

ISSUE BRIEF HEALTH CARE SYSTEM PERFORMANCE

What Mississippi Indicators Reveal

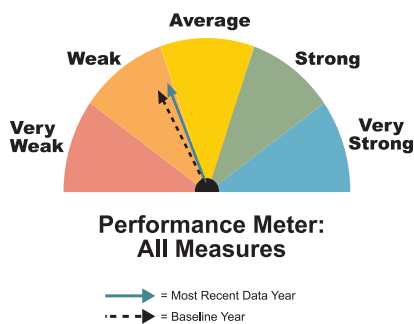
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National indicators rank Mississippi below most states on several health system performance measures. This issue brief summarizes findings from a report on Mississippi's health system performance indicators and associated policy implications to provide insight into opportunities for improvement in the state's health care system. The report is available at www.mshealthpolicy.com.

In 2001, the Institute of Medicine released *Crossing the Quality Chasm*, a report that shed light on national health care system performance concerns. Health system performance indicators are now routinely examined by several organizations nationwide and within some states. Mississippi consistently scores "weak" relative to the other states on broad health care system performance measures. If Mississippi could improve its health system performance measures to that of the best performing state, according to one report by The Commonwealth Fund, the result would have been 12,046 fewer hospitalizations, saving \$67 million in 2009 alone.

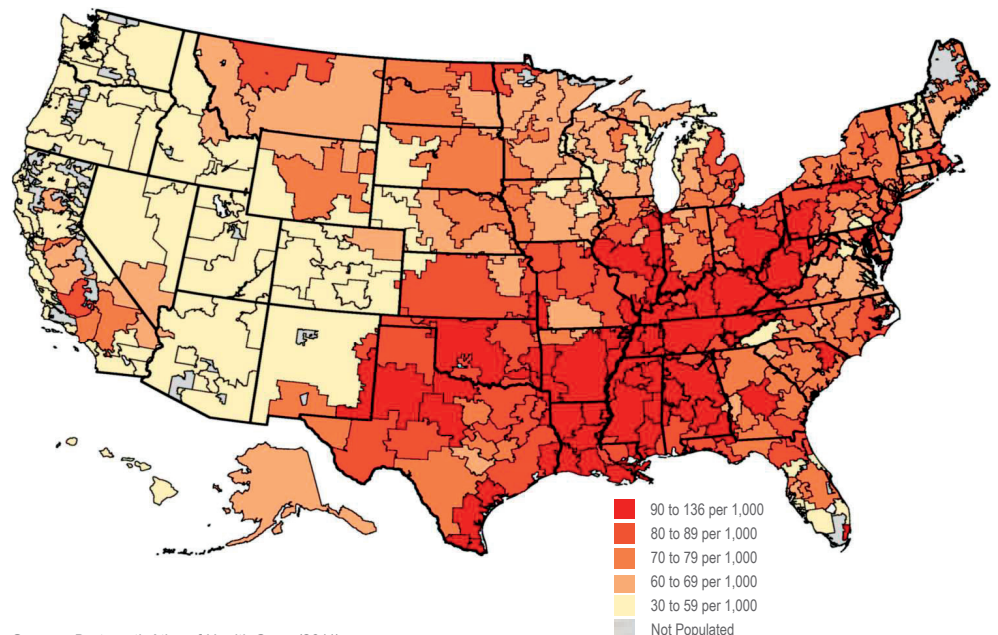
National measures indicate that hospital care for complications of common conditions that may be avoided by timely outpatient care, or "ambulatory care sensitive conditions," is higher in Mississippi compared to national rates (Figure 1). When seen regularly in a primary care setting by health care professionals who can provide comprehensive care, these individuals can often avoid hospitalization. Improving the quality of care patients receive can also reduce complications that may lead to permanent, life-altering consequences.

MISSISSIPPI HEALTH SYSTEM PERFORMANCE DASHBOARD, 2010 & 2011



Source: Agency for Healthcare Research and Quality. (2011).

FIGURE 1. AVOIDABLE HOSPITALIZATION RATES PER 1,000, 2003-2007



Source: Dartmouth Atlas of Health Care. (2011).

Indicators of Performance: Diabetes As An Example

TYPES OF COMPREHENSIVE OUTPATIENT PRIMARY AND PREVENTIVE CARE

MEDICAL TESTING AND SCREENING

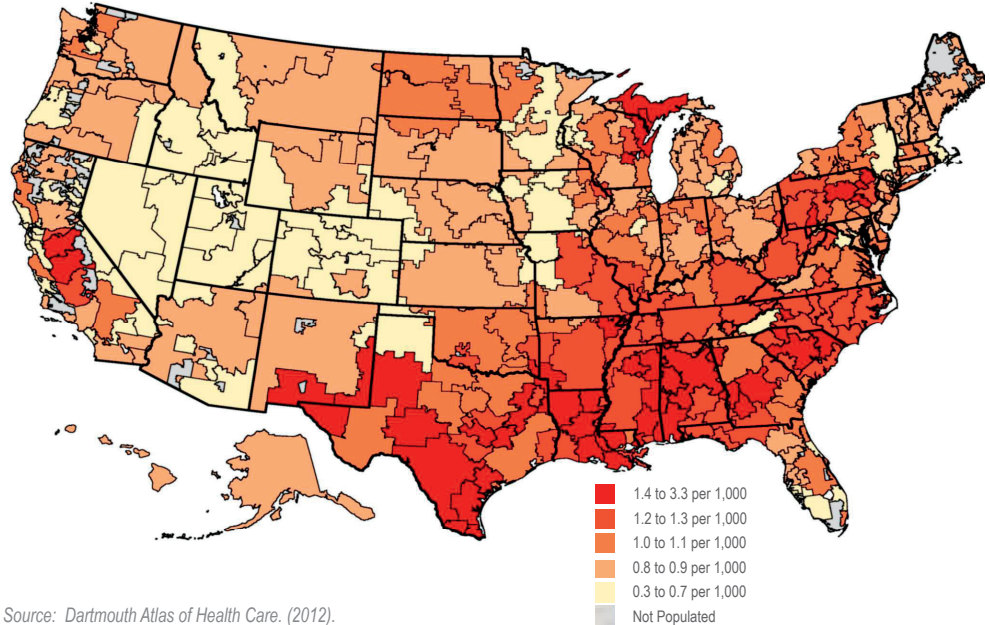
EDUCATION ON SELF CARE

MEDICATION MANAGEMENT AND TIMELY VACCINATIONS

COORDINATED INTERDISCIPLINARY TEAMS OF HEALTH CARE PROVIDERS

Mississippi's high rate of leg amputations serves as an example of the severe health consequences (Figure 2) that can result when there is a lack of consistently coordinated, high quality outpatient care. Research shows enhanced primary health care, including ongoing monitoring of diabetes related conditions, results in statistically significant ($p < .05$) declines in foot and leg amputations.

FIGURE 2. LEG AMPUTATION RATES PER 1,000, 2003-2007



Source: Dartmouth Atlas of Health Care. (2012).

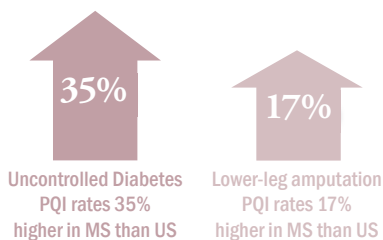
High rates of such conditions can indicate inadequate access to comprehensive preventive or primary care within the health care system. Research shows enhanced primary health care, including ongoing monitoring of diabetes related

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conditions, results in statistically significant ($p < .05$) declines in foot and leg amputations.

Mississippi has top prevalence rates of diabetes as well as one of the lowest hemoglobin A1c testing rates, a measure for diabetes control. Less than half (49%) of Mississippians diagnosed with diabetes report seeing a health professional regularly for their diabetes care.

To help focus on the specific areas where the health care system can achieve higher quality care using less costly health services, the Agency for Healthcare Research and Quality (AHRQ) developed measures based on hospital inpatient admissions for certain preventable conditions. The measures, termed Prevention Quality Indicators (PQIs), serve to indicate the use of preventive and primary outpatient care. Lower PQI rates tend to indicate higher quality outpatient care.



To examine where Mississippi stands relative to the nation, Mississippi PQI rates were calculated from inpatient hospital data by the State Department of Health for common conditions, including diabetes. PQI rates for each preventable condition were all significantly ($p < .01$) higher in Mississippi than national rates, including uncontrolled diabetes and lower-leg amputations by 35 percent and 17 percent, respectively. The use of hospital care for complications of chronic illnesses and

other preventable conditions is also higher in Mississippi when compared to the national rates. Other indicators of the use of preventive and primary care show lower utilization of these health services in Mississippi. This points to a health care system heavily weighted toward later stage, acute care at a higher cost. When combined with greater prevalence of disease and lower use of primary and preventive care services, the resulting poor health outcomes create a burden on state resources in terms of excess disability and health costs.

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What Models Exist for Improving Health System Performance?

COORDINATED STATE STRATEGIES TO IMPROVE HEALTH SYSTEM PERFORMANCE

- PROVIDER WORKFORCE DEVELOPMENT
- HEALTH SERVICES PAYMENT REFORM
- CHANGES IN HEALTH CARE DELIVERY
- ENHANCEMENT OF DATA SYSTEMS TO MEASURE PERFORMANCE

Several states have been working over the years to improve the performance of the health care system. A review of their experience shows that the efforts have been comprehensive and collaborative in approach. New health care delivery models, such as patient-centered medical homes and accountable care organizations, are being driven by payers such as Medicare as they transition from fee-for-service payment systems to methods that reward improved health outcomes.

Health care providers across the nation are adapting in a variety of ways also, reassessing staffing and technology needs, implementing electronic health records, and changing health care practice patterns. This dynamic environment provides an opportunity to examine how these changes can shift Mississippi's health care system toward prevention and primary care rather than continuing to manage the consequences resulting from delays in care.

Studies published in the last decade document improved health care performance measures for patients with diabetes by using a collaborative, team-based approach. A study of patients with advanced diabetes in the Mississippi Delta showed significant improvement in markers for disease control, sustained over the long-term (Figure 3). This project serves as an example of what the state can do to address health care performance measures through systematic, coordinated care. Health outcomes improve through collaborative and consistent provision of high quality outpatient preventive and primary care.

State efforts to improve health system performance have been comprehensive and collaborative in approach.

FIGURE 3. MISSISSIPPI DELTA DIABETES COORDINATION OF CARE STUDY PERFORMANCE RESULTS, 2007

CONDITION	PERFORMANCE OF CARE RESULTS FOR MEASURES OF DISEASE CONTROL
Diabetes	Levels of hemoglobin A1c lowered significantly over 5 year period. Eye exams for risk of blindness significantly increased over 1 year period.
Heart Disease	Levels of blood pressure lowered significantly over 1 year period. Levels of fat in the blood lowered significantly over 1 year period.

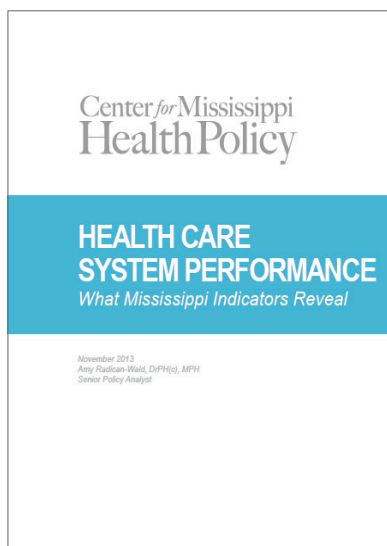
Source: Low, et al. (2007). *Ethnicity and Disease*, Vol. 17: S2-55-59.

Policy Considerations

The National Academy for State Health Policy, an organization with years of experience working with state governments to improve health system performance, recommends that states work on the following actions to strengthen health system performance and improve health outcomes:

- Increase providers trained in primary and preventive care to enable better disease management options of health conditions
- Alter payment systems to provide incentives for improved outcomes rather than provisions of higher volume and higher intensity of health care services
- Encourage expansion of patient care coordination and multi-disciplinary services to manage diseases through initiatives including patient-centered medical home and accountable care organization models
- Incorporate health professionals in service delivery planning and payment system changes
- Accelerate adoption of electronic health records to improve health care coordination and monitor performance improvement
- Periodically review additional data needs and enhance data systems to support performance improvement measurement
- Enhance current performance measurement development by participating in reporting on core health quality measures to Medicare

Research indicates that increased collaboration would accelerate the state's progress in improving its health care system performance scores. While there is considerable activity by a variety of organizations in many of these areas, Mississippi lacks a comprehensive, coordinated set of strategies as described for some of the other states. Mississippi can benefit from lessons learned by those who have tested these strategies, both within and outside the state.



Download the report from the Center's web site at www.mshealthpolicy.com

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