

Mapping Missouri's Health Care Workforce

2016 Workforce Report





Hospitals throughout the nation are facing a significant challenge recruiting and retaining qualified health care workers in a highly competitive labor market. Missouri is no different.

Throughout the last decade, external forces — expanded access to health insurance coverage, delivery model changes and economic uncertainty — have influenced the demands on, and design of, the workforce. These factors and others continue to challenge workforce planners.

There is general agreement that today's workforce must be expanded and reoriented to meet the needs of tomorrow's health care delivery system — the destination is fairly clear. The optimal routes to build tomorrow's workforce remain in question.

The Missouri Hospital Association's 2016 Annual Workforce Report finds increased turnover rates among many hospital-based health care professions, while vacancies have decreased for several positions. Last year's report demonstrated increased turnover and vacancy for the majority of surveyed positions. The data this year illustrate a health care workforce shortage that is progressively getting worse, with employee turnover at an all-time high. These high turnover and vacancy rates can influence access to health care.

The report's statewide and regional data can help planners recognize milestones, evaluate direction and make course corrections that improve the value of investments on the journey to tomorrow's workforce.



A Starting Point

There are a multitude of factors impacting the health care workforce in Missouri including:

- sicker hospital patients
- expanded access to health care
- new positions created by the Affordable Care Act

Nearly one in four jobs created so far in 2016 is in the health care sector.¹

- an aging patient population
- retirement of baby boomers from health care professions
- millennials becoming the largest generation in the workforce
- accessibility to a wealth of job opportunities at the click of a button
- lack of Missouri Medicaid expansion

Ongoing volatility, within the workforce and externally, has made delivering on tomorrow's health care workforce needs difficult. Health care is the fastest growing job sector. However, this has significantly shifted power in the labor market from primarily employer-driven to employee-driven, which can lead to increased vacancy and turnover.

As hospitals work to attract the best possible employees in new and creative ways, recruitment and retention have become hot topics not just for human resource managers, but also C-suite leaders and hospital boards. Stretching beyond the hospital, health care workforce shortages in Missouri are starting to garner attention from other partners — federal, state and local — that educate, train and employ.

Although the added attention is helpful, stakeholder collaboration is essential. Recruiting, training and retaining health care professionals in Missouri will require ongoing, targeted investment.

It is virtually impossible to accurately predict future turnover and vacancy rates. However, history has shown that a lack of investment or concerted action certainly will result in the deterioration of Missouri’s health care workforce. This would have very real consequences for the communities, patients and families who depend on access to hospitals. In addition, it would fail to realize the economic opportunity presented by the expanding health care sector and cause Missouri to lose, while other states and industries gain.

For example, new research on Medicaid expansion released by the Georgetown University Health Policy Institute provides a powerful comparative between expansion and non-expansion states. This includes the very negative differences being experienced in health care in Missouri (a non-expansion state) compared to Arkansas (an expansion state) that directly affect workforce staffing, recruiting and retention in Missouri.

Collaboration toward a strong, highly-trained workforce is essential. It will require Missouri policymakers, educators and employers to understand the present state of the workforce and develop consensus on shared investments. Six million Missourians are counting on access to health care and that starts with an adequate supply of health care providers to meet growing demand.³



The stakes are high. Health care providers are working to improve community and individual health. Access to high-quality health care, close to home, matters.

“Medicaid expansion states see more jobs in the health sector. On average, the states that expanded Medicaid in January 2014 saw jobs grow by 2.4 percent during 2014, while jobs in states that did not expand grew by only 1.8 percent in the same year.”

– Robert Wood Johnson Foundation²



Peaks and Valleys

Monitoring turnover of health professionals is important. Turnover data can provide a benchmark to measure trends in the health care workforce. Moreover, managers can use turnover data to identify, diagnose and solve problems in their individual employee pools. Turnover can help project the job market for health professionals, and can act as an indicator of an organization’s employee engagement and culture.

According to Carol Brewer, Ph.D., R.N., FAAN, Professor at the University at Buffalo School of Nursing, “A high rate of turnover at a hospital, if it’s voluntary, could be problematic, but if it’s involuntary or if nurses are moving within the hospital to another unit or position, that tells a very different story.”⁴

Vacancy and turnover rates for staff nurses are indicative of the problem in the current workforce. Vacancy rates for staff nurses remain high by historical standards and turnover for staff nurses has reached the highest level since Missouri hospital workforce data was first collected in 2001 (Figure 1).

Statewide and regional turnover data often tell different stories. As referenced in last year’s report, Missouri’s 10 workforce investment areas continue to have regional variation in their workforce needs (Figure 2). However, an increase in turnover appears to be a statewide trend.

FIGURE 1: NURSE STAFF TRENDS

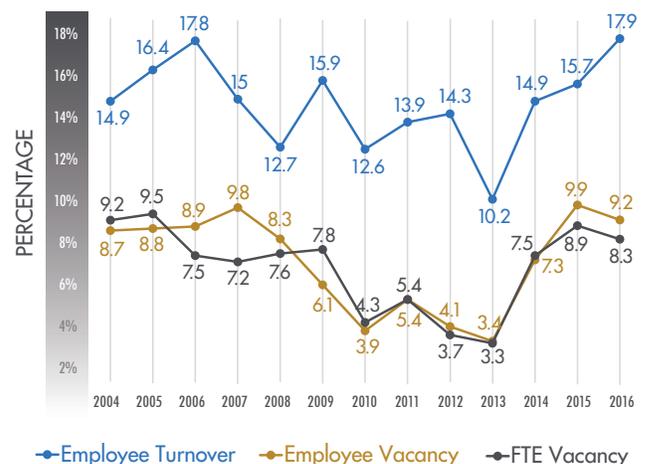
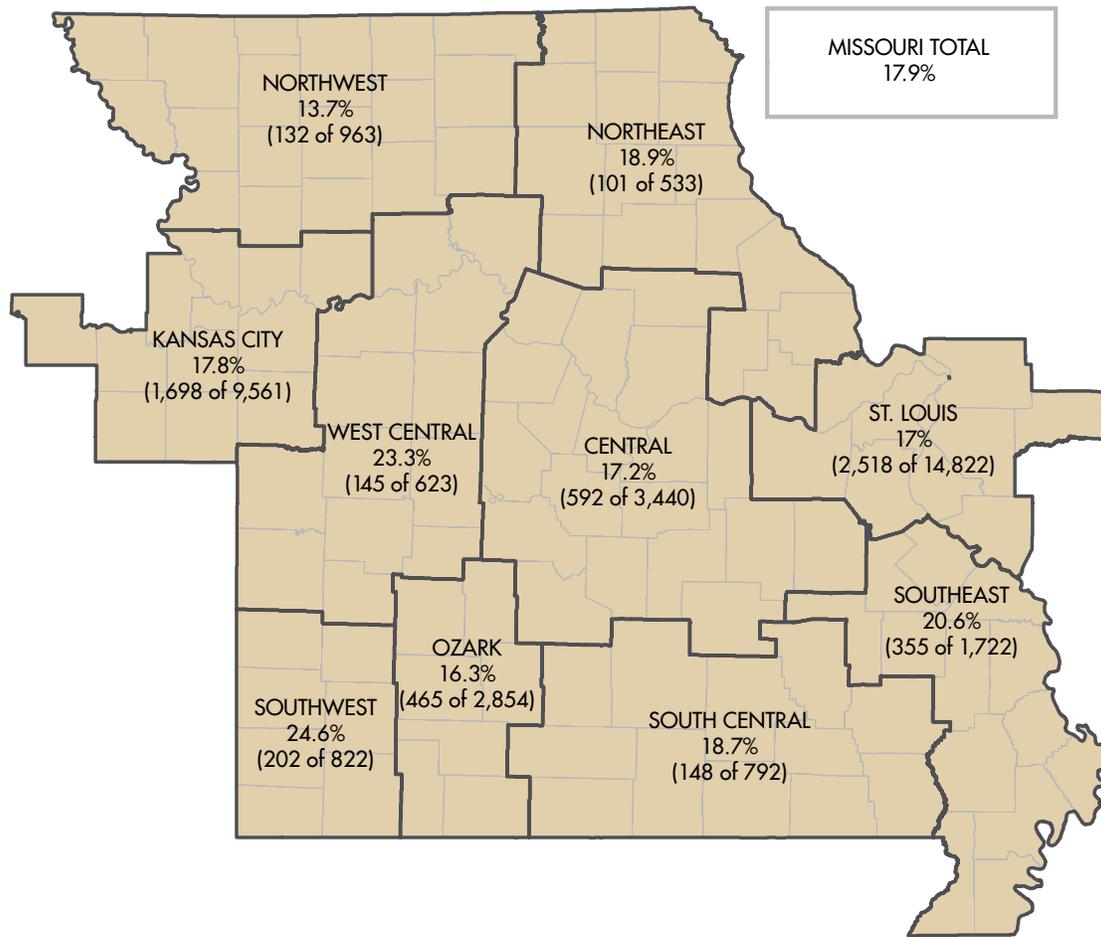


FIGURE 2: NURSE STAFF EMPLOYEE TURNOVER



According to a study in *Policy, Politics & Nursing Practice*, 1 in 5 newly-licensed R.N.s leave their first nursing job within the first year, and 1 in 3 (33.5 percent) leave within two years.⁵

Studies show that the average cost of turnover for a bedside R.N. is between \$36,900 and \$57,300. The average financial loss from R.N. turnover per hospital is between \$4.9 million and \$7.6 million annually.⁶

Employee engagement has a direct impact on turnover. Investing in programs that promote increased employee engagement through promoting growth, recognition and trust, are cost-effective compared to the cost of losing a valued employee.

Turnover is costly. Hospital staff are essential for hospitals to provide quality, direct patient care. While automation has displaced workers in other industries, health care remains a people-intensive business despite advances in technology.



2016 Survey Highlights

MHA's annual workforce survey provides a snapshot of the 36 occupations that make up a hospital's workforce and five clinic and physician practice occupations.

Job Title (Collected January 2016)	Number of Working FTE's	Number of FTE Vacancies	Vacancy Rate (FTE)	Working Number of Employees	Number of Vacant Positions	Employee Vacancy Rate	Total Employee Separations	Employee Turnover Rate
NURSING & MEDICAL								
Unlicensed Assistive Personnel (UAP)	5,936	456	7.1%	7,450	506	6.4%	2,059	25.9%
Nurse Anesthetist – Certified Registered (CRNA)	208	5	2.3%	381	5	1.3%	20	5.2%
LPN – (Non-I.V. Certified)	605	77	11.3%	778	55	6.6%	105	12.6%
LPN – (I.V. Certified)	1,532	129	7.8%	1,573	114	6.8%	368	21.8%
Nurse Practitioner (R.N.)	623	39	6.0%	716	66	8.4%	74	9.5%
Nurse Specialist – Clinical (R.N.)	110	5	4.3%	127	5	3.8%	12	9.1%
Nurse – Staff (R.N.)	20,923	1,891	8.3%	27,302	2,771	9.2%	5,385	17.9%
Physician Assistant	171	21	10.7%	186	21	10.1%	17	8.2%
Behavioral Health Nurse (R.N.)	408	48	10.5%	479	65	12.0%	159	29.2%
Nurse – Obstetric (R.N.)	712	34	4.5%	941	53	5.3%	147	14.8%
DIAGNOSTIC IMAGING								
CT Technologist (R.T.)	397	10	2.6%	510	24	4.5%	63	11.8%
Magnetic Resonance Imaging (MRI) Technologist (R.T.)	520	11	2.0%	284	18	6.0%	20	6.6%
Mammography Technologist (R.T.)	191	3	1.5%	233	9	3.7%	15	6.2%
Nuclear Medicine Technologist (R.T.)	203	1	0.7%	273	10	3.5%	24	8.5%
Radiology Technologist (RTR)	1,034	41	3.8%	1,447	86	5.6%	205	13.4%
Sonographer – Cardiac/Echo Technician	213	8	3.7%	268	19	6.6%	38	13.2%
Sonographer – Ultrasound Technologist	318	17	5.0%	268	37	7.7%	69	14.4%
Sonographer – Vascular Technologist	154	8	5.2%	214	13	5.7%	35	15.4%
LABORATORY								
Medical Laboratory Technician MLT	410	35	7.9%	439	52	10.5%	89	18.2%
Medical Technologist (M.T.)	799	60	6.9%	989	81	7.6%	143	13.4%
THERAPIES								
Occupational Therapist	526	34	6.0%	801	63	7.2%	112	13.0%
Occupational Therapy Assistant – Certified (COTA)	149	4	2.8%	191	11	5.4%	42	20.8%
Physical Therapist	995	57	5.4%	1,433	91	5.9%	153	10.0%
Physical Therapy Assistant – Certified (PTA)	359	11	3.1%	503	24	4.6%	50	9.5%
Respiratory Therapist – Certified	361	26	6.6%	480	30	5.9%	79	15.5%
Respiratory Therapist – Registered	1,116	64	5.4%	1,617	82	4.8%	243	14.3%
Speech Pathologist	254	13	4.7%	399	34	7.9%	65	15.0%
PHARMACY								
Pharmacist – Clinical	425	37	8.1%	527	41	7.2%	45	7.9%
Pharmacist – Staff	495	19	3.8%	647	23	3.4%	70	10.5%
Pharmacy Technician – Certified	681	56	7.6%	821	65	7.3%	156	17.6%
SURGERY								
Surgical Technician – Non-Certified	535	42	7.3%	667	61	8.4%	111	15.2%
MISCELLANEOUS HOSPITAL BASED POSITIONS								
Clinical Informatics Specialist (R.N.)	66	2	2.9%	66	2	2.9%	7	10.3%
Medical Records Coder	546	21	3.7%	585	23	3.8%	46	7.6%
Project Manager – (I.T.)	33	0	0.0%	36	0	0.0%	3	8.3%
Housekeeper	2,763	224	7.5%	3,042	243	7.4%	972	29.6%
Dietician	308	18	5.6%	412	22	5.0%	50	11.5%
CLINIC & PHYSICIAN PRACTICES								
Nurse - Staff (R.N.)	1,231	151	10.9%	1,364	150	9.9%	299	19.7%
Licensed Practical Nurse (LPN)	1,454	135	8.5%	1,489	113	7.1%	319	19.9%
Nurse Practitioner (R.N.)	740	70	8.6%	866	82	8.6%	124	13.1%
Medical Assistant – Certified	925	56	5.7%	977	65	6.2%	180	17.3%
Medical Assistant – Non-Certified	715	35	4.7%	768	32	4.0%	183	22.9%

Data includes Missouri hospitals only, not Kansas or Illinois.

TABLE 1: COMBINED EMPLOYEE TURNOVER FOR 36 HOSPITAL POSITIONS SURVEYED BY WORKFORCE INVESTMENT AREA

State of Missouri	18.1%
Northwest WIA Total	13.9%
Northeast WIA Total	17.5%
West Central WIA Total	21.2%
Central WIA Total	18.0%
Southwest WIA Total	17.3%
Ozark WIA Total	20.0%
South Central WIA Total	19.5%
Southeast WIA Total	23.6%
St. Louis WIA Total	16.2%
Kansas City WIA Total	18.5%

Of the 36 hospital occupations surveyed, 11 indicated an employee turnover of more than 15 percent. Positions with the highest turnover include housekeeper, behavioral health nurse (R.N.), unlicensed assistive personnel, licensed practice nurse (I.V. certified), certified occupational therapy assistant and staff nurse (R.N.). Two positions new to the workforce report in 2016, housekeeper and behavioral health nurse, have the highest rates of employee turnover in the state. These positions tend to fall into one of two categories — less skilled or high stress (Table 2).

Missouri is facing a mental health workforce shortage made worse by maldistribution and the aging of behavioral health providers. The *HIDI HealthStats* publication, “Mental Health in Missouri: Limited Access, Increasing Demand and Tragic Consequences,” states that one in 10 Missouri adults have a serious mental illness, and 40 percent of those adults go without treatment. As demand for behavioral health services is spiking, behavioral health providers are aging out of the workforce or transitioning into outpatient settings. Physician-specific health professional shortage area data show that access to mental health services particularly is limited in Missouri where 90 percent of counties are federally-designated mental health professional shortage areas, and 61 percent have no licensed psychiatrists.

Missouri’s behavioral health shortage is not solely physician specific — behavioral health nurses not only have the second highest turnover in the state, but the highest vacancy rate. Revenue funding cuts across the state (as much as 35 percent since 2009) for mental health services further exacerbate this issue.⁷ Improved coordination and integration of behavioral health care into primary care will be crucial to address the behavioral health needs of Missourians.

Turnover for certified occupational therapy assistants may be attributed to a vast array of career opportunities outside of a hospital, such as occupational therapists’ offices and

Missouri’s all-employee turnover rate of the combined 36 positions surveyed increased by 1.8 percent to 18.1 percent (Table 1). That is compared to 16.3 percent from 2014 and 12.9 percent from 2013.

nursing care facilities. To become a certified occupational therapy assistant, an associate’s degree is required, whereas a high school diploma or equivalent is needed to become a pharmacy technician. Employment of occupational therapy assistants and aides is projected to grow 40 percent from 2014 to 2024, much faster than the average for all occupations.⁸

TABLE 2: PROFESSIONS WITH THE HIGHEST EMPLOYEE TURNOVER

Housekeeper	29.6%
Behavioral Health Nurse (R.N.)	29.2%
Unlicensed Assistive Personnel	25.9%
Licensed Practical Nurse (I.V. Certified)	21.8%
Occupational Therapy Assistant – Certified (COTA)	20.8%
Nurse, Staff (R.N.)	17.9%

Missouri is one of 12 states that restricts the ability of a nurse practitioner to engage in at least one element of N.P. practice, whereas the neighboring states of Nebraska and Iowa, have approved “full practice” status for N.P.s, which allows them to assess, diagnose, interpret diagnostic tests and prescribe medications independently. Likewise, Missouri physician assistants do not have full prescriptive authority. The high vacancy rates for N.P.s and physician assistants potentially correlate with Missouri’s restricted practice for physician extenders in comparison to neighboring states. With regard to vacancy rates, of the 36 hospital occupations surveyed, 24 indicated an employee vacancy of more than 5 percent. Positions with the highest vacancy are behavioral health nurses, medical laboratory technicians, physician assistants, staff nurses, nurse practitioners and non-certified surgical technicians (Table 3).

TABLE 3: PROFESSIONS WITH THE HIGHEST EMPLOYEE VACANCY

Behavioral Health Nurse (R.N.)	12.0%
Medical Laboratory Technician (MLT)	10.5%
Physician Assistant	10.1%
Nurse, Staff (R.N.)	9.2%
Nurse Practitioner (R.N.)	8.4%
Surgical Technician – Non-Certified	8.4%



Making Progress



Missouri is making progress toward the workforce of the future. In October 2015, the Missouri Department of Social Services was awarded a nearly \$15 million, five-year competitive federal **Health Profession**

Opportunity Grant to provide low-income Missourians in the St. Louis, Kansas City and central Missouri regions with job training in health-related fields that are expected to either experience a labor shortage or be in high demand. The grant is an example of stakeholders at the federal, state and local level working together to increase health care workforce opportunities across the state of Missouri. Multiple organizations, including MHA and numerous hospitals across the state, are collaboratively working to educate, recruit and train individuals along defined health profession pathways.



In December 2015, The **Grow Your Own** grant program, funded through the MHA Center for Education Health Improvement, Research and Scholarship Fund, concluded. The program provided nearly \$2 million to 39 Missouri hospitals throughout the

last two years to help develop and expand their health care workforce according to locally-defined needs. The program, which began in September 2013, resulted from a competitive application process that encouraged investment in local talent — identifying workforce entrants and expanding opportunities for incumbents in areas of need. In February and March, collaborative meetings were held throughout the state to encourage sharing of lessons learned from the unique programs. A compendium also was distributed.



In April, the newly-formed **Missouri Healthcare Workforce Coalition** held a primary care summit in Jefferson City to outline the workforce shortage challenge, review current policy and begin planning for efforts to strengthen the state's primary care

workforce. MHA is a founding member of the coalition. Three of the top priorities that came from the event include creating and passing a tax incentive program for preceptors, creating and increasing coordinated preceptor development programs and resources, and adopting a health care workforce database system.



In July, Governor Nixon signed legislation which includes a provision allowing various state licensure boards to contract and collaborate with a state department, higher education

institution or nonprofit entity to collect and analyze workforce data to assess the expertise, supply and location of qualified health care professionals. Appropriate planning for, and assessment of, health professional needs are dependent on the availability of accurate and timely data. The legislation's proponents envision that the database will provide annual state and county-level analysis of the types of health care professionals available, as well as population health and demographic characteristics. This should not only enable better monitoring of the trends in supply and distribution of health care professionals, but also will inform training programs that will determine quantity and distribution of health care professionals and help identify emerging health care workforce issues.



In recognition of the varying needs across the state, the MHA Center for Education's Health Improvement, Research and Scholarship Fund is offering the 2016 **Missouri Hospital Employee Scholarship Program**

that provides education expense reimbursement for employees of Missouri-based MHA-member hospitals obtaining advanced education or training for approved certification, vocational or degree programs. The purpose of the program is to enable hospitals to award scholarship funds based on their unique, priority workforce needs for any job category or profession. As of July 2016, 671 individuals have been awarded funds to further their education. The final deadline to submit applications is Sept. 30, 2016. While programs like this can make a significant impact, additional funding is needed across the state to help individuals who are interested in pursuing a health career. For example, area health education centers serve as a catalyst for recruitment, retention and local support of health care providers in the rural and medically-underserved counties of central Missouri, resulting in healthier, stronger communities.



The Road Ahead

Missouri hospitals need the right number of people with the right skills in the right place at the right time to deliver high quality care. Workforce instability associated with high attrition can negatively impact quality of care, patient safety and patient satisfaction. Recruitment and retention need continuous investment, not just by hospitals, but also by all stakeholders in Missouri to reduce turnover and improve vacancy rates. The opportunity grants, primary care summit and workforce database are all steps in the right direction. The vitality of Missouri's health care workforce depends on collaboration at all levels — local, state and federal — focused on strategic investments to recruit and retain Missouri health care professionals well into the future.

This year's workforce report will help all stakeholders plot the position of the workforce on the map. To get to the destination, there must be concerted effort to identify the best route forward.

Workforce development is a long-term endeavor, and course corrections will be part of the road ahead. Nonetheless, significant movement toward the goal is underway.

Methodology

A total of 148 hospitals participated in this year's survey: 136 in Missouri, 10 in Kansas and five in Illinois. The survey requested data on 36 hospital health care positions and five clinic and physician practice positions. In 2015, four new hospital positions were added to the survey, including behavioral health nurse (R.N.), nurse – obstetric (R.N.), housekeeper and dietician. This statewide report only highlights Missouri hospitals, not Kansas or Illinois.

The survey is distributed to hospitals with the annual compensation and benefits survey in January. Responses are collected by Compdata Surveys. Data are reported as of Dec. 31, 2015. A comprehensive collection of workforce data, trends and color-coded vacancy and turnover maps, is available at www.mhanet.com.

Suggested Citation

Kenyon, M. (2016, July). *2016 annual workforce report*. Missouri Hospital Association. Available at <http://www.mhanet.com>

References

- ¹ Healthleaders. (2016, July). *Healthcare job growth on record pace in 2016*. Retrieved from <http://www.healthleadersmedia.com/leadership/healthcare-job-growth-record-pace-2016?spMailingID=9182266&spUserID=MtMyMzQyMTM1OTc2S0&spJobID=960833764&spReportId=OTYwODMzNzY0S0>
- ² Robert Wood Johnson Foundation. (2016, March). *States expanding Medicaid see significant budget savings and revenue gains*. Retrieved from http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2016/rwjf419097
- ³ United States Census Bureau. (2014, July). *Missouri QuickFacts from the U.S. Census Bureau*. Retrieved from <http://www.census.gov/quickfacts/map/PST045214/29>
- ⁴ Robert Wood Johnson Foundation. (2014, September). *Nearly one in five new nurses leaves first job within a year, according to survey of newly-licensed registered nurses*. Retrieved from <http://www.rwjf.org/en/library/articles-and-news/2014/09/nearly-one-in-five-new-nurses-leave-first-job-within-a-year--acc.html>
- ⁵ Policy, Politics & Nursing Practice. (2014, August). *What does nurse turnover rate mean and what is the rate?* Retrieved from <http://ppn.sagepub.com/content/early/2014/08/22/1527154414547953.refs>
- ⁶ Strategic Programs Inc. (2016, January). *Nursing shortage statistics*. Retrieved from <http://strategicprogramsinc.com/nursing-shortage-statistics/>
- ⁷ Reidhead, M. & Willson, S. (2016, June). *Mental health in Missouri: Limited access, increasing demand and tragic consequences*. HIDI HealthStats. Missouri Hospital Association. Hospital Industry Data Institute. Retrieved from <http://bit.ly/1tezje5>
- ⁸ Bureau of Labor Statistics. (2017, December). *Occupational outlook handbook*. Retrieved from <http://www.bls.gov/ooh/healthcare/occupational-therapy-assistants-and-aides.htm>
- ⁹ Missouri Hospital Association. (2016, May). *Summary of the 2016 session of the Missouri General Assembly*. Retrieved from http://www.mhanet.com/mhaimages/2016_MHA_Legislative_Summary.pdf



© 2016 Missouri Hospital Association
P.O. Box 60 • Jefferson City, MO 65102-0060 • www.mhanet.com