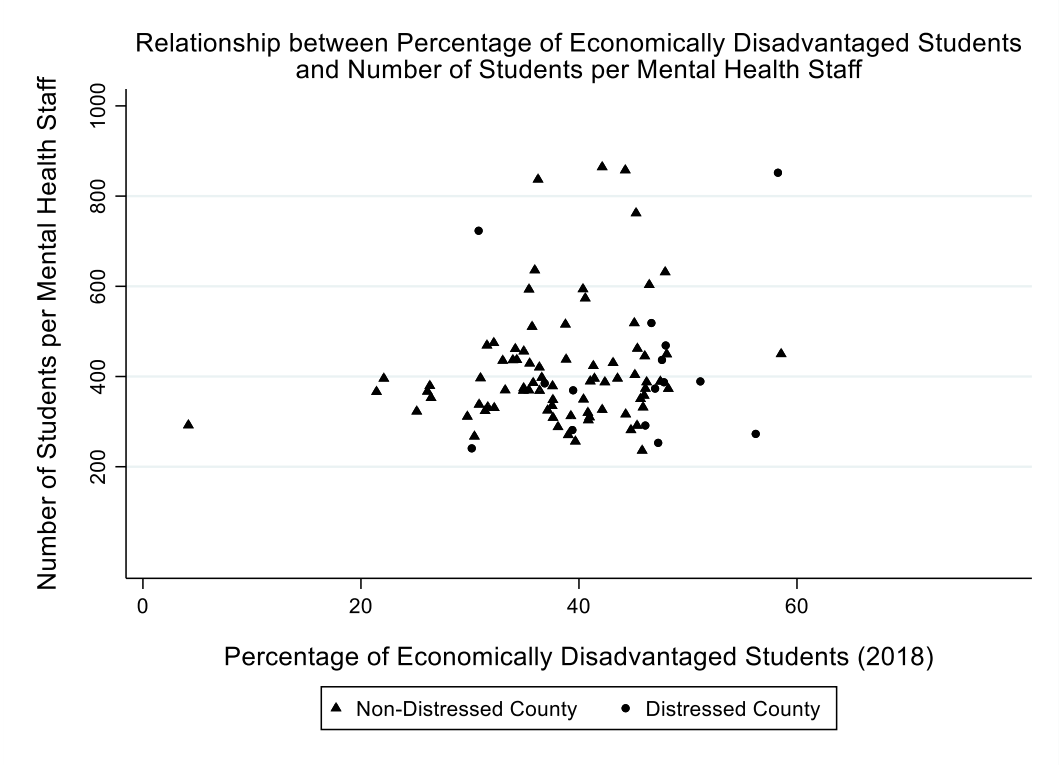
Notes: Percentage of economically disadvantaged students calculated using TERA data on K-12 student enrollment in 2018. Community service expenditures reported in total dollars per county from the 2018-19 Tennessee Department of Education Annual Statistical Report.

Figure 3



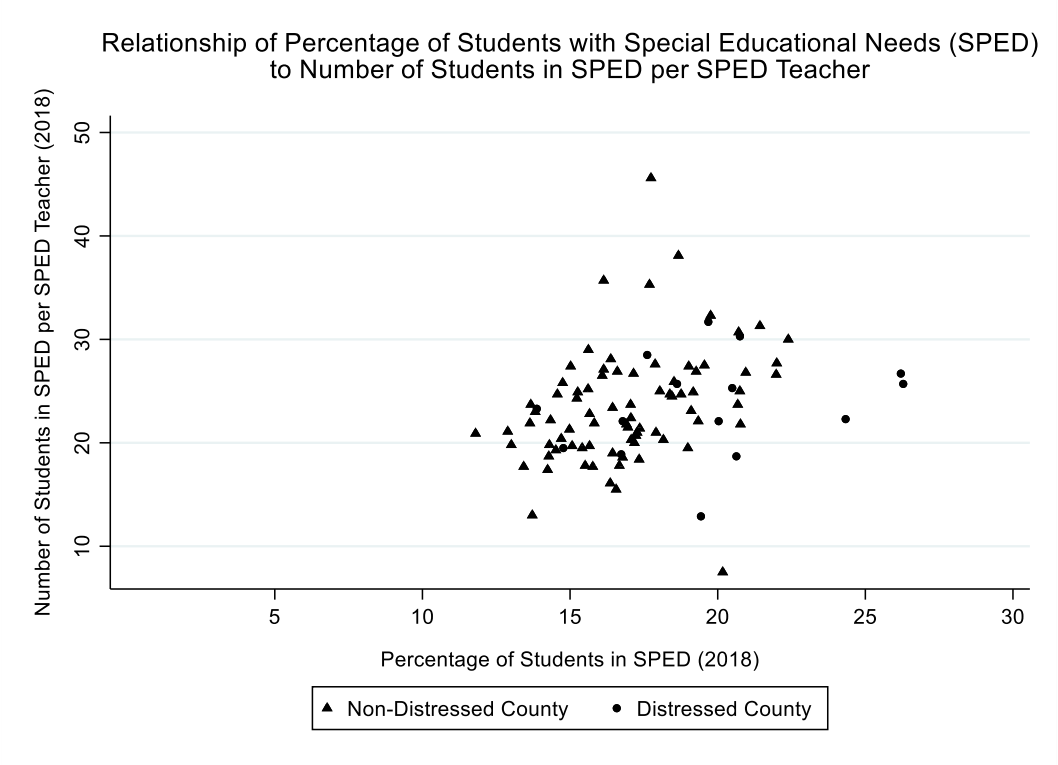
Notes: Percentage of economically disadvantaged students calculated using TERA data on K-12 student enrollment in 2018. Food service expenditures are reported in total dollars per county and are from the 2018-19 Tennessee Department of Education Annual Statistical Report.

Figure 4



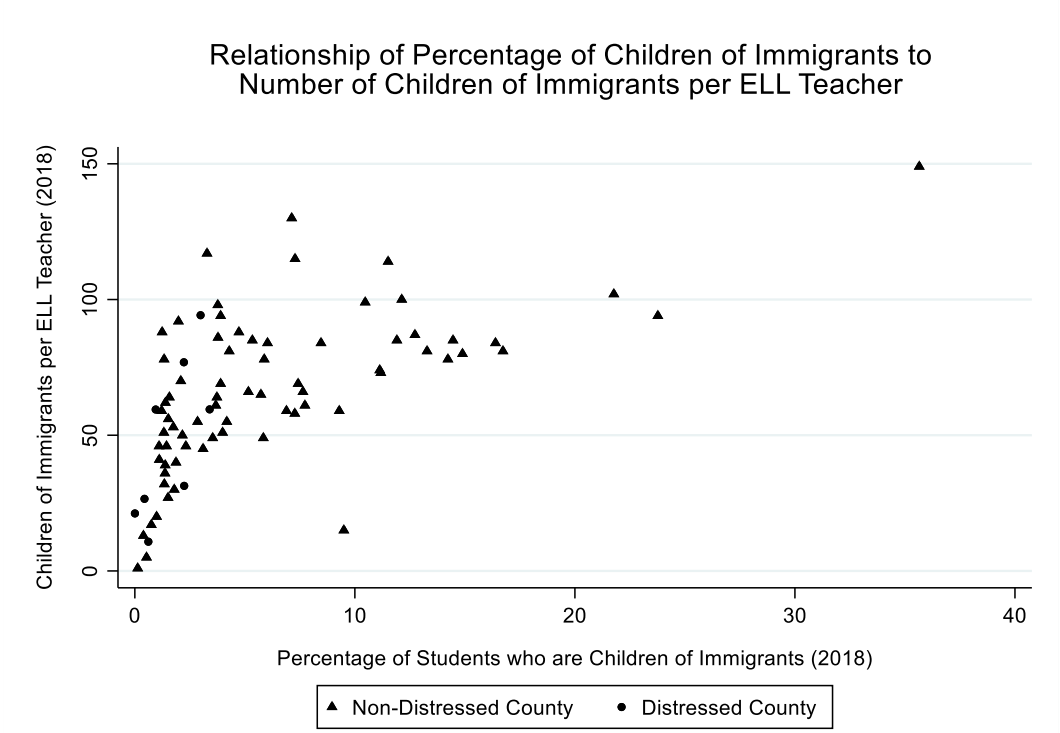
Notes: Percentage of economically disadvantaged students calculated using TERA data on K-12 student enrollment in 2018. Number of students per mental health staff in the 2017-2018 school year, where mental health staff include counselors, psychologists, and social workers (TERA data).

Figure 5



Notes: Percentage of economically disadvantaged students calculated using TERA data on K-12 student enrollment in 2018. Ratio of children receiving special education services (SPED) to SPED Teachers calculated by aggregating counts of SPED students and SPED teachers in every county, using K-12 student enrollment in 2018 data from TERA.

Figure 6



Notes: Percentage of children of immigrants calculated from 2018-19 TERA student demographic files. Ratio of children of immigrants per English Language Learner (ELL) teacher calculated by aggregating counts of children of immigrants and ELL teachers in every county using K-12 student demographic data in 2018-19 from TERA. Number of ELL teachers in 2017-2018 from TERA.

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