HISTORICALLY HIGH GROWTH OCCUPATIONS

HEALTHCARE CLUSTER
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The Healthcare Staffing Shortage

Researchers at the Missouri Economic Research and Information Center (MERIC) conducted a historical analysis of the past 5 rounds of long-term occupational projections starting with the 2000-2010 projections and ending with the recently released 2008-2018 projections. Within the Healthcare Cluster, there were six occupations that were identified as having historically high numbers of occupations with growth openings. These occupations were Registered Nurses, Medical Assistants, Pharmacy Technicians, Licensed Practical and Licensed Vocational Nurses, Nursing Aides, Orderlies, and Attendants, and Dental Assistants.

Despite the current economic climate, the health care industry has experienced steady growth. These six occupations, especially Registered Nurses, consistently have high growth that outpaces the number of graduates and trainees entering the workforce. In 2008, Missouri had an average 7.8% vacancy rate for Registered Nurses and in some areas; the vacancy rate was higher than 11%.1 Nationally, the number of Licensed Practical and Licensed Vocational Nurses employed by hospitals decreased by 153,000 since 1984, mainly due to hospitals shifting the roles of nursing support staff.2

This skills gap is expected to continue to intensify as more baby-boomers are aging and their need for health care grows. By 2025, the national nursing and healthcare support shortage is expected to grow between 260,000 to 1 million people.3 There are 320 medically underserved areas or populations throughout Missouri’s counties currently, and that number can only be expected to grow until the healthcare industry, workforce and education policy makers take proactive measures to decrease the shortage of healthcare support occupations.4

Healthcare Skills Gap

Healthcare support occupations often have a large skills gap due to the nature of their work. These occupations typically have heightened work life stress and greater turnover rates in the workplace. Hospitals trying to deal with cost effectiveness are handing over more responsibilities to support staff than higher salaried doctors and physicians. Because of this, there are increased problems with nurse-to-patient ratios and overall patient care. More than 75% of nurses surveyed by the American Association of the Colleges of Nursing said that the healthcare support staffing shortage presents problems for their work life, the quality of patient care, and the amount of time they have to tend to their patients. Almost 93% of those surveyed stated that if the shortage continues into the future it would serve as a catalyst for them to leave the profession completely.5

Failure to retain nurses and healthcare support workers contributes to the skills gap in the industry. High turnover for healthcare support occupations is also costly to healthcare facilities. In 2008, Missouri spent over $44,000,000 on temporary staff needed because of increased turnover rates. This staffing uses a considerable portion of hospital budgets.6 Also, the aging trend of healthcare support staff is rising and a large number is expected to retire in the coming years. In 2008, the average age of Registered Nurses was 47 and over 45% of all nurses were aged 50 or older.7

One of the other large contributing factors to the skills gap in the healthcare industry is the lack of trained faculty. Nursing programs typically lose money for many colleges, therefore their willingness to expand the programs is stifled and salaries are not raised for faculty. In a national survey, over three-quarters of nursing schools stated that they were unable to accept all qualified applicants into entry-level programs due to faculty shortages.8 Despite this, the Council of Physician and Nurse Supply called for an additional 30,000 nurses to graduate annually to keep pace with the national healthcare expansion.9 Without adequate faculty to train the up-and-coming healthcare support workers, the number of graduates will continue to be disproportionate to the needs of the healthcare industry.
**Recommendations**

Hospitals and the government can do more to alleviate the skills gap for healthcare support staff by increasing funding and opportunities for education and training. For the 2009 Fiscal Year, Congress appropriated $530 million for funding health workforce programs throughout the nation, as well as an additional $200 million granted through the American Recovery and Reinvestment Act of 2009. Medicare also contributes roughly $150 million annually to support nursing education, but that is a small share compared to the $12 billion annually they contribute to hospitals for specialized physicians education. To address the shortage of workers in rural and overpopulated areas, the Health Resources and Services Administration funds programs for primary care, general dentistry, and nursing to provide healthcare to the underserved regions of Missouri.¹⁰

Today the majority of nurses in Missouri are trained in the academic setting rather than getting their primary healthcare education in a hospital-based setting. Over 89% of Registered Nurses in Missouri graduated with either an Associate or a Bachelor’s Degree in 2009. One alternative for easing the shortage through other methods has been to offer training opportunities through alternative training. The state of Washington has instituted The Washington Health Care Worker Training Coalition that hopes to provide an additional 550 incumbent entry-level workers interested in the healthcare field a chance to advance into a healthcare support occupation. This would then create an additional 350 entry-level positions that would then have the chance to advance later in their career as well. Courses and training would be offered through workforce learning opportunities, online instruction, and recruiting more instructors to allow for applicants to move along the nursing pathway: Medical Assistant to Licensed Practical Nurses, before finally becoming certified as a Registered Nurse. This grant would allow for more low-wage workers with the interest in healthcare to advance their training and long-term career opportunities.¹¹

Other opportunities Washington provides for healthcare training is the State Need Grant which allows more low-wage workers to apply for part-time healthcare support training which would allow them to both advance their skills and keep their current jobs. Some opportunity grants also offer payment for up to 45 course credits for income eligible students studying in high-demand occupations, especially in healthcare.¹² Missouri can alleviate a number of the shortages by offering more opportunities for healthcare skills training to those workers who may have previously been interested in entering the field but could not afford the cost.

Training also needs to be updated to deal with newer, emerging technologies in the healthcare field. Electronic monitoring and recording is becoming the norm for healthcare facilities now to eliminate paper waste and increase hospital transparency. Using these new tools can also decrease turnaround time for patients and create a more seamless healthcare service industry. More remote distance learning can be completed for trainings in Missouri in areas that do not have full access to healthcare education facilities. Some training facilities are using newer computer simulation monitoring systems that track how clinicians are performing against the established best practices for their institutions.¹³ A more advanced and comprehensive early training system allows for less workplace stress for healthcare support occupations.

Most importantly, hospitals and healthcare facilities need to address the high turnover rates for healthcare support occupations that occur due to workplace stress caused by the nature of the industry and the staffing shortage the employees face. Registered Nurses are seeing their workloads increase exponentially due to the shortage and their cost-effectiveness. These nurses are attempting to care for more patients than is possible, thereby decreasing the patient care received and causing nursing burnout. By instead training Registered Nurses with more leadership skills, more workers could be hired as lower paid Licensed Practical and Vocational Nurses or Medical Assistants which could handle more of the case loads and alleviate the nurse to patient ratios and workplace stress. Evidence shows that Licensed Practical Nurses prefer working in hospital environments, but they are often forced to work elsewhere as hospitals have restructured from team-based model to a primary nursing care model.¹⁴
Historically High-Growth Healthcare Occupations

Each of the six occupations experiencing historical high-growth are outlined with more information about what to expect for future employment, with the most up-to-date projections for Missouri's outlook and the training and skills need for each occupation. These six occupations have the best potential for narrowing the workforce shortage in Missouri and increasing the quality of patient care as the healthcare industry continues to grow.

Registered Nurses

Registered Nurses have consistently been a growing occupation in all of the past five long-term projections that MERIC has completed since 2000. This occupation is defined as someone who assesses the health of patients, what help or assistance the patient will need, and maintains the medical records throughout their stay. They assist with the ill, convalescent, injured, or disabled patients, and can work within hospitals or smaller medical offices to assist patient case management. Registered Nurses are required to have licensing and registration, and educational requirements range from an Associate Degree to a Master’s or Doctoral Degree.

Missouri has seen the actual employment of Registered Nurses grow by over 10,000 employees between 2000 and 2008. This is a 20.1% growth rate over an eight-year period, which is faster than the average estimated growth rate of 19.6% for the past five long-term projections.

Missouri Employment Projections for Registered Nurses

![Graph: Missouri Employment Projections for Registered Nurses]

National trends estimate that between 2008 and 2018 there will be continued growth in employment for Registered Nurses due to slight increases in hospitals, physician's offices, nursing care facilities, and outpatient centers across the United States. Registered Nurses will make up a larger portion of the industry employment due to their cost-effectiveness compared to the higher wages commanded by physicians and medical specialists. Missouri's long-term projections also predict a 17.1% growth in Registered Nurses employment, with over 21,000 anticipated openings throughout the state.

Across Missouri, there are 51 academic institutions that provide the training to become a Registered Nurse. These courses range from a Postsecondary Vocational Certificate to a Doctoral program. In 2009, there were 4,155 students graduating with degrees for Registered Nursing.
Healthcare

Of the 4,155 graduates of Registered Nursing programs for Missouri in 2009, a large number were Registered Nurses obtaining new or advanced training. Because of the small number of new Registered Nurses gaining certification, the occupation is unlikely to fully meet the estimated 2,100 average total openings for Missouri.

### Degrees Conferred for Registered Nurses in 2009

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral Degree</td>
<td>23</td>
</tr>
<tr>
<td>Post-Master's Certificate</td>
<td>21</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>352</td>
</tr>
<tr>
<td>Postbaccalaureate Certificate</td>
<td>16</td>
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<tr>
<td>Bachelor's Degree</td>
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</tr>
<tr>
<td>Associate Degree</td>
<td>1,623</td>
</tr>
<tr>
<td>Postsecondary Vocational Certificate</td>
<td>45</td>
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### Institutions with Degree and Certification Programs for Registered Nurses

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avila University</td>
<td>Missouri State University</td>
</tr>
<tr>
<td>Boonslick Technical Education Center</td>
<td>Moberly Area Community College</td>
</tr>
<tr>
<td>Cape Girardeau Career &amp; Technology Center</td>
<td>National American University</td>
</tr>
<tr>
<td>Cass Career Center</td>
<td>Nichols Career Center</td>
</tr>
<tr>
<td>Central Methodist University</td>
<td>North Central Missouri College</td>
</tr>
<tr>
<td>Chamberlain College of Nursing</td>
<td>Ozark Technical Community College</td>
</tr>
<tr>
<td>Clinton Technical School</td>
<td>Park University</td>
</tr>
<tr>
<td>Columbia College</td>
<td>Penn Valley Community College</td>
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<tr>
<td>Concorde Career College</td>
<td>Pike Lincoln Technical Center</td>
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<tr>
<td>Cox College</td>
<td>Rolla Technical Center</td>
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<tr>
<td>Crowder College</td>
<td>Saint Louis University</td>
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<tr>
<td>Culver-Stockton College</td>
<td>Saint Luke’s College</td>
</tr>
<tr>
<td>East Central College</td>
<td>Sanford-Brown College</td>
</tr>
<tr>
<td>Barnes-Jewish College</td>
<td>South Central Career Center</td>
</tr>
<tr>
<td>Graceland University</td>
<td>Southeast Missouri State University</td>
</tr>
<tr>
<td>Grantham University</td>
<td>St. Charles Community College</td>
</tr>
<tr>
<td>Hannibal Career &amp; Technical Center</td>
<td>St. Louis Community College</td>
</tr>
<tr>
<td>Hannibal-Lagrange College</td>
<td>State Fair Community College</td>
</tr>
<tr>
<td>ITT Technical Institute</td>
<td>Three Rivers Community College</td>
</tr>
<tr>
<td>Jefferson College</td>
<td>University of Central Missouri</td>
</tr>
<tr>
<td>Lincoln University</td>
<td>University of Mary</td>
</tr>
<tr>
<td>Lutheran School of Nursing</td>
<td>University of Missouri</td>
</tr>
<tr>
<td>Metropolitan Community College</td>
<td>University of Phoenix</td>
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<tr>
<td>Mid-America Nazarene University</td>
<td>Webster University</td>
</tr>
<tr>
<td>Mineral Area College</td>
<td>Wentworth Military Academy &amp; Junior College</td>
</tr>
<tr>
<td>Missouri Southern State University</td>
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</tr>
</tbody>
</table>

Degrees Conferred for Registered Nurses in 2009
Medical Assistants
Medical Assistants have also consistently been a growing occupation in all of the past five long-term projections that MERIC has completed since 2000. This occupation is defined as someone who performs the administrative and some clerical duties for physicians. Medical Assistants may be in charge of maintaining patient records, scheduling appointments, coordinating billing and coding for insurance, as well as preparing patients for exams, taking vital signs, and administering medications under the direction of the physician. Medical Assistants are required to have licensing and registration, and educational requirements range from On-the-Job Training to an Associate Degree.

Missouri has seen the actual employment of Medical Assistants grow by over 1,000 employees between 2000 and 2008. This is a 14.8% growth rate over an eight-year period, which is much slower than the average estimated growth rate of 35.5% for the past five long-term projections.

National trends estimate that between 2008 and 2018 there will be continued growth in employment for Medical Assistants due to slight increases in physician’s offices, but larger growth in hospitals and surgical centers across the United States. Medical Assistants will make up a larger portion of the industry employment due to hospitals maintaining lower costs. Missouri’s long-term projections also predict a 20.5% growth in Medical Assistants employment, with over 2,500 anticipated openings throughout the state.

Degrees Conferred for Medical Assistants in 2009

| Postsecondary Vocational Certificate 2 yr. | 1,000 |
| Postsecondary Vocational Certificate 1 yr. | 607 |

In 2009, there were 49 academic institutions that provide the training to become a Medical Assistant in Missouri. Those training to become a Medical Assistant could chose between a Postsecondary Vocational Certificate obtained in one year or gain more advanced training in a two year setting. In 2009, there were 2,172 students graduating with degrees as a Medical Assistants.
Pharmacy Technicians

Pharmacy Technicians have been a growing occupation in four of the past five long-term projections that MERIC has completed since 2000. This occupation is responsible for preparing the medications per the pharmacists’ instructions, as well as measuring, counting, labeling, and recording the medications for patients. Pharmacy Technicians are required to have licensing and registration, and educational requirements range from On-the-Job Training to an Associate Degree.

Missouri Employment Projections for Pharmacy Technicians

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2010</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
</tr>
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<tr>
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<td>5,002</td>
<td>6,725</td>
<td>6,739</td>
<td>7,223</td>
<td>8,758</td>
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<td></td>
<td>10,539</td>
<td>13,358</td>
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<td></td>
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Institutions with Degree and Certification Programs for Medical Assistants

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied College</td>
<td>Moberly Area Community College</td>
</tr>
<tr>
<td>Bolivar Technical College</td>
<td>National American University</td>
</tr>
<tr>
<td>Brown Mackie College</td>
<td>Nevada Regional Technical Center</td>
</tr>
<tr>
<td>Bryan College</td>
<td>New Horizons Computer Learning Center</td>
</tr>
<tr>
<td>Columbia Area Career Center</td>
<td>New Madrid County Area Technical School</td>
</tr>
<tr>
<td>Concorde Career College</td>
<td>North Central Missouri College</td>
</tr>
<tr>
<td>Daruby School</td>
<td>Northwest Missouri State University</td>
</tr>
<tr>
<td>East Central College</td>
<td>Perryville Area Career Center</td>
</tr>
<tr>
<td>Eldon Career Center</td>
<td>Pinnacle Career Institute</td>
</tr>
<tr>
<td>Everest College</td>
<td>Rolla Technical Institute</td>
</tr>
<tr>
<td>Franklin Technology Center</td>
<td>Saline County Career Center</td>
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<tr>
<td>Grantham University</td>
<td>Sanford-Brown College</td>
</tr>
<tr>
<td>Hannibal Career &amp; Technical Center</td>
<td>Southeast Missouri State University</td>
</tr>
<tr>
<td>Heritage College</td>
<td>St. Charles Community College</td>
</tr>
<tr>
<td>Hickey College</td>
<td>St. Louis College of Health Careers</td>
</tr>
<tr>
<td>High Tech Institute</td>
<td>St. Louis Community College</td>
</tr>
<tr>
<td>International Institute of Metro St. Louis</td>
<td>St. Louis Public Schools-Adult Technical Education</td>
</tr>
<tr>
<td>Jefferson College</td>
<td>State Fair Community College</td>
</tr>
<tr>
<td>Kirksville Area Technical Center</td>
<td>Stoddard County Career Learning Center</td>
</tr>
<tr>
<td>Lex La Ray Technical Center</td>
<td>Techskills</td>
</tr>
<tr>
<td>Macon Area Vocational Technical School</td>
<td>Texas County Technical Institute</td>
</tr>
<tr>
<td>Metro Business College</td>
<td>Three Rivers Community College</td>
</tr>
<tr>
<td>Metropolitan Community College</td>
<td>Unitec Career Center</td>
</tr>
<tr>
<td>Midwest Institute for Medical Assistants</td>
<td>Vatterott College</td>
</tr>
<tr>
<td>Missouri College</td>
<td></td>
</tr>
</tbody>
</table>
Missouri has seen the actual employment of Pharmacy Technicians grow by over 5,500 employees between 2000 and 2008. This is a 110.7% growth rate over an eight-year period, which is exceedingly faster than the average estimated growth rate of 28.57% for the past five long-term projections.

National trends estimate that between 2008 and 2018 there will be substantial growth to the demand for pharmacy technicians. Pharmacy Technicians are increasingly taking on more of the routine tasks within the pharmacy usually handled only by the pharmacist. Large increases in employment are expected in grocery stores and other general merchandise stores as more are adding pharmacies. Pharmacy Technicians are also projected to grow in electronic shopping and mail-order businesses as more people are able to purchase their prescriptions through the internet. Missouri’s long-term projections also predict a 26.8% growth in Pharmacy Technicians employment, with over 5,000 anticipated openings throughout the state.

**Degrees Conferred for Pharmacy Technicians in 2009**

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree</td>
<td>64</td>
</tr>
<tr>
<td>Postsecondary Vocational Certificate 2 yr.</td>
<td>90</td>
</tr>
<tr>
<td>Postsecondary Vocational Certificate 1 yr.</td>
<td>67</td>
</tr>
</tbody>
</table>

Across Missouri, there are 23 academic institutions that provide the training to become a Pharmacy Technician. These courses range from a Postsecondary Vocational Certificate to an Associate Degree. In 2009, only 221 Pharmacy Technicians graduated in Missouri, this is far under the estimated annual openings for Pharmacy Technicians which was 548 total openings.

<table>
<thead>
<tr>
<th>Institutions with Degree and Certification Programs for Pharmacy Technicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied College</td>
</tr>
<tr>
<td>Brown Mackie College</td>
</tr>
<tr>
<td>Columbia Area Career Center</td>
</tr>
<tr>
<td>Crowder College</td>
</tr>
<tr>
<td>Everest College</td>
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<tr>
<td>Franklin Technology Center</td>
</tr>
<tr>
<td>Kirksville Area Technical Center</td>
</tr>
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<td>Macon Area Vocational Technical School</td>
</tr>
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<td>Metropolitan Community College</td>
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<tr>
<td>Midwest Institute for Medical Assistants</td>
</tr>
<tr>
<td>National American University</td>
</tr>
<tr>
<td>North Central Missouri College</td>
</tr>
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</table>


Licensed Practical and Licensed Vocational Nurses

Licensed Practical and Licensed Vocational Nurses has been a growing occupation in three of the past five long-term projections that MERIC has completed since 2000. This occupation is defined as someone who assists with the ill, convalescent, injured, or disabled patients, usually under the supervision of a registered nurse, and can work within hospitals or smaller medical offices to assist patient case management. Licensed Practical and Licensed Vocational Nurses are required to have licensing and registration, and educational requirements within Missouri usually require a postsecondary vocational certificate.

Missouri has seen the actual employment of Licensed Practical and Licensed Vocational Nurses grow by over 200 employees between 2000 and 2008. This is a 1.29% growth rate over an eight-year period, which is slower than the average estimated growth rate of 8.84% for the past five long-term projections.

National trends estimate that between 2008 and 2018 there will be slight decreases for the occupation in hospitals and physicians’ offices due to the increased demand for Registered Nurses and Nursing Aides to complete the tasks usually performed by Licensed Practical and Licensed Vocational Nurses. Missouri’s long-term projections also predict an 11.38% growth in Licensed Practical and Licensed Vocational Nurses employment, with over 7,800 anticipated openings throughout the state.

Degrees Conferred for Licensed Practical & Vocational Nurses in 2009

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postsecondary Vocational Certificate 2 yr.</td>
<td>1,287</td>
</tr>
<tr>
<td>Postsecondary Vocational Certificate 1 yr.</td>
<td>59</td>
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</table>

In 2009, there were 44 academic institutions that provide the training to become a Licensed Practical and Licensed Vocational Nurses in Missouri. Those training to become a Licensed Practical and Licensed Vocational Nurse could chose between a one-year or two-year Postsecondary Vocational Certificate. In 2009, there were 1,346 students graduating with degrees as Licensed Practical and Licensed Vocational Nurses.
Nursing Aides, Orderlies, and Attendants

Nursing Aides, Orderlies, and Attendants has experienced regular growth and has appeared as a high growth occupation in three of the past five long-term projections that MERIC has completed since 2000. Nursing Aides, Orderlies, and Attendants are responsible for providing basic patient care under the supervision of nursing staff. Their duties may consist of feeding, clothing, bathing and moving patients in the health care facilities, and clean the patient rooms once they have been discharged. This occupation typically required On-the-Job Training or a Postsecondary Vocational Certification.
Missouri has seen the actual employment of Nursing Aides, Orderlies, and Attendants grow by just under 2,300 employees between 2000 and 2008. This is a 6.2% growth rate over an eight-year period, which is slower than the average estimated growth rate of 13.8% for the past five long-term projections.

National trends estimate that between 2008 and 2018 there will be continued growth in employment for Nursing Aides, Orderlies, and Attendants due to slight increases in hospitals, physician’s offices, nursing care facilities, and outpatient centers across the United States. Nursing Aides, Orderlies, and Attendants will make up a larger portion of the industry employment due their increasingly performing many of the duties normally attended to by Licensed Practical and Licensed Vocational Nurses. Missouri’s long-term projections also predict a 9.7% growth in Nursing Aides, Orderlies, and Attendants employment, with slightly fewer than 7,800 anticipated openings throughout the state.

Across Missouri, there are 51 academic institutions that provide the training to become Nursing Aides, Orderlies, and Attendants. Graduates for these institutions would receive a one-year Postsecondary Vocational Certification. In 2009, only 41 Nursing Aides, Orderlies, and Attendants graduated in Missouri, this is far under the estimated annual openings for Nursing Aides, Orderlies, and Attendants which was 777 total openings.

<table>
<thead>
<tr>
<th>Institutions with Degree and Certification Programs for Nursing Aides, Orderlies, &amp; Attendants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Technology Services</td>
</tr>
<tr>
<td>Arcadia Valley Career Technology Center</td>
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<tr>
<td>Bolivar Technical College</td>
</tr>
<tr>
<td>Cape Girardeau Career &amp; Technology Center</td>
</tr>
<tr>
<td>Carrolton Area Career Center</td>
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<tr>
<td>Carthage Technical Center</td>
</tr>
<tr>
<td>Cass Career Center</td>
</tr>
<tr>
<td>Center for Health Careers</td>
</tr>
<tr>
<td>Columbia Area Career Center</td>
</tr>
<tr>
<td>Crowder College</td>
</tr>
<tr>
<td>Dallas County Career Center</td>
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<tr>
<td>Daruby School</td>
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<tr>
<td>David H. Hart Career Center</td>
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<td>East Central College</td>
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<td>Grand River Technical Center</td>
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<td>Hillyard Technical Center</td>
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<td>Jefferson College</td>
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<td>Kirksville Area Technical Center</td>
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<td>Lake Career &amp; Technical Center</td>
</tr>
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<td>Lebanon Technology &amp; Career Center</td>
</tr>
<tr>
<td>Lex La Ray Technical Center</td>
</tr>
<tr>
<td>Macon Area Vocational Technical School</td>
</tr>
</tbody>
</table>
**Dental Assistants**

Dental Assistants have witnessed growth within the occupation in three of the past five long-term projections that MERIC has completed since 2000. This occupation is defined as someone who assists the dentist with setting up the patient and equipment needed, as well as maintaining the patient records. Normally, Dental Assistants are involved with preliminary teeth-cleaning and x-rays of patients for oral exams. Dental Assistants are required to have licensing and registration, and educational requirements range from a Postsecondary Vocational Certificate to an Associate Degree.

**Missouri Employment Projections for Dental Assistants**

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2010</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
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<td>5,925</td>
<td>7,664</td>
<td>6,922</td>
<td>5,279</td>
<td>4,979</td>
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</tbody>
</table>

Missouri has seen the actual employment of Dental Assistants grow by over 250 employees between 2000 and 2008. This is a 5.4% growth rate over an eight-year period, which is much slower than the average estimated growth rate of 29.6% for the past five long-term projections.

National trends estimate that between 2008 and 2018 there will be continued growth in employment for Dental Assistants due to slight increases in dental offices. This is mainly due to dentists continuing to delegate more patient care to their dental assistants. Missouri’s long-term projections also predict a 20.5% growth in Dental Assistants employment, with over 2,000 anticipated openings throughout the state.

**Degrees Conferred for Dental Assistants in 2009**

- **Associate Degree**: 97
- **Postsecondary Vocational Certificate 2 yr.**: 212
- **Postsecondary Vocational Certificate 1 yr.**: 183

Across Missouri in 2009, there were 18 academic institutions that provide the training to become a Dental Assistant. These courses range from a Postsecondary Vocational Certificate to an Associate Degree. In 2009, there were 492 students graduating with degrees for Dental Assistants.
Conclusion

Missouri has seen consistent growth in support occupations for the healthcare industry, but there is still a shortage of workers that leads to higher work life stress and less consistent patient care. By providing more training options and attending to the needs of current staff, the healthcare workforce has the opportunity to nurture and develop new talent that can keep pace with current needs.

Other states across the nation, like Washington, have taken more advanced steps to alleviate their healthcare shortage with proactive measures by recruiting current entry-level workers with the possibility of advancement into higher-wage healthcare occupations. Other simpler steps such as hiring more nursing faculty at educational and training programs can increase the number of applicants accepted to programs, and thereby increase the graduation rates for new workforce participants.

As the population continues to retire and age, healthcare will become an even more vital industry with sustained growth. To ensure superior patient care and growth in the future, the shortage of workers in the healthcare industry has to be dealt with now so the problem does not become compounded with other growing pains the workforce may experience.

References

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