Rural and Minority MDs in Mississippi: An Overview

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ABOUT THE AUTHORS

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EXECUTIVE SUMMARY

• Data from the 2007/08 MSMD survey (including an oversample of non-White, women, and rural physicians) were analyzed statistically in two previous reports. This final report synthesizes findings and includes qualitative data from the intensive interviews with a purposes sample of Mississippi physicians.

• The first two reports document the experiences of physicians who served in rural areas and HPSAs in Mississippi (Physicians Practicing in Rural and Underserved Areas of Mississippi [Street et al. 2009]) and how demographic characteristics influenced the experience of medical practice in Mississippi (Mississippi Physicians: Characteristics and Experiences of Physicians in an Underserved State [Street et al. 2009]) respectively.

Quantitative Results

• Demographically speaking, physicians who practice in vulnerable locations are more likely to have been born outside the U.S., are slightly more likely to be men than women, are less likely to be White than non-white and are about two years older on average, than physicians practicing in other locations.

• Not surprisingly, patient loads are heavier (124 patients per week in an average week) for physicians in vulnerable practice locations than patient loads for other Mississippi physicians (89 patients per week in an average week), but physicians in vulnerable practice locations only report working one extra hour per week to meet that higher patient load and, therefore, are more likely to report feeling stressed or having occasional burnout.

• Physicians who practice in vulnerable practice locations report that a greater proportion of their patients depend on public sources of
insurance—Medicare or Medicaid—and fewer are covered by private health insurance (compared to physicians who practice in other areas).

- Physicians who worked in vulnerable practice locations in 2007/08 were more likely to have been sued in 2004, 2005 and 2006, compared to their counterparts elsewhere in Mississippi. The number of lawsuits is on the decline, but the gap between physicians who do and do not practice in vulnerable locations remains.

- Likely related to the higher rates of being sued in vulnerable practice locations, physicians in such areas are more likely to report that they use defensive techniques in their medical practice than physicians elsewhere.

- Mississippi physicians, regardless of individual or spatial differences, share broadly similar concerns that it is difficult to recruit physicians to practice in the state, but physicians in vulnerable practice locations have heightened concerns about prospects for retaining physicians to pursue long-term practices in their communities.

- There are no significant differences in the level of dissatisfaction with reimbursement by Medicare or private insurance—or even lack of reimbursement associated with uncompensated care—associated with practice location. Physicians across the state regard reimbursement levels as lower than they should be. Physicians in vulnerable practice locations are less likely to report Medicaid reimbursements as poor and more likely to report them as fair or average.

- Non-physician colleagues are relatively more important sources of support for physicians working in vulnerable practice locations, likely reflecting both the intimacy of small practices and the relative lack of physician colleagues in such communities.

- Physicians who practice in vulnerable locations are more likely to report that they feel isolated from their patients because of ethnic, cultural or gender differences than physicians who practice elsewhere. This may be because many physicians working in vulnerable practice locations are non-U.S. born.

- As for practice resources and conditions and perceptions of professional autonomy or prestige, there are few variations by practice location.

- Physicians in vulnerable practice locations report similar levels of specific questions on career satisfaction with their counterparts elsewhere. However, in response to the global measure “All things considered I am satisfied with my career as a physician,” physicians in vulnerable practice locations reported slightly higher levels of general satisfaction.
Concerning family and community influences on physician perceptions, there are few differences by practice location. Physicians in vulnerable practice locations emphasize school quality but give less weight to local amenities. All other questions netted comparable responses across practice location.

Interview Findings

- Interview findings associated with recruitment and retention highlight physicians’ concerns about rural educational systems and overcoming unfounded stereotypes about working as a physician in Mississippi.
- Another theme in the interview results concerned generational differences: perceptions that younger physicians and women do not want to work as many hours, that older physicians have a harder time keeping up with technology particularly in rural areas, and that conditions for minority physicians have improved across generations.
- There was also recognition among primary care physicians that this generation of primary care physicians is more of a medical home than a complete care provider, with the advent and growth of specialty care and technology.
- Concerning International Medical Graduates (IMGs), experiences were diverse with some IMGs indicating concern with being accepted by their communities while others happily told of coming to Mississippi and falling in love with it.
- As for racial issues, interviewed physicians thought racial prejudices are seldom expressed openly, more often elaborated in subtle ways that are more difficult to describe. Also, more race-related experiences were reported between physicians and patients than among co-workers and colleagues.
- From the interview responses, gender seems to be an evolving concept in Mississippi health care, with physicians themselves striving for ways to understand the role gender plays in their experiences, and their capacity to achieve work/life balance. Gender seems to play less of a role in physician-patient relationships than in relationships with other physicians.
- Frustrations associated with trying to deliver high quality care to Mississippi’s vulnerable communities were considerable. Constant and enduring themes in the interviews were concerns about the future of
primary care given the complexities of rural and small town medical practice. Other major themes included concerns about the inherent problems for patients from poor and/or rural communities to readily access care and follow treatment regimens, and the stress and burnout associated with heavy patient and paperwork burdens.

- As for patient issues, every single physician we interviewed mentioned issues associated with lifestyle issues, particularly unhealthful diets and lack of exercise, as contributing factors to high rates of diabetes, obesity, and heart disease that plague Mississippians. Others worried that the lack of constructive alternative behaviors in rural communities, particularly in the Delta, combined with traditional health beliefs rather than accurate knowledge, contributed to behaviors leading to risky teenage sexual behavior.

- While language barriers to care is an emerging problem in some Mississippi communities, the traditional barriers to care and healthy lifestyles—poverty, lack of education, and isolation—are what, in most physicians’ accounts, contribute most to the health vulnerabilities their patients endure.

- The two overarching themes in the interview data associated with physicians’ perspectives on how to improve health care delivery for the Mississippi patients centered on the need for more education associated with health, disease prevention, and healthy lifestyles, and a need for improved, streamlined, secure access to care.

- When asked about how to improve the system, physicians’ recommended corrective actions were varied but can best be summarized with this doctor’s statement: “I would just make the health care resources—medicine, diagnostic tools, everything—available.” Improving insurance, access, time with patients and record-keeping were all mentioned repeatedly.

- Despite many challenges, physicians we interviewed had the gratification of serving multiple generations in the same families, knew their patients in a holistic way, understood how important their services were to their communities, and felt valued and respected by them.
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<tr>
<td>AAMC</td>
<td>Association of American Medical Colleges</td>
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<td>AMA</td>
<td>American Medical Association</td>
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<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
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<td>CDC</td>
<td>Centers for Disease Control</td>
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<td>HPSA</td>
<td>Health Professional Shortage Area</td>
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<td>HRSA</td>
<td>Health Resources and Services Administration</td>
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<tr>
<td>IMG</td>
<td>International Medical Graduate</td>
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<td>IOM</td>
<td>Institute of Medicine</td>
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<td>MCHW</td>
<td>Mississippi Center for Health Workforce</td>
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<td>MS</td>
<td>Mississippi</td>
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<td>MSMD</td>
<td>Mississippi Physician Workforce Survey</td>
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<td>MSBML</td>
<td>Mississippi State Board of Medical Licensure</td>
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<td>SCHIP</td>
<td>State Children’s Health Insurance Program</td>
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<td>SPSS</td>
<td>Statistical Program for the Social Sciences</td>
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<td>USDHHS</td>
<td>United States Department of Health and Human Services</td>
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Acknowledgements

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We appreciate the generosity and candor of Mississippi physicians who spent valuable time completing the 2007/08 MSMD survey, and especially those physicians who agreed to be interviewed for this research. The survey data, by its nature, is anonymous and depicts a generalized snapshot of physician experiences in Mississippi. And although we have taken care to conceal interviewee identities to protect the confidentiality of the data, it was their comments that helped us put survey data into broader, less abstract, context.

Funding for the initial phase of the 2007/08 MSMD survey was from several groups: The Mississippi Physician Care Network, the Mississippi Academy of Family Physicians and the American Academy of Family Physicians, with matching support from the Mississippi State University Social Science Research Center. Without their original investment in the systematic study of the Mississippi physician workforce, there would be no foundation upon which to build this study.
RURAL AND MINORITY MDs IN MISSISSIPPI: AN OVERVIEW

SECTION 1

INTRODUCTION

Healthy People 2010 (www.healthypeople.gov) set national objectives for health care, advocating disease prevention and setting goals for health care delivery in the first decade of the 21st century. A major concern of the report was the Healthy People 2010 goal to eliminate health disparities among different segments of the U.S. population. Health disparities are a matter of national attention, with some groups (especially low income individuals, rural residents, members of racial or ethnic minority groups, and immigrants) at predictably higher risk of poor health outcomes that range from earlier onset of chronic conditions to premature death.

Despite nationwide concerns about health disparities, Mississippi represents a place of multiple health disadvantages. Mississippi is among the states experiencing the greatest risk of multiple determinants of population health disadvantages. Compared to residents in most other states, Mississippians rank lower on many measures of health and wellness (United Health Foundation 2008). Alongside well-documented state population health challenges and endemic health disparities, Mississippi also confronts physician workforce shortages (Butts and Cossman 2008; Butts, Cossman and Welford 2008; Cossman 2003).

Mississippi ranks last in the United States in terms of physician supply (AAMC 2007), reflecting an historic and chronic shortage of health care professionals in the state. In Mississippi's rural areas, inequalities in access to health care are worsened by high rates of individuals living in poverty (21%) and high proportions of racial and ethnic minorities (39%), mostly African-Americans (37%) (U.S. Census Bureau 2008) for whom systematic barriers to access to care are well-documented (AHRQ 2004; CDC 2005;
IOM 2003). Solutions to the rural inequality in access to health care have largely focused on federal subsidies to encourage development of rural clinics, placement of international medical graduates (IMGs) in rural areas, bolstering the National Health Service Corps, and increasing numbers of non-physician providers (see Baer et al. 1998; Shi et al. 1994). Such strategies make sense, to the extent that insufficient rural access or provider supply is associated with poorer health outcomes. Rural residents have higher risks of health complications, linked in part to access issues, compared to residents of urban areas (Auchincloss and Hadden 2002). But poor rural health is not just a matter of place, since care access and health disparities are also closely tied to individual socio-demographic characteristics, like race, income and education, regardless of the location of patient populations (Link and Phelan 1995; Link and Phelan 2005; Williams and Collins 1999; Williams and Jackson 2005).

Purpose of the Study

A comprehensive analysis of health care provision and physician workforce experiences in Mississippi is incomplete without explicit attention to issues associated both with place and with race. This project supplemented the most recent Mississippi Physician Workforce Survey (hereafter 2007/08 MSMD) by extending its focus to document experiences and perspectives of Mississippi physicians that are associated with place and race.

The broad purpose of the survey and qualitative data we analyze in this series of reports (described below) is to provide the foundation for analytic strategy to provide systematic social scientific evidence for stakeholders seeking to understand Mississippi physician workforce experiences as minority and rural health care providers, particularly physician perspectives on their professional experiences and the patients they serve. More specifically, we sought to document and analyze the experiences of physicians practicing in underserved and/or rural areas of Mississippi, and to document how conditions affecting Mississippi’s physicians vary by their individual characteristics, including demographic characteristics (race, gender, age group) and practice location.

Analytic Strategies for Rural and Minority MDs in Mississippi

We used three strategies to acquire data for the research for this project. First, we leveraged existing resources from the 2007/08 MSMD statewide survey, boosting responses among actively practicing minority physicians in
the state. Second, we linked cross-sectional 2007/08 MSMD data to two available secondary databases. Linking the 2007/08 MSMD survey data to physician licensure data supported a limited amount of trend analysis (Thran and Hixson 2000). Linking the 2007/08 MSMD to Census data maximized the analytic value of the quantitative data by providing a foundation for analysis using place and race associated variables available in both data sets. Third, we acquired qualitative data from focused interviews with a purposive sample of physicians whose practices were rural or who served traditionally underserved (poor and/or minority) patient populations, or physicians who were themselves members of an “underrepresented” group of Mississippi physicians (that is, were African American, women, and/or international medical graduates).

Focus and Organization of the Research

Place (in both its geographic and social manifestations) is an important component of the Mississippi health care puzzle, since disadvantages or disproportionate levels of poverty, health disadvantage, and concentrations of race/ethnic minority residents vary across communities of physicians and their patients in rural and urban areas. Such differences, anchored in place, shape both physicians’ and patients’ experiences. In the first report, Physicians Practicing in Rural and Underserved Areas of Mississippi (Street et al.2009), we used data from the 2007/08 MSMD survey to explore how place shapes the experiences of physicians who practice in rural and/or medically underserved areas of Mississippi compared to physicians who practice in urban areas and/or communities with sufficient primary health care providers.¹

Race-based differences in individual opportunity and experience of health disparities are realities of the U.S. health care landscape, and as such are another important influence on both the physician workforce and patient populations. Our exploration of race considered the experiences of diverse Mississippi physicians, with particular attention to differences associated with membership in minority groups. We also analyzed the roles of two additional ascribed characteristics (gender and age) that influence physician experiences in the communities they serve.

¹ The criteria used to distinguish rural and medically underserved communities from non-rural and adequately served communities are discussed in greater detail in Section 3 of this report.
Race, gender and age are the physicians’ personal characteristics that we analyzed in the second report, *Mississippi Physicians: Characteristics and Experiences in an Underserved State* (Street et al. 2009).

The final report, *Rural and Minority MDs in Mississippi: An Overview*, considers challenges associated with serving communities with multiple disadvantages (both rural and underserved). It also capitalizes on the face-to-face interviews we conducted with 57 Mississippi physicians in a purposive sample that targeted physicians who (1) practiced in rural and/or HPSA designated areas, or (2) were a member of an underrepresented group among the Mississippi physician workforce (women and non-white physicians). For the statistical analyses we present in this report, we categorize physicians as serving in **vulnerable practice locations** if the community he or she serves is both underserved (HPSA designation from the federal government) and rural. These communities, with documented shortages of physician supply and located away from population centers where larger hospitals and specialty services are more readily available, and often serving patient populations that are disproportionately composed of minority individuals, are especially vulnerable practice locations compared to other more urbanized practice locations or communities that have sufficient physician supply. We supplement the conclusions drawn from the statistical analyses presented in the first two reports and the analysis of physicians’ experiences in vulnerable practice locations presented in this one with data from field interviews with a sample of physicians throughout the state, to achieve a deeper contextual understanding of the relationships between place and race for Mississippi physicians.

This report is organized in six main sections. Following the introduction provided here (Section 1), Section 2 gives the contextual background for the *Rural and Minority MDs in MS* (summary of findings from statistical analysis in the two previous reports), to set the stage for the analysis in this final report. Section 3 provides details about the samples, data sources and analytic approach we used to create this report. It includes detailed information about how the data were acquired and how variables were defined for analysis. Section 4 provides descriptive statistical analysis of the experiences of physicians serving in vulnerable practice locations (both rural and HPSA) compared to those who practice elsewhere. Section 5 provides narrative analysis that documents the perspectives of a subset of Mississippi physicians who were interviewed for this research: that is, physicians who have rural practices, serve disproportionately high minority patient or rural populations, or who are physicians whose personal characteristics (gender,
race) are underrepresented in the Mississippi physician workforce. We summarize the main findings of the project in Section 6. This includes a discussion of limitations of the research and some of the main implications of the findings associated with the experiences of Mississippi physicians as they bear on place and race in a medically underserved state.
SECTION 2

BACKGROUND

This report builds on results from two previous reports associated with this project. The first report, *Physicians Practicing in Rural and Underserved Areas of Mississippi*, explores how place shapes physicians’ experiences in rural or medically underserved areas of Mississippi.² The second report, *Mississippi Physicians: Characteristics and Experiences of Physicians in an Underserved State*, analyzes physicians’ individual characteristics (race, gender and age) and practice experiences (e.g., workload, satisfaction and autonomy). Both reports use survey data from the 2007/08 MSMD survey that has been linked to additional publicly held data. Main results from those two reports are summarized here to provide the context of the larger project, to set the stage for the additional emphasis in this report, on the experiences of physicians serving in vulnerable locations; that is the experiences of rural HPSA providers (compared to all other providers). This section also provides the background against which the physicians we interviewed experience their practices in rural and underserved locales in Mississippi, or who are themselves members of demographic groups underrepresented in the Mississippi physician workforce.

Demographically speaking, the average white physician is a 53 year old married man, while the average African American physician is a relatively young, single woman who practices in an urban area. The African American physicians in our sample were more likely to graduate with high student debt loads (84% had more than $20,000 in student loans) while white physicians (50%) and physicians of other races (25%) were less likely to carry such student debts.

² The criteria used to distinguish rural and medically underserved communities from non-rural and adequately served communities are discussed in greater detail in Section 3 of that report, available at [http://www.nemsahc.msstate.edu/publications/whitepaper/MIGMH%20Report%20I.pdf](http://www.nemsahc.msstate.edu/publications/whitepaper/MIGMH%20Report%20I.pdf)
Mississippi Patients

Physicians, regardless of their individual characteristics, rank patient relationships as the most important and satisfying part of their professional lives, regardless of race of physician. However, African Americans single out patient relationships as particularly important. There were few statistically significant gender differences in patient relationships. In terms of career stage sources of professional satisfaction, early-career physicians tended to value collegial professional relationships, while physicians later in their careers value patient relationships.

Although the importance of patient relationships varies little by race and gender, and only somewhat more by career stage, patient loads do vary by every demographic category we studied. For example, White physicians average 95 patients per week, while African American physicians see about 80 patients in an average week and Other race physicians average 75 patients per week. Men physicians have patient loads, on average, that are heavier than those experienced by most women physicians in Mississippi (96 and 77 patients per week respectively). Mid-career physicians in their prime working years (ages 40-59) report the highest patient loads by age group, averaging 99 patients in a typical week.

While African American physicians see fewer patients/week than White physicians, they are the group most likely to report that their patients disproportionately rely on the combination of public programs available—Medicare and Medicaid—for insurance coverage. A large percentage of physicians in every demographic category and practice location type say reimbursement is inadequate, particularly Medicaid reimbursement.

Considerably more minority physicians than White physicians report that their patients had experienced primary care interruptions in the last year, compared to less than half of White physicians. Compared to men, women physicians said that barriers to care—whether travel or wait times—were becoming more problematic for their patients. Barriers to patient care were not highly associated with age group or career stage of physicians.

Although the composition of the Mississippi physician workforce limits the potential for race and gender concordance between many Mississippi patients and physicians, few physicians reported that they felt separated from their patients due to ethnic or cultural differences (3 percent for whites, 9 percent for African Americans and 12 percent for physicians of Other
Women physicians were the most likely to say they felt strong personal connections to their patients, while greater percentages of men physicians see relationships with patients becoming increasingly adversarial, also reporting that their patients were more demanding. Later career physicians (60+) felt most connected to their patients, and were least likely to perceive that their patients were adversarial or that time pressures interfered with patient relationships.

**Mississippi Physician Practice Experiences**

African American physicians report spending somewhat less time in professional activities (42 hours in an average week) than White (47 hours) or Other race physicians (46 hours), yet White physicians are less likely to take call (73%) than African American or Other race physicians (80%). Men, on average report more hours devoted to professional activities (48 hours) than women physicians (40 hours), but there are no gender differences associated with whether or not a physician reports taking call. Mid-career physicians report working about 6 hours a week longer in an average week than their younger and older colleagues, but the youngest doctors are the most likely to take call and the oldest doctors are least likely to do so.

African American physicians and women physicians say that they have less control over practice circumstances than physicians who are White or Other race and men, respectively. Older physicians (age 60+) feel significantly less in control of the length of hospital stays and which tests they can order than younger physicians. This, perhaps, reflects the earlier professional experiences of older doctors whose basis of comparison might be a period when physicians rather than third parties determined length of hospital stays. For younger physicians who are more recently trained, the expectation that other entities are involved in decision-making surrounding hospitalizations is likely more taken for granted.

No significant differences were noted in association with self-identified race of the physicians surveyed in terms of stress or burnout. However, twice as many women physicians as men reported that they experienced persistent burnout symptoms. A lower percentage (70 percent) of mid-career (aged 40-59) said they enjoyed their practices or were only occasionally stressed, compared to younger (84 percent) and older physicians (80 percent). Mid-career appears to be the most stressful phase of Mississippi physicians’ careers.
Issues Associated with Medical Liability

White physicians, men and mid-career physicians were all more likely to report that they had been named as defendants in a medical malpractice lawsuit in the previous year than their respective counterparts. However, the number of medical malpractice lawsuits being filed in Mississippi dropped dramatically between 2003 and 2007, likely due to the 2004 tort reforms (Cossman and Street 2008; Cossman and Street 2010). Although White physicians were more likely to have been named in a lawsuit, African American physicians were more likely to report that the malpractice climate conditions were poor or fair (87 percent), compared to White physicians (62 percent) or Other race physicians (73 percent). The youngest physicians were most concerned with the malpractice climate (78 percent said it was either fair or poor) and the oldest physicians were the least concerned (54 percent fair/poor). There were no significant gender differences in the assessment of the malpractice climate.

Despite experiencing a less volatile malpractice climate in the year or two immediately before the 2007/08 MSMD survey, many physicians respond to perceived risk by practicing defensive medicine. Regardless of self-identified race, between a quarter and half of all Mississippi physicians report practicing medicine defensively on a regular basis. Men were more likely than women to report that they regularly took malpractice issues into account in ways that affected their clinical behavior. Later career physicians (aged 60+) were less likely than mid or early career physicians to report practicing defensive medicine.

Recruitment and retention of physicians in Mississippi generally, and in rural and underserved areas of Mississippi particularly, is a persistent concern for health care stakeholders. African American physicians and women physicians were more likely (than their counterparts) to report having concerns about the capacity for physician recruitment and retention, particularly the recruitment and retention of women and minority physicians. Physicians in the mid and later stages of their careers (aged 40+) are more pessimistic about prospects for recruiting new physicians in general, but they were significantly more optimistic about recruiting sufficient women and minority physicians compared to physicians in the early stages of their careers.
Physician Relationships and Resources

White physicians are significantly more likely to report that their non-physician colleagues supported their professional judgment or carry out instructions than their colleagues in other self-identified race categories. Men physicians agreed more with the statement “my physician colleagues are an important source of personal support,” but significantly less that their colleagues supported their efforts to balance career and family. Early career physicians (under age 40) were less likely than physicians at mid or later career phases to feel that their colleagues value their unique perspectives, but were more likely to report that professional colleagues supported their efforts at work/life balance.

Fewer African American physicians thought their compensation package was adequate and more reported that their patient care/administrative work out of balance compared to physicians in other self-reported race categories. African American physicians were also more likely to report that their medical practice work has not met expectations. From a gender perspective men (more so than women) are more likely to report that their practices have sufficient resources and support staff. Mid-career physicians, compared to colleagues at earlier and later phases of their careers, were more likely to express concerns about the adequacy of their practice resources and space, as well as the balance between patient care and administrative tasks.

All racial minority physicians were more likely than White physicians to report that they wanted opportunities for research and to regard recognition of their professional work as critical. Women were only half as likely as men to perceive that they had the same career opportunities as their colleagues; mid-career physicians (age 40-59) were significantly less likely to say they had the same opportunities as their peers compared to earlier and later career phase physicians.

Minority physicians were significantly likelier than White physicians to say that their specialty still appealed to them. White physicians were twice as likely to say they would not advise others to pursue medical careers and were also the most likely to say they would not choose medicine if they had it to do over. Women were generally more satisfied with their specializations than men (66 percent compared to 54 percent). Compared to both later and earlier career physicians, mid-career physicians (aged 40-59) were
significantly more likely to say that their specialization was no longer appealing and that it had failed to live up to their expectations. Mid-career physicians would also be less likely to recommend a career in medicine, to choose medicine as a career again, or to report that they were satisfied with their careers.

Most physicians feel connected to their communities, but White physicians report the highest levels of connection. Living in communities with good schools was listed as a higher priority for minority physicians than for white physicians. More women than men reported that proximity to parents was important, reflecting gender norms about family life and kin keeping. The early career physicians emphasized the importance of quality of schools. Mid-career physicians were more likely to experience work schedules that encroached on their personal time and physicians in their careers the longest (60 and older) reported the least disruption of their personal lives by work.

More Other race physicians said Mississippi’s cost of living was an important factor for choosing a community of practice than African American or White physicians. African American physicians were significantly less likely than White or Other race physicians to say that they did not feel at home in the community where they practiced. Compared to White and African American physicians, Other race physicians were much more likely to say that practicing medicine in Mississippi was different from practicing elsewhere. Early career physicians (under age 40) emphasized that cost of living was an important consideration in picking a practice location. For later career physicians (60 and older), practicing medicine in Mississippi seems pretty much like practicing medicine anywhere else.
Context Matters

Still, context matters. About 60 percent of Mississippi’s 3 million residents (around 1.65 million people), live in rural areas of the state, with all the limitations to medical infrastructure that rurality implies. More than a million people, around 37 percent, live in Mississippi communities that are designated by the Federal government as medically underserved (HPSA).

Figure 2.1 shows counties in Mississippi designated as rural or not, using Census code definitions to dichotomize counties into rural (meeting criteria for any one of three non-metro classifications) or non-rural [the term urban is used interchangeably](areas meeting one of six metro classifications). The Census definitions we used to identify rural counties are described in more detail in earlier reports and in the methods and data section that follows.

Figure 2.2 shows counties in Mississippi conventionally described as underserved (having Federal designation as a HPSA). HPSA designation is one approach to understanding which communities have shortages of medical providers insofar as primary health care is concerned.

Figure 2.3 depicts the spatial distribution of rural and HPSA-designated counties in Mississippi alongside non-rural and non-HPSA counties. Mississippi’s rural counties (shaded gray) and urban (shaded maroon) counties are not perfectly contiguous with counties that are medically underserved. Overlaid on the rural/urban map is the distribution of counties with federal HPSA designation (patterned) and places with adequate primary health
professional supply (no pattern). Insufficient population density to sustain an abundance of medical services and relative isolation combine throughout both the United States and Mississippi to create “predisposing conditions” that create obvious risks of also being medically underserved places. Put another way, rural areas are disproportionately likely to have federal designation as HPSA communities. However, as Figure 2.3 shows, in Mississippi (as elsewhere) HPSA status and rurality are not one and the same. Some rural counties have adequate supplies of primary care health professionals (21 of 65 rural counties), while some more densely populated non-rural counties in Mississippi are designated as HPSA areas (8 of 17 non-urban counties), characterized by primary care provider shortages.

**Figure 2.3 Rural and Underserved Counties in Mississippi**

Given the Figure 2.3 depicts, it is obvious that HPSA-designated and rural places are not precisely analogous. For this reason, in this final report we decided to take the two potential spatial “risk” categories into account together, by exploring the experiences of Mississippi physicians who practice in vulnerable practice locations—that is, physicians who practice in places that are both rural AND underserved. An earlier report considered rural versus urban, and HPSA versus non-HPSA distinctions in physician experiences, and those findings provide the context for further exploration of the spatial component of Mississippi physician practices. The data presented in Section 4 of this report refers to analysis of survey data that compares physicians in the counties designated vulnerable practice locations by a patterned gray legend (gray=rural, pattern=HPSA) compared to physicians in counties that may be either rural (=gray) or urban (=maroon) but are non-HPSA (=no pattern). We set the stage by first highlighting the main findings associated with rural and underserved locations considered separately (below).
Are Rural Doctors Different?

Rural physicians’ experiences differ from non-rural physicians on issues ranging from malpractice experiences and the practice of defensive medicine to several measures related to professional relationships and work/life balance. However, rural and non-rural physicians have similar experiences with patient relationships, concerns about recruiting and resource availability, and autonomy.

More specifically, rural physicians are more likely to practice in a medically underserved area: more than a third of rural physicians in the sample practice in underserved (HPSA) counties, while only 3 percent of non-rural physicians practice medicine in HPSA counties. Rural physicians are also more likely to have patient bases that are disproportionately dependent on public programs (Medicare, Medicaid and SCHIP) than their urban counterparts. Among the most disconcerting differences is that rural physicians are more likely to have been named in a lawsuit, a difference that has widened from the first Mississippi Physician Workforce study in 2003 to the 2007/08 MSMD (even though overall rates of litigation have declined). Finally, urban physicians report a stronger desire for research opportunities while rural physicians valued their position as role models for their communities.

The Importance of Practicing in a Health Professional Shortage Area

While rural physicians are more likely to practice in a health professional shortage area (HPSA) than urban physicians, there are underserved areas in Mississippi that are not rural. Consequently, we also assessed differences between the experiences of physicians serving in HPSA versus non-HPSA locations. Since HPSAs are shortage areas by definition, it is not surprising that physicians practicing in HPSA locales have a third heavier patient burden in an average week compared to physicians who are not practicing in a HPSA. Further, HPSA providers’ patients are more likely to be publicly insured compared to patients served by practices in adequately served communities. Perhaps the insurance mix is part of the reason that nearly 25 percent more non-HPSA providers (compared to physicians who practice in HPSAs) would recommend their community as a good practice site to future physicians. However, even in the face of their challenges, physicians practicing in underserved areas reported comparable positive relationships
with patients compared to physicians in adequately supplied areas, but physicians in HPSA practices report weaker professional relationships than their counterparts in non-HPSA areas.

While a recap of the distinctions experienced by rural and HPSA physicians sets the stage, in this report we seek to understand if there are facets of physician experience that reflect a “multiplier” effect of negative outcomes associated with both rural location of practice and HPSA designation together. Data and methods we used to explore this potential spatial interaction are outlined in Section 3 Findings of the statistical analysis related to physician experiences in vulnerable practice locations (both rural and HPSA) are presented in Section 4.
SECTION 3

DATA AND METHODS

Most of the quantitative data used in the following sections are from the 2007/08 MSMD survey (Appendix A), conducted as part of the 2008 Mississippi Physician Workforce Study at the Social Science Research Center at Mississippi State University. Some individual level data, practice county and specialization are from the Mississippi State Board of Medical Licensure. Other county level data are from the U.S. Bureau of the Census and the U.S. Department of Health and Human Services.

The qualitative data are from 57 intensive interviews and direct observations acquired during fieldwork conducted throughout Mississippi from July through December 2008. The study investigators traveled to interview physicians in person in their home communities, including (when possible) in their specific practice locations. The interview schedule we used is in the appendices of this report (Appendix B).

First we detail the steps taken to analyze the quantitative data used in statistical analysis in the first two reports, and this final report. The second subsection in this part of the report details the data acquisition and analysis process for the qualitative interview data.

Quantitative Data

Individual level data

Approximately 15 percent of Mississippi’s licensed physicians responded to the 2007/08 MSMD survey. The original administration of the survey occurred in spring/summer 2007 and yielded responses from 988 physicians. An additional 430 surveys were returned in summer/fall 2008 as a result of
outreach associated with this project, in which we targeted physicians from minority groups and physicians who worked in rural or underserved areas for participation in intensive interviews. Consequently, the total number of respondents to the 2007/2008 MSMD is 1,418, including not only physicians in active practice (the focus of this study) but also physicians who are licensed to practice in Mississippi but who are not currently involved in active practice in the state. The total number of 2007/08 MSMD respondents who are actively practicing in Mississippi is 834 (120 practice part-time and 714 practice full-time).

The 2007/08 MSMD survey replicated many questions from an earlier 2002 study of the Mississippi physician workforce (Cossman 2003) to permit tracking of broad trends. New modules of questions about physicians’ practice experiences, explicit questions about minority physician experiences and recruitment, malpractice issues, the effects of Hurricane Katrina and its aftermath were topics added to items from the original 2002 survey. Funding for 2007 MSMD data collection came from the Mississippi Physician Care Network, Mississippi Academy of Family Physicians and the American Academy of Family Physicians, with some matching support from the Mississippi State University Social Science Research Center.

The 2007/08 MSMD sampling frame was all physicians licensed to practice medicine in Mississippi (provided by the Mississippi State Board of Medical Licensure [MSBML]) who had email addresses (approximately 90 percent of physicians who renew licenses online), mailing addresses, and several standard demographic and professional (i.e., primary practice address, primary and secondary specialization) data. The MSMD survey was pre-tested in November of 2006, refined by the researchers, and then fielded both online and in paper form from February to August 2007. In the first wave of data collection 988 physicians responded. The survey was timed so fieldwork could capitalize on the window of opportunity determined by external circumstances: time elapsed since Katrina and physician malpractice experience after tort reform (2004).

With additional funding from the Mississippi Institute for Improvement of Geographic and Minority Health, we were able to supplement the first wave

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3 Physicians who met particular criteria (non-White physicians, physicians practicing in rural Mississippi, physicians practicing in underserved areas) were asked to participate in face-to-face interviews regarding their experiences meeting the unique needs of their patient communities. If they had not already completed the 2007/08 MSMD survey, researchers left a blank form and asked them to return it.
of data from the 2007/08 MSMD survey. We contacted physicians who worked in rural counties and Health Professional Shortage Areas (HPSA), targeting in particular women physicians and/or members of racial or ethnic minority groups. These respondents were somewhat underrepresented in the initial wave of data collection, so targeting them explicitly in a second wave was a strategic use of scarce resources to increase their representation in the Mississippi physician workforce sample. We mailed surveys to physician practices, called and asked office staff to encourage physicians to complete the survey, and we met in person with several dozen physicians who agreed to be interviewed at their offices (or similarly convenient public location at their request). Once interviewed, we requested that they complete and return the MSMD survey (if they had not previously completed the survey, as explained in the section below on Qualitative Data).

Data from the original wave of the 2007/08 MSMD survey were not completely representative. When comparing physician characteristics in initial wave of the 2007 MSMD sample to 2006-2007 MSBML licensure data, we determined that 18 percent of white full-time, active MS physicians responded to the survey, compared to only 11 percent of African American full-time active physicians. Other racial categories are adequately represented among the 2007 MSMD sample of physicians, but African American physicians were the least likely to respond to the 2007 MSMD. Therefore, the researchers proposed an intensive and more personalized data collection effort to target African American physicians and physicians who serve minority and/or rural populations, consistent with the mandate to improve rural and minority health of the Mississippi Institute for Improvement of Geographic Minority Health, who funded this study.

An examination of response rates by gender and race indicates the analytic sample is demographically comparable to the population of MS physicians, establishing confidence in generalizability of findings in this report. For example, 78 percent all active physicians in Mississippi in 2008 were men; 79 percent of respondents in the 2007/08 MSMD were men. The population of minority physicians practicing in Mississippi is relatively small; therefore, approaching perfect representativeness is more difficult. According to the annual licensure data from MSBML, of all active physicians in the state, 81 percent are White, nine percent are Black, 10 percent report an “Other” race. In the final survey sample, 86 percent of respondents reported that they are White, seven percent Black, and eight percent “Other”, closely approximating Mississippi licensed physician workforce population parameters, although Whites are still slightly overrepresented in the sample.
Quantitative Analytic Sample

Mississippi physicians in active practice provided valid responses to the 2007/08 MSMD survey are analyzed here.\(^4\) We used all available cases with valid data (N=834) as the analytic sample for documenting similarities and differences based on demographic characteristics of Mississippi physicians.

One purpose of this research project was to boost response rates among physicians practicing in rural and underserved areas of the state to better understand the circumstances of physicians who served especially vulnerable communities. Another purpose was to better understand the experiences of minority physicians practicing in Mississippi; minority, rural, and women physicians were the main targets of the fieldwork conducted for this research. The higher response rates among rural and HPSA physicians and increases in both minority and women physician response rates indicates that we met that goal. Recruitment tactics and fieldwork observations indicate that we were successful in boosting the number of minority physician respondents in the sample.

Most of the quantitative data are self-reports from the 2007/08 MSMD. In cases where key demographic data (race, gender, or age) was missing, probabilistic matching was used to backfill those data fields from the MSBML to preserve the largest possible sample and to enhance representativeness.

There are several other methodological issues related to the categorical demographic variables around which the research is centered.

Race. First, note that the term “minority” was not selected or coined by the researchers. Instead, its use in this series of reports represents our use of a term that is regularly used in health services research and by the program that funded this research. We use it in the conventional sense to denote non-whites. Minority is not precise terminology however, but rather is a catchphrase that in lay terms (and often in health services research) typically refers to any individuals who are not identified as members of the White race category. Such usage presumes a stance that natural comparisons are Whites to any other group, which need not necessarily be the case even if it is the convention. Our intent in this research is to be

\(^4\) Respondents to the 2007/08 MSMD who reported that they were retired, who did not have any active or direct patient contact with patients in the previous year, or who no longer practiced medicine in Mississippi were removed from the study sample.
more precise in the definition of race. However, that aspiration is severely constrained by available data.\(^5\) Throughout our reporting about Mississippi physicians we use self-identified survey data to classify respondents as White if they selected that race category on the 2007/08 MSMD survey. We classify individual physicians as African American if they identified both as Black on the 2007/08 MSMD survey AND they were born in the United States. Respondents who self-identify as Black but who were born outside of the United States and other 2007/08 MSMD respondents who did not self-identify as White are included in the residual “Other” race category. There were insufficient cases representing racial categories (such as Asian or Native American) to make analytic distinctions in the statistical models about more groups than the three—White, African American, and Other—defined in this paragraph.

Gender is defined straightforwardly; individuals are categorized as men or women based on their survey self-identification. If gender was missing in the survey data, it was taken from the Mississippi State Board of Medical Licensure Data (MSBML) as outlined above.

Age group is a three-category measure intended to explore generational differences among Mississippi physicians of different ages. Self-reported age was collapsed into three categories to serve as a rough proxy for the physicians’ career stage. Physicians under age 40 represent those in the early stages of their careers. Physicians from age 40 to 59 represent the age group most commonly associated with stable, well-established careers and the prime professional working years. Physicians aged 60 and older have the longest experience of practice in Mississippi, have experienced the most changes in health care delivery over the course of their longer careers, and may be at a point in their professional lives when they start planning for (or at least contemplating) practice and professional changes associated with retirement preparation and workforce withdrawal.

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\(^5\) For statistical analysis, there must be sufficient cases in each analytic category to permit meaningful comparison. We analyzed White, Black (including both U.S. and foreign born blacks) and Other (analysis not shown) and White, African American and Other (the analysis reported in this manuscript). We chose that definition of racial categories because one of the most vulnerable patient populations in Mississippi is African Americans, and because of the historical legacy of racism in the United States which had historically blocked black physicians from advancing in the profession. For these reasons, the most appropriate comparisons are U.S. born Blacks to other groups of Mississippi physicians.
County level data

We derived the lists of Mississippi’s rural and HPSA counties from federal sources: the U.S. Bureau of the Census and the USDHHS Health Resources and Services Administration websites. As described in the first report in this series, within the physician data set we identified and coded Mississippi counties as rural/non-rural (we use the terms non-rural and urban interchangeably) and HPSA/non-HPSA (we use the terms HPSA and underserved interchangeably to denote documented localized shortages of primary health care workers). In the analyses presented later in this report, counties that met one of three rural Census definitional codes were designated rural (the remaining counties were coded as non-rural/urban). Counties that were federally designated as HPSAs, with documented shortages of primary medical care providers, were defined as HPSA (underserved) places (all other counties were defined by default as non-HPSA - areas with no documented primary care provider shortage).6

Vulnerable practice location as we define the variable in this report refers to rural practices in Mississippi that are also designated as medically underserved using the federal definition for HPSA provided above. This does not imply, of course, that only rural- or HPSA-related spatial considerations create health care provision vulnerabilities, nor that merely experiencing both necessarily will “make matters worse.” However, taking these two spatial considerations into account simultaneously permits us to assess whether there are negative multiplier effects on physicians’ experiences in communities having both spatial disadvantages. The intent is to highlight particular risks to physician workforce consideration or possible patient concerns arising from these spatial realities.

Statistical Analysis

We conducted categorical and descriptive comparisons of physicians who worked in rural and HPSA-designated areas and with different demographic characteristics on a series of themes relating to physicians’ workforce experiences, presented in the first two reports from this project. In this report, we provide similar analyses for physicians working in vulnerable

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6 We do not mean to imply that HPSA-designated areas are the only places with primary care health provision shortages, only that the federal designation reflects documentation that shortages exist and the shortages are severe enough to meet federal definitions associated with medically underserved places.
practice locations, again using the same data from the 2007/08 MSMD survey. We presented detailed findings from the analysis of physicians in vulnerable practice locations in a series of tables and figures in the following section of this report.

The quantitative data were analyzed using the Statistical Program for the Social Sciences (SPSS ver.16).

Tests of differences between means are used to establish levels of statistical significance in most of the analysis presented in the next section. In some instances, the data required other statistical tests (e.g., Chi square). Regardless of the test statistic used, statistical significance is indicated by the Cronbach’s alpha, which indicates the percent chance the relationship is not random (e.g., alpha < .10 indicates a 90% chance that the relationship is empirically grounded and only a 10% chance that the relationship is a statistical artifact).

**Qualitative Data**

During summer and fall 2008, researchers interviewed a purposive sample of physicians with practice experience relevant to assessing and describing minority patient experiences and spatial challenges associated with providing medical care throughout Mississippi. The purposive sampling strategy also ensured that interviewees included many women and non-White physicians, as well as physicians of any race or gender who practiced in communities with disproportionate minority patient bases or which were designated as rural and/or underserved.

The interview schedule was pre-tested with several physicians who practice in Mississippi. It was designed to elicit responses that gave a provider perspective on some of the practice experiences faced by physicians in Mississippi who practiced in rural communities or areas of the state with HPSA designation (see Appendix B). It was also geared towards understanding potential differences associated with the demographic characteristics of the physicians.

To schedule interviews, a project research assistant first called medical practices to establish a convenient time and place for a face-to-face interview with sampled physicians. Interview sessions were planned to take into account the logistics of travel and researcher availability. The interviews were grouped into blocks at nearby sites that could be
accomplished during week-long fieldwork trips. Four fieldwork episodes included two to practices in the Mississippi Delta (the largest concentrations of physicians practicing in underserved and/or disproportionately minority communities), one to the greater Jackson area (the greatest concentration of minority physicians), and another to underserved areas in south/central Mississippi (areas that rural and/or are medically underserved). Staff at medical practices serve as gatekeepers for access to physicians (Keating 2008), whether to patients or researchers, and often have a considerable amount of discretion in terms of buffering interactions with physicians. Generally, office staff were helpful in passing the researchers’ request for a face-to-face interview to the physicians sought for the sample. Office staff typically consulted with the physician selected for the sample and would then call back to the research assistant to confirm details of prospective interviews. Some physicians opted for the researchers to conduct the face-to-face interview at their practice, squeezing the interview in before or between appointments or other practice responsibilities. Other physicians preferred to meet outside their practice locale in another public place, typically a local restaurant or coffee shop. In either case, researchers did their utmost to ensure that the interview was conducted in sufficiently private circumstances that the physicians would feel comfortable discussing their practice experiences candidly. Although there were no tangible incentives offered for participation, researchers offered to provide breakfast or lunch (either brought to the practice site, or purchased if the interview took place elsewhere) so that these busy practitioners could multi-task by being interviewed and having a meal at the same time.

Among the 100 physicians initially selected into the purposive sample, 16 were eliminated from the sampling frame because they were unreachable (either because contact information was outdated or because their staff did not return repeated calls to solicit researcher appointments for face to face interviews). Only 9 of the remaining 84 physicians in the sample outright declined (10.7 percent, communicated by office staff) to be interviewed. There is no systematic bias we can determine associated with the likelihood of declining the interview; that is, there appear to be no demographic or geographic pattern in characteristics associated with physician practices among the physicians (or their staff) who declined interviews.

An additional 10 physicians (11.9 percent) were willing to be interviewed, but were unavailable during the period that the researchers could travel to their communities. There are substantial differences in the quality of data derived from face-to-face interviews and other data acquisition modalities.
In the interests of acquiring equivalent data under similar circumstances from all respondents for the qualitative portion of this research, only interviews that could be conducted face-to-face by experienced field researchers were scheduled. Again, there seemed to be no systematic demographic or geographic bias among the physicians with whom we could not schedule convenient interviews; the one common characteristic was busy practices.

Sixty-five physicians were scheduled for interviews. Researchers re-confirmed the time and place of each interview the previous business day before the interview was scheduled. In the end, 57 interviews physicians completed interviews (68 percent response rate). Medical emergencies and unexpected duties associated with these busy medical practices meant that seven standing appointments for interviews could not be kept.\(^7\) In one instance, researchers arrived at a closed practice for a scheduled interview and were unable to contact the physician by phone or make alternative arrangements. Although not quite 60 percent of the original sample of 100 physicians was interviewed, rather than selection bias problems arising from refusals, other circumstances (including somewhat outdated contact information and emergency circumstances associated with the demands of busy medical practices) depressed the number of physicians available for interviews. For such busy professionals, Mississippi physicians were very generous with their time. Interviews lasted from 15 minutes to nearly two hours; most interviews were between 30-50 minutes long.

Interviewers provided each physician with an information sheet explaining the purpose of the research, the credentials of the researchers, details concerning safeguarding confidentiality of information provided during the interview, and procedural requirements associated with the Mississippi State University Institutional Review Board procedures for informed consent for participants in research. Data were audio recorded (when subjects consented); otherwise, only field notes were kept. Recordings were transcribed and anonymized and recordings destroyed. Handwritten field notes were also transcribed and all identifying information removed from the transcribed files.

\(^7\) When this happened, we were usually in the waiting room when a physician would call in to say they were on their way to a hospital, or who were in the office and were called out. Typically, physicians offered to reschedule the appointment but tight constraints on time and budget meant that missed appointments could not be rescheduled.
Qualitative Data Organization and Analysis

Once interviews were complete, we transcribed, de-identified, and analyzed the data and fleshed out field notes. Along with transcription, listening to the interviews a second time helped to further analyze the content and recapture many of the contextual nuances linked with the interview session (Sobo 2009). Data privacy is paramount, and care is taken to ensure that identifying information is expunged (including some information that could provide valuable context, but which might inadvertently signal the respondent) in reports.

The semi-structured interview format was appropriately adapted in field situations in accordance with interviewees’ responses to maintain the conversational flow, while still eliciting essential content of the interview. The interview schedule was a guide for questions we were interested in investigating. After using the interview guide and analyzing responses to early interviews, we refined probes for questions that had the most analytic interest, questions regarding the unique professional experiences, challenges in the physicians’ particular practice setting or patient population, and suggestions for improving health care in Mississippi.

Initial phases of data analysis included the verbatim data transcription and review. Audio files were transcribed as soon after the interview as was possible to also preserve good recall of the event. As transcripts were read repeatedly, recurring patterns in the physicians’ narratives were used to develop categories and organize the data under broad topical or thematic headings, used to organize the data in Section 5. Categories were based on concepts and concerns associated with the overarching research questions associated with this research—how race and space are implicated in the experiences of Mississippi physicians. These broad conceptual categories were helpful in guiding the organization of the data. The analysis of the narrative qualitative data provided by the interviews with physicians builds on and fleshes out the patterns observed in the statistical analysis of data in earlier findings from this project. Strauss and Corbin (1998) refer to this process of coding qualitative data as a process that involves researchers developing concepts that provide insight into the thoughts, ideas, and meanings of the subjects of research. The analytic step of systematically comparing across conceptual categories to examine the relationships between the concepts within the categories is an essential step in qualitative data analysis (Strauss and Corbin 1998). The iterative process of coding and categorizing narrative materials permitted the necessary data reduction
that identifies strong themes across physicians’ interview data, helps to identify patterns in the data, and suggests interrelationships between their narrative accounts and the quantitative data we analyzed.

The next section of the report provides statistical analysis of physician experiences associated with vulnerable practice locations, followed by the thematic presentation of physician accounts of their experiences serving rural and or disproportionately minority communities in Mississippi, and the impact of their unique personal characteristics on their own experiences as physicians.
SECTION 4

PHYSICIANS IN VULNERABLE PRACTICE LOCATIONS

Physicians in Vulnerable Practice Locations

Recall from earlier reports that the Mississippi physician workforce has distinctive demographic and geographic characteristics. Analysis in the first report explored the experiences of rural versus non-rural physicians, and physicians in underserved communities (HPSA) versus non-HPSA communities. The second report analyzed several major categorical differences between physicians who are members of particular self-identified racial groups, gender, and age groups (which we used as a proxy variable to distinguish between physicians’ career phase [early, mid-career, later career]) respectively. In the analysis presented below, we have combined the two salient geographic variables—rural and HPSA—into a single spatial variable that represents vulnerable practice locations. We are not suggesting the absence of spatial vulnerabilities in other practice locales in Mississippi, simply acknowledging that the combination of rural location and insufficient primary care provider supply presents a distinctively vulnerable location.

The data presented in Table 4.1 show the demographic characteristics of physicians in vulnerable practice locations. Physicians practicing in vulnerable practice locations are nearly three times more likely to be born outside the United States (20 percent) compared to physicians who practice in less vulnerable communities (7 percent). Physicians in vulnerable practice locations are slightly more likely to be men than women (84 percent versus 78 percent), are less likely to be White than non-white (13 percent compared to 19 percent either African American or Other race) and about two years older on average. While there are no statistically significant differences in marital status between physicians who work in vulnerable practice locations compared to those who practice elsewhere (despite
anecdotal evidence that many spouses are not interested in locating in especially rural areas), the most likely explanation for no difference is a selection effect. That is, physicians who aspire to practice in vulnerable practice locations probably select partners with similar aspirations in the first place.

Table 4.1. Descriptive Statistics by Practice Location

<table>
<thead>
<tr>
<th></th>
<th>HPSA+Rural (N=114)</th>
<th>Other (N=614)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Place of birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Born in the U.S.</td>
<td>80%</td>
<td>93%</td>
</tr>
<tr>
<td>Born elsewhere</td>
<td>20%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>84%</td>
<td>78%</td>
</tr>
<tr>
<td>Women</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>81%</td>
<td>87%</td>
</tr>
<tr>
<td>Non-White</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>87%</td>
<td>86%</td>
</tr>
<tr>
<td>Widowed, divorced, single</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Average age</strong></td>
<td>54 years</td>
<td>52 years</td>
</tr>
<tr>
<td><strong>Rural/non-rural location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural practice</td>
<td>100%</td>
<td>65%</td>
</tr>
<tr>
<td>Non-rural practice</td>
<td>0%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Percentages may not add to 100 due to rounding.

Next we examined whether physicians in vulnerable practice locations value different aspects of their professional practice compared to physicians who practice in other types of communities. As Figure 4.1 shows, differences are few and relatively small. Overwhelmingly, physicians (regardless of where they practice) value patient relationships and a congenial practice environment above any other consideration. Physicians in vulnerable practice locations (HPSA+Rural) are more likely to report that they value high income than those who work elsewhere and slightly less likely to report that they value the intellectual challenges associated with being a physician. The former may be related to reimbursement incentives available to physicians working in HPSA areas, and the latter may reflect the reality of fewer formal educational/intellectual opportunities in rural practices.
Mississippi Patients

Patient loads for physicians in vulnerable practice locations are much heavier (124 patients per week in an average week) than patient loads for other Mississippi physicians (89 patients per week in an average week). There are few differences in challenges physicians face treating patients in different spatial circumstances, except that physicians in vulnerable practice locations report that their patients are somewhat less likely to experience numerous and complex psycho-social problems (Figure 4.2). Since the question about psycho-social problems may prompt recall about patients with mental illness, one plausible explanation for higher rates of patients with complex or numerous psychosocial problems outside of vulnerable practice locations is that mentally ill patients are likelier to be concentrated in places where there is a broader range of services to meet their needs.
Differences among patient characteristics in communities of differing vulnerabilities are apparent when considering insurance mix. As Figure 4.3 shows, physicians in vulnerable practice locations report that a greater proportion of their patients depend on public sources of insurance—Medicare or Medicaid—and fewer are covered by private health insurance (compared to physicians who practice outside vulnerable practice locations). This likely reflects two trends: lower incomes in rural areas than in urbanized ones increases the proportion of the population eligible for public assistance programs and processes of urbanization that have left rural communities around the country with aging populations as younger people move to cities for greater economic opportunities. Because private health insurance is typically linked to eligibility under group plans associated with employment, it also mirrors the trend of greater potential for private insurance coverage through employment in non-vulnerable practice locations.

**Figure 4.3. Patient Payment Method by Practice Location**

Another series of questions on the 2007/08 MSMD survey probed additional physician perspectives about their patients. The questions asked about physicians’ impressions of patient access issues, including necessary travel, wait times, and insurance coverage.

The data indicate that many Mississippi physicians believe barriers to patient access to care have increased recently and that most of these increases have been experienced quite uniformly across practice locations, vulnerable or not. The main exception is that physicians in vulnerable practice locations
are more likely to report that their patients have recently experienced increased in disruption in the continuity of primary care than did physicians who practice in more urban and/or more adequately supplied areas of the state. A plausible explanation for this is the intermittent eligibility of individuals for coverage under the state Medicaid program, which features many individuals cycling off and back under coverage. Because physicians in vulnerable practice locations serve a disproportionate share of Medicaid patients, disruptions in continuity care when coverage is lost may be very apparent to them.

Table 4.2. Changes in Patient Access by Practice Location

<table>
<thead>
<tr>
<th>In the past 12 months, have any of the following conditions changed for patients in your community?</th>
<th>Large Increase</th>
<th>Small Increase</th>
<th>No Change</th>
<th>Small Decrease</th>
<th>Large Decrease</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>How far patients travel for primary care</td>
<td>HPSA+Rural Other</td>
<td>6%</td>
<td>25%</td>
<td>69%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6%</td>
<td>27%</td>
<td>65%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>How far patients travel for specialty care</td>
<td>HPSA+Rural Other</td>
<td>13%</td>
<td>25%</td>
<td>58%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13%</td>
<td>28%</td>
<td>55%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>How far patients travel for surgical procedures</td>
<td>HPSA+Rural Other</td>
<td>10%</td>
<td>26%</td>
<td>58%</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>9%</td>
<td>24%</td>
<td>65%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Waiting times for patient appointments</td>
<td>HPSA+Rural Other</td>
<td>18%</td>
<td>28%</td>
<td>50%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13%</td>
<td>36%</td>
<td>44%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Waiting times in the emergency room</td>
<td>HPSA+Rural Other</td>
<td>24%</td>
<td>28%</td>
<td>36%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>23%</td>
<td>31%</td>
<td>34%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Waiting times for specialist referrals</td>
<td>HPSA+Rural Other</td>
<td>23%</td>
<td>35%</td>
<td>41%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>19%</td>
<td>42%</td>
<td>35%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Interruptions in continuity of primary care*</td>
<td>HPSA+Rural Other</td>
<td>5%</td>
<td>48%</td>
<td>45%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>12%</td>
<td>33%</td>
<td>55%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Loss of health insurance coverage</td>
<td>HPSA+Rural Other</td>
<td>21%</td>
<td>48%</td>
<td>25%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>19%</td>
<td>47%</td>
<td>32%</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
Rows may not equal 100% due to rounding.

Physician’s Professional Experiences

Table 4.3 depicts the hours in an average week that Mississippi physicians spend on professional activities and differences in participation in call activities by practice location. Physicians in vulnerable practice locations report slightly more hours of work per week, but also report slightly lower rates of taking call. There is a recent trend toward hiring hospitalists in rural areas (Williams 2008) which reduces the amount of call that other physicians have to do in rural areas.

Table 4.3. Hours in Professional Activities and Percent Taking Call by Practice Location

<table>
<thead>
<tr>
<th>Hours at Work</th>
<th>Percent Taking Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSA+Rural</td>
<td>48.0</td>
</tr>
<tr>
<td>Other</td>
<td>46.7</td>
</tr>
</tbody>
</table>
Physician Burnout

Some aspects of medical practice are very satisfying while others are stressful and exasperating and Mississippi physicians (like physicians everywhere) have professional experiences ranging from enjoyable to alienating. These variations by practice location are presented in Table 4.4. Physicians serving in vulnerable practice locations are somewhat less likely to report no burnout or persistent burnout than their counterparts in less vulnerable practice locations. Obviously, this means that they report slightly higher rates of stress and occasional burnout.

<table>
<thead>
<tr>
<th>Practice Location</th>
<th>No Burnout</th>
<th>Stressed</th>
<th>Occasional Burnout</th>
<th>Persistent Burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerable Practice Location (HPSA+Rural)</td>
<td>17%</td>
<td>58%</td>
<td>22%</td>
<td>3%</td>
</tr>
<tr>
<td>Non-Vulnerable Practice Location</td>
<td>20%</td>
<td>56%</td>
<td>19%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Malpractice and Liability Experiences

Mississippi’s malpractice “crisis” captured national attention by 2004, when nearly half of Mississippi physicians had been named as party to at least one professional liability lawsuit in the previous three years (Cossman and Street 2008; Cossman and Street 2010). Professional groups and tort reform advocates claimed that physicians had stopped delivering babies, doing complex procedures, and treating head trauma, and that the malpractice/liability climate was so toxic that many Mississippi doctors were looking to leave Mississippi to practice elsewhere, or to retire early. The difficulty of finding and paying for liability insurance was particularly difficult for physicians in general practices in rural locations, since serving their communities as first responders to multiple trauma injuries or delivering babies put them at especially high risk of being named in a lawsuit. So, too, did the legal strategy of naming physicians as party to a lawsuit intended to go after the deep pockets of pharmaceutical companies. By 2004, Mississippi legislators pushed through tort reform legislation designed to limit the capacity for plaintiffs to sue and recover damages; afterwards, malpractice lawsuits dropped precipitously.

The 2007/08 MSMD survey asked physicians to explain their evolving experiences with malpractice lawsuits and their perspectives on the contemporary liability insurance climate in the aftermath of tort reform. Figure 4.4 shows the distribution of lawsuits by practice location and the
precipitous decline in lawsuits after 2004. It is clear from the figure that physicians who worked in vulnerable practice locations in 2007/08 (the period of the MSMD survey) were more likely than their counterparts elsewhere in Mississippi to have been sued in 2004, 2005 and 2006. Although the number of lawsuits is on the decline, the gap between physicians who do and do not practice in vulnerable locations remains.

Figure 4.4. Percent of Physicians Named in a Lawsuit by Practice Location

Table 4.5 shows practice location differences in perceptions relating to the contemporary malpractice climate or the availability of liability insurance. Physicians from vulnerable practice locations are less likely to report that medical malpractice conditions are good or excellent (although the difference does not reach statistical significance) but there is no difference in reports of the availability of liability insurance by practice location. The availability of liability insurance in Mississippi had improved substantially by the time of the survey, so differences in the availability of malpractice insurance were not anticipated.

Table 4.5. Malpractice and Liability Climate by Practice Location

<table>
<thead>
<tr>
<th>Rate each of the following items relating to your practice climate in Mississippi</th>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical malpractice conditions</td>
<td>HPSA+Rural Other</td>
<td>27%</td>
<td>36%</td>
<td>30%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Availability of liability insurance</td>
<td>HPSA+Rural Other</td>
<td>18%</td>
<td>30%</td>
<td>35%</td>
<td>16%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.

Rows may not add to 100% due to rounding.

Despite few and small differences in perceptions concerning the malpractice or liability climate (that do not reach statistical significance), there are statistically significant differences in nearly every defensive medicine practice. Physicians in vulnerable practice locations were more likely to
report ordering tests that might not be necessary, prescribe more medicine than potentially necessary, refer patients to specialists sooner than they might normally and to avoid performing particular procedures—all because of the medical malpractice climate (Table 4.6). This behavioral response to malpractice realities indicates that although differences in perception may not have been statistically significant, they were nonetheless substantively important enough to promote behavioral differences in physicians in different practice locations.

Table 4.6. Defensive Medicine by Practice Location

<table>
<thead>
<tr>
<th>How often do concerns about medical malpractice liability cause you to...</th>
<th>Never, almost never, less than once a year</th>
<th>Sometimes, less than once in 6 months</th>
<th>Sometimes, about once a month</th>
<th>Often, at least once per week</th>
<th>Regularly, daily or almost daily</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order more tests than you would based on your professional judgement of what is medically needed?**</td>
<td>4%</td>
<td>18%</td>
<td>18%</td>
<td>22%</td>
<td>38%</td>
<td>0.03</td>
</tr>
<tr>
<td>Prescribe more medications, such as antibiotics, than you would based only on your professional judgement of what is medically needed?**</td>
<td>9%</td>
<td>24%</td>
<td>23%</td>
<td>24%</td>
<td>22%</td>
<td>0.08</td>
</tr>
<tr>
<td>Refer patients to specialists more often than you would based only on your professional judgement*</td>
<td>5%</td>
<td>23%</td>
<td>17%</td>
<td>32%</td>
<td>29%</td>
<td>0.02</td>
</tr>
<tr>
<td>Suggest invasive procedures, such as biopsies, to confirm diagnoses more often than you would based only on your professional judgement?</td>
<td>11%</td>
<td>34%</td>
<td>23%</td>
<td>18%</td>
<td>14%</td>
<td>0.13</td>
</tr>
<tr>
<td>Avoid personally conducting certain procedures or interventions?*</td>
<td>17%</td>
<td>17%</td>
<td>15%</td>
<td>21%</td>
<td>30%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
Rows may not add to 100% due to rounding.

Physician Perspectives on Recruitment and Retention

Physicians’ organizations and policymakers worry that Mississippi faces particular disadvantages insofar as recruiting and retaining physicians is concerned, often reflected in the *Journal of the Mississippi State Medical Association* editorials. Physicians keep up with state affairs by reading the journal, which represents and shapes the concerns of their professional organization. It is not surprising that physicians with different characteristics hold particularized impressions of the recruitment and retention climate in Mississippi.

The 2007/08 MSMD survey asked physicians about their perspectives on recruitment and retention of the Mississippi physician workforce in two somewhat different ways. First, two items asked about recruiting/retaining in the generic sense—recruiting new physicians, retaining experienced physicians. Then additional pairs of items asked about recruiting/retaining physicians who were members of minority groups and women separately, to
see if Mississippi physicians might have one impression associated with recruiting and retaining physicians in general, and then have another perspective when a particular characteristic of a potential physician recruit was invoked.

Physicians who work in vulnerable practice locations are somewhat more likely to express concerns about retaining experienced physicians than their counterparts working elsewhere. However, there are no other statistically significant differences between them and physicians who practice in other practice locations on other measures associated with recruitment and retention. This underscores that Mississippi physicians share broadly similar generalized concerns that it is tough to recruit physicians to practice in the state, and that physicians in vulnerable practice locations worry somewhat more about retaining physicians in their communities. This worry may have several foundations. First, non-U.S. trained physicians—aka International Medical Graduates (IMGs)—can receive visas to remain in the United States by practicing for several years in HPSA communities. When that period has elapsed, many IMGs leave those communities for practices elsewhere, making retention an issue. Second, many physicians express concerns that rural physicians especially are in a process of “aging out” of medical practice. This combines two trends—older physicians who may be contemplating retirement, without an adequate supply of newer physicians to replace them.

Table 4.7. Recruitment and Retention by Practice Location

<table>
<thead>
<tr>
<th>Rate each of the following items relating to your practice climate in Mississippi</th>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruiting new physicians</td>
<td>HPSA+Rural Other</td>
<td>42%</td>
<td>35%</td>
<td>23%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Recruiting minority physicians</td>
<td>HPSA+Rural Other</td>
<td>19%</td>
<td>36%</td>
<td>29%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Retaining experienced minority physicians</td>
<td>HPSA+Rural Other</td>
<td>19%</td>
<td>36%</td>
<td>34%</td>
<td>13%</td>
<td>0%</td>
</tr>
<tr>
<td>Retaining experienced women physicians</td>
<td>HPSA+Rural Other</td>
<td>16%</td>
<td>39%</td>
<td>35%</td>
<td>10%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Asking physicians for their perspectives on the state climate for recruiting and retaining physicians captures their impression of a broad and shifting situation. To bring it back to a more pragmatic level, we also asked physicians if physician supply is an issue in their own practices. A majority of physicians in all practice locations (more than 50 percent) regard
recruitment as a problem, with physicians in vulnerable practice locations (56%) little different from physicians elsewhere (58%).

One aspect of medical practice—its financial rewards—is often regarded as a critically important factor in recruiting and retaining physicians. As Table 4.8 shows, physicians in vulnerable practice locations were less likely to say Medicaid reimbursement rates were poor, and more likely to regard them as fair or average, than physicians who practice in other areas. This is an interesting finding, since the proportion of Medicaid patients in vulnerable practice locations is so high. It may be that service volume and the economies of running a practice in a rural location mitigate some of the concerns that physicians in non-vulnerable practice locations have about Medicaid reimbursement rates. There are no significant differences in the level of dissatisfaction with reimbursement by Medicare or private insurance—or even lack of reimbursement associated with uncompensated care—associated with practice location.

Table 4.8. Reimbursement Climate by Practice Location

<table>
<thead>
<tr>
<th>Rate each of the following...</th>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid reimbursement rates*</td>
<td>HPSA+Rural</td>
<td>57%</td>
<td>31%</td>
<td>11%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>72%</td>
<td>19%</td>
<td>8%</td>
<td>1%</td>
<td>0%</td>
<td>0.05</td>
</tr>
<tr>
<td>Medicare reimbursement rates</td>
<td>HPSA+Rural</td>
<td>49%</td>
<td>33%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>57%</td>
<td>29%</td>
<td>13%</td>
<td>1%</td>
<td>0%</td>
<td>0.48</td>
</tr>
<tr>
<td>Private insurance reimbursement rates</td>
<td>HPSA+Rural</td>
<td>24%</td>
<td>38%</td>
<td>34%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>16%</td>
<td>44%</td>
<td>33%</td>
<td>7%</td>
<td>0%</td>
<td>0.26</td>
</tr>
<tr>
<td>Manageable amount of uncompensated care</td>
<td>HPSA+Rural</td>
<td>47%</td>
<td>33%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>48%</td>
<td>30%</td>
<td>18%</td>
<td>5%</td>
<td>0%</td>
<td>0.20</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
Rows may not add to 100% due to rounding.

Practice Relationships, Resources, and Autonomy

In this section we review responses to the 2007/08 MSMD as they relate to aspects of physicians’ daily professional lives. We first look at relationships arising from practice, with patients and colleagues. We then explore physicians’ perspectives on the adequacy of the resources they can bring to bear on the health care they provide. Finally, we consider several more abstract components of medical practice, issues associated with professional autonomy, prestige, and satisfaction.

The quality of patient relationships is largely unrelated to practice location with one exception. Physicians who practice in vulnerable locations are more likely to report that they feel isolated from their patients because of
ethnic, cultural or gender differences (Table 4.9) than physicians who practice elsewhere. This may be because many of the physicians in vulnerable practice locations are non-U.S. born (Table 4.1).

Table 4.9. Quality of Patient Relationships by Practice Location

<table>
<thead>
<tr>
<th>Item</th>
<th>HPSA+Rural Other</th>
<th>Other</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel a strong personal connection to my patients.</td>
<td>36%</td>
<td>40%</td>
<td>50%</td>
<td>10%</td>
<td>4%</td>
<td>0%</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>Many patients demand potentially unnecessary treatments.†</td>
<td>15%</td>
<td>13%</td>
<td>43%</td>
<td>25%</td>
<td>16%</td>
<td>1%</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>I am isolated from my patients because of ethnic, cultural or gender differences.* †</td>
<td>3%</td>
<td>0%</td>
<td>4%</td>
<td>26%</td>
<td>21%</td>
<td>3%</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>I often feel like what I do for my practice is just a drop in the bucket.†</td>
<td>5%</td>
<td>7%</td>
<td>27%</td>
<td>26%</td>
<td>36%</td>
<td>5%</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>Time pressures keep me from developing good relationships with my patients.†</td>
<td>5%</td>
<td>3%</td>
<td>22%</td>
<td>28%</td>
<td>39%</td>
<td>5%</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>I am overwhelmed by the needs of my patients.†</td>
<td>2%</td>
<td>4%</td>
<td>25%</td>
<td>33%</td>
<td>33%</td>
<td>7%</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>My relationships with patients is more adversarial than it used to be.†</td>
<td>5%</td>
<td>3%</td>
<td>14%</td>
<td>27%</td>
<td>43%</td>
<td>12%</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>I am having a positive impact on a socio-economically disadvantaged population.</td>
<td>25%</td>
<td>17%</td>
<td>50%</td>
<td>23%</td>
<td>3%</td>
<td>0%</td>
<td>0.18</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the .10 level.
† Question is reverse coded.
Rows may not add to 100% due to rounding.

Another daily component of active medical practice are relationships with professional colleagues, whether other physicians, office staff, or ancillary health providers. The next table (Table 4.10) documents physician responses to 2007/08 MSMD items that probed the quality of relationships associated with practice location. Several differences emerge. Physicians in vulnerable practice locations are more likely to regard their non-physician colleagues as a source of support, are less likely to think their physician colleagues value their unique perspective, are less likely to value their physician colleagues as a source of professional stimulation or personal support, and are slightly less likely to report that they get along with their physician colleagues. Generally speaking, physicians in rural health professional shortage areas have less supportive relationships with their peers, which may reflect little more than the fact that they have fewer peers in the first place. There is also complex interplay between several factors, including a general lack of peers, being regarded as an “outsider” to the state, and frustration at the inconvenient and time-consuming efforts that often have to be made to get specialty care for their patients. The general
lack of peer physicians also probably explains why non-physician colleagues are regarded as more important sources of support for physicians working in vulnerable practice locations.

Table 4.10. Professional Relationships by Practice Location

<table>
<thead>
<tr>
<th>Non-physicians in my practice support my professional judgment.</th>
<th>HPSA+Rural Other</th>
<th>Strongly Agree 41%</th>
<th>Agree 49%</th>
<th>Neither Agree nor Disagree 8%</th>
<th>Disagree 1%</th>
<th>Strongly Disagree 1%</th>
<th>Sig. 0.33</th>
</tr>
</thead>
<tbody>
<tr>
<td>My non-physician colleagues are a major source of support.*</td>
<td>HPSA+Rural Other</td>
<td>15%</td>
<td>61%</td>
<td>21%</td>
<td>2%</td>
<td>1%</td>
<td>0.07</td>
</tr>
<tr>
<td>Non-physicians in my practice reliably carry out clinical instructions.</td>
<td>HPSA+Rural Other</td>
<td>21%</td>
<td>62%</td>
<td>12%</td>
<td>5%</td>
<td>0%</td>
<td>0.81</td>
</tr>
<tr>
<td>My physician colleagues value my unique perspective in practice.*</td>
<td>HPSA+Rural Other</td>
<td>9%</td>
<td>45%</td>
<td>40%</td>
<td>6%</td>
<td>0%</td>
<td>0.00</td>
</tr>
<tr>
<td>My physician colleagues are a source of professional stimulation.*</td>
<td>HPSA+Rural Other</td>
<td>7%</td>
<td>44%</td>
<td>39%</td>
<td>8%</td>
<td>3%</td>
<td>0.00</td>
</tr>
<tr>
<td>I get along well with my physician colleagues.*</td>
<td>HPSA+Rural Other</td>
<td>26%</td>
<td>67%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>0.01</td>
</tr>
<tr>
<td>My physician colleagues are an important source of personal support.*</td>
<td>HPSA+Rural Other</td>
<td>2%</td>
<td>37%</td>
<td>42%</td>
<td>15%</td>
<td>3%</td>
<td>0.03</td>
</tr>
<tr>
<td>I wish there were more doctors like me in my practice.†</td>
<td>HPSA+Rural Other</td>
<td>22%</td>
<td>43%</td>
<td>32%</td>
<td>3%</td>
<td>0%</td>
<td>0.85</td>
</tr>
<tr>
<td>It is easy to communicate with physicians with whom I share patients.</td>
<td>HPSA+Rural Other</td>
<td>13%</td>
<td>63%</td>
<td>13%</td>
<td>10%</td>
<td>1%</td>
<td>0.61</td>
</tr>
<tr>
<td>Many of my colleagues do not share my life experiences.†</td>
<td>HPSA+Rural Other</td>
<td>10%</td>
<td>44%</td>
<td>34%</td>
<td>11%</td>
<td>1%</td>
<td>0.33</td>
</tr>
<tr>
<td>My colleagues support my efforts to balance family and career responsibilities.*</td>
<td>HPSA+Rural Other</td>
<td>3%</td>
<td>58%</td>
<td>30%</td>
<td>7%</td>
<td>2%</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
† Question is reverse coded.
Rows may not add to 100% due to rounding.

Resources and the constraints associated with a lack of resources are an important component of overall physician experience in their individual practice settings (Table 4.11). The rest of this section on the quality of physician practice experiences explores the more abstract components of their professional lives, including experiences associated with professional autonomy and prestige (Table 4.12) and satisfaction in current practice circumstances (Table 4.13).

As for practice resources and conditions, there are few variations by practice location. Those who work in vulnerable practice locations are actually less likely than their counterparts to report that their practice has inadequate resources—whether physical resources or staff resources—an interesting observation considering they serve in especially vulnerable locations. It is
difficult to know how they frame their thinking about the adequacy of resources, but it may be that they adjust their frame of reference to take what is reasonable to expect in a rural area into account, and that counterparts elsewhere have expectations about more resources available in non-vulnerable locations that are not quite met. Although physicians in vulnerable practice locations take less call than their counterparts, they are still likely to say they take too much. Physicians in vulnerable practice locations are also more dissatisfied with the balance between administrative work and patient care, which may reflect some of the bureaucratic realities associated with public insurance.

Table 4.11. Practice Resources and Conditions by Practice Location

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>My practice has adequate resources for me to do my work.*</td>
<td>HPSA+Rural Other</td>
<td>9%</td>
<td>68%</td>
<td>13%</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>Paperwork required by payers is a burden to me.†</td>
<td>HPSA+Rural Other</td>
<td>39%</td>
<td>45%</td>
<td>9%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Medical supplies are not always available when I need them.‡</td>
<td>HPSA+Rural Other</td>
<td>4%</td>
<td>26%</td>
<td>22%</td>
<td>41%</td>
<td>8%</td>
</tr>
<tr>
<td>I have enough exam space to see my patients.</td>
<td>HPSA+Rural Other</td>
<td>16%</td>
<td>69%</td>
<td>2%</td>
<td>12%</td>
<td>1%</td>
</tr>
<tr>
<td>My total compensation package is not adequate.‡</td>
<td>HPSA+Rural Other</td>
<td>8%</td>
<td>31%</td>
<td>29%</td>
<td>30%</td>
<td>2%</td>
</tr>
<tr>
<td>Competition with other physicians is a threat to my financial future.†</td>
<td>HPSA+Rural Other</td>
<td>3%</td>
<td>13%</td>
<td>17%</td>
<td>52%</td>
<td>14%</td>
</tr>
<tr>
<td>There are too few support staff in my practice.**</td>
<td>HPSA+Rural Other</td>
<td>2%</td>
<td>22%</td>
<td>31%</td>
<td>40%</td>
<td>6%</td>
</tr>
<tr>
<td>In my opinion, I am expected to take too much call.***</td>
<td>HPSA+Rural Other</td>
<td>3%</td>
<td>28%</td>
<td>27%</td>
<td>38%</td>
<td>5%</td>
</tr>
<tr>
<td>My work in this practice has met my expectations.</td>
<td>HPSA+Rural Other</td>
<td>10%</td>
<td>63%</td>
<td>18%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>I am satisfied with the balance of time I spend on patient care versus administrative tasks.*</td>
<td>HPSA+Rural Other</td>
<td>10%</td>
<td>43%</td>
<td>24%</td>
<td>20%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
† Question is reverse coded.
‡ Rows may not add to 100% due to rounding.

Variations by practice location in physicians’ thoughts on professional autonomy and prestige are quite consistent regardless of practice location. Physicians in vulnerable practice locations feel somewhat more restricted by prescription formularies and report having less control over setting the pace of their own work, perhaps reflecting practice constraints associated with Medicaid. However, they report no difference in their levels of concern with third-party interference insofar as their ability to provide patient care is concerned, indicating that their experiences in that regard mirror those experienced by physicians working in more urban areas and/or in areas with better physician supply relative to the population.
Table 4.12. Perspectives on Autonomy and Prestige by Practice Location

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to set the pace of my own work.*</td>
<td>HPSA+Rural</td>
<td>10%</td>
<td>58%</td>
<td>8%</td>
<td>20%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>16%</td>
<td>42%</td>
<td>13%</td>
<td>23%</td>
<td>5%</td>
</tr>
<tr>
<td>In my practice, it often feels like bureaucrats are second-guessing me.‡</td>
<td>HPSA+Rural</td>
<td>26%</td>
<td>33%</td>
<td>24%</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>18%</td>
<td>39%</td>
<td>23%</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>Clinical guidelines restrict my freedom to practice.‡</td>
<td>HPSA+Rural</td>
<td>7%</td>
<td>25%</td>
<td>24%</td>
<td>40%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4%</td>
<td>16%</td>
<td>31%</td>
<td>42%</td>
<td>7%</td>
</tr>
<tr>
<td>Formulations or prescription limits restrict the quality of care I can</td>
<td>HPSA+Rural</td>
<td>23%</td>
<td>47%</td>
<td>9%</td>
<td>19%</td>
<td>3%</td>
</tr>
<tr>
<td>provide.‡</td>
<td>Other</td>
<td>16%</td>
<td>37%</td>
<td>19%</td>
<td>25%</td>
<td>4%</td>
</tr>
<tr>
<td>I can keep patients in the hospital as long as is medically necessary.</td>
<td>HPSA+Rural</td>
<td>10%</td>
<td>44%</td>
<td>21%</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>9%</td>
<td>42%</td>
<td>20%</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>Outside reviewers rarely question my professional judgements.</td>
<td>HPSA+Rural</td>
<td>7%</td>
<td>46%</td>
<td>28%</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>10%</td>
<td>52%</td>
<td>22%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>I need to work in an area where I have research opportunities.</td>
<td>HPSA+Rural</td>
<td>2%</td>
<td>8%</td>
<td>15%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3%</td>
<td>11%</td>
<td>18%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>I find my present clinical work personally rewarding.</td>
<td>HPSA+Rural</td>
<td>18%</td>
<td>65%</td>
<td>13%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>25%</td>
<td>64%</td>
<td>8%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Career advancement opportunities are available to me in the same</td>
<td>HPSA+Rural</td>
<td>9%</td>
<td>43%</td>
<td>27%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>ways as they are available to my colleagues.</td>
<td>Other</td>
<td>9%</td>
<td>46%</td>
<td>24%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>The responsibility of being a role model for others is a burden.†</td>
<td>HPSA+Rural</td>
<td>0%</td>
<td>13%</td>
<td>23%</td>
<td>50%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1%</td>
<td>8%</td>
<td>24%</td>
<td>54%</td>
<td>13%</td>
</tr>
<tr>
<td>Recognition of the importance of my work and my profession is</td>
<td>HPSA+Rural</td>
<td>9%</td>
<td>31%</td>
<td>39%</td>
<td>19%</td>
<td>2%</td>
</tr>
<tr>
<td>critical.‡</td>
<td>Other</td>
<td>10%</td>
<td>42%</td>
<td>30%</td>
<td>15%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
‡ Question is reverse coded.
Rows may not add to 100% due to rounding.

When asked about particular areas of satisfaction (specialty, compensation), physicians in vulnerable practice locations report similar levels of satisfaction with their counterparts. But, in response to a global item (“All things considered I am satisfied with my career as a physician”), physicians in vulnerable practice locations reported slightly higher levels of satisfaction, suggesting that physicians who have chosen to practice in especially vulnerable places find sources of intrinsic motivation and reward that sustain their satisfaction with their career choices, a stance consistent with what many physicians talked about in the qualitative section that follows.
Table 4.13. Professional Satisfaction by Practice Location

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>My specialty no longer has the appeal to me it used to have.†</td>
<td>HPSA+Rural Other</td>
<td>4%</td>
<td>21%</td>
<td>21%</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td>My specialty does not provide the security that it once did.</td>
<td>HPSA+Rural Other</td>
<td>7%</td>
<td>42%</td>
<td>23%</td>
<td>24%</td>
<td>4%</td>
</tr>
<tr>
<td>I am well-compensated compared to physicians in other specialties.</td>
<td>HPSA+Rural Other</td>
<td>4%</td>
<td>2%</td>
<td>15%</td>
<td>37%</td>
<td>19%</td>
</tr>
<tr>
<td>In general, practice in my specialty has met my expectations.</td>
<td>HPSA+Rural Other</td>
<td>9%</td>
<td>54%</td>
<td>26%</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>I am isolated from my colleagues because of ethnic, cultural and gender differences.†</td>
<td>HPSA+Rural Other</td>
<td>1%</td>
<td>6%</td>
<td>15%</td>
<td>53%</td>
<td>25%</td>
</tr>
<tr>
<td>I am not well-compensated, given my training and experience.†</td>
<td>HPSA+Rural Other</td>
<td>15%</td>
<td>23%</td>
<td>30%</td>
<td>24%</td>
<td>9%</td>
</tr>
<tr>
<td>I would recommend medicine to others as a career.</td>
<td>HPSA+Rural Other</td>
<td>15%</td>
<td>43%</td>
<td>23%</td>
<td>14%</td>
<td>5%</td>
</tr>
<tr>
<td>If I were to choose over again, I would not become a physician.†</td>
<td>HPSA+Rural Other</td>
<td>4%</td>
<td>10%</td>
<td>19%</td>
<td>36%</td>
<td>31%</td>
</tr>
<tr>
<td>All things considered, I am satisfied with my career as a physician.†</td>
<td>HPSA+Rural Other</td>
<td>23%</td>
<td>65%</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
† Question is reverse coded.
Rows may not add to 100% due to rounding.

Family and Community Experiences

The final look at similarities and differences among Mississippi physicians’ experiences associated with practice location steps back from an exclusive focus on practice-related experiences to incorporate a broader perspective. Physicians are likely little different from anyone else in terms of the importance of family and community factors in their lives, although there are certainly differences across physicians in different subgroups.

Family is an important consideration for almost everyone, physicians included. As Table 4.14 shows, most physicians and their families feel connected to their communities. The only difference between physicians by practice location is that those who work in vulnerable practice locations place slightly less importance on having access to high quality schools. It could be that these physicians are also less likely to have school-aged children, but we do not have that data available for analysis.
As for how physicians fit in and feel about their lives in Mississippi communities, comparing physicians who practice in different environments due to their practice location may be important for understanding spatial patterns of physician supply. As Table 4.15 shows, there are actually few significant differences. Physicians in vulnerable practice locations place somewhat less emphasis on the importance of local amenities than their counterparts, suggesting that they incorporate into their understanding of community the reality that their small places may lack some amenities—but that such amenities may not be all that important.

Table 4.15. Community Perspectives by Practice Location

<table>
<thead>
<tr>
<th>Cost of living in a community is an important consideration for where I want to work.</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSA+Rural Other</td>
<td>8%</td>
<td>54%</td>
<td>23%</td>
<td>16%</td>
<td>0%</td>
<td>0.29</td>
</tr>
<tr>
<td>Mississippi taxes are a burden.</td>
<td>HPSA+Rural Other</td>
<td>13%</td>
<td>28%</td>
<td>38%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>People from elsewhere don’t realize Mississippi is a great place to live.</td>
<td>HPSA+Rural Other</td>
<td>20%</td>
<td>57%</td>
<td>16%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>I feel a sense of belonging to the community where I practice.</td>
<td>HPSA+Rural Other</td>
<td>23%</td>
<td>58%</td>
<td>8%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>Local amenities, like parks, shopping, and cultural events, are important in deciding where I want to work and live.</td>
<td>HPSA+Rural Other</td>
<td>8%</td>
<td>44%</td>
<td>22%</td>
<td>24%</td>
<td>0%</td>
</tr>
<tr>
<td>I do not feel at home in the community where I practice.</td>
<td>HPSA+Rural Other</td>
<td>1%</td>
<td>12%</td>
<td>10%</td>
<td>50%</td>
<td>27%</td>
</tr>
<tr>
<td>Practicing medicine in Mississippi is not much different from practicing in other states.</td>
<td>HPSA+Rural Other</td>
<td>1%</td>
<td>32%</td>
<td>30%</td>
<td>30%</td>
<td>7%</td>
</tr>
<tr>
<td>I feel respected by the community where I practice</td>
<td>HPSA+Rural Other</td>
<td>26%</td>
<td>59%</td>
<td>10%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>I am proud to practice medicine in Mississippi.</td>
<td>HPSA+Rural Other</td>
<td>22%</td>
<td>57%</td>
<td>18%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
† Question is reverse coded.
**Rows may not add to 100% due to rounding.
Voices from the Field: Rural and Minority Physicians Talk About Their Work

Physicians we interviewed for this study were passionate about their work, their patients, and their experiences in Mississippi, regardless of any other characteristics. Nearly half of the 57 physicians interviewed were women (N=27) and the same number were Mississippi natives, while 13 were international medical graduates (IMGs). The balance of physicians in the sample was from elsewhere in the United States, often from other southern states. Fifteen of the physicians we interviewed self-identified as African American, 13 were from Other race/ethnic groups (neither African American nor White), and the remainder of the interviewees were White. The composition of the sample reflects the purposive strategy we pursued to maximize variation and to oversample on demographic characteristics under-represented in the Mississippi physician workforce.

Other than the oversample of underrepresented groups that was part of the deliberate research strategy, we could discern no identifiable pattern to suggest that physicians we interviewed were systematically different from individuals with comparable personal characteristics who we did not interview. In general, individuals who agree to be interviewed for research are typically knowledgeable individuals who are most interested or motivated by the research questions or with viewpoints they want to express. Still, we are confident that the sample represents a range of perspectives and experiences of physicians who serve Mississippi’s rural areas and vulnerable populations.

The sample incorporates a spectrum of physicians with varying personal demographic characteristics. We planned carefully to study a broad range of
professionals, ranging from under-represented groups in the physician workforce (African American and women physicians), the more typical White men physicians who have been the historic backbone of health care provision in Mississippi, and the talented international medical graduates upon whom many communities in the state depend for their health care. Although we do not quote every physician who participated in the interviews, the quotations we do use are consistent with and evocative of the main themes identified in the analysis of the qualitative data. In that sense, the data presented in the following sections are not merely anecdotal but rather are illustrative data, systematically derived. As is the case in all qualitative research, the quotes serve as exemplars that summarize and emphasize themes and patterns routinely occurring in the data provided by many physicians.

**Physician Supply**

Few physicians expressed optimism about physician supply in Mississippi, noting shortages in most areas of medical practice, especially for primary care, but for a number of specialties as well. For example, a surprising number of physicians noted that dermatologists were in very short supply, and represented a nearly impossible referral for Medicaid or uninsured patients.

Beyond issues of numbers, many physicians noted that having Mississippi roots or Mississippi connections was an important foundational component of the physician supply in the state. Nearly half of the physicians we interviewed were either Mississippi natives, or embarked on their medical career in the state because they were married to a Mississippian.

> I just—each step of the way, I decided to stay close to home. So I went to med school here, didn’t have any question about going to another residency—this was a strong one—and Mississippi needed family docs, and that’s what I was going to do… then after residency, ended up marrying and really never thought about moving out of Mississippi.

However, Mississippi has been unable to sustain a large enough pool of Mississippians willing to remain in practice in the state to meet its needs for sustaining adequate access to health care. Despite increasing medical school slots for Mississippi natives, many physicians worry that Mississippi trained physicians are being “lost” to other states, or at the very least, not
likely to want to set up practices in underserved areas of Mississippi. Their concerns ranged from inadequate supply first of primary care physicians, then of certain specialties, and finally, the spatial distribution of physicians throughout the state.

I think that’s one of the biggest challenges...I’m having a hard time right now getting somebody recruited back to the area. I think it’s an extremely big challenge trying to recruit someone back who’s not...used to being from a small place.

...it’s very, very difficult. In a small town area—here at least—you have to have a connection. The person—the physician—has to have a connection. He has to have come from the area, he has to have family—he/she, I don’t mean to be chauvinistic—but that physician has to have a connection, there has to be family, has to...have been raised in this area or at least have...the spouse from the area. There has to be some connection...to the area to be able to retain—not necessarily to recruit but to retain.

Physicians generally felt that native Mississippians, even those trained in-state, would be unlikely to return to rural communities after an extended period living in a larger city with more varied services and conveniences. In the most vulnerable communities, physicians we interviewed often acknowledged the need to depend on new immigrants to meet medical needs in their communities.

The people we can get is probably someone who...was a J1—

That is a drawing card for many international medical graduates (IMGs), the prospects of receiving permanent residency once they have fulfilled an obligation to the country.

I was looking for jobs...that...had what we call a waiver position, meaning, uh—when you finish as a J1, you have a choice of going into a rural area to practice for...three to five years...to get the green card. Or...go back to your home country for two to five years...and then try to get back into the States. So I chose—so I chose a rural area, I wanted to stay [in the United States] and it was less risky [to take a J-l placement rather than try to re-enter the U.S. later].
Recruiting physicians from elsewhere to practice in Mississippi is difficult, but often not impossibly so. Retaining physicians to stay in state and practice over the longer term, however, is an ongoing problem according to the physicians we interviewed.

Now we have physicians that uh...will come to a physician-shortage area—to serve in the physician shortage area for their five years, but during their five years—[they’re planning] on moving back to...back to home, going back to home to...start their practice. So to be able to retain, there has to be a connection, and therefore to be able to recruit and retain physicians into a rural area, you’ve got to recruit within that rural area to start with it.

For international medical graduates (IMGs) and for domestic physicians participating in loan pay-back programs, cutbacks in state and federal programs have had the effect of limiting the potential supply of physicians available to practice in vulnerable Mississippi communities. Some physicians who work in Mississippi do so temporarily, just long enough to fulfill their obligation, whether to meet visa requirements for permanent residency or repay loans, but never intend to stay in Mississippi beyond their obligatory period. Others might be willing to stay in Mississippi practices, but efforts to retain such physicians often confront other barriers.

Despite finding Mississippi a good place to practice medicine and little different from practicing elsewhere (a qualitative finding consistent with the statistical analysis in this project), few physicians expressed much optimism about successful recruiting strategies. A recurring theme among physicians we interviewed was their conviction that stereotypes about Mississippi get in the way. One African American woman physician remarked that, while she hadn’t personally experienced some of the anecdotal “Mississippi challenges” except in small doses [referring to the history of disadvantaged treatment of African Americans in the state], she said that outsiders often have a skewed view of life in Mississippi. Her contention was that insiders—Mississippians—had a particular view of Mississippi, too, that wasn’t entirely positive. Other physicians, too, felt that recruiting would be much easier if only the state could surmount many of the negative stereotypes about Mississippi that were no longer a part of contemporary culture.

If I can convince somebody to come here, if I can just get them past the stereotype about coming to Mississippi, and show them
what we have here to offer the kind of professional community we have and physicians here, the type of practice that they can have here and they’re appreciated (physicians are appreciated around here) and let them know that we’re regular folks, you know we’re talented and skilled...that we wear shoes...

Other physicians held similar views, noting that even for prospects coming from another nearby state, Mississippi can often seem—in a stereotypic way—like an unattractive place to practice.

[We] don’t go to Mississippi. We go through Mississippi on our way to New Orleans; we don’t go to Mississippi....but I thought, I’ll check out Jackson first, so that if I don’t like it, it won’t really matter. I’ll get my feet wet. I came down here, and I was so dramatically surprised, and I realized that the very same bias toward Mississippi that I now try to dispel for people who are coming here, I also had. And how bad is it? I had it, and I’m from the Southeast.

Whether the stereotypes outsiders hold about Mississippi have any basis in reality, Mississippi physicians regard them as a genuine barrier to recruiting doctors to practice in the state.

Beyond a feeling that recruiting and retaining physicians from elsewhere to Mississippi in general was a problem, physicians in rural and underserved settings expressed even more worry about the prospects for attracting physicians to set up shop in their vulnerable communities, and then stay.

That’s the thing...we have a lot of people that come here and stay here for a short time and leave.

Well, when I was recruited, I asked the recruiter, I said how many people stay, and he said out of ten people maybe one person would stay.

Some physicians felt that beyond efforts made to recruit physicians in the first place, communities did not work hard enough to try to attract physicians and sustain their interest in remaining in the locality.

There are a lot of students that go into the medical centers at the university that are from Mississippi—they just don’t choose
to come back here or to the state to practice because I think...in large part, the towns and citizens are not progressive...in doing the things that people want, once they reach that level... I mean, when you training in a city away from here, you get used to having certain things at your convenience, that you can go and get it, in particular if you want to raise a family. I mean, these small towns...and the community’s more so...none of them come together and say “The physicians are a very, very important part of the town”...they don’t do that for physicians, black or white.

The quality of education and the acceptability of schools in small Mississippi communities was a persistent problem, one mentioned by almost all of the physicians we interviewed in the context of recruiting and retaining dedicated physicians.

The school systems are getting better but they are not great.

...you could change the job, you could change what’s happening in your work environment, but you can’t change the school. You know, you can’t go and say “We need this type of curriculum... because my son is going to the school.”

You are educated so you want your child to be educated; it’s just simple as that.

... there has to be good schools....schooling for most families is very important because that’s the only way of making a good living. Having a good school is going to be paramount for anybody who’s coming down [to practice in Mississippi].

As some physicians noted, sometimes there were alternative strategies to schooling their children in the communities they served. For example, a physician told a story about a couple, both physicians, who had been recruited in the past to practice in a small Mississippi town,

....they were willing to stay but when the kids were going into the middle and high school...they just couldn’t. I know she felt really bad about it. They really wanted to stay, so the husband stayed but the mother had to move ...so they [the couple] were commuting back and forth, so the kids could go to a good school.
Some physicians used or anticipated strategies of keeping their children in local schools until grades three or four, and then driving their children (sometimes several hours each way in a day) to better quality schools in larger communities. Other physicians who had not yet experienced what one called “school angst” remarked that once they had children, or their children reached school age, they would confront difficult choices. Even Mississippians who had grown up and returned to their home communities to practice recognized the dilemmas young physicians faced:

I was brought up in public schools...knowing how you have to adapt to the environment and make sacrifices...you know, given the choice...some of the sacrifices you have to make versus being able to step into a suburban environment where things given to you...but you know, I can see why nobody wants to come back to a small town. Why would you make those sacrifices if you don’t have a reason to?

The lack of educational opportunities in rural Mississippi represented a huge problem for recruitment, as well as retention of both “homegrown” practitioners and physicians recruited from elsewhere.

A woman physician who returned to her childhood community in the Mississippi Delta to practice summed up some of the problems in recruiting other physicians to vulnerable communities, echoed by other physicians in our sample.

You know just a way of life we have grown accustomed to. We would not be able to maintain that in the Delta. And I think that is the deterrent for new people who would have offers in that area. It’s the lack of resources, just for everyday living. And it’s the load, the patient load.

For many, this combination represented a double whammy—too many patient responsibilities to handle comfortably because of health care provider or health infrastructure shortages, without offsetting local amenities to compensate. Other physicians shared similar concerns, including worries about the (lack of) attractions of small communities for spouses in professional couples.
This area doesn’t have a whole lot to offer, even for people who want to live in small towns. Small towns are not—they just don’t have it. They don’t have anything for...if the spouse comes here, if the physician is a male, the spouse comes here, there’s usually nothing for the spouse to do or vice versa...if the physician is a female and her spouse is something else. There’s nothing for them to do.

Small communities need health care providers, but spouses of physicians may need to pursue careers in other professional realms, and confront no opportunities. Some physicians also noted that if the lack of community amenities was a problem in the past and current circumstances in terms of physician recruitment and retention, there were risks that the lack might become an even greater problem in the future. In some rural places, local industries were collapsing, creating communities with so few economic opportunities that most young people planned to leave—if they had not already done so. Such trends are foreboding, since youth flight to more urban areas leaves behind a population deprived of its most talented younger generations and an aging population with increased incidence of health problems. Processes like that also “hollow out” traditional rural communities, further undermining the talents and fiscal capacity of vulnerable communities to meet even the most basic needs of their usual residents, never mind the physicians who serve them.

Not all physician supply prospects are dire. Some doctors thought there might be viable strategies for recruitment to rural Mississippi, if focused on mid or later career physicians rather than newly trained ones. This could be helpful because the school problem was surmounted (presuming physicians who were parents had already educated their children) and because of generational differences in styles and expectations of practice.

...it might be easier to recruit...people who are about to retire...because people that are coming off from residency are coming from a...level of training that they want to use. You want the MRI, you want the MRI right away. You want a CT scan or this surgery done right away, you don’t want to have to wait three months to get the child in...because they’re [recently trained residents] used to that.
This suggests that, even when Mississippi roots are taken into account, the recency of medical training might steer many away from medical even considering setting up practice in especially vulnerable rural communities. As our interviewees reasoned, differences in availability of technology and services are more apparent to those trained in the 21st century health care arena, making rural communities even less desirable practice locations for newly minted physicians than for physicians trained in decades past. While longer tenured physicians may have similar desires for supportive services, the “older” physician recruits might be somewhat more willing to forego their ready availability and consider a rural or small community practice.

Despite the array of problems confronting the effective recruitment and retention of Mississippi physicians, there is a bedrock of professionals who will always be willing to practice in its underserved communities, no matter the challenges.

I would say this is probably the lowest offer I got for my job. I could have gone and made a lot more money seeing patients who really weren’t as sick, but to leave these people really fundamentally bothered me, and I guess because this population looks a lot like the population I grew up around and the people who I knew. So in the faces of these strangers, I see those people who were instrumental in my growing up, and it really is a sense of responsibility that I grew up with that I got instilled in me from my parents to always try, if you have the opportunity to do something, to help those people.

Such perspectives are admirable, widely shared by the physicians we interviewed, and underscore the idea of medicine as a vocational calling. As such, it provides the rationale that sustains physicians in many practices serving vulnerable Mississippians. But there should likely be no greater expectation that physicians, any more than other professionals, make disproportionate sacrifices of family and self to practice medicine. Sufficient opportunities to earn a living, keep a practice on an economic even keel, and sustain family life are essential parts of recruiting and retaining physicians to any community.
Generational Issues

The pace of change in modern medical practice has been so fast in recent years that generational disconnects in the narratives of physicians we interviewed are no surprise. The themes that were most often associated with medical practice were generational differences associated with training and career expectations. One middle aged rural practitioner put it this way,

It’s a generational thing. Nobody—I seen so many people coming out, you know they think you go to medical school, you come out, they offer you a bunch of money, you don’t work very much...life’s just easy. It’s not, especially in a small town. I mean you...you know, you work...you work. I mean, I—just work.

Even physicians who trained as recently as the past decade found new medical graduates a different breed of doctor,

...even if you have a great center that gives you excellent training, they’re [medical students] going to worry about what they’re going to do in their time off. And I trained at the time when we didn’t have work hour restrictions and all that great stuff. Yeah, what there was to do didn’t really matter. But those kinds of things, especially to the generation XYers, are things that really matter now.

Other physicians emphasized the growing emphasis on specialty versus general medical training, a trend they associated with the preferences of recent medical graduates who they see as pushed to specialize.

I’ll tell you there’s another dirty secret that nobody’s talking about—you can leave it on [referring to the tape recorder]—is that the newest generation of physicians being trained...don’t want to take care of you.

This physician’s comments echoed the sentiments of many of the rural and family practitioners we interviewed, that more recently trained physicians are not inspired by treating the “whole patient” but rather prefer to specialize in a single focus that ensures only episodic contact with patients. Clearly, generalists and family physicians feel they are in beleaguered
specialties, inadequately respected and compensated for their holistic approach to medicine.

Nearly every physician mentioned the greater income and respect, and fewer hours of work, most specialists enjoyed. While they praised the quality of health care delivered by their specialist counterparts, the generalists we interviewed also commented on the fragmentation of health care for their patients—and their own ultimate responsibility of caring for the whole patient, once the specialist was “done”—as a burden born without much recognition. Many generalists bemoaned the fact that, while they were responsible for health care management for patients with complex and intractable medical problems, a specialist could “parachute in” to a patient’s treatment course for a short time. A specialist might do a procedure or consultation that in a few minutes would gain more reimbursement than an entire year of sustained care provided in the rural physician’s office or clinic.

Another manifestation of generational thinking led to women physicians to be stereotyped by some as insufficiently committed to the profession by some physicians. Commenting on the tendency for some longer-tenured men physicians to generalize from a few cases to criticize most women physicians—whether for taking up medical school “slots” and then “having babies” or for planning careers that enabled them to balance work and family life from the outset, one woman physician remarked,

But I don’t think that only reflects women, but I think they’re mistaken. I think that they’re pinning that on the woman’s problem—and I think it is; there is some truth to the fact that a lot of women do want part-time work, but I think it’s also a generational issue. And I think I hear it more from the older practitioners, and they’re saying the same thing about the younger graduates than just the women.

Her comments reflect traditional expectations held by some long time physicians that the profession was most appropriately a 24/7 enterprise. She recognized that the time more recently trained physicians are willing to devote to medical practice seems to be evolving, so that practicing medicine is no longer seen as a pursuit that is necessarily an all-encompassing demand for all available time. Some older physicians criticized women physicians, who in the past made adaptations to their work schedule to accommodate families. While women might still be “blamed” by some in earlier generations of
medical practice for insufficient commitment to medicine, more and more medical graduates (women and men alike, regardless of family status) prefer careers that also permit them to have a rewarding personal life. Having experienced a health care arena where the time demands were seemingly limitless, some older physicians appear to have adopted a “what’s the matter with kids these days” stance towards recent trainees.

Yeah, it’s just a paycheck now as a lot of people look at it and I didn’t look at it that way.

No one wants to take call, or work any evenings, or give up a weekend.

Further, in a profession that until recent decades was overwhelmingly male dominated, some physicians have not yet been able to fully accept women physicians, particularly those who choose to try to balance professional and family responsibilities, as adequately committed to the profession. But this was a position taken more often by older physicians than younger ones, suggesting that replacement within the physician workforce will likely mitigate this problem as time passes.

As much as some practitioners bemoan the perceived lack of adequate commitment among their more recently trained counterparts, others worry about their continued capacity to keep up with current demands.

The pace of knowledge that is really – I just don’t know how much longer I can hang on. There are tools out there. There really are some tools, but I guess that’s what people start thinking when they get to be [my age]. Maybe some of this is just glamorizing the past, but it just seems like there was a way for mature physicians to still provide a real service in the community, especially as primary care physicians. There are kind of some high expectations there that I really just wrestle with.

Adapting to the speed of change can be especially taxing when physicians are spatially isolated from centers where exposure to new technologies and procedures is readily available, reflected in the angst that physician expressed.
Not all generational issues had potentially negative connotations. Many minority and women physicians remarked that conditions for physicians like them had improved in recent decades—although many also remarked that there was still plenty of room for improvement. Further, some physicians noted that the pace of change might be a way to force improvements in the quality of medical care, by leaving behind practices that no longer work or make sense. This theme of necessary change was one that family practitioners in particular sounded.

...if we’re just going to try to resuscitate that dinosaur, you know it’s not going to work. The world has changed. Move on. We just have to look at how do we make that relationship a good one and take care of that patient. A family doctor doesn’t have to provide all these things that [they] all did in the past...but we have to be the medical home for patients to be sure that we coordinate everything that has to happen in that patient’s life even if we aren’t the ones who take care of them in the hospital.

This position reflects the reality of 21st century medicine. Generalists are not likely to return to the often-romanticized past of the family practitioner or general surgeon who performs every single medical procedure and intervention that an individual needs—health technology and the evolving arrangements for health care delivery virtually insure that will never again be the case. But the coordination of services is, according to many, a more essential component than ever of high quality health care that newer generations of physicians may find easier to adapt to their practices.

Not all generational themes mentioned in physician interviews were confined to physician’s individual experiences and opinions. There are many generational themes associated with patient behavior and expectations (also discussed in further detail in sections that follow). For example, in terms of gender and race relations manifested in physician-patient relationships, one African American woman physician noted,

I find that the gaps are actually more with the much older generation. The younger ones have gotten educated.

For this busy physician, younger patients were often easier to deal with because they did not challenge her authority as a physician, or
expect her to explain her credentials—they took for granted that a young black woman could easily be a physician. That was not necessarily the case with older patients.

**International Medical Graduates (IMGs) Considerations**

Talking to IMGs about their experiences in underserved communities in Mississippi was an occasionally sensitive topic. Most IMG physicians we interviewed were carefully respectful of the communities and patients they served, portrayed their appreciation of the opportunities that working in the United States presented to them and their families, and were generally quite reluctant to be critical. Many IMG physicians we interviewed reported having pleasant and rewarding experiences in their Mississippi communities of practice. Others faced challenges that they were uncomfortable speaking about, and typically did so only warily. Due to these sensitivities, many preferred not to have their interviews audio recorded. Consequently, the themes associated with IMGs arose in analysis of both field notes from the interviews and transcriptions of audio files from some interviews with IMGs.

Many IMGs had completed residencies in large U.S. cities in the Northeast, and their entire American practical knowledge prior to moving to Mississippi was bounded by that experience, or by media they had access to in their home countries. Scenes from rural Mississippi were not part of the fabric of American knowledge that many IMGs brought to Mississippi, and the period of adjustment that many reported experiencing is not surprising. As one respondent noted:

> Religion-wise, culture-wise, everything was different.

Overall, most IMGs were well received in the communities where they worked, and experienced few overt acts of discrimination or prejudice, either by patients or by other health professionals. Sometimes subtle forms of discrimination emerged:

> They [patients] don’t say stuff in front of face. When we know [how patients really feel] is when other doctors come, when people...see the new American doctor so… patients who were your patients and then the new Mississippi doctor came and they go to that doctor and when that doctor leaves, they come back
to you. That’s my fear… probably no one will say up front but we know it’s happening.

For many IMG physicians, their professional community was an especially important anchor to their lives in small, unfamiliar, communities.

it’s a little tough for us to blend into the general community. I don’t know…what we’d do… I mean, the hospital, all we do is just…professional, linked into the hospital, that’s it. We don’t really do anything outside the professional community.

While the professional setting was a haven, this lack of embeddness in the broader community reflects a sense of community isolation or separation that some (although not all), IMGs communicated.

That’s one of the disadvantages since I’ve been here because in bigger cities there have been no problems. I think it’s difficult for them, for people…to relate to us…but as long as we are here, I mean, in the clinic… they just come to us, they ignore us in other aspects.

A definite disadvantage of small town and rural Mississippi was the lack of social and cultural outlets readily available for some IMGs, accompanied by the sense that in small close-knit communities, IMG physicians (even after long periods in a single place) were “outsiders.” Alongside cultural and language differences, differences in the socioeconomic background of physicians and the communities they served likely contributed to the sense of separateness that some IMG physicians described. Already, professional training and status separate physicians in general from the people they serve. On even more levels, IMG physicians, even those most determined to fully make their lives part of the communities where they practiced, were different from their patients. For physicians who felt excluded by their communities, it is impossible from this data to discern whether it was because IMG physicians were actually unwelcome, or whether because they and the community residents had simply not found a comfortable way of joining in and socializing together.

Still, despite many cultural differences in their backgrounds, at least a few IMG physicians found strong parallels in the places where they
grew up, and the communities where they now practiced medicine. As one doctor put it:

It was the same...no money, no access, no transport—it was the same thing in my home country where I grew up. So it was...like...[my community here] is not far off from [where I came from] in terms of the problems that we, we see. So uh...um...I do have an accent...but it’s very strange that a lot of the patients here, they understand me better than...than [laughs]...a Yankee doctor.

Some IMG physicians found opportunities for socializing and satisfying personal lives outside their profession by travelling to nearby cities and keeping up with professional and cultural contacts in other places. Others have settled into satisfying lives in the communities they chose to serve. Some came to Mississippi expecting to leave, fell in love with their communities and patients, and decided to stay. Others IMG physicians arrive in Mississippi with a strategy of staying only long enough to fulfill their obligation. In those cases, they do not mind not putting down deep roots.

None of the IMG physicians we interviewed mentioned any unpleasant encounters they associated with their IMG status in terms of patient encounters. As one put it, what would you expect—patients come to them seeking help, not looking for a scene. Only a few IMG physicians recounted overtly unpleasant experiences encountered in the Mississippi communities where they served, and even in those instances the examples given were isolated rather than systemic instances. However, several IMG physicians mentioned that they sensed subtle snubs and occasional discrimination, both from other health professionals and from some individuals in the communities where they lived. On the whole, the unifying theme from IMG physicians was dominantly a general sense of satisfaction with their Mississippi professional and personal experiences, even in the face of challenging medical practices serving disadvantaged patients.

Race Issues

Issues associated with race represented another sensitive topic for physicians we interviewed. Keep in mind that both of the interviewers are white women, and we asked probing questions about the personal and professional experiences of physician in terms of their race/ethnic characteristics, and their experiences treating patients of different
race/ethnic backgrounds in their practices. It is well-documented in the social sciences that questions about race are challenging ones for researchers and respondents alike, and that it can be difficult to avoid capturing some degree of social desirability in responses. Despite these caveats, our impression is that the physicians we interviewed gave thoughtful, candid answers to questions about how race and ethnicity were expressed in the experiences of Mississippi physicians, especially those in rural and underserved areas of the state.

Although Mississippi has had to cope with the legacy of racial segregation, both among its citizens and within its professions, substantial progress has occurred over recent decades. Some physicians, including minority physicians, said that they regard race as a matter of little import in their professional lives.

I don’t think it makes much difference about the color of a physician because...if you look at it, the majority of physicians in this town are not black or white...they are...foreign, they’re from somewhere else. They’re uh...uh...Indian, Pakistani, or something else. I think the people just wanna be taken care of...by the best person available, whether they are black or white.

Not really, it’s [race] not an issue here in Mississippi for the most part. There are some subtle things but as far as the major thing—most of the practices I’ve been associated with, particularly a health center...most of the physicians are black

Instances or examples of overt racism were rare in physician accounts, but subtle and not-so subtle professional experiences influenced by the physician’s race did feature in many, although not all, minority physicians’ interviews.

I think medicine is still very much a white man’s world. I do. I mean, no one has said to me, “You’re not welcome,” or, “You don’t deserve to be here.” No one has verbalized that to me, but there’s always these undertones. And they’re definitely different circles where you don’t feel that at all. I was raised in a home where my parents taught me I can do whatever I want to do. I know I’m black. You know? —there’s some people that I think very much approach all the time with their race filter up, and you know, even if there’s nothing there, that’s all they can
see. So I don’t think that I approach life like that at all, but there definitely are times when it’s uncomfortable.

Some minority physicians, including both African American and international medical graduates, felt that majority professionals’ responses to their race/ethnic status left them somewhat outside the inner circles of their profession. However, most remarks about racism indicated that the issues minority physicians most focused on most seemed to arise more in the context of patient-provider issues than problems associated with relationships with their professional colleagues.

When I first got here [there were issues associated with race], and I don’t notice it as much now, …but we didn’t have many minority physicians here for sure. You’d get confused by patients with whether you were one of the orderlies coming in to get somebody or we’d have on occasion periodically when a patient wouldn’t want an African American physician in the hospital.

Not all minds can be changed, as several minority physicians observed, and racism in Mississippi had historical significance and contemporary effects “whether we want to go there or not.” A theme observed in the interview data is that racial prejudices are seldom expressed openly, more often elaborated in subtle ways that are more difficult to describe. As one physician tried to explain, “while not everything is about race, nobody really thinks that, many things can be and are.” Another, speaking from a more collective stance, remarked that,

It can be difficult for my white colleagues to really understand the nuances we pick up, and why we...we sometimes see the race part of some things that they just miss. Don’t get me wrong, it isn’t that they are racists...it’s not like they [white colleagues] lack goodwill to try to see things my way or that they don’t have the imagination to think about it, it’s not that. But the bottom line is, they just haven’t had the experiences we have.

None of the physicians we interviewed gave an example of an overtly racist exchange or interaction with fellow physicians, although there were several examples of such encounters in patient contact. Whether
prejudice is overtly expressed or covertly experienced, a successful encounter with a health professional often persuades some recalcitrant patients that minority physicians provide care that is as good as that provided by white physicians.

Now I have...run into some real prejudice with somebody that kind of got vocal and verbal about it, and um, we talked to the patient... and basically explained that we have physicians here that are training to take care of you and this is the best environment working with this surgeon in this room and so, you know, and that went that way. And ultimately the patient ended up having the surgery and got past that.

Attitudes about race in the general population have changed considerably. Most Mississippi physicians seemed hopeful that the pace of change will mean that, at some time in the future, Mississippi may lay the negative aspects of its race legacy to rest.

....it’s the older population that came up in a more segregated environment. Kids come along now, for some there’s no difference. They don’t see color sometimes.

They said, ‘She’s a good doctor. She will listen to you.’ They will come, they bring their friends. Women are the ones who tend to choose the doctors for the family. So I discovered that once you did well with grandma or mama, you got the children and the grandchildren. So actually I was surprised given the history of Mississippi. I wasn’t expecting to have that number but I actually ended up having a lot of Caucasian patients come to see me. I actually have more here than I did in [the diverse city where I last worked].

Many minority physicians felt that race had little impact on their professional relationships, and only slightly more in terms of patient relationships. When it did, most believed that Mississippi patients would likely come around to embrace care from a minority physician.

I think it’s more with patients. Because I think when people talk to me, I’ve heard people say that when they talk to me on the phone and then when they meet me they’re like, "Oh, I thought you were white." "You don’t sound black." I get that a lot, and I
think originally when people they meet me, they kinda don’t know how to take me because it’s not what they expect, but when they hear about the work I’ve done or where I’ve come from, then that lends itself to give me more credibility, if that makes sense. And that I think is just something that is based on a southern thing. We still are working our way through that, you know.

Of course, being a member of a race or ethnic minority group is not the only way physicians are underrepresented as a category of physicians in the Mississippi physician workforce.

Here, I think my greatest issues have probably been more of gender than of race. You know from a patient’s standpoint, you never really know if it’s about being a woman or if it’s the black thing too. Because I’ve gone into patients’ rooms, and I know that my white colleagues have never been offered a tray or told where the trashcan is, and I’ve had people say, “Oh yeah, the trash is over there.” I was like--what exactly does that have to do with me?...and they thought that I was the housekeeping person. Never mind the white coat, never mind the name across the lapel, or the stethoscope around the neck. That somehow, me coming into their room, I’m either here because I work in housekeeping, or I’m here because I’m like food services.

As a young black physician, this woman deals with the two characteristics—both race and gender—that distinguish her as a physician from an underrepresented group as she moved through her professional roles. As she noted, it was not always clear which characteristic took center stage—whether patients and peers saw her as a black person, or as a woman—as she discharged her professional duties.
Gender Issues

While the specific contributions of minority statuses to physician experiences, whether race or gender, can be difficult to untangle, recall that one respondent has already characterized medicine in Mississippi as still dominated by white men…but changing.

I think, well in this industry, not just for Mississippi, I think it’s hard for anybody to be a physician. It is hard for a woman and so much of that are internal difficulties, you know trying to balance a career with family. I think the new wave of physicians is much more ... the newer generation is much more ... geared towards compartmentalizing and not just dismissing women.

Professionally-wise, it started out when I was in med school, they were still giving lectures with girlie pictures, seriously, like the Playboy type. And the girls in our class, weren’t that many, but we got together and tried to make a voice about that. But early on, there was somewhat of a reluctance to see a female doctor, but now it’s just the opposite. It’s fine for women to be physicians these days...

Despite the occasional annoyances of sexist stereotypes and thinking that accompany a traditionally (but rapidly evolving) profession, some women regarded their gender as a positive attribute they bring to their medical practices. They take in stride the gendered assumptions some patients have about women’s roles in medicine.

It’s very different, very different I think for men. If I walk in the room with one of my colleagues who’s a male, he is automatically a physician, what I am is left to be determined. But it’s me...sometimes I get asked to fill a water glass.

I do like to spend more time talking to my patients a lot. And patients sometimes, especially the older patients, and I’ve always seen a lot of elderly patients, and they really like to talk. And I would engage in their conversations, and I think that was not something they expected from a doctor. And that might have been one of the things that they would assume that I was a nurse. It made it easier for me with them assuming that I was a nurse. I think there’s more comfort you know, especially for the
elderly black patients, I think there’s more comfort with me. Though they are probably the ones who would think I was the nurse more so than the younger ones.

How does gender play out in most relationships we studied? Gender seems to be an evolving concept in Mississippi health care, with physicians themselves striving for way to understand the role gender plays in their experiences, and their capacity to achieve work/life balance. Many women physicians asserted that being a woman gave them distinctive challenges in their professions, sometimes because more senior colleagues called their commitment into question, sometimes because of gendered assumptions about their appropriate roles and responsibilities. Recognizing that it is still socially normative for women to be held responsible for most family responsibilities, some women physicians used their family roles and evolving perspectives about their professional roles as tools in their medical careers.

I feel like maybe it kind of gives me a chance to communicate more with families. In medical school, I was jealous of the guys. I didn’t think I was treated quite equally, but actually I’m really kind of glad to be a female physician. I think that I—in some ways there’s a little more acceptance.

I think that so many times, at least my generation, we put a lot of expectations on ourselves and it’s finding that balance between being a person and having outside interests. I think it’s a lot easier [for younger women]. I think a lot of barriers have fallen in terms of discrimination. A lot of women have been promoted – I’m not saying they don’t deserve it, I think they do – so that’s a good thing.

Women have their own sets of criteria for what makes a rewarding and feasible medical career. Being women also endowed gendered advantages or benefits in their professional relationships, particularly in terms of patient interactions.

...[when I came here] patients could not feel comfortable with a female GYN. They had been going to male GYN, so once they started coming, they got used to it, they couldn’t go back to male GYN.
They say ‘you know what I couldn’t discuss this with that person but I can discuss it with you because you’re female.’ I realize that certain things women are more comfortable discussing with another woman than with a man. So if there’s no woman, they will go with a man. But if there’s a man there are certain things I discovered that the women feel a woman would understand a little bit better.

One of the things patients tell me that I listen, women tend to listen more. And then women have different issues, and they are more open to discuss it if it something to do with maybe gyn problems or emotional things or they’re going through some menopause issues or they’re going through some sexual things with their husband.

While some physicians emphasized the advantages of women physicians treating women patients, some doctors regard gender concordance as relatively inconsequential.

Women are the same everywhere, they have the same problems...ethnic groups, nothing matters. I think that they all have the same problems.

In recognition of rapid changes in medical practices, more and more patients (including men) are seeking health care from women physicians.

I think that the patients really enjoy coming to see a woman. I think for the most part, we have more requests at our clinic for women physicians. We have more patients that say, “I want to see a woman,” than we have say, “I want to see a man.”

...a significant number of my male patients will say that they don’t ever want to see a man again. They believe that women will listen more intently, that we are more understanding—some psychology studies prove that out—so take more time with them, better listeners.

Another recurring theme noted in both women’s and men’s interview narratives was the special challenge that Mississippi faces in recruiting and
...the reason recruiting women physicians is hard is that we know, women, for the most part, still serve as the—I was gonna say head of the household, but men won’t like that—women still serve as coordinator of the household and still, for the most part, have more responsibility for children, for taking care of all the things that happen, washing like I did last night.

...more and more women want to have children along with their career, want to balance that, and it’s difficult. People in the state want full time practicing physicians, and I think it’s very hard to accommodate the women who want to be part time and fit that into a practice and then retain them and keep them happy and make them a viable part of the practice as well as feeling like they’re a viable part of their other responsibilities as a woman.

I’ve heard some of my male colleagues say, “I don’t know why we’re spending all this money training women to be doctors because we spend all this money training them, and then they just go part time and have a couple of kids, and they want a part time job...state dollars [are] paying for UMC, paying for their medical education. They’re taking up a slot. But I don’t think that that only reflects women, I think they’re mistaken. I think that they’re pinning that on the woman’s problem—and I think there is some truth to the fact that a lot of women do want part time work, but I think it’s also a generational issue. And I think I hear it more from the older practitioners, and they’re saying the same thing about the younger graduates that are men.

The tensions between women fulfilling normative roles, the expectations of fellow professionals, and pressure to deliver empathetic health care that is attentive to patient needs place stresses on many women physicians.

I think it’s [being a woman physician] been a benefit. I do. I think uh...my patients look at me as somebody easier to talk to...or more approachable...than um...someone that has children, as a mother too. But what I found interesting—as my patient population is growing in the last 20 year—I started out as mostly
seeing females and I’ve got more and more of the husbands and the…daddies and so…but…I’ve seen my patients grow more. I have…I still have—I think all doctors seen more females than males…but um, my male population has grown.

Women’s experiences in the workplace are changing. Not only do women physicians represent a growing proportion of Mississippi’s physician workforce, they are attracting patients of diverse race ethnicities. Unlike in the past, when women physicians were often relegated into “women’s” specialties (OB-GYN), family practice and pediatrics, they are today pursuing training in much broader areas. Combined with preferences for more predictable work schedules and adequate work/family balance among recently trained cohorts of physicians, medicine may continue to evolve in the 21st century to the point where women physicians will not be a minority or at a disadvantage in their careers. Work/life balance helps physicians regardless of gender. Evolving norms that incorporate men’s efforts into family care (particularly shared parenting) may be accompanied by changes in the pace and intensity of medical practice in ways that will make women and men physicians’ careers and work patterns more similar.

**Challenges in Rural and Underserved Practice Locations**

Despite the satisfaction associated with medical practice that most physicians expressed, frustrations associated with trying to deliver high quality care to Mississippi’s vulnerable communities were considerable. Constant and enduring themes in the interviews were concerns about the future of primary care given the complexities of rural and small town medical practice. Most physicians we interviewed were skeptical that family medicine could persist as a viable specialty in the future, and that if family medicine could not survive they regarded providing adequate health care in their communities as being in grave jeopardy. They were proud of their practices, believed in the importance of family medicine in delivering holistic primary care, but worried that the way health care delivery is being restructured will, as one physician put it “render family physicians extinct.” Other major themes included concerns about the inherent problems for patients from poor and/or rural communities to readily access care and follow treatment regimens, and the stress and burnout associated with heavy patient and paperwork burdens.
Perhaps because it is the way that the issue of the uncertain future of family medicine is discussed within the specialty, several physicians referred to themselves and others serving in vulnerable practice locations as “dinosaurs” as they discussed their concerns about medical care in Mississippi. None of the physicians we interviewed were optimistic about the prospects for improved primary care in their communities in general, or of family medicine in particular.

But it all comes down to…who’s got the most power, who’s got the most influence, and it comes down to cost because if you turn it up on it’s head…the cost are going to skyrocket because in terms of actual numbers—primary care people…there are a lot more of us and if you asked us, they’re hardly reimbursing us.

Physicians recognized that while adequate primary care is essential, the political will to fund and sustain primary care providers seems to be missing, in part because primary care providers are not politically powerful constituency in a health care system driven by increasing specialization. Several primary care physicians interpret their position on the health care frontlines as overlooked and undervalued, not only within the health care system broadly, but also by physicians in other specialties.

If this was a job, nobody would do it. A job, you punch your clock and you go to work from 8 to 5 and you go home. This is not a job… People…and you know, there are some doctors who look at it that way. I’ll admit, there are some who, you know, it’s a job. Those people need to get out. They need to go fall off the face of the Earth, you know, ‘cause I’ve had to clean up—their messes—not medical messes but the psychological… relationship messes, you know?

Themes associated with seeing primary care as a calling or a vocation, and a pursuit not done only for the money were regular features of the interviews.

...in residency, we did what we did for...I think it was about $2.42 an hour, you know? And what I do now, the hours I put in the last few years, it’s not much more than that. So it’s not about the money, it’s not about prestige...you do it because...my...you do it because you have to.
...people out in the rural area doing some pretty heroic work but you know what? They’re middle-aged and older....an awful lot of family physicians because that tends to be what we see more in the rural communities. You don’t see specialists. You see a family doc and they’re aging quickly. And you know the younger crowd’s not going into those areas...because you don’t have a lot of help and there’s the disparity and pain. You don’t get paid much to be in family medicine and now-a-days probably not much in internal medicine and you certainly don’t get paid well in rural areas so you got to do something to fix that.

Mississippi physicians were passionate about their practices and the need for the communities they served to continue to have access to essential primary health care services. A standard response to change—and change in the health care arena has been substantial—is often nostalgia for past arrangements. However, the perspectives of the physicians practicing in vulnerable communities was not merely nostalgic, it was also forward looking.

You know, I don’t mean to sound negative—maybe it’s because I’ve been in beat down the last couple of years. You know, this is where I want to be but ...if I look at the numbers—you can go to family practice meetings and uh...you know, there’s just not—nobody wants to...there’s nothing of an incentive to come in this to family practice. You know, you work this hard at it, you get...you know, the compensations are just not there ...you can’t get anybody to come back to practice, you know?

Given their firsthand knowledge of the patient populations they served, concerns about whether primary practices in vulnerable communities could be viable in the future, and the observation that few medical students aspired to general practices in rural and vulnerable communities, most of the physicians we interviewed were pessimistic about future prospects for essential primary services in many Mississippi communities.

I tell people “I’m 40 something going on 70”...you know, it will kill you, you can never catch up, you never—and even the patients see that—you know, they tell you, all your patients say “You need to rest, you need to rest, you need to take a break”
Many physicians described demands of their practices and the needs of their patients to underscore the problem of the apparent disconnect between physician supply in their particular communities and obviously unmet patient needs. Yet, despite an overwhelming sentiment that the best prescription for health care access in vulnerable practice locations was more primary care physicians, few thought that was likely to transpire, despite offering evidence that their holistic approach to providing medical care was of high quality, valued by their patients, and clinically appropriate.

I came out with the top scores … in managing diabetes—but yet you don’t…you don’t get far, you know? I can send somebody to an endocrinologist and they get three times the reimbursement. When I see somebody, I don’t just see them for diabetes, I see them for diabetes, hypertension, high cholesterol—you know, that’s one of the things I see them for, but I see them for everything else that they walk in the door with…and yet I get a fourth of what they get when they see that endocrinologist.

…you can go to an orthopedic doctor that specializes in the foot. There’s only …a handful of things that they see, and [mimicking another’s voice] “it’s either this, this, or this. And you tell me how you twisted your foot or where it hurts. I can do an x-ray, stick a needle in it or do surgery.” Get a million dollars real easily. But in family practice, you get a patient that comes in with “I don’t feel good” and then you start the barrage of questions to try to figure out what it is that’s going on with that patient. All the psychological overlays that may be there, deciding, you know, what tests to order, and who to send them to if you can’t figure it out and you get no reimbursement.

Although these physicians regarded the health care they provided as high quality. They emphasized that they treated complex medical patients that took the patient into account as a vulnerable human being, “not just a collection of conditions, but a whole person.” They are discouraged that their approach was often not particularly highly valued under current health care arrangements. Like we stated earlier, more than one physician remarked that she or he was a dinosaur, representing a type of provider and an approach to medical practice that seems doomed for extinction.
Patient-Specific Issues

When we asked physicians whether there was anything different or distinctive about their patient populations, some remarked that the complexities of rural and small town medical practice were not really all that different than what might be experienced elsewhere.

We have a whole gamut of patients of, uh, different cultures, different ages, different socioeconomic backgrounds and all that and so you sort of adapt the process to an approach that will mostly cover almost all of that.

Many of the physicians we interviewed also commented on the “southern” lifestyle as a common barrier to good health among their patients.

I’m dealing with diabetes, hypertension, and high cholesterol, we are raised in the South; in the rural, you’re eating...eggs, sausage, and bacon—everything’s cooked in oil and that kind of thing. So it’s hard in that aspect trying to get a patient to understand how important it is to make lifestyle modifications to control their medical problems.

I have made this statement, I have made this statement for the last several years and again this is being a bit facetious but it gives you my impression of my practice...“If you’re over the age of 40, you have diabetes until proven otherwise.”

Every physician we interviewed mentioned issues associated with lifestyle issues, particularly unhealthful diets and lack of exercise, as contributing factors to high rates of diabetes, obesity, and heart disease that plague Mississipians. Not only was the traditional southern lifestyle regarded as problematic, but several physician mentioned that most people’s employment no longer required hard physical labor, and that TV viewing had replaced many physical activities that mitigated some health risks in the past. Several also remarked that the influx of fast food restaurants and lack of cooking skills among younger generations were creating new health risks.

Families are struggling--it’s wrong, working late, they come home tired, they don’t have a proper meal, it’s fast food, no...they eat cheap and get fat...The children don’t even know
how to...fix their vegetables...or boil an egg. They don’t know anything.

Such concerns are not restricted to Mississippi, or vulnerable practice locations in Mississippi, but rather reflect secular trends across the country.

However other physicians, particularly those practicing in the Mississippi Delta, noted that there were distinctive characteristics among some of the patients they served. Some physicians remarked at the enduring reach of folk beliefs about health practices in some communities. Some of those were associated with general health, but other folkways were associated predominantly with women’s sexual and reproductive health.

Old wives talks, myths...all here rely on myths that are still carried on from the olden times...that need to be demystified... I mean most of my 20s patients [patients aged in their twenties] would have had about three or four kids already...so they’re just...did what their grandparents told them. Not because they believed it, it’s because—I mean, that’s what’s always been done.

They get convinced that certain things are not good [talking about how health beliefs are instilled in small children]. You know old wives’ tales, grandmothers’ tales and all that. They have been there and it’s been hard to convince them not to do those things. You know, certain things like...don’t bathe when you are on your period, no showers, nothing...don’t even wash your hair. I tell them, no, no, you can do that.

Don’t wash your hair when you, ah...when you had a baby. They don’t wash their hair for a month or so. I mean, these are things that you have to do some education. Like saying, don’t douche, don’t douche at all, but especially don’t douche right after you’ve had a baby... you really have to educate the patients...that douching would spread infections and all that Grandmothers insist on it, I had to fight that, I really had to fight it.

Others worried that the lack of constructive alternative behaviors in rural communities, combined with traditional health beliefs rather than accurate knowledge, contributed to behaviors leading to risky teenage sexual behavior.
...younger generation...STDs and things like that. It’s difficult in rural communities where aren’t very many—they don’t have much to do. There’s a lot of it [youth sexual activity]...and in the media, kissing... herpes. It’s rapid, the spread of STDs here is rapid...absolutely because they’re just hopping from one to the second to the third [partner]. We just keep on telling them...you must take care of yourself, you must... often the parents are with them...because they know they’ve been sexually active. sometimes the parents urge them...”do something. You certainly don’t want a baby that I’ll have to take care of.” They think “it won’t happen to me”...of course, what do you expect from a 12 year old? Most people [here] just seem to ...accept this...it’s, it’s bad.

Other physicians noted how the legacies of place distinguished their patients from those elsewhere.

...a lot of the doctors that come from north and different places say that the patients here [Mississippi Delta community], the diseases, the complex processes of the diseases are a lot different from patients you see everywhere else and everybody’s trying to figure out exactly why it is. They don’t know whether it is...exposure to chemicals that we’ve been exposed to in the agriculture area for so long...even they say even the anatomy of the patients that they see is very different from patients that they see up north. And generations of exposure...to things like pesticides...things like pesticide neuro-toxins ... a lot of those things are—we don’t know...the exact source...but there are cancers. We have a lot more people with cancers...in this area than you would in a lot of other places.

Some of the problems his patients encountered could be traced to generations of disadvantage associated with rural life in poor agricultural communities, including the possibility of systemic exposure to toxic chemicals have lifelong health effects on current patients. Other distinctions physicians noted among their patients are more prosaic, structured into the community framework of vulnerable practice locations.
We still see patients who come here with diseases, process things that you should only see in the textbooks still. Now, we’ll see people...with, for example, goiters and things like that...simply because they don’t have care or can’t afford care or whatever. There are no doctors out there. A myriad of circumstances that allow somebody to sort of be, to tolerate this condition as it continues to worsen until the point where you got to go in because you can’t continue to live without doing something about it. Obviously there is no magic wand for that, but that’s what this state needs. Because the other thing is you can’t continue to progress in this state throughout the state without having a healthy population. If you’re sick you can’t learn....

As this physician saw it, seeing patients with “textbook” conditions and diseases that had been eradicated elsewhere was not exclusively the fault of patients, but rather was an unavoidable circumstance arising from the way health care is arranged in her community. The barriers to routine, high quality medical care in these vulnerable practice locations are myriad.

**Barriers to Care**

Changes in some Mississippi communities have contributed to barriers to care for some subsets of the vulnerable patient population. An influx of Hispanic patients in some places has compelled physicians to come up with creative ways to reach that group of patients.

There is a...young Hispanic girl that is a **student** in [community] and she speaks Spanish...it’s so funny...she speaks with this **funny** southern accent [laughs] but she often comes as an interpreter for, you know—they know—who speaks real well and they’ll use her from time to time.

While language barriers to care is an emerging problem in some Mississippi communities, the traditional barriers to care and healthy lifestyles—poverty, lack of education, and isolation—are what, in most physicians’ accounts, contribute most to the health vulnerabilities their patients endure.

A rural area is a rural area. It’s transport, it’s money, it’s access, it’s patient knowledge, patient education, um...the more
educated people, the more experienced people, tend to go to the bigger towns...bigger schools but still. Everybody who stays in these small towns or live their whole life here...they have the same...type of...thinking.

There’s a lot more isolation that I’ve found here than in the patient populations that I’ve served in other places. It’s remarkable to me how distant the nearest neighbor can be for some of our patients, and for many of them, we had to increase their surveillance. Just because if you’re at home somewhere and something happens to you, it may very well be a few days before somebody, you know, sees something’s happened, because they live so remote, away from other people.

A lot of them are very poor. It’s hard to get medicine when you’re poor. A lot of them are...not...the most educated people in the world. So they have problems communicating...with even us at times. So it’s a very difficult situation...to try to get through because...transportation, education, and...just the general situation.

Money is an issue, ...of course, the economy is tight across, across the nation, but here.... now that trying to convince patients that it is important that they get these medicines to...you know, treat their conditions.

Even insured patients have co-pays and deductibles for which they are responsible, and coming up with that money can be difficult. Especially problematic can be arranging transportation to health care facilities in communities where there are simply no public transportation capacities.

...transport, getting the patients to the clinic. You know, that’s a big challenge for a lot of the parents because a lot of them have...probably one car or zero cars and they need that to go to work with. Yeah. And for our clinical hours are pretty similar to their work hours...I mean that we open eight to five, they work eight to five; when we close and their cars are available, they’ll...the clinic is closed, that’s...so um... hard even to get them here.
Physicians expressed universal concern about problems associated with patient compliance. Once physicians have seen patients, the problems associated with follow up and treatment regimens sometimes seem insurmountable. Some physicians laid the blame for the biggest problems associated with compliance at the feet of the very structure of the society within which they practiced, citing the need for more and better education.

You know, they always say “But I feel fine” you know, “My blood pressure doesn’t bother me, my high cholesterol, I feel fine” I try to explain, yes these things, you do normally feel fine until you have a major event and that’s what we’re trying to prevent”. There’s a lot of education, I think...that we have to do.

...at [my residency location], people would come and had read things on the Internet, and they’ve said, “Oh, well I’ve had this, this, and this problem.” So I know they come in with their little notebook and say, “This is what I have, and I looked it up online. And it says this, this, and this. And what’s the next step?” They really wanted to participate in their care. They asked a lot of questions, and they were relatively informed. And even if they weren’t, we could say here are a few links, and they could go home and look it up online. And here, it’s dramatically different. You know, many of our patients don’t have access to a computer at home or at work, and even if they did, [some] wouldn’t really know how to use it. For many of our patients, the first time that they see a doctor is when they show up to see us.

Lack of knowledge and education about health conditions prevented many patients in these physicians’ practices from taking proactive stances to protect and preserve their health. In an era when “informed medical consumers” are a feature of many modern practices, in Mississippi entire communities have limited access to the materials and information they would need to enact proactive health behaviors and fully comprehend their medical conditions.

However, a handful of physicians regarded lack of money and other barriers to care as less of a problem than individual level problems, like an unwillingness to correct ignorance of health practices or to make health care a priority over other preferences. Several physicians found their patients diffident about issues related to health care, identifying a lack of urgency and competing priorities as a problem for treating some patients. One
doctor remarked that many of his patients complain that they cannot afford to buy prescriptions or get transportation to clinics and practices, yet

“Well, they come here with some pretty fancy expensive-looking cell phones but they say they can’t afford for the four dollar Medicaid co-pay for a prescription.”

He was especially exasperated with parents who he perceived as neglecting the health of their small children.

You’ve got to treat the kids, you’ve gotta treat the kids, and so, um...there’s lots of follow-up calls like “You’ve got to keep that appointment, I got you a special appointment, you’ve got to keep that appointment, you’ve gotta keep that appointment” and yet they’ll come back to see me in a couple of months and...um, they will not have kept an appointment that’s been made with a specialist I personally begged for. You can’t spoil the parents but, but then, you have to treat the kids.

The interview with this physician was echoed in themes in some other physician’s narratives. It is hard to determine whether they regard the patient’s lack of initiative as an individual failing, or whether it is regarded as an outcome associated with structured disadvantage. Nonetheless, several physicians expressed extreme frustration with the stance and lack of urgency their patients often took towards their own and their children’s health care.

In other cases, physicians characterized the depth of poverty and poor levels of education that some of their patients experience as the most formidable barriers to routine access to health care, even for patients with Medicaid coverage. The problems associated with the failure to enact health-seeking behaviors were themes that recurred repeatedly in our interviews. The problems were multifaceted and structured deeply into the communities of patients. Some patients simply couldn’t afford healthy lifestyles, some weren’t well enough educated to understand them, and in some cases, others seemed as if they weren’t very interested in getting health care for themselves and their children. Teasing out the motivations for patients’ behavior is tricky business. The cascade of disadvantage experienced by many individuals and families in Mississippi’s small and rural communities, particularly among very poor residents in such places, likely contributes to
stances that are often at odds with health-seeking behaviors. The first and most obvious barrier was usually economic.

I work in the community health center also, so that means I see patients who may not have insurance or underinsured. Now, a lot of those patients do not go to their doctor ‘til they are...really, really sick. They’re not much into preventive medicine so a lot of times when you get the patients there, the illness is too uh...further instead than it would if they were going to preventive care all along. So a lot of times when we see patients, they’re sicker than patients you may see somewhere else.

I think there are more uninsured now. Or underinsured. Medicaid now, the thing is that it is harder to refer people with Medicaid now. If they have Medicare and Medicaid, we can get them in [for referrals to specialists] pretty easily anywhere. But if they just have Medicaid, it’s almost as bad as not having anything.

Community health clinics can provide basic care for individuals who have no insurance, public or private. However, gaps in coverage undermine the capacity for physicians to ensure their patients get specialty care they need.

Obtaining referrals for patients without “gold standard” insurance coverage or independent wealth were frustrating and time consuming enterprises for most of the physicians we interviewed. Compounding their frustration with arranging specialist referrals was a deep-seated antipathy to the bureaucracy and paperwork burden that small practice physicians confronted. Some discussed the issues of charting, paperwork, and satisfying the rapidly shifting paperwork requirements of public programs and private insurers with emotions that verged on anger and despair.

**Corrective Actions**

The two overarching themes in the interview data associated with physicians’ perspectives on how to improve health care delivery for the Mississippi patients centered on the need for more education associated with health, disease prevention, and healthy lifestyles, and a need for improved, streamlined, secure access to care. These two themes were connected by the recognition by physicians that until access/reimbursement issues were improved, there would be little hope of having the capacity or resources to
improve on patient education. In their own words, this is how Mississippi physicians would fix the problems that most concerned them about how health care is practiced/delivered in Mississippi.

I think we don’t stop enough to educate them [patients] in terms of things they could be doing to improve their lifestyle. We don’t get reimbursed for education. I can understand why we don’t…and that’s the tragedy of the American health care system.

Maybe if I could speak with the government, I would say please provide some transportation because that’s one big issue quite often when they don’t come, not because they don’t want to come but because they need grandmother or grandchild to leave school and pick them up and bring them.

So many times people are just so rushed and pressured that we really are missing some of the big clues. I think sometimes just give a prescription you do that instead of being able to feel like you have the time. You don’t have the time. You’re pressured to see so many in a certain period of time. You go with whatever’s the most likely thing, and sometimes that’s not it.

It really isn’t. But we don’t have time. I think we’re really throwing the baby out with the bathwater. And that may be itself a way, if it could ever change, to get better care. I don’t what they do in Canada or other places, but surely if they can spend more with you and listen and rule out some of the bigger things without quite so much... that’s got to be better.

I’d give everybody insurance. If I could insure everybody, then it would just make things so much easier. Because then we could do what we needed to do for people, for the most part, without. It wouldn’t be, well Miss so-and-so can’t get this cuz she can’t afford it.

As bad as I had to admit it ‘cause we’re right in the throes of it right now—but is uh...computerized or a...an electronic medical record that is nationally based or something. Now I hate to say that...but it’s true [Why do you hate to say that?] I hate
computers [laughs]. There needs to be a national health care database... a national health care database.

So I think that’s one of the things that is truly doable with any new...bureaucrat who says you need to do this, we tell thank you but no thank you when they try to impose something new. You know, you have to run it by us, we got to have a means where our association says this is unreasonable, you want to do it, you pay for it, or you come up with another method to do it that makes sense.

Yeah, I think we absolutely have to get to universal health care coverage for everybody.

I’m not for single payer but here, it’s just gotten so business-oriented. If we can maybe—hopefully the pendulum has swung so far, but the almighty dollar is the bottom line. It’s easy for me to point out problems. The solutions aren’t easy.

We need way better coordination, there’s a lot of turfdom here, a lot of times I think the right hand doesn’t know what the left hand is doing. I’m talking like mental health and Medicaid, some of these agencies like—we can refer somebody, like a family needs counseling, we can refer them to mental health, but a lot of times we don’t get the feedback that that service even takes place. That would be a huge thing. We’re closer than we were, but we’ve still got a long way to go. Just the cost, I mean that’s a huge thing. The cost is—something’s got to give. Something’s got to change. I guess it will one way or the other. It’ll be very painful.

It’s gonna have to be that we start getting people into the most cost effective physicians, and those are going to be primary care docs, general internists, general pediatricians, general family docs, general OB/GYN—not all are sub-specialists.

A family doctor doesn’t have to provide all these things that the dinosaurs all did in the past, but we have to be the medical home for those patients to be sure that we coordinate everything that has to happen in that patient’s life even if we aren’t the ones who take care of them in the hospital. It’s nice to do, but
even thought that we don’t, but if the coordination is there—right now the coordination isn’t there because this person is not talking to this person. So if we truly got a coordinated model, we could still give that kind of quality care to patients in a little different...50ish woman family practice academic medicine

So, we need to find a way to—and that’s why I said feasibly—spend more time with the patients. And the reality of that goes back to reimbursement, some kind of change at some level, the reimbursement, so that for evaluation and management codes, we’re paid for being able to spend twenty minutes with them instead of ten. We spend time anyway, but just makes everybody late. But feasibly spend twenty to thirty minutes with them.

And I think that having a home that somebody knows you, knows when it’s time to call somebody, knows when it’s just you need to talk to me...you know, and has a really good grasp of your health care and its entirety. I think that, I think that’s the best model for true core preventive medicine. And if I could change one thing, I’d give everybody a medical home. And that’s not to exclude them from having access to the specialists. I mean, imagine if you left work, and some days you went to an apartment, and some days you stayed over at the Hilton, and some days you went over here. There’s something about you having a home; there’s a place that you go to, and that’s your spot. And you know it, and it knows you. And that’s how I see primary care, whether that’s family medicine, internal medicine, or combined specialties, that’s how I think about it. It’s that place you call home with regards to your medical care. Woman family practice

Obviously there is no magic wand, what this state needs is to fix access to care. Because the other thing is you can’t continue to progress in this state throughout the state without having a healthy population. If you’re sick you can’t learn....

I’m hoping. I’m hoping. I’m, you know, supporting Canada’s type of system...
I would just make the health care resources—medicine, diagnostic tools, everything—available. I know it sounds like I’m being a socialist here, but I would just make—it makes it very difficult to practice when patients can’t get what you know they need. If I find something I need, I’m suspecting a mass somewhere, and I want the patient to get a CAT scan or want something, some diagnostic done, it’s not always easy. If they don’t have any money, it’s very difficult to get them scheduled. We used to have, where I practice now, we used to be able to call the medical center and schedule a mammogram or CAT scan pretty readily. But now when the nurses call, they don’t get an appointment right away. They have to evaluate and have the patient come in for an assessment, a financial assessment, and try to...so they go through that, and we can’t get them scheduled when we need to, and so that makes it very frustrating. And then of course the medications too. I mean I’ve had patients come in for follow up and give them a prescription for something; they haven’t gotten it filled or they got a few filled and took them for a few days and then couldn’t complete the course or whatever or couldn’t continue to take them. But it happens, it’s reality. People I think, a lot of people out there don’t know how bad the situation is, but it is. And I have worked always except for two years of my eighteen years of practice in medicine. I have served patients who have those needs and problems. And it’s gotten worse.

Clearly, physicians came from varied perspectives and emphasized different approaches that could be tried to improve health care delivery in Mississippi. Coordination of care and having a medical home emerged as consistent themes in the physicians’ suggestions for improvement. So, too, did improvements to insurance and insurance coverage, although there was considerable disagreement about how to accomplish that. Physicians were very wary of the potential for new mandates being imposed on them without resources to follow, and although many mentioned electronic medical records as a potential tool for coordination and support of clinical guidelines, none regarded that as a magic bullet that would cut costs and improve care. Some physicians favored single-payer style health insurance coverage, others were adamantly opposed. If there was a single sentiment that had unanimous support it was for a system structured to allow physicians to spend more time with their patients.
Practicing in Rural and Underserved Mississippi

Many of the physicians we interviewed practiced in rural locations and small towns, with all of the realities that accompany that,

I go to the grocery store and you know…it’s the old thing, you know people don’t mean to do it but you know...what do they talk about when they see me? Their aches and pains, and the health stuff—you know, I’d like to talk about—the weather or something else but you know, that’s one thing they gravitate towards...I’d rather go in at midnight and hope nobody sees me [laughing].

I do medicine at the post office every morning, I go to church and I do...well, I don’t go to church anymore, I’ve changed out of town which has helped a little, but you’re on call 24/7. There’s no question about that. You can’t get away and I think that’s just something why a lot of people don’t come to rural areas because nobody hardly walks in this door that I don’t know...you know, because being born and raised here, it’s such a small town, I know everybody. But it’s difficult and you just have to learn to live with it...“Hey, come by the office, I’d be glad to see it”, you know?

Several physicians discussed their small town practices as having many benefits. They had the gratification of serving multiple generations in the same families, knew their patients in a holistic way, understood how important their services were to their communities, and felt valued and respected by them. The interview data bore out the findings from the survey data in terms of connection to their communities.

Most physicians, despite their candor and occasional discouragement about some of the problems they faced, were respectful and admiring of their patients.

Well...[here you see] the goodness of the people.

Very...good...hearted, basic, down-to-earth people. And...I’ve been a lot of places, you know, but...the...they’ll share anything
they got with you...you know...in the spring, greens [laughs] and...turkeys at Thanksgiving and...you know, all kinds of things.

My patients are my neighbors and they’re my friends and it’s just really special that you know you...go to open house at school and you see the kids you treat and their mamas, their teachers, and uh...it’s really a special thing.

Even when physicians in these vulnerable communities worry about issues associated with money, running a practice, and levels of reimbursement, they still see a bigger picture.

So there, there goes more money. [Laughs] So...you know...you do what you can. But what you get in return is totally immeasurable...you get love. You get gratitude. You get cooperation. You get people...who will pat you on the back and say “Hey, you’re my doctor”.

The intimate connection with their patients means that physicians in rural Mississippi feel that they understand their patients’ lived experiences. Physicians feel they understand where their patients are coming from, in terms of their capabilities and concerns—either through direct experience (for physicians who came back to their childhood communities to practice) or empathy (for physicians who responded to a calling to serve vulnerable places and people).

When they start talking about you know, picking butter beans or picking cotton or killing hogs, you know, I can relate and...know exactly what they’re talking about and can talk on that level with them.

They have to have the confidence in you as an individual that you have their best interest at heart but that you can relate to them. You don’t need to be this individual who’s almighty who has all the answers, and “Do it my way...or see somebody else”. You’ve got to be able to build that relationship over time, and it’s not that difficult but within a rural practice I think it’s very important. Some of the older rural patients, I mean, they have their ideas and you have to understand their ideas and you have to be...to an extent accepting of those ideas and work with it.
One young African American woman physician, recruited to the state, summed up her experiences practicing in Mississippi this way:

When I met the people here that I work with now who I would potentially be working with, they just seemed really like great guys. They saw a lot of stuff. They took care of really sick people. They just really seemed dedicated to what they did.

Not only did she value her Mississippi physician colleagues and the place she worked, but had pride in what physicians in the state can accomplish.

And I think the biggest thing is that this would be a much greater publicized place if it were located anywhere else in the country. If we did just what we do now, any other place besides Mississippi...it would count more. And it’s just because people discount Mississippi. I tell them, you know, it’s the same concept, that whole real estate thing: location, location, location. And despite the good that we do—part of the reason I think we can do so much good is because we’re in Mississippi, but I don’t think that people recognize it because we’re still fighting to matter. We’re still fighting to count. And I don’t think that until we matter more, will people really get it.

The circumstances of Mississippi’s physicians certainly reflect barriers and challenges, but opportunities and excellence as well. Physicians’ convictions about the benefits of working in Mississippi, pride in good medical practice, and a belief that Mississippi gets insufficient respect were recurrent themes in the physicians’ narratives. Sometimes, the undeniable magnitude of problems associated with health care access and delivery combined with unhealthy lifestyles experienced in many Mississippi communities are a routine part of the Mississippi physician workforce landscape. An exclusive focus on problems, however, means that there is a risk that routine good practice and excellence can be overlooked. The challenges of providing high quality health care to vulnerable populations are substantial, but so too is the talent and dedication of the many physicians who serve them. Nevertheless, the positive attributes and experiences of physicians in these communities cannot transcend the scope of challenges and barriers structured into the lives of vulnerable Mississippians or the shortcomings of
the Mississippi health care context. Those problems require fixes at a much more fundamental level than the experiences of individual physicians. These physicians are on the frontlines of medicine in Mississippi and they were happy to tell us about their challenges, but they also have a great deal of respect for their patients, which cannot be forgotten. Take this quote from an academic African American woman IMG:

Even when the patient is uneducated, you can find a very smart patient. Some patients you are talking to them and you think it’s going over their head, but I’ve had patients who come back and have repeated almost word for word what I told them. And it’s made me really humble, to say you know what do not look at a person because they are not educated, they’re not smart because when they find out that you care for them and that you’re interested and you’re trying to explain, they’re actually hang on to every word that you say to them. So I found some, you know two or three, that you think, oh they’re not listening to me, I’m just talking over their heads, and they’ll come back and they will relay exactly what you said. It’s made me very cautious, very careful about what I say to them so I don’t misspeak, but at the same time I should not think that because they do not have a high school education that they are not interested in their health, number one, they are if they find a physician who really takes the time to listen to them and examine them. They really want to get well and they will really listen to what you have to say, advice implement. Don’t think that because they are not high school educated that they are not interested in their health or not interested in what you’re saying. Some things you have to say it plainly. I have an accent, so I have to slowly say it. They hear what I have to say and they try to follow it, so do not underestimate the ability of the patient to comply with your recommendations just because they are not educated. The second thing I would say is just show that you care. Patients say this doctor didn’t do this. When I listen to the patient, I see where they are coming from. They say you know what, this doctor never listened to me or never even examined me or touch me. You might be a very smart physician, and you already know what it is, but just to touch them. Just simple things make the patient feel like you really care and they are ready to make changes because if they trust you, even if they have like four or five medicines they will take it because they trust you. And even if they have to make changes in their lifestyle, they will do that because they trust you. This doctor really cares, and I want to please, I want to do something good when I go to doctor next time. So
those are the two main things I would say that don’t feel that because they are poor and uneducated that they are not going to listen, they’re not going to want to comply. They want to be well too. They will listen and try to do as much as they can.
SECTION 6

DISCUSSION AND CONCLUSION

This is the final report in a three-part series of research manuscripts that respond to the need for more detailed articulation of the circumstances of health care provision in Mississippi. The analysis undertaken for this project provides a foundation for understanding a range of the broad-based experiences of Mississippi’s physicians. Further, the analyses distinguish differences in physicians’ experiences by spatial circumstances (rural versus urban and HPSA versus non-HPSA communities), personal characteristics (race, age, and gender) and perspectives associated with practicing in especially vulnerable practice locations that have the combined challenges of being simultaneously rural and underserved places.

Our analyses combine MSMD survey data with census data and MSBML data to provide insight into physicians’ differential perceptions concerning patient characteristics, practice characteristics, concerns about malpractice, relationships with both patients and physician colleagues, and measures of autonomy, satisfaction and work-life balance, including connections to the community. These items were compared by space (rural/urban, HPSA/non-HPSA) and demographic characteristic of physicians. Issues associated with race—race of provider, race of patient—are also considered, as are physician experiences in unusually vulnerable places in Mississippi.

Experiences Associated with Physician Characteristics

Findings from this research suggest that some experiences associated with becoming a physician and practicing medicine are shaped by the intersections between race, gender and career phase. For example, race and gender are significantly associated with physician perceptions of career...
advancement opportunities. Consider that, in Mississippi, 17 percent of women physicians are African American, but only three percent of men physicians are African American. These findings suggest that lingering obstacles to higher education and the professions manifest especially for African American men who may want to practice medicine in Mississippi. Barriers to advancement are perceived both by African American physicians and women physicians, and both demographic groups are under-represented in the Mississippi physician workforce. African American physicians are only half as likely as physicians of other races to perceive having the same opportunities for career advancement; women are half as likely as men to perceive advancement opportunities as equivalent. Times are changing, and opportunities for women and minority physicians have opened significantly in recent decades, but the legacy of historic underrepresentation in the medical profession still exerts influence on contemporary circumstances.

Women and African American physicians were likeliest to say they sometimes felt isolated from colleagues due to ethnic, cultural, or gender differences. Although the composition of the Mississippi physician workforce is changing, women and minority physicians work in a profession still undeniably dominated by Whites and men.

Variations are also noted by location in one’s career (as measured by age) in that younger physicians value collegial professional relationships, but those later in their career value patient relationships. The youngest doctors report the most call, but mid-career physicians report longer work hours and higher patient loads. Mid-career physicians were the most likely to be targeted in lawsuits in the 2004-2005 malpractice crisis, but later career physicians reported higher rates of being sued by 2006; somewhat inexplicably unrelated, the youngest doctors were the most likely to report practicing defensive medicine. Physicians in practice longer (40 to 59 and 60+) are more pessimistic about prospects for recruiting new physicians in general, but more optimistic about recruiting women and minority physicians. Mid-career physicians, compared to both older and younger colleagues, were more likely to disagree that: (1) their practices had enough resources or exam space, (2) their practices met their expectations, and (3) they were satisfied with the balance between patient care and administrative tasks. Mid-career physicians would be less likely to recommend a career in medicine to others, to choose medicine as a career if they could choose again, or to say they were satisfied with their careers. The longest-practicing physicians (60 and older) were the age group most likely to agree
that practicing medicine in Mississippi was pretty much like practicing medicine anywhere else.

Spatial Considerations

Comparing rural and urban physicians, we find that rural doctors are more likely to report being sued recently (even after tort reform) and (likely related to being sued more frequently) also report more frequently practicing defensive medicine. Although rural physicians are unique from their urban counterparts in terms of some measures of work-life balance and quality of professional relationships, urban and rural physicians in Mississippi have similar perceptions about patient relationships, concerns about recruiting physicians, resource availability and autonomy. Rural physicians do have a larger Medicare and Medicaid patient base compared to urban physicians, with rural physicians serving a greater proportion of elderly and poor patients. And, perhaps as obviously, urban physicians are more likely to value research opportunities while rural physicians are more likely to value their position as community role models.

For comparisons between physicians working in a HPSA-designated county and those who do not, a different set of divergences emerge (compared to the differences the analysis demonstrated between urban and rural physicians). HPSA physicians treat an average of 121 patients per week, while non-HPSA practitioners treat about 89 patients per week. Further, HPSA physicians treat more publicly insured patients (Medicare and Medicaid) than physicians who practice in areas that are not officially labeled as shortage areas. Non-HPSA providers are more likely than providers in underserved areas to recommend their community to future physicians.

Non-HPSA providers also report having better professional relationships with other physicians compared to physicians in HPSAs. However, the most frequently cited source of physician satisfaction, no matter whether a physician practiced in an underserved area or a community with more resources, was having high quality patient relationships.

When rural and HPSA locations are combined to assess vulnerable practice locations, we find that physicians who practice in vulnerable locations are more likely to have been born outside the United States, are slightly more likely to be men than women, are less likely to be White than non-white and about two years older on average, compared to physicians practicing in other locations. As for patient loads, physicians in vulnerable practice
locations have much heavier patient loads (124 patients per week in an
average week) than patient loads for other Mississippi physicians (89
patients per week in an average week), but they only report working one
extra hour per week in meeting that higher patient load and, therefore, are
more likely to report feeling stressed or having occasional burnout.

Physicians in vulnerable practice locations are more likely to serve publicly
insured patients, are more likely to have been sued and are more likely to
report practicing defensive medicine. There are fewer unique characteristics
between physicians in vulnerable locations and other locations when
considering issues related to their families and communities, their reports of
autonomy or prestige, or their specific concerns about career satisfaction.

While physicians throughout the state share broadly similar concerns that it
is generally tough to recruit physicians to practice in Mississippi, physicians
in vulnerable practice locations worry more than others about retaining
physicians in their communities. A number of federal and state programs
provide incentives for physicians to serve for a prescribed number of years
in health care shortage and rural areas, but once that period has expired,
physicians in those programs are free to practice where they prefer. Many
opt to leave the disadvantaged communities once their incentive program
obligations are fulfilled.

Non-physician colleagues were identified as particularly important sources of
support for physicians working in vulnerable practice locations. This reflects
spatial realities of practices in vulnerable areas—few physicians work in such
communities, making other health professionals the most salient
professional community. Physicians who practice in vulnerable locations are
also somewhat more likely to report that they feel isolated from patients due
to ethnic, cultural or gender differences than physicians who practice
elsewhere. This reflects a structural reality embedded in most incentive
programs, in that the physicians incentivized to practice in vulnerable
practice locations are disproportionately foreign-born.

**Physicians Concerns**

Physician concerns focused around several topics in the interviews:
recruitment and retention, generational differences, the future of family
medicine, the community integration of IMGs, race and gender issues within
the profession, and barriers to care. Essentially, the largest challenges faced
by rural physicians providing care in underserved areas focus on patient
access, enough time with patients, patient ability and interest in following treatment regimens. Physicians noted that their patients had issues associated with Southern culture and lifestyle, including particularly unhealthful diets and lack of exercise. The traditional barriers to care and healthy lifestyles—poverty, lack of education, and isolation—are what, in most physicians’ accounts, contribute most to the health vulnerabilities their patients endure.

Despite many challenges, physicians we interviewed had the gratification of serving multiple generations in the same families, knew their patients in a holistic way, understood how important their services were to their communities, and felt valued and respected by them.

**Conclusions**

This report reflects, in part, responses to mounting localized and national attention to issues surrounding disparities in health care in the U.S. and lack of diversity in the health care provider workforce, particularly among physicians. Of particular concern for this project are the funding agency’s concern with disparities in health and health care delivery among different segments of the U.S. population in general and Mississippi in particular. Mississippi is among the states experiencing the greatest risk to adverse health outcomes due to convergence of multiple determinants of population health disadvantages. This cumulative risk affects especially vulnerable groups including those living on low incomes, in rural and underserved areas, and/or who are member of racial or ethnic minority groups. Compounding these demographic-related vulnerabilities to risk, Mississippi also confronts an historic and chronic shortage of health care professionals and a workforce that has only in recent decades begun to diversify.

Where compensation is concerned, a large percentage of physicians in every group regard every form of reimbursement as inadequate, and the level of uncompensated care appears to be unmanageable for many of the physicians in our study. These perceptions of reimbursement are especially meaningful when considered in light of Mississippi’s physician recruitment and retention challenges. Yet the physicians we interviewed made it very clear that, while financial considerations associated with practice were important to them, the most vulnerable communities in Mississippi are served by physicians who are intrinsically motivated to serve. This is true even when the fiscal components of practice are less rewarding in their communities than might have been the case elsewhere.
Still, no matter how many nor how dedicated physicians are, there is only so much health care professionals can do about health outcomes that have their foundations in unhealthy communities. Many problems associated with health and health care in Mississippi have little to do with physicians, physician supply or health care providers’ experiences. Insofar as patients are concerned, chronic stress, racial segregation, mistrust, lack of knowledge, and social isolation/alienation also affect an individual’s motivation and capacity for making health-changing behaviors. Self-efficacy and the ability to embrace health-changing behaviors begin first with the individual belief that behavioral changes will have a positive effect on health. Individuals who experience economic deprivation, racial and community segregation, lack of social supports, and deprived educational resources may find it difficult to engage in healthy self-efficacious behaviors under any circumstances (Cockerham 2005; Geronimus et al. 2006). Public promotions that encourage adopting healthy lifestyles tend to make use of an individualistic approach toward health responsibility, seldom addressing the economic, social, cultural, and political determinants of health inequalities or the poverty and accompanying lack of opportunities that Phelan and Link (1995) identify as “fundamental causes” of poor health.

The findings in this report have some implications for Mississippi’s prospects for health care supply, since research indicates that physicians behave and make practice decisions based, in part, on their individual demographic characteristics and those demographic characteristics shape the types of communities where physicians want to practice. Undeniably, there are Mississippi communities with few enough amenities that it is difficult for any physician who does not feel a “calling” to practice medicine as a vocation to want to locate a practice there. It also emphasizes the need for Mississippi to “grow its own” physicians, a sentiment we heard echoed frequently by the American born physicians we interviewed. Findings also underscore the inevitable need to depend on the talented IMG physicians to sustain the provider supply in Mississippi’s vulnerable communities—physicians who may not relocate permanently, but whose interventions improve the lives of Mississippians while they are there.
REFERENCES


APPENDIX A:

2007/2008 MSMD Survey Instrument
The 2007 MSMD Survey

A survey on physician workforce, worklife, recruitment & retention.

To complete the survey on-line, you may proceed to www.ssrc.msstate.edu/2007MSMD, which has a link to the survey or go directly to https://snaponline.snapsurveys.com/siam/surveylanding/surveylogin.asp?k=116923170264.

This survey was funded by the Mississippi Physician Care Network, the Mississippi and American Academies of Family Physicians and the Social Science Research Center at Mississippi State University.
Welcome to the 2007 MSMD. Please write your User ID (Mississippi physician license number) to begin the survey.

1. Mississippi Physician License Number
This number is critical to track of response rates

All information you provide for the 2007 MSMD survey is strictly confidential and will be used only for research purposes. Your responses will only be released as aggregated data for the purpose of analysis and reporting. No data will be released that will permit the identification of any individual or individual characteristics. Once your data is entered in the 2007 MSMD database, the license number used to track responses is removed and replaced by an anonymous case ID number, de-identifying data received from study participants. We understand how important your privacy is and we safeguard it carefully.

Your participation is important for the quality of the study. If you have questions about the 2007 MSMD study, you can contact Dr. Jeralynn Cossman at Mississippi State University (662-325-3791, Lynne.cossman@msstate.edu). The Institutional Review Board at Mississippi State University reviewed this study protocol. If you have any questions about your rights as a participant in a research project, you should contact the MSU Institutional Review Board at 662-325-3294.

We know how valuable your time is and we appreciate your participation in this important research. Your participation is entirely voluntary and you may stop answering questions or withdraw from the survey at any time. There are no known risks for participating in this study. Completing the 2007 MSMD survey indicates that you understand the information you just read about the study and have consented to participate. We have adapted this paper survey from an internet version, consequently some questions are skipped in this version of the survey.

Throughout the survey, we use terms like “community” and “primary practice.” Please consider your “community” to be the area from which you draw your practice base. If you practice in a larger city, you might even consider your specific part of town. For your “primary practice” location or setting, please consider that as the place where you spend the most time and/or see the most patients. For some questions, we are asking your best estimate for the state as a whole; for others, thinking more specifically about your community is what we want to know.

For some of the items in the survey, you may not know the answer (DK) or the item may not be applicable (NA) to your circumstances. In those instances, please check the NA/DK box. And remember, if there are items that you prefer not to answer at all, you can skip those items entirely-although we hope you will agree to answer most of the questions.
DIRECT PATIENT CARE
Not all physicians licensed in Mississippi are currently providing direct patient care. In this first series of questions, we would like to find out whether you currently provide direct patient care in Mississippi or have done so in the past.

2. Do you currently provide direct patient care in Mississippi?
   - Yes, full-time (31 hours or more per week) *(Please skip to Question 10 on Page 3)*
   - Yes, part-time (at least 1 hour but no more than 30 hours per week) *(Please skip to Question 10 on Page 3)*
   - No (Not at all, or less than 1 hour per week)

3. Do you currently practice medicine in Mississippi, but not direct patient care?
   - Yes
   - No *(Please skip to Question 5 below)*

4. Please describe the nature of your practice.

______________________________________________________________________________________________________________________________________________________________________________

5. Did you ever provide direct patient care on a regular basis in Mississippi, excluding occasional emergencies?
   - Yes
   - No, never *(Please skip to Question 148 on Page 32)*

6. When did you last provide direct patient care in Mississippi on a regular basis? _________________ [four digit year]

7. Why did you stop providing direct patient care in Mississippi?

______________________________________________________________________________________________________________________________________________________________________________

8. Would you ever consider providing direct patient care in Mississippi again?
   - Yes
   - No

9. Please briefly explain why or why not.

______________________________________________________________________________________________________________________________________________________________________________
**EFFECTS OF HURRICANE KATRINA ON PHYSICIAN PRACTICES**

When Hurricane Katrina hit the Gulf Coast, many individuals and businesses were displaced by the storm. We are interested in knowing about experiences in your primary practice in the aftermath of the storm. There are no right or wrong answers to these questions. Your responses will likely be influenced by where in the state you were practicing medicine when Katrina hit.

10. **How was your practice affected by Hurricane Katrina?** *(NA/DK=not applicable, don't know)*

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did your practice have an influx of patients displaced by Katrina?</td>
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<tr>
<td>Did your practice lose existing patients due to Katrina?</td>
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<tr>
<td>Did your practice provide more uncompensated care post-Katrina?</td>
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<tr>
<td>Did your practice temporarily add a displaced physician?</td>
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<tr>
<td>Did you temporarily work in another practice, hospital or clinic?</td>
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<tr>
<td>Did your patients lose private health insurance due to the storm?</td>
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<tr>
<td>Were patient <strong>medical</strong> records destroyed?</td>
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<td></td>
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<tr>
<td>Were patient <strong>prescription</strong> records destroyed?</td>
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</table>

11. **Were you considered a first responder when Katrina hit in 2005?** *(check one)*

- Yes
- No
- NA/DK

12. **Was your primary practice located in a county that was designated a FEMA disaster area after Katrina?** *(check one)*

- Yes
- No *(Please skip to Question 20 on page 4)*
- NA/DK *(Please skip to Question 21 on page 4)*

13. **Which of the following describes what you did regarding your primary practice in the immediate aftermath of the storm?** *(check one)*

- I never left.
- I left and have now returned to permanent practice in the area.
- I left and plan to return to practice in the area in the future. *(Please skip to Question 16 on page 4)*
- I left and I have no plans to return to practice in the area. *(Please skip to Question 19 on page 4)*

14. **What percent of your patient base was in the area:**

   - One month post-Katrina? _________ %
   - One year post-Katrina? _________ %
15. Please describe the immediate unmet needs for health care providers in the area where you were in primary practice.

_________________________________________________________________________________________________________________
_________________________________________________________________________________________________________________

Please skip to Question 21 on page 5.

16. What have you done in the meantime since being displayed by Katrina?

_________________________________________________________________________________________________________________
_________________________________________________________________________________________________________________

17. If you have not yet done so, when do you plan to return permanently to that area?

_________________________________________________________________________________________________________________
_________________________________________________________________________________________________________________

18. What remains to be done before your permanent return?

_________________________________________________________________________________________________________________
_________________________________________________________________________________________________________________

19. If you have not returned, what have you done instead of practicing in your original pre-hurricane community?

_________________________________________________________________________________________________________________
_________________________________________________________________________________________________________________

Please skip to Question 21 on page 5.

In the immediate aftermath of Katrina (within one month) did you leave your usual primary practice location to provide short term help in Katrina-affected areas? (check one)

- [ ] Yes
- [ ] No
- [ ] NA/DK
PRACTICE AND PATIENT ISSUES

We’re shifting gears a bit now, away from the focus on last year’s disaster to more general information about Mississippi’s health care environment for physicians.

21. In what year did you begin practicing medicine in Mississippi? ________ [four digit year]

22. Excluding problems related to Hurricane Katrina, what would you say are the biggest challenges or most important issues that Mississippi physicians face right now?
   1. ________________________________________________________________________________________________________
   2. ________________________________________________________________________________________________________
   3. ________________________________________________________________________________________________________

We are also interested in how your own medical practice is organized.

23. Please fill in the number for each type of health care provider in your primary practice setting, including yourself.
   Primary Care Physicians ______
   Specialist Physicians ______
   Nurse practitioners ______
   Registered nurses ______
   Other nurses (LPNs, RLPNs) ______
   Dieticians/Nutritionists ______
   Psychologists ______
   Occupational therapists ______
   Other ______
   (please specify "other") ____________________________
24. Which of the following best describes your primary practice’s use of electronic medical records for at least some patient record keeping? *(check only one)*

- I (we) already use electronic medical records.
- Plans are well along for implementation of electronic medical records.
- I (we) have no plans to use electronic medical records at this time.
- I (we) would like to use electronic medical records if resources were available.
- I (we) need more information to decide if electronic medical records are right for the practice.

25. Do you, personally, use a computer or computer-like device for…

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving lab results, x-rays, hospital records</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Updating electronic medical records</td>
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<tr>
<td>Looking up information about treatment alternatives</td>
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<tr>
<td>Sending prescriptions to pharmacies</td>
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<tr>
<td>Communication with patients</td>
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<td></td>
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<tr>
<td>Taking courses for CME credits</td>
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<tr>
<td>Providing care via telemedicine</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

*(please specify "other")

For the following items, please select the answer that best reflects your own experiences with patients in your primary practice setting.

26. Please estimate the number of patients you personally see in your primary practice setting in an *average week*, excluding patients seen while on call. Approximately: ___________ patients per week

27. Please describe the *dominant* patient population you served in your primary practice setting. *(check all that apply)*

- Inner city
- Urban/suburban
- Small town
- Rural
- Geographically isolated/remote
- Other

*(please specify "other")

________________________________________________________
28. Thinking about the patients you see in your primary practice, please indicate the best response for each of the following statements. (NA/DK=not applicable, don’t know)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have enough time to spend with patients during a typical office visit.</td>
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<tr>
<td>I have the freedom to make clinical decisions that meet my patients’ needs.</td>
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<tr>
<td>It is possible to provide high quality care to all of my patients.</td>
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<td>[ ]</td>
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<td>[ ]</td>
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<tr>
<td>I can make clinical decisions in my patients’ best interests without reducing my income.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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<td>[ ]</td>
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<tr>
<td>The level of communication I have with specialists about the patients I refer to them is sufficient to ensure the delivery of high quality care.</td>
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<tr>
<td>The level of communication I have with primary care physicians about the patients they refer to me is sufficient to ensure the delivery of high quality care.</td>
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<tr>
<td>It is possible to maintain the kind of continuing relationships with patients over time that promote the delivery of high quality care.</td>
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</tbody>
</table>

29. What percent of your patients.....(note: these do not need to sum to 100%)

- have complex or numerous medical problems? ________ %
- have complex or numerous psycho-social problems? ________ %
- have substance abuse problems? ________ %
- are generally frustrating to deal with? ________ %

30. In your own capacity to accept new patients (not including your partners or other physicians in your practice), do you accept ANY new patients at all?

- [ ] Yes
- [ ] No (Please skip to Question 32 on page 8)
- [ ] NA/DK (Please skip to Question 32 on page 8)
31. **In your own capacity to accept new patients, do you accept:**

<table>
<thead>
<tr>
<th>Type of Patient</th>
<th>Yes</th>
<th>No</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>New patients with specific medical problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New patients with limited medical problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New referrals from other physicians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family members of current patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends of current patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Medicaid patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Medicare patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients from other public programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New uninsured patients</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

32. **How would you assess the general availability of health care services in Mississippi, other than the services you provide? Is your opinion that the quantity and quality of services and professionals listed below are **sufficient** or **insufficient** at the state level for Mississippi residents? (Check the best answer for each)**

<table>
<thead>
<tr>
<th>Service</th>
<th>Sufficient</th>
<th>Insufficient</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care physicians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist physicians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatrists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OB/GYNs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthopedic surgeons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women physicians for patients who prefer them</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority physicians for patients who prefer them</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family physicians accepting new patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anesthesia services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency room services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-emergency hospital admissions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital bed availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiotherapy services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational therapy services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term care bed availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community nursing services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-patient mental health care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out-patient mental health services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health care in patient’s language</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
33. In the last 12 months, have any of the following conditions changed for patients in your community?  

<table>
<thead>
<tr>
<th>Condition</th>
<th>Large Increase</th>
<th>Small Increase</th>
<th>No Change</th>
<th>Small Decrease</th>
<th>Large Decrease</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>How far patients travel for primary care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How far patients travel for specialty care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How far patients travel for surgical procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting times for patient appointments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting times in the emergency room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting times for specialist referrals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interruptions in continuity of primary care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of health insurance coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For each item above that you indicated changed in Question 33, please indicate the main reason for the change.

34. If you indicated there had been a change in how far patients travel for primary care in your community over the past 12 months, what was the primary reason for this change?
   - Hurricane aftermath
   - Physician supply
   - Malpractice issues
   - Other (Please specify): _______________________________________________________

35. If you indicated there had been a change in how far patients travel for specialty care in your community over the past 12 months, what was the primary reason for this change?
   - Hurricane aftermath
   - Physician supply
   - Malpractice issues
   - Other (Please specify): _______________________________________________________

36. If you indicated there had been a change in how far patients travel for surgical procedures in your community over the past 12 months, what was the primary reason for this change?
   - Hurricane aftermath
   - Physician supply
   - Malpractice issues
   - Other (Please specify): _______________________________________________________

37. If you indicated there had been a change in waiting times for patient appointments in your community over the past 12 months, what was the primary reason for this change?
   - Hurricane aftermath
   - Physician supply
   - Malpractice issues
   - Other (Please specify): _______________________________________________________
38. If you indicated there had been a change in waiting times in the emergency room in your community over the past 12 months, what was the primary reason for this change?
   □ Hurricane aftermath
   □ Physician supply
   □ Malpractice issues
   □ Other (Please specify): _______________________________________________________

39. If you indicated there had been a change in waiting times for specialist referrals in your community over the past 12 months, what was the primary reason for this change?
   □ Hurricane aftermath
   □ Physician supply
   □ Malpractice issues
   □ Other (Please specify): _______________________________________________________

40. If you indicated there had been interruptions in continuity of primary care in your community over the past 12 months, what was the primary reason for this change?
   □ Hurricane aftermath
   □ Physician supply
   □ Malpractice issues
   □ Other (Please specify): _______________________________________________________

41. If you indicated there had been loss of health insurance coverage in your community over the past 12 months, what was the primary reason for this change?
   □ Hurricane aftermath
   □ Physician supply
   □ Malpractice issues
   □ Other (Please specify): _______________________________________________________
For the next questions, we are not asking about your own practice, but rather about your opinion of patients’ experiences with the Mississippi health care system in general. Based on your own impressions, please indicate whether it is harder for some Mississippians to get health care than others.

42. How often would you say a patient’s ability to get **routine medical care** when needed is **limited** when the patient is:

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely/Never</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>...a man?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a woman?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a race/ethnic minority individual?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a poor person?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a low income person (but not &quot;poor&quot;)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

43. How often would you say that a patient’s ability to get **specialized treatment or services** is **limited** when the patient is:

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely/Never</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>...a man?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a woman?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a race/ethnic minority individual?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a poor person?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a low income person (but not &quot;poor&quot;)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44. How often would you say that a patient lacks **any kind of health insurance** to pay for medical care if the patient is:

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely/Never</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>...a man?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a woman?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a race/ethnic minority individual?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a poor person?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...a low income person (but not &quot;poor&quot;)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

45. Please do your best to estimate what percentage of patients in your own primary practice use each of the following forms of payment for health care you provide (estimate should total 100 %)

- Medicare __________ %  
- Medicaid __________ %  
- Child Health Insurance (SCHIP) __________ %  
- Private health insurance __________ %  
- Self-pay/Cash __________ %  
- Charity/uncompensated care __________ %  
- Other (please specify ____________________ ) __________ %  

Total 100 %
47. Do you have any special concerns regarding accepting or treating patients whose care is paid by Medicare?

_________________________________________________________________________________________________________________
______________________________________________________________________________________________________________

48. Do you have any special concerns regarding accepting or treating patients whose care is paid by Mississippi Medicaid?

_________________________________________________________________________________________________________________
______________________________________________________________________________________________________________

CHANGES IN PRACTICE
Conditions for physicians practicing in Mississippi can sometimes change very quickly. The next series of questions seeks information on how your primary practice setting may have changed in recent years.

49. How long have you been providing care in your current primary practice setting?_______________years

50. During the past two years, have you made any major changes to your practice, such as moving your practice location, changing specialty, changing the scope of your practice, changing your work hours, or retiring?
   □ Yes
   □ No (Please skip to Question 65 on page 14)
   □ DK/NA (Please skip to Question 65 on page 14)
51. During the past two years, have you made any of the following major changes to your practice?

<table>
<thead>
<tr>
<th>Change</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>I moved to the US from another country.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I moved to MS from another state.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I relocated within MS.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I changed specialty.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I narrowed work within my specialty.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I reduced my scope of practice (e.g. stopped OB or surgical procedures).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I expanded my scope of practice (e.g. added OB or surgical procedures).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I reduced my work hours.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I increased my work hours.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I changed discipline or retrained.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I changed practice settings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I retired.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I made another major change in my practice.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

52. If during the past two years, you made at least one of the major changes listed in the question you just answered, what was the most important reason for the change?

- Better practice environment
- More professional opportunities
- Opportunities for higher income
- Lower professional liability insurance rates
- Better medical malpractice climate
- Minimize malpractice risk
- Losses associated with hurricane
- Mid-career adjustment
- Personal/family issues
- Other (please specify) ________________________________________________________
- DK/NA
65. **During the next two years**, do you plan to make any **major** changes to your practice, such as moving your practice location, changing specialty, changing the scope of your practice, changing your work hours, or retiring?

   - Yes
   - No *(Please skip to Question 80 on Page 15)*
   - DK/NA *(Please skip to Question 80 on Page 15)*

66. **For each of the items listed below, please indicate whether you plan to make such a change in the **next two years**.**

<table>
<thead>
<tr>
<th>Change Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>I plan to relocate from the US to another country.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to relocate from MS to another state.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to relocate my practice within MS.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to change my specialty.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to narrow work within my specialty.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to reduce my scope of practice (e.g. stop OB or surgical procedures).</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to expand my scope of practice (e.g. add OB or surgical procedures).</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to reduce my work hours.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to increase my work hours.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to change disciplines or retrain.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to change practice settings.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to retire.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I plan to make another major change.</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

67. **During the next two years**, if you plan to **make a major change to your practice**, what would be the most important reason for this planned change?

   - Better practice environment
   - More professional opportunities
   - Opportunities for higher income
   - Lower professional liability insurance rates
   - Better medical malpractice climate
   - Minimize malpractice risk
   - Losses associated with hurricane
   - Mid-career adjustment
   - Personal/family issues
   - Other *(please specify)* *(please specify)*
   - DK/NA
TIME ALLOCATION/SCOPE OF WORK
For the following items, please give your best estimate about how you spend practice time and tasks you perform in the course of your professional duties. When we refer to on-call, we mean time outside of regularly scheduled clinical activity during which you are available to patients.

80. In a typical year, how many weeks do you spend on each of the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing clinical services</td>
<td></td>
</tr>
<tr>
<td>Away from practice for CME purposes</td>
<td></td>
</tr>
<tr>
<td>On vacation</td>
<td></td>
</tr>
<tr>
<td>Other <em>(please specify ______________________)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52</td>
</tr>
</tbody>
</table>

82. In a typical week, about how many hours do you spend on professional activities, not including on-call time? ___________ hrs/wk

83. In a typical week, excluding call, about what percentage of your work time is spend on each of the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing primary care to patients</td>
<td></td>
</tr>
<tr>
<td>Providing specialty care to patients</td>
<td></td>
</tr>
<tr>
<td>Management of practice</td>
<td></td>
</tr>
<tr>
<td>Utilization review</td>
<td></td>
</tr>
<tr>
<td>Legal consultation</td>
<td></td>
</tr>
<tr>
<td>Other <em>(please specify ______________________)</em></td>
<td></td>
</tr>
</tbody>
</table>

85. Do you participate in on-call activities?
   - Yes
   - No *(Skip to Question 89 on Page 16)*
86. Do your on-call activities involve the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrical call?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical call?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurosurgery call?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-call for hospital patients?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-call for non-hospitalized patients, phone only?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-call for non-hospitalized patients, phone and in person?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency room call?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other? (please specify __________________)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

87. Estimate your average number of on-call hours in a typical month. ________________________ hours/month

88. Average on-call hours in a typical month requiring direct patient care. ________________________ hours/month

PERSONAL/FAMILY LIFE

The research literature on the professions shows that most physicians work hard to maintain a work/life balance that feels right for them. The items in this section of the survey ask for your impressions relating to work/life balance. There are no right or wrong answers; please select the most appropriate answer for you.

89. Please choose the single item that most closely represents how you feel. (check one)

   - I enjoy my work. I do not feel burned out.
   - Occasionally I am under stress, and I don’t always have as much energy as I once did. But, I don’t feel burned out.
   - I am definitely burning out and have one or more symptoms of burnout, such as physical or emotional exhaustion.
   - The symptoms of burnout that I’m experiencing won’t go away. I think about frustrations at work a lot.
   - I feel completely burned out and often wonder if I can go on. I am at the point where I may need to make some changes or may need to seek some sort of help.

90. Do you have any minor dependents or children for whom you provide direct personal care or supervision? (check one)

   - Yes
   - No (Skip to Question 92 on Page 17)
   - NA/DK (Skip to Question 92 on Page 17)

91. To how many minor dependents or children do you provide care? ________________________ children under 18 years of age.
92. Do you provide direct personal care or supervision for any adults, such as adult disabled children or elderly parents? (check one)
   - Yes
   - No (Skip to Question 94 below)
   - NA/DK (Skip to Question 94 below)

93. To how many adults do you provide care? __________________________ adults who need care.

94. If you had one choice, what would you say about the balance of your personal and professional commitments? Would you say the balance is… (check one)
   - About right
   - Need more time for family
   - Need more time for career
   - Need more time for self

PROFESSIONAL SATISFACTION AND PERCEPTIONS

95. Please rank these sources of professional satisfaction, from 1 (most important) to 4 (least important). Please use each rank only once.

   High income
   Substantial intellectual challenge
   Good patient relationships
   Congenial practice environment
## Practice Relationships

Professionals like you have a wide range of experiences relating to practice, professional satisfaction and community relationships. There are no right or wrong responses. Simply select the responses ranging from strongly agree to strongly disagree that are most appropriate for you and your unique experiences. (NA/DK=not applicable, don’t know)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel a strong personal connection to my patients.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-physicians in my practice support my professional judgment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often feel like what I do for my patients is just a drop in the bucket.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>My physician colleagues are a source of professional stimulation.</td>
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<tr>
<td>Many patients demand potentially unnecessary treatments.</td>
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<tr>
<td>I get along well with my physician colleagues.</td>
<td></td>
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<tr>
<td>My non-physician colleagues are a major source of support.</td>
<td></td>
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<tr>
<td>Time pressures keep me from developing good patient relationships.</td>
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<tr>
<td>My physician colleagues value my unique perspective in practice.</td>
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<tr>
<td>I am overwhelmed by the needs of my patients.</td>
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<tr>
<td>My physician colleagues are an important source of personal support.</td>
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<tr>
<td>My relationship with patients is more adversarial than it used to be.</td>
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<tr>
<td>It is easy to communicate with physicians with whom I share patients.</td>
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<tr>
<td>Many of my colleagues do not share my life experiences.</td>
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<tr>
<td>I am having a positive impact on a socio-economically disadvantaged population.</td>
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<tr>
<td>I wish there were more doctors like me in my practice.</td>
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<tr>
<td>My colleagues support my efforts to balance family and career responsibilities.</td>
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<tr>
<td>Non-physicians in my practice reliably carry out clinical instructions.</td>
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<tr>
<td>I am isolated from my patients because of ethnic, cultural or gender differences.</td>
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</tbody>
</table>
## AUTONOMY AND PRESTIGE

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to set the pace of my own work.</td>
<td></td>
<td></td>
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<tr>
<td>I need to work in an area where I have research opportunities.</td>
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<tr>
<td>I find my present clinical work personally rewarding.</td>
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<tr>
<td>In my practice, it often feels like bureaucrats are second-guessing me.</td>
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<tr>
<td>The responsibility of being a role model for others is a burden.</td>
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<tr>
<td>Clinical guidelines restrict my freedom to practice.</td>
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<tr>
<td>Recognition of the importance of my work and my profession is critical.</td>
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</tr>
<tr>
<td>I am isolated from my colleagues because of ethnic, cultural or gender differences.</td>
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<tr>
<td>I can keep patients in the hospital as long as is medically necessary.</td>
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<tr>
<td>I am not well-compensated, given my training and experience.</td>
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<tr>
<td>Formularies or prescription limits restrict the quality of care I can provide.</td>
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<tr>
<td>Career advancement opportunities are available to me in the same ways as they are available to colleagues.</td>
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<tr>
<td>I am well-compensated compared to physicians in other specialties.</td>
<td></td>
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<tr>
<td>Outside reviewers rarely question my professional judgments.</td>
<td></td>
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<tr>
<td>All things considered, I am satisfied with my career as a physician.</td>
<td></td>
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<tr>
<td>I would recommend medicine to others as a career.</td>
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<tr>
<td>My specialty no longer has the appeal to me it used to have.</td>
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<tr>
<td>If I were to choose over again, I would not become a physician.</td>
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<tr>
<td>My specialty does not provide the security it once did.</td>
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<tr>
<td>In general, practice in my specialty has met my expectations.</td>
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</tbody>
</table>
## Cost of living in a community is an important consideration for where I want to work.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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</table>

My family and I are strongly connected to the community where I work.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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</table>

Mississippi taxes are a burden.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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</table>

People from elsewhere don’t realize Mississippi is a great place to live.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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</table>

I feel a sense of belonging to the community where I practice.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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<tbody>
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<td></td>
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</table>

My work schedule leaves me enough time for my family.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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<tbody>
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</table>

Local amenities, like parks, shopping, and cultural events, are important in deciding where I want to work and live.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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</table>

The interruption of my personal life by work is a problem.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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</table>

I do not feel at home in the community where I practice.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
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<tbody>
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<td></td>
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</table>

Living in close proximity to parents and/or extended family is important to me.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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</table>

Practicing medicine in Mississippi is not much different from practicing in other states.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

I feel respected by the community where I practice.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

My spouse (or partner) supports my career.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Work rarely encroaches on my personal time.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
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<tbody>
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</tbody>
</table>

High quality schools are important in deciding where I want to work and live.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

I am proud to practice medicine in Mississippi.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
### 99. PRACTICE CONDITIONS

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>My practice has adequate resources for me to do my work.</td>
<td></td>
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</tr>
<tr>
<td>Paperwork required by payers is a burden to me.</td>
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<tr>
<td>Medical supplies are not always available when I need them.</td>
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<tr>
<td>I have enough exam space to see my patients.</td>
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<tr>
<td>My total compensation package is not adequate.</td>
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<tr>
<td>Competition with other physicians is a threat to my financial future.</td>
<td></td>
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<tr>
<td>There are too few support staff in my practice.</td>
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</tr>
<tr>
<td>In my opinion, I am expected to take too much call.</td>
<td></td>
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</tr>
<tr>
<td>My work in this practice has met my expectations.</td>
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</tr>
<tr>
<td>I am satisfied with the balance of time I spend on patient care versus administrative tasks.</td>
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</tbody>
</table>

### 100. Practicing physicians commonly face pressures related to their medical practices. Please indicate whether or not you have experienced these pressures and whether they have affected your practice.

<table>
<thead>
<tr>
<th>Pressure</th>
<th>I do not feel pressure</th>
<th>I feel pressure, does not affect care</th>
<th>I feel pressure, it affects care</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel pressure to see more patients per day.</td>
<td></td>
<td></td>
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<tr>
<td>I feel pressure to limit the number of tests I order.</td>
<td></td>
<td></td>
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<tr>
<td>I feel pressure to limit referrals to specialists.</td>
<td></td>
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<tr>
<td>I feel pressure to limit what I tell patients about treatment options.</td>
<td></td>
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</tbody>
</table>

### 101. How much control do you have over each of the following?

<table>
<thead>
<tr>
<th>Control</th>
<th>None</th>
<th>Some</th>
<th>Much</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>The physicians to whom you refer patients.</td>
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<tr>
<td>When to admit patients to the hospital.</td>
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<tr>
<td>Length of patient hospital stays.</td>
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<tr>
<td>The specific medications patients receive.</td>
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<tr>
<td>Details of your primary practice or clinic schedule.</td>
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<tr>
<td>Which diagnostic tests you order.</td>
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</tr>
<tr>
<td>The volume of paperwork you have to do.</td>
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<tr>
<td>The hours you work.</td>
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<tr>
<td>Volume of your patient load.</td>
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<tr>
<td>Pre-authorization for patient services.</td>
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</tbody>
</table>
102. How likely would you be to recommend to someone graduating from medical school that they practice in...

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Not Very Likely</th>
<th>I would not recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>your specialty?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>your community?</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Mississippi?</td>
<td></td>
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</tr>
</tbody>
</table>

103. What is your opinion on giving the general public a performance measure (i.e., a report card) on each of the following elements of the Mississippi health care system?

<table>
<thead>
<tr>
<th></th>
<th>Favor</th>
<th>Neutral</th>
<th>Oppose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health plans</td>
<td></td>
<td></td>
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<tr>
<td>Medical groups/practices</td>
<td></td>
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<tr>
<td>Hospitals</td>
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<tr>
<td>Individual physicians</td>
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<tr>
<td>Other</td>
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</table>

Please specify ____________________________
MALPRACTICE ISSUES

Medical malpractice is an issue of nearly constant interest for physicians in Mississippi. Until the 2004 professional liability reforms, state and national physician organizations characterized Mississippi as a “crisis state” with respect to medical malpractice litigation and professional liability insurance. Reforms enacted in 2004 were intended to address the Mississippi "medical malpractice crisis." We’re interested in your perceptions about issues related to medical malpractice and professional liability insurance both before and after Mississippi professional liability reform.

104. First, we have some general questions regarding malpractice concerns. How often (never, seldom, sometimes, often, regularly/daily) do concerns about malpractice liability cause you to…

<table>
<thead>
<tr>
<th>Concern</th>
<th>Never, almost never, less than once a year</th>
<th>Seldom, less than once in 6 months</th>
<th>Sometimes, about once a month</th>
<th>Often, at least once a week</th>
<th>Regularly, daily or almost daily</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order more tests than you would based on your professional judgment of what is medically needed?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Prescribe more medications, such as antibiotics, than you would based only on your professional judgment of what is medically needed?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Refer patients to specialists more often than you would based only on your professional judgment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Suggest invasive procedures, such as biopsies, to confirm diagnoses more often than you would based only on professional judgment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Avoid personally conducting certain procedures or interventions?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

POST-REFORM QUESTIONS

105. After state professional liability reform to improve the malpractice climate in Mississippi in 2004, did the way you get your primary layer liability insurance change? Remember, this pertains only to the post-reform period.

☒ No it has not changed. (Please skip to Question 107 on page 24)
☒ Yes, my insurance coverage changed.

Number times changed since 2004: __________
106. For each change in professional liability insurance carrier or coverage source since 2004, please give a brief description of the change (e.g., "My insurance company stopped writing policies so I found another," "I switched from the state insurance pool to hospital coverage," "I initially self-insured but switched to an insurance carrier," etc.)

_________________________________________________________________________________________________________________

_________________________________________________________________________________________________________________

_________________________________________________________________________________________________________________

107. The Mississippi legislature reformed professional liability laws in the fall of 2004. Since that time, what typical annual premium changes have you experienced for your professional liability insurance?

☐ Rates decreased
☐ Rates remained about the same
☐ Rates increased less than 25% annually
☐ Rates increased 25% - 50% annually
☐ Rates increased 51% - 100% annually
☐ Rates increased more than 100% annually
☐ NA/DK

108. In your opinion, did recent reforms addressing medical malpractice and professional liability solve the problems Mississippi physicians had faced during the medical malpractice crisis?

☐ Almost all of them
☐ Some
☐ A few
☐ None
☐ NA/DK

109. In your opinion, what is the best way to address malpractice issues? Please check the single answer that best reflects your perspective.

☐ Uniform practices across the country, regulated by the federal government
☐ State level regulation
☐ Self-regulation through physicians’ professional associations
☐ System is fine as it is
☐ Other (Please specify __________________________________________________________)
110. Are you currently covered by professional medical liability insurance?
   - Yes
   - No (Please skip to Question 113 below)
   - NA/DK (Please skip to Question 114 below)

111. How do you get your primary layer professional liability insurance (first $500,000 of coverage)?
   - Through a hospital that you are employed by
   - Through a hospital that you are affiliated with
   - Directly from an insurance carrier, either individually or though your practice/group
   - State pool
   - Self-insured
   - Other (please specify ________________________________)

112. How much of a financial burden is your current professional liability insurance premium?
   - Not a burden at all (Please skip to Question 114 below)
   - Minor burden (Please skip to Question 114 below)
   - Major burden (Please skip to Question 114 below)
   - Extreme burden (Please skip to Question 114 below)

113. Why are you not currently covered?

_________________________________________________________________________________________________________________

114. We recognize that being named in a lawsuit does not reflect on the excellence of a physician’s practice. For each year please estimate how many medical/professional lawsuits you were named in relating to your medical practice in Mississippi. (If you practiced in Mississippi and were not named in a lawsuit, enter '0'; if you did not practice in Mississippi, leave blank.)
   2004_______
   2005_______
   2006_______

115. What was your most recent annual malpractice premium, in dollars? $________________________/year

116. What do you expect to pay for your next annual malpractice premium, in dollars? $________________________/year
117. Are you a neurosurgeon practicing in Mississippi?
   - Yes
   - No (Please skip to Question 119 below).

118. As a neurosurgeon practicing in Mississippi:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you ever stop performing brain surgery?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Did you ever stop performing spinal surgery?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Did you ever stop taking call?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you currently perform brain surgery?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you currently perform spinal surgery?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you currently take call?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

119. Have you ever provided maternity and newborn care?
   - Yes
   - No (Please skip to Question 133 Page 28)

120. As a provider of maternity/newborn care:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you ever stop providing maternity care?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Did you ever stop providing newborn care?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you currently provide maternity care?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Do you currently provide newborn care?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

121. When did you stop delivering babies? ____________________________ [four digit year]

122. Please rate the importance of each of the following factors in your decision to stop delivering babies.

<table>
<thead>
<tr>
<th>factor</th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of backup coverage for C-sections</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Time demands/personal life</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Medical liability premiums</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Experience with lawsuit(s)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Lack of demand</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Low level of reimbursement</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Lack of interest in continuing this type of care</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other (please specify __________________________)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
123. Please estimate the number of deliveries in the past 12 months. ____________ births.

124. Please describe your involvement in maternity and newborn care. Do you provide:

<table>
<thead>
<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared care: Provide antenatal care, then make referrals?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Intrapartum care in addition to prenatal care?</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

If no, please skip Question 133 on page 28.

125. Which of the following do you provide?

<table>
<thead>
<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum extractions</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Mid-forceps and rotations</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Low forceps</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cesarean section, primary surgeon</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cesarean section, assists</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>High-risk pregnancies or deliveries</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Deliveries to Medicaid beneficiaries</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

If yes, please answer Question 126 below.

126. Vacuum extractions

127. Mid-forceps and rotations

128. Low forceps

129. Cesarean section, primary surgeon

130. Cesarean section, assists

131. High-risk pregnancies or deliveries

132. Deliveries to Medicaid beneficiaries

In the coming 12 months, do you plan to continue providing……

<table>
<thead>
<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum extractions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Mid-forceps and rotations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Low forceps</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cesarean section, primary surgeon</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cesarean section, assists</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>High-risk pregnancies or deliveries</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Deliveries to Medicaid beneficiaries</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
WORKFORCE ISSUES: SUPPLY, RECRUITMENT, RETIREMENT, RETENTION

This section is concerned with identifying key issues related to physician workforce recruitment and retention in Mississippi.

133. The following items concern your perceptions of the practice climate in Mississippi. Please rate, from poor to excellent, each of the items relating to the practice climate in Mississippi.

<table>
<thead>
<tr>
<th>Item</th>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruiting new physicians.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Retaining experienced physicians.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Recruiting minority physicians.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Retaining experienced minority physicians.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Recruiting women physicians.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Retaining experienced women physicians.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Medicaid reimbursement rates.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Medicare reimbursement rates.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Private insurance reimbursement rates.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Manageable amount of uncompensated care.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Medical malpractice conditions.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Availability of liability insurance.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

134. How difficult would you say it is to recruit physicians to work in Mississippi?

☐ Easy to recruit  
☐ Moderate  
☐ Difficult to recruit  
☐ NA/DK  

135. In your opinion, what is the single most effective means of recruiting new physicians?

☐ Recruiter  
☐ Internet job advertisement/on-line job board  
☐ Journal or print ad  
☐ Networking/word of mouth  
☐ Residency program participants  
☐ Other (please specify ________________________________________________________________)

29
136. Since tort reform in 2004 addressed medical liability, how has the supply of physicians been in your community (too few, just right, too many)?

<table>
<thead>
<tr>
<th>Professional Type</th>
<th>Too Few</th>
<th>Just Right</th>
<th>Too Many</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing physicians overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority physicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women physicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family practitioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General surgeons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurosurgeons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetricians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency room doctors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other specialists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International medical graduates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

137. Since tort reform in 2004 addressed medical liability, would you say the supply has increased, stayed about the same, or decreased?

<table>
<thead>
<tr>
<th>Professional Type</th>
<th>Increased</th>
<th>Stayed about the same</th>
<th>Decreased</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing physicians overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority physicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women physicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family practitioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General surgeons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurosurgeons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetricians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency room doctors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other specialists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International medical graduates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

138. On average, about how many months would you estimate it takes to recruit a physician to your type of practice in your area of the state? About ________________ months.

139. Are physician supply issues a problem for you/your practice?

- [ ] Yes
- [ ] No
- [ ] NA/DK
140. Have you attempted to recruit any new physicians to your practice in the last three years?
   - Yes
   - No
   - NA/DK

141. Please write your concerns about issues surrounding the recruitment or retention of physicians in general, or any specific types of physicians, including family physicians, specialists, minority physicians, women physicians, and/or foreign-trained physicians.

142. How difficult would you say it is to recruit the types of non-physician health professionals listed below to work in Mississippi?

<table>
<thead>
<tr>
<th>Health Professional</th>
<th>Easy to Recruit</th>
<th>Moderate</th>
<th>Difficult to Recruit</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other health professionals</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

143. Since tort reform in 2004 addressed medical liability, how has the supply of non-physician health professionals been in your community (too few, just right, too many)?

<table>
<thead>
<tr>
<th>Health Professional</th>
<th>Too Few</th>
<th>Just Right</th>
<th>Too Many</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified nurse midwives</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Chiropractors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
144. Please indicate the extent to which you agree or disagree with each of the following items concerning nurse practitioners.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employing a nurse practitioner to provide primary care increases a physician’s chance of being sued for malpractice more than hiring a staff nurse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse practitioners should be allowed to practice independently in underserved areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse practitioners provide lower-quality primary care than physicians.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiring a nurse practitioner can attract new patients to a practice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of a lower-cost nurse practitioner is unfair to other physicians in the area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse practitioners can provide 80 percent or more of the primary care services of a physician.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse practitioners should be allowed to prescribe commonly used drugs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients are willing to see a nurse practitioner for some of their primary care.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse practitioners bring a different yet positive dimension of care to a physician’s practice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employing a nurse practitioner would increase a physician’s time for activities other than patient care.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse practitioners are not needed to improve access to primary care services in rural areas.</td>
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<tr>
<td>Nurse practitioners are practical as physician extenders when immediate supervision is provided by a physician.</td>
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</tbody>
</table>

145. To what extent do you think the supply of non-physician health professionals (thinking mainly of nurse practitioners, certified nurse midwives, chiropractors, and physician assistants) in your community affects your professional security?

- Enhances security
- Threatens security
- Has no effect on my security
- NA/DK

146. To what extent do you think the expanded scopes of practice for non-physician health professionals affects your professional security?

- Enhances security
- Threatens security
- Has no effect on my security
- NA/DK
147. Have you attempted to recruit any new non-physician health professionals to your practice in the last three years?
   - Yes
   - No
   - NA/DK

DEMOGRAPHICS, EDUCATION AND COMPENSATION

148. What is your sex?
   - Male
   - Female

149. Are you of Hispanic origin or descent?
   - Yes
   - No
   - NA/DK

150. What do you consider to be your race?
   - White/Caucasian
   - African-American/Black
   - Asian
   - American Indian/Native American
   - Other (please specify) _______________________________________________________

151. What is your marital status?
   - Single, never married
   - Married
   - Divorced or separated
   - Widowed
   - Other (please specify) _______________________________________________________

152. In what year were you born? ______________________ [four digit year]
153. Which of the following items best describe your history in Mississippi? (check all that apply)
   - Graduated from high school in Mississippi
   - Graduated from college in Mississippi
   - Attended medical school in Mississippi
   - Completed internship, residency, or fellowship training in Mississippi
   - Began practice in Mississippi immediately after training in another state
   - Moved to Mississippi from practice in another state
   - Other (please specify) ____________________________

154. When did you begin medical practice (after completing medical training, including residencies and fellowships, and licensing)? ____________________________ [four digit year]

155. How many offices have you held and committees have you served on in Mississippi state professional associations over the past five years? Your best estimate is fine.
   ____________________________ offices/committees

156. Were you born in the United States?
   - Yes
   - No (Please skip to Question 158)

157. What was your state of birth? ____________________________ (Please skip to Question 159)

158. In what country were you born? ____________________________

159. What was your student loan debt load when you completed your medical training?
   - None
   - $19,999 or less
   - $20,000-39,999
   - $40,000-59,999
   - $60,000-79,999
   - $80,000-99,999
   - $100,000-119,999
   - $120,000-139,999
   - $140,000-159,999
   - $160,000-179,999
   - $180,000-199,999
   - $200,000 or more
160. Did you participate in any incentive programs related to your medical education, licensure, or practice that encouraged you or required you to practice in Mississippi?

- Yes
- No (Please skip to Question 162 below)
- NA/DK (Please skip to Question 162 below)

161. In which incentive programs that encouraged or required you to practice in Mississippi did you participate?"

_____________________________________________________________________________________________________________

PAYMENT / COMPENSATION / PROFESSIONAL INCOME

162. In your current position, are you salaried or are you the solo or part-owner of the practice where you work? (check single answer)

- Salaried
- Self-employed (solo or part owner of practice)
- Other (please specify) __________________________________________

163. Please look at the categories below and select the best category for your total annual income from your medical activities in 2006. [We are interested in your own net income from the practice of medicine, after expenses but before taxes. Please include contributions to retirement plans made for you by the practice and any bonuses as well as fees, salaries and retainers. Exclude investment income. Also, please include earnings from ALL practices, not just your primary practice. This information will be reported only in aggregate form to ensure confidentiality.]

- $59,999 or less
- $60,000-79,999
- $80,000-99,999
- $100,000-119,999
- $120,000-139,999
- $140,000-159,999
- $160,000-179,999
- $180,000-199,999
- $200,000-249,999
- $250,000-299,999
- $300,000-349,999
- $350,000-399,999
- $400,000-449,000
- $450,000-499,999
- $500,000 or more
Thank you for taking the time to complete our survey. Your responses are extremely valuable to us. We will be combining your responses with those of other Mississippi physicians, analyzing the results, and producing a report that will be made available to the public. If you would like to receive this report or if you have comments or questions about the survey, please contact Dr. Cossman by e-mail at Lynne.Cossman@msstate.edu or by telephone at 662-325-3791.
APPENDIX B: Physician Interview Schedule

Research Question:

Here’s the information sheet that describes the study, you should keep that. And you should be aware that you can decline to answer any questions, although of course we hope you are willing to answer all of them. But you should feel comfortable saying no if you prefer to decline any question.

The research question we’re trying to address with this interview is:
What unique challenges and opportunities do physicians face in adequately and appropriately serving rural Mississippians?

I’d like to tape record this interview with your permission (yes or no, take notes if no). What I’ll do is turn the tape recorder on and put it on the table/desk/between us. When the red light right there is lit, we are recording. If you want to go off the record, just let me know and I’ll stop the recorder until it is okay with you to go back on the record.

At the beginning of the interview, I will say “this is Lynne Cossman doing an interview with “your license number” only for identification purposes. When we transcribe we will replace that with an anonymous CASEID. We have almost as many rules as HIPPA about protecting privacy.

Interview questions:

1. First of all, could you tell me a little bit about how you decided to practice in rural Mississippi?

2. Is there anything notable about your patient base, other than the fact that it’s rural?
   
   Is it easy to provide them culturally appropriate care? (I don’t mean anything special by that, just wondering how easy or hard it is to sort of “meet patients where they are”, you know, in terms of their income, background, health care beliefs, that sort of thing).

3. Do you think that there have been any benefits or drawbacks to your practice or patients of you being a [woman, African American, rural, as appropriate] physician? Probes: could you give an example?

4. Are there any obvious barriers to recruiting and retaining physicians like you to practice in rural Mississippi? Could you give me an example? Do you think any of them are related to being [black, woman, IMG, whatever they are] who practices medicine? Could you tell me more about that?
5. How about health care delivery in your community? Any obvious changes that could improve that for your practice or patients? Could you tell me more about that?

6. Those are all the questions I have. **Can you think of any other information I should have if I am to really understand the perspective of a [woman, minority, rural] physician whose practice and patients are rural Mississipians?**

Thanks so much, you’ve been incredibly generous with your time. I know the data you provided will be very helpful for us getting the big picture. Ask if you can contact them again to follow up if you need to, or if they will be sure to send back their survey if they haven’t yet.