HIDI HealthStats
Statistics and Analysis From the Hospital Industry Data Institute

JANUARY 2015 ■ **A TWO-PART SERIES ON WOMEN'S HEALTH – PART ONE: THE IMPORTANCE OF HEALTH INSURANCE COVERAGE**

Key Points:

- Uninsured women are often diagnosed with breast and cervical cancer at later stages when treatment is less efficacious.
- Insurance status is associated with improved mental and financial health, as well as increased productivity and higher lifetime earnings.
- According to the most recent U.S. census data, 15 percent of all women under age 65 in Missouri are uninsured.
- Expanding coverage to 138 percent of the poverty level through the Medicaid program or private market-based options would reduce the uninsured rate for women in Missouri from 15 percent to 7.7 percent.
- Uninsured Missouri women visited a hospital emergency room or were admitted as inpatients on 308,000 occasions, which resulted in $1.17 billion in medical charges during 2013.

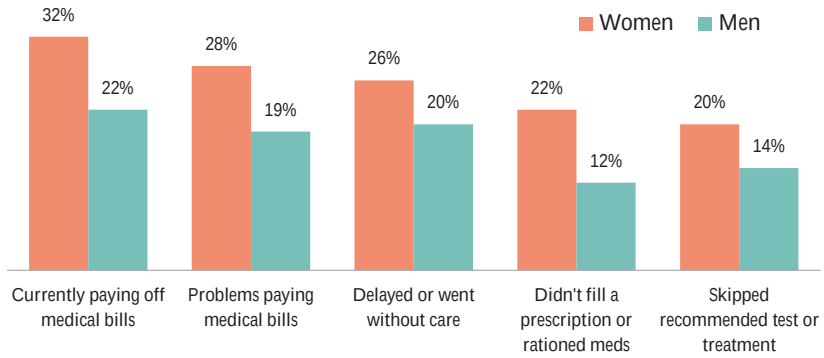
HOSPITAL INDUSTRY DATA INSTITUTE
The Data Company of the Missouri Hospital Association

Background

Health insurance coverage plays a critical role in the health status of women. Having coverage expands affordability and access to health care services. In addition to limiting access to care, women without health insurance coverage often experience lower standards of care when it is accessed, and face disparities in their health outcomes. Women who have health insurance coverage also utilize critical preventive care services such as mammographies and pap tests at significantly higher rates than women without coverage.[i] As a result, breast and cervical cancer are often diagnosed at later stages among uninsured women when treatment is less efficacious. Uninsured women also are unable to benefit from prenatal care at the same rate as women with insurance, which results in poorer health outcomes for their children.[ii]

Aside from myriad physical health benefits, insurance status is also associated with improved mental and financial health, as well as increased productivity and higher lifetime earnings. Women without health insurance are 31 percent more likely to be diagnosed with depression, five times more likely to have catastrophic medical spending and 58 percent more likely to be forced to borrow money to pay bills or skip payments because of unanticipated medical costs.[iii] Also, they face a significantly higher cost-related burden of health care compared to men in terms of paying off existing debt, delaying or skipping needed medical care and rationing or not filling prescription medications (Figure 1).[iv] The relationship between health insurance, health outcomes and workforce productivity is referred to as health human capital. The positive association between health and productivity produces short- and long-term gains in both compensation and productivity through fewer work days lost to illness, higher marginal productivity of labor and longer life expectancy.[v]

Figure 1: The Gender Gap in Medical Cost Burden



Note: Ages 18-44. Each category features a statistically significant higher rate for women, p<.05.
Source: KFF, 2013 Kaiser Women's and Men's Health Surveys.

Uninsured Women In Missouri

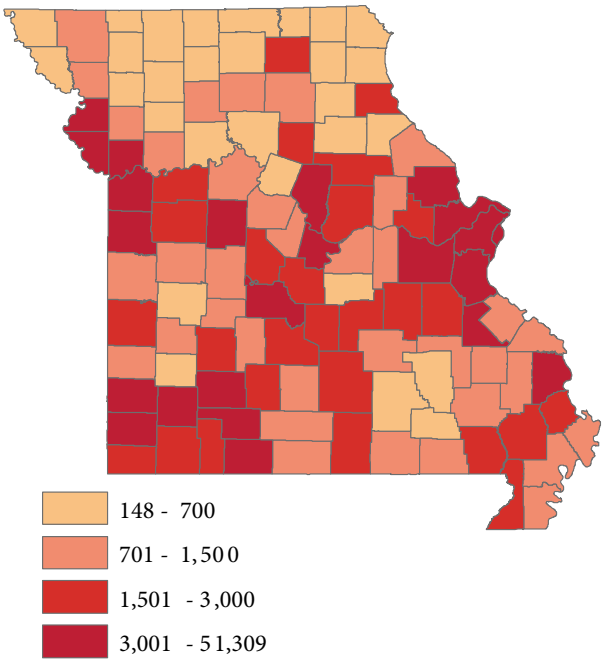
According to the most recent census data, 15 percent of all women under age 65 in Missouri are uninsured. More than 182,000 of these women — nearly half of all uninsured women in Missouri — would be eligible for health insurance coverage if Medicaid reform expanded eligibility for the program to 138 percent of the federal poverty level.[vi] In 2014, this would extend insurance to women in single-person households earning less than $16,000 and women in three-person households with less than $27,000 in combined annual income (Table 1).[vii] Currently, women in Missouri are ineligible for Medicaid regardless of their income unless they are pregnant, have dependent children, are disabled or elderly.[viii] Expanding coverage to 138 percent of the poverty level through the Medicaid program or private market-based options would reduce the uninsured rate for women in Missouri from 15 percent to 7.7 percent. Expansion of Medicaid eligibility in Arkansas using an innovative private market strategy produced a similar reduction, cutting the uninsured rate nearly in half during the first year of the program.[ix]

Table 1: Uninsured Missouri Women by Annual Household Income

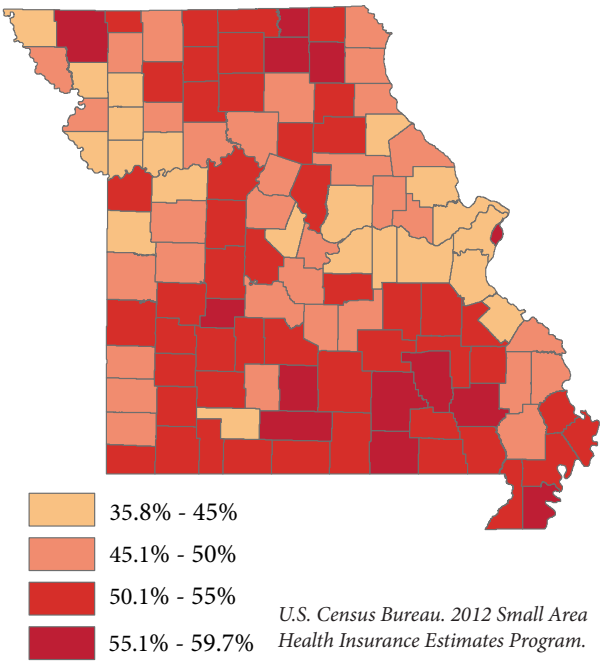
	Uninsured Women Ages 0-64		2014 Federal Poverty Level Income Ranges	
	Number	Percent	Individual	Family of Three
At or Below 138%fpl (Eligible for Expanded Medicaid Coverage)	*182,492*	*48%*	*Under $16,106*	*Under $27,311*
>138% to 200%fpl	68,464	18%	$16,106 to $23,340	$27,311 to $39,580
>200% to 250%fpl	39,750	11%	$23,341 to $29,175	$39,581 to $49,475
>250% to 400%fpl	57,483	15%	$29,176 to $46,680	$49,476 to $79,160
>400%fpl	28,760	8%	Over $46,680	Over $79,160
Total	376,949	100%	$16,727 (median)	$28,365 (median)

Figure 2: Geographic Distribution of Uninsured Women in Missouri

Uninsured Female Population Ages 0-64



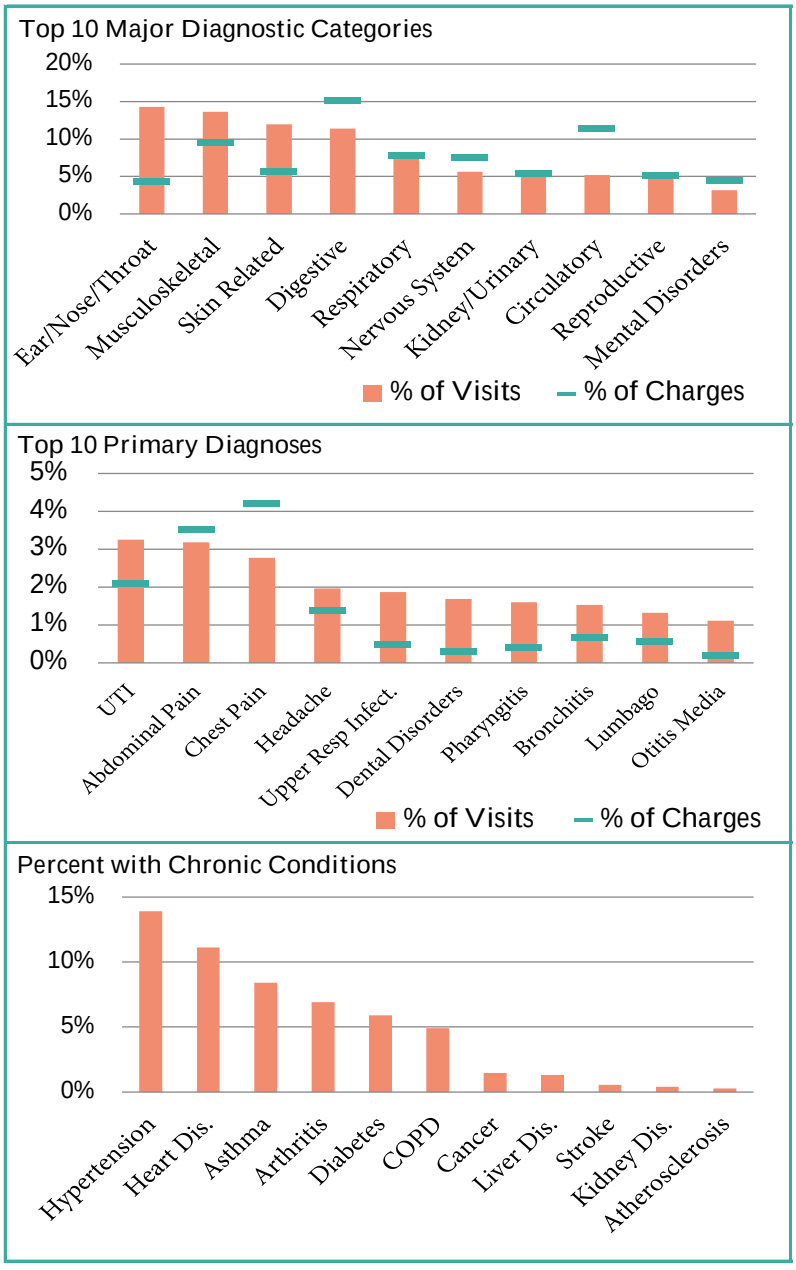
Percent Eligible for Coverage with Medicaid Reform



U.S. Census Bureau. 2012 Small Area Health Insurance Estimates Program.

Figure 2 shows the geographic distribution of uninsured women in Missouri. The highest concentrations tend to resemble overall population centers with the largest numbers occurring in counties along the major interstate corridors (Figure 2, left panel). Viewing the geographic distribution of uninsured women in Missouri as a percent who would be eligible for coverage through Medicaid reform (incomes at or below 138 percent of the FPL), reveals higher density in predominantly rural areas of the state (Figure 2, right panel). This indicates that although larger numbers of uninsured women in urban areas would benefit from the extension of health insurance through Medicaid reform, significantly higher portions of rural uninsured women would benefit.

Figure 3: 2013 Clinical Profile of Uninsured Female Hospital Patients in Missouri



Hospital Utilization By Uninsured Women In Missouri

More than 148,000 unique uninsured female patients were treated in a Missouri hospital inpatient setting or emergency department during fiscal year 2013.[1] On average, they were 33.2 years old, of which 67 percent were white, 27 percent were black and 6 percent were another race. These patients accounted for 276,000 hospital visits for an average of 1.86 visits per individual. Including patients without a unique identifier, uninsured women in Missouri accounted for a total of nearly 307,800 inpatient hospitalizations and emergency department visits during 2013. At 91.6 percent, the majority of visits were to an ED, and 8.4 percent of all visits included an overnight hospitalization with an average length of stay of 4.1 days. Fifty-six percent of all inpatient hospitalizations for uninsured women originated in the ED. Medical charges for these visits amounted to $1.17 billion during the year, which was either paid out of pocket, provided as charity care by the hospitals or resulted in loan default, which places additional burden on the patient, the hospital and privately insured individuals through cost-shifting.[x]

Clinical Profile Of Hospital Utilization By Uninsured Women In Missouri

All of the inpatient and ED discharge records used in the analysis were grouped into major diagnostic categories to determine the most common causes of hospital utilization for uninsured women. The top 10 MDCs accounted for 84 percent of all visits and 76 percent of all charges. The most common major diagnostic cause of hospital visits for uninsured women

1 *All hospital discharge data are from the 2013 Hospital Industry Data Institute Inpatient and Outpatient Databases. Unique patients are represented in 90 percent of records with a valid Social Security Number. Fiscal year 2013 covers Oct. 1, 2012 through Sept. 30, 2013.*

was ear, nose and throat disorders (Figure 3). Only 322 of 43,975 total ENT visits resulted in the patient being admitted to the hospital. This may signal a substitution of primary care with more expensive emergency room care by uninsured women as a result of limited access to the former.

The top 10 primary diagnoses accounted for 20 percent of all visits and 14 percent of all charges for uninsured women during 2013. Again, signaling a potential concern for limited access to care, nine of the top 10 most common primary diagnoses for uninsured women would most appropriately be treated first in a primary care physician or dentist office.

The most prevalent chronic condition among uninsured women in Missouri was hypertension, with 14 percent of all patients having the condition as the primary diagnosis or a comorbid condition during 2013. Heart disease was diagnosed in 11 percent of patients; 8 percent had asthma and 6 percent had diabetes.

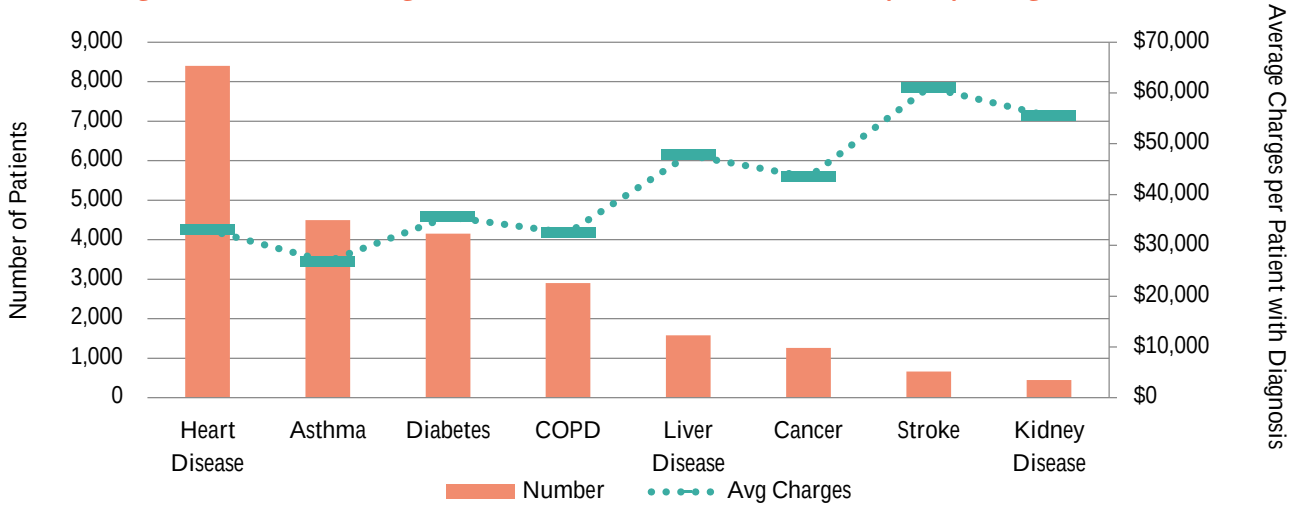
Catastrophic Medical Spending For Uninsured Women In Missouri

Catastrophic medical spending is typically defined as a percentage of the individual's household income. For this analysis, median household income for uninsured women in Missouri was estimated using the distribution of income levels for uninsured women that is produced by the U.S. Census Bureau and presented in Table 1. With 376,949 uninsured women under age 65 in Missouri, the median position is the 188,475th woman. Because females in the lowest income category produced by the census data account for 182,492 of all uninsured Missouri women, the median position lies 5,983 places into the second-lowest income category available in the census data, which is 139 to 200 percent of the FPL. Assuming linearity in the distribution of income for women within this category, the median household income level for uninsured women under age 65 in Missouri is 143 percent of the federal poverty limit, which for a family of three would amount to $28,365 in 2014. The criteria for catastrophic medical spending used in this analysis was set at one fourth of median household income, or any uninsured female with total charges in excess of $7,091 during 2013.

There were a total of 33,158 unique uninsured female patients who met this limit using Missouri hospital claims records alone. The charges per patient ranged from $7,091 to $1.48 million with an average of $23,960. The average number of visits for patients with catastrophic spending was 3.3 and the median number of visits was two. Compared to all uninsured females where 8 percent of visits were inpatient, 17.3 percent of visits for patients with catastrophic spending were inpatient, with 65 percent originating in the ED. The average age for uninsured women with catastrophic hospital spending was 37.3, of which 72 percent were white, 25 percent were black and 3 percent were another race.

Heart disease was the most common severe diagnosis for uninsured Missouri women with catastrophic medical spending in 2013. More than 8,000 women in this category were diagnosed with heart diseases including heart attack and congestive heart failure in 2013. The average level of charges for these women was $33,000. The 660 uninsured Missouri women who experienced a stroke during 2013 faced the highest level of medical cost burden with average charges topping $60,000 for the year. Nearly 1,300 uninsured Missouri women with catastrophic medical spending in 2013 received a cancer diagnosis. The

Figure 4: 2013 Severe Diagnoses for Uninsured Women with Catastrophic Spending in Missouri



Suggested Citation
Reidhead, M. *HIDI HealthStats*, January 2015: A Two-Part Series on Women's Health — Part One: The Importance of Health Insurance Coverage. Missouri Hospital Association, Hospital Industry Data Institute. Available at http://web.mhanet.com/hidi.

average level of hospital charges for these women exceeded $43,000. The most common types of cancer found in these women were uterine and cervical cancer (33 percent) and breast cancer (16 percent).

The best medical methods used to early-detect breast, uterine and cervical cancer are mammography and Papanicolaou tests. These tests reduce spending and greatly improve health outcomes for women diagnosed with the diseases. Recent research based on the gold standard in scientific design — a large-scale, randomized control trial[iii] — suggests that previously uninsured women with new health insurance coverage use mammographies at nearly twice the rate they would without coverage. This would result in 73,000 additional mammography screens for uninsured Missouri women with incomes below 138 percent of the FPL. The same study also found that the rate of pap tests for newly-insured females increased by 34 percent, which would result in more than 26,000 additional pap tests for uninsured Missouri women with incomes below 138 percent of the FPL through expanded insurance coverage.

[i] *The Henry J. Kaiser Family Foundation. Women's health insurance coverage. December 2014. Available online: http://kff.org/womens-health-policy/fact-sheet/womens-health-insurance-coverage-fact-sheet/.*

[ii] *Bovbjerg R, Hadley J. Why health insurance is important. The Urban Institute. November 2007. Health Policy Briefs (DC-SPG no1). Available online: http://www.urban.org/uploadedPDF/411569_importance_of_insurance.pdf.*

[iii] *Baicker K, et al. The oregon experiment—Effects of medicaid on clinical outcomes. The New England Journal of Medicine. May 2, 2013. 368;18: 1713-22.*

[iv] *Salganicoff A, et al. Women and health care in the early years of the affordable care act: Key findings from the 2013 kaiser women's health survey. May 2014. Kaiser Family Foundation. Available Online: http://kff.org/womens-health-policy/report/women-and-health-care-in-the-early-years-of-the-aca-key-findings-from-the-2013-kaiser-womens-health-survey/.*

[v] *Fronstin P, (ed). The economic costs of the uninsured: Implications for business and government. Employee Benefit Research Institute. Washington DC. 2000.*

[vi] *U.S. Census Bureau. 2012 small area health insurance estimates program. Available online: http://www.census.gov/did/www/sahie/.*

[vii] *U.S. Department of Health and Human Services. 2014 poverty guidelines for the 48 contiguous states and the district of columbia. Available online: http://aspe.hhs.gov/poverty/14poverty.cfm.*

[viii] *Missouri Hospital Association. July 2013. Missouri health and health care data book. Available online: http://web.mhanet.com/uploads/media/2013_Medicaid_Data_Book.pdf.*

[ix] *Wilson R. The best state in america: Arkansas, for reducing its uninsured. The Washington Post. August 8, 2014. Available online: http://www.washingtonpost.com/opinions/best-state-in-america-arkansas-for-reducing-its-uninsured/2014/08/08/fd145326-1e48-11e4-82f9-2cd6fa8da5c4_story.html.*

[x] *The Missouri Hospital Association. The hidden health care tax: How not reforming medicaid could lead to cost shifting. 2013. Available online: http://web.mhanet.com/uploads/media/Cost-Shift_Report.pdf.*

A supplemental one page infographic related to this edition of HealthStats is available at http://web.mhanet.com/hidi.

HOSPITAL INDUSTRY DATA INSTITUTE
The Data Company of the Missouri Hospital Association

P.O. Box 60
Jefferson City, MO 65102-0060