

#### **Research Objective**

- Examine Prevention Quality Indicators (PQIs) for community hospitals in Mississippi as compared to PQIs for the United States. Determine strategies for improving quality
- of the health care system in Mississippi.

#### Methods

Qualitative	Quantitative
<ul> <li>Stakeholder scan with the following health care leaders:</li> <li>Payers</li> <li>Providers</li> <li>Health Officials</li> </ul>	<ul> <li>Mississippi PQI data analyses.</li> <li>United States PQI data analyses.</li> <li>Literature review on the following:         <ul> <li>legislation</li> </ul> </li> </ul>

- nalyses. nited States PQI ata analyses. iterature review on he following:
- legislation research
- best practices

#### **Study Population**

- Preventable hospitalizations of Mississippi patients in 2010 (n = 40,753) from all payer hospital billing claims at discharge for the following conditions defined by the Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators (PQIs):
  - Diabetes Conditions (n = 6,150)
  - Lung Conditions (n = 9,282)
  - Heart Conditions (n = 14,251)
  - Infection Conditions (n = 11,070)

#### Heart Condition PQI Rate Differences Figure 1. Mississippi vs. United States, 2010

**Admission Rate\*** 

Rate\*

# Figure 2. Diabetes Condition PQI Rate Differences Mississippi vs. United States, 2010

Lower-extremity amputation rates in patients with diabetes\*

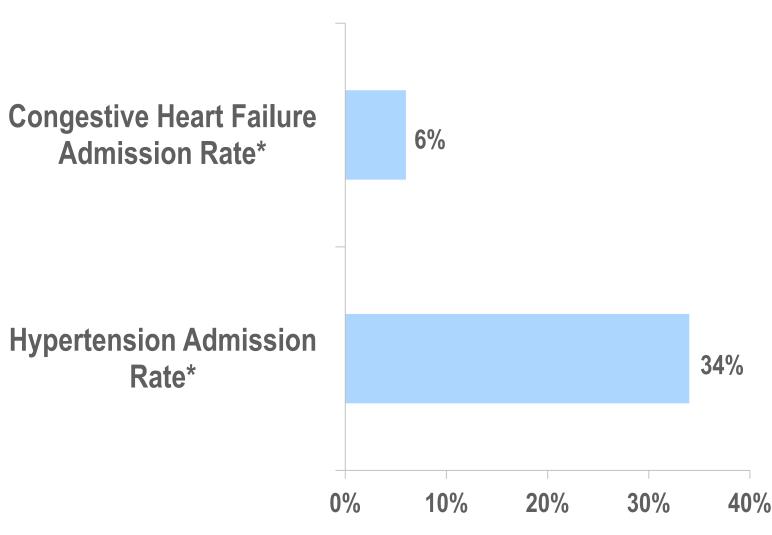
**Diabetes long-term** complication admission rates\*

**Diabetes short-term** complication admission rates\*

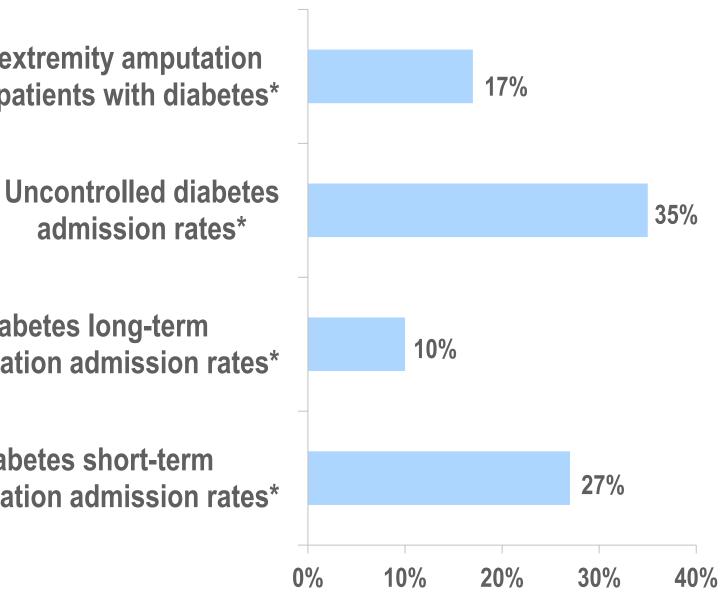
# WHAT HEALTH QUALITY INDICATORS IN MISSISSIPPI **REVEAL ABOUT THE HEALTH CARE SYSTEM**

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### **Principal Findings**



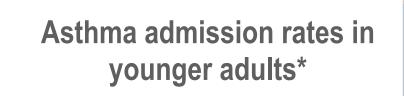
Source: Mississippi Hospital Discharge Data & AHRQ Quality Report., 2010. \*Note: Percent difference is statistically significant at p<.05.



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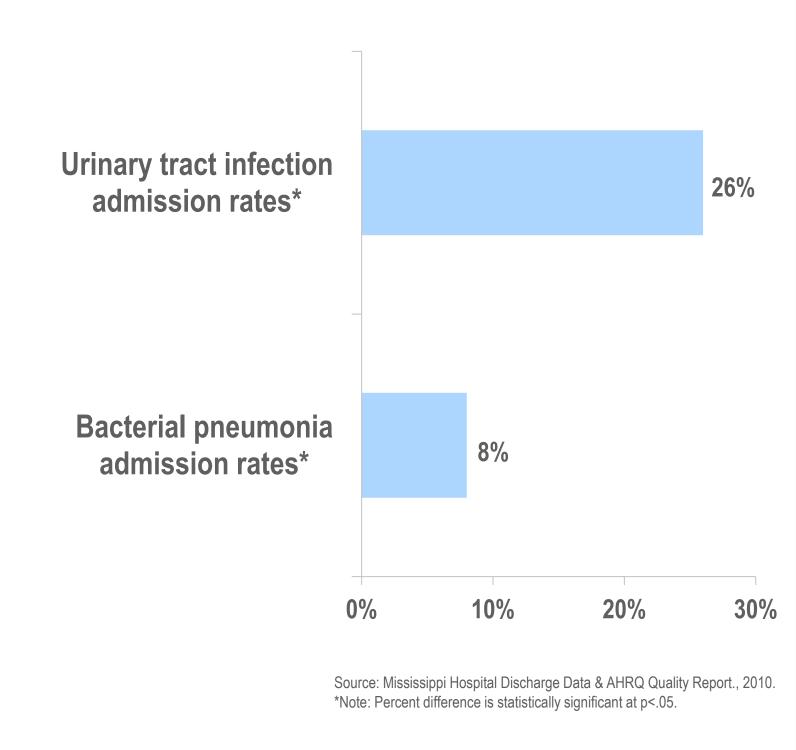
#### **Principal Findings**

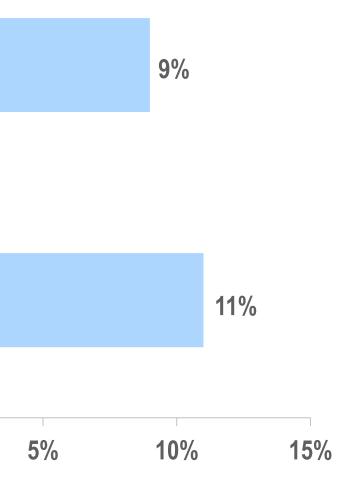
# Figure 3. Lung Condition PQI Rate Differences Mississippi vs. United States, 2010



**Chronic Obstructive** Pulmonary Disease or Asthma admission rates in older adults\*

# Figure 4. Infection Condition PQI Rate Differences Mississippi vs. United States, 2010



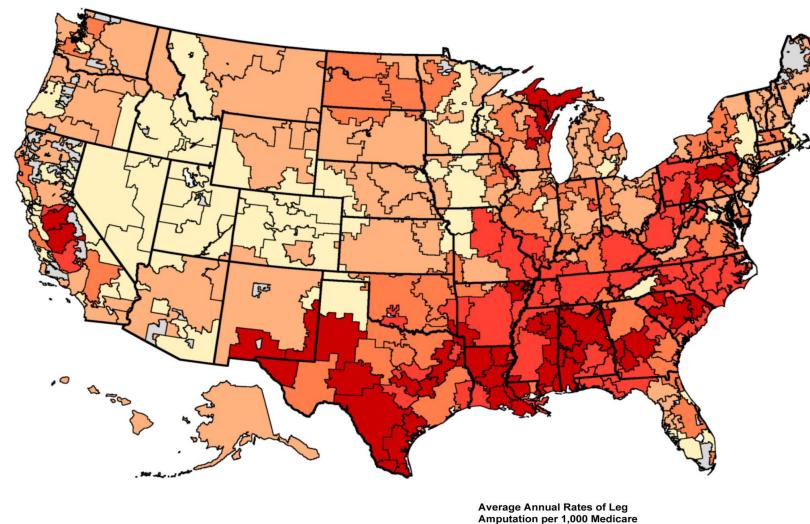


Source: Mississippi Hospital Discharge Data & AHRQ Quality Report., 2010.

# **Principal Findings**

- Literature shows relationships between state quality health care rankings, Medicare health care spending, and health workforce. In Mississippi, these relationships are found to be as follows:
  - Low state ranking for health care quality
  - High levels of Medicare spending
  - High per capita physician specialists
  - Low per capita primary care providers
- Examination of Mississippi's health system shows low utilization of primary care and high utilization of acute care.
- Mississippi has low penetration of managed care, low investment in public health, and high burden of chronic health conditions.
- For example, Mississippi has high rates of of leg amputations (Figure 5), an indicator of poorly controlled diabetes.

# Figure 5. Leg Amputation Rates in Medicare Enrollees per 1,000, 2003-2007



Source: Dartmouth Atlas of Health Care, Dartmouth Institute for Health Policy and Clinical Practice, 2013.

y Hospital Referral Region (2003-07

1.4 to 3.3 (45)

 $\begin{array}{c} 1.2 \text{ to } < 1.4 \quad (53) \\ 1.0 \text{ to } < 1.2 \quad (69) \\ 0.8 \text{ to } < 1.0 \quad (85) \end{array}$ 

0.3 to < 0.8 (54)

Not populated

#### Conclusions

Mississippi's health care system is heavily weighted toward high cost, tertiary acute care. Changes in health care are occurring rapidly and require adapting to new rules/structures. Opportunity exists to shift the health care system toward high quality preventive care rather than managing delayed care outcomes.

#### **Policy Considerations**

Research shows some of the following interrelated, coordinated policies can work in concert to improve health care quality:

- Increase providers trained in primary and preventive care to enable better disease management of certain acute and chronic conditions.
- Incorporate health professionals in planning care delivery and payment system changes.
- Alter health payment systems to provide incentives for improved outcomes rather than rewarding higher volume of health care services.
- Accelerate adoption of electronic health records to provide clinicians with the tools needed to improve health care coordination and monitor quality improvement.
- Periodically review data on performance of the health care system, determine additional data needs, and enhance data systems to support ongoing quality improvement.
- Enhance quality measurement by reporting core quality measures for Medicaid-eligible adults to the Centers for Medicare and Medicaid. (CMS).

#### **Contact information**

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