

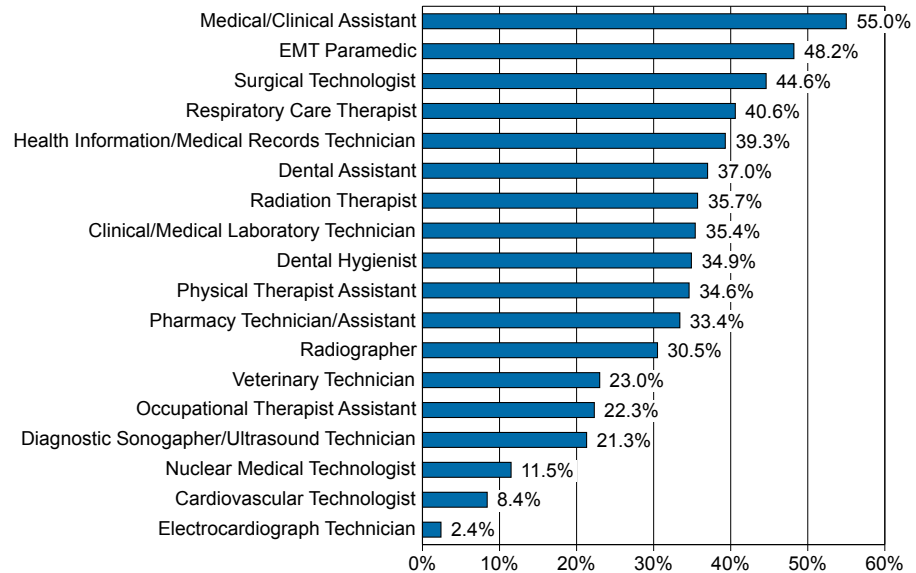
The Contributions of Community Colleges to the Education of Allied Health Professionals in Rural Areas of the United States

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Background

Promoting allied health career pathways in rural areas not only supports rural health care delivery but also supports the important goal of rural economic development. Community colleges educate a significant portion of the nation's allied health workforce (including Health Information/Medical Records Technicians, Surgical Technologists, and Dental Assistants, to name a few), prepare local residents for local jobs, and strive to be accessible to their community members. Short drive times to their programs are frequently cited as evidence of that accessibility.

Percent of U.S. Population in Rural Areas with Community College Allied Health Education Programs* within a 60-Minute Drive, by Program Type, 2007-2009



* Among allied health occupations most frequently employed in rural settings.

Purpose

This study's purpose was to increase understanding of how community colleges contribute to allied health education and rural health care by (1) assessing which allied health occupations are most relevant to rural health care delivery and can be attained through community college education programs, and (2) describing where these allied health community college programs were located in relation to rural populations and small rural hospitals across the United States in 2007-2009.

Data Sources and Methodology

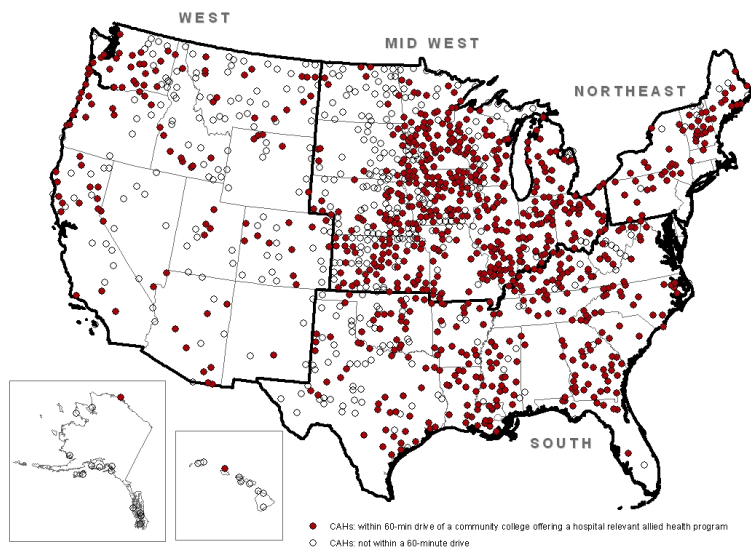
Data from the federal Integrated Postsecondary Education Data System, Flex Monitoring Team, American Hospital Association, and U.S. Census Bureau were used for this study. Bivariate analyses were conducted using ArcGIS and STATA software. Most agree that allied health occupations do not include physicians, dentists, or nurses, but there is not agreement on the complete list of professions that comprise "allied health." We selected for study 18 occupations that are frequently employed in rural care settings and that could be completed through a

community college program from among the National Center for Education Statistics' list of all non-nursing health professions and related clinical sciences programs. The locations of community college education programs for these 18 occupations were analyzed in relation to rural populations by assessing the percent of overall and regional rural populations that were within 30- and 60-minute drives. In addition, among these selected allied health occupations the 13 most often employed by rural hospitals were identified for analyses comparing the locations of hospital-relevant allied health programs to small rural hospitals (fewer than 50 beds).

Major Findings

■ Depending on the profession, allied health professionals can obtain their education from four-year colleges and universities, at community and technical colleges, or on the job. Of the nearly 200,000 persons who completed a postsecondary program in 2007-2008 to prepare for these 18 rural-relevant allied health occupations, the majority (62%) did so at a community college.

Critical Access Hospitals Located within a 60-Minute Drive of a Community College Allied Health Education Program*



* Among allied health occupations most relevant to rural hospitals.

Conclusions

Rural communities in many areas of the country have limited access to a local community college program for allied health occupations—a likely barrier to recruiting, training, and retaining the health care workforce. Nearly half of CAHs and a third of all small rural hospitals do not have a local education source for one or more of the allied health occupations needed to deliver care. Access to allied health professions education in community colleges appears to be particularly limited in the West where population density is much lower and commuting times to community college programs are greater than in other regions.

Policy Implications

This study provides information quantifying the geographic relationships between community college allied health education programs, rural populations, and health care facilities that employ allied health professionals. Rural communities can use these findings to help identify strategies to alleviate allied health workforce shortages,

including:

- expanding the distribution of community college allied health education programs,
- building rural satellite programs that bring programs closer to rural populations,
- increasing clinical training opportunities for community college allied health education programs, and
- increasing distance education opportunities for rural populations.

Data on rural workforce demand and supply are scarce, but if demand data were more widely available, they could be used to assess whether allied health gaps are associated with the rural community college “deserts” identified in this report (for example, if those regions with few health information/medical records programs are regions struggling to meet Meaningful Use requirements). Rural communities and community colleges could benefit from information about effective collaborations between community colleges, health care employers, and rural communities that help meet the demand for allied health workers. Studies underway by the WWAMI Rural Health Research Center will, when complete, help to improve understanding of some of these issues.

■ 99% of urban populations resided within a 60-minute drive to a community college that educated at least one of the 18 rural-relevant allied health professions, compared to only 73% of the U.S. rural population (defined using Rural Urban Commuting Areas) (83% of populations in large rural areas, 69% of small rural areas, and 56% of isolated small rural areas). Only 35% of rural populations nationwide were within a 30-minute drive to one of these programs.

■ Access varied considerably by region. Only 58% of the rural population in the West was within a 60-minute drive, compared to 90% in the Northeast.

■ Some types of programs were more accessible than others. Programs for Medical/Clinical Assistants (55%), Emergency Medical Technicians/Paramedics (48%), and Surgical Technologists (45%) had the highest percentage of rural populations within a 60-minute drive; programs for Diagnostic Medical Sonographers/Ultrasound Technicians (21%), Nuclear Medical Technologists (12%), Cardiovascular Technologists (8%), and Electrocardiograph Technicians (2%) had the lowest.

■ 55% of Critical Access Hospitals (CAHs) were within a 60-minute drive to a community college program with at least one of the 13 rural hospital-relevant allied health education programs, compared with 67% of small (fewer than 50 beds) non-CAH rural hospitals. Yet only 3% of CAHs in the West were within a 60-minute drive to a Clinical/Medical Laboratory Technician community college program.

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Findings are more fully described in WWAMI RHRC Final Report #136:

Skillman SM, Keppel GA, Patterson DG, Doescher MP. The Contributions of Community Colleges to the Education of Allied Health Professionals in Rural Areas of the United States. October 2012. http://depts.washington.edu/uwrhrc/uploads/RHRC_FR136_Skillman.pdf.