

Variations in the Career Expectancy of Mississippi Physicians:

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## **Extended Abstract**

The United States has been facing looming physician shortages for several decades, but Mississippi has been experiencing extensive physician shortages. Mississippians are in desperate need of health care, and an adequate supply of physicians is necessary to ensure appropriate access to health care. While measures of access to care include more than the availability of physicians, physician shortages hinder residents from obtaining routine care easily, which in turn may magnify health disparities, as individuals may postpone care until they encounter severe health problems. A shortage of primary care physicians is not only detrimental to individual health, but it is also harmful to the economic and social structure of the communities involved.

Physician career longevity is shaped by a work and retirement patterns, which vary based on individual and community characteristics. Undoubtedly, individual characteristics and contextual experiences both factor into physician decisions to leave practice. Understanding these characteristics and how they differ across physician subgroups seems vital in developing physician recruitment and retention strategies. Due to physician shortages, recruitment and retention have become critical issues in the medical community, especially since physicians in their first three years of practice are at greatest risk of leaving practice (NEJM 2007).

Understanding physician career expectancy may be one step in relieving Mississippi's physician shortage. The objective of this research is to determine the current expected career life of actively practicing physicians in Mississippi using data on the state's current active physician workforce. Furthermore, this research assesses variations in the current career expectancy of Mississippi physician subgroups by considering characteristics such as gender, race, practice specialty, and practice county type.

Data were obtained from the Mississippi Physician Workforce Database to construct abridged career life tables for Mississippi physicians. Career age, or number of years licensed to practice medicine in Mississippi, was calculated based on the date that medical licensure was obtained in Mississippi. Physician population was defined as the number of physicians who either applied for licensure or renewed their medical license in 2009, who identified a primary practice location within Mississippi, and who was involved in active patient care of at least 20 hours per week. The number of physicians exiting medical practice in Mississippi, or “exiters”, was defined as licensed physicians who engaged in at least 20 hours per week of patient care and claimed a primary practice location in Mississippi in 2008, but who had either not renewed their medical licensure with the Mississippi Board of Medical Licensure in 2009, did not claim a primary practice location in Mississippi in 2009, or did not engage in patient care at least hours per week in 2009.

In 2009, career expectancy at career entry was 21.9 years for all physicians. Overall, career expectancy for primary care physicians is higher than that for specialists in all career age intervals. Likewise, in all career age intervals, the career expectancy of men physicians is higher than that of women physicians, and the expected career life of white physicians is higher than that of non-white physicians. In general, women physicians, non-white physicians, and physicians in health professional shortage areas experience the lowest career expectancy. Across all physician population subgroups, the first five years of practice are the most critical in terms of physician retention. While Mississippi broadly needs improved strategies for physician recruitment and retention due to the demand for more physicians, this analysis suggests that such strategies need to target non-white physicians, women physicians, and physicians practicing in health professional shortage areas.

Future research should seek to compare the career expectancy of Mississippi physicians, as well as the variations by physician subgroups, to the career expectancy of other U.S. physicians. Additionally, future research should examine changes in career expectancy of Mississippi physicians over time, particularly since the Mississippi physician workforce has become more diverse in recent years.