

The Potential for Medical School Expansion: A Western North Carolina Perspective

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The North Carolina Institute of Medicine (NC IOM) 2007 Primary Care and Specialty Supply Task Force report indicates that the overall supply of practitioners in North Carolina may currently be adequate, but escalating trends in the environment threaten a substantial future shortage. The overall population growth, combined with the aging of native residents and the influx of retirees from other states, presents a serious threat to quality health services in Western North Carolina (WNC), which is experiencing both of these phenomena at an accelerated rate.

The region's population is projected to increase by 21% over the next 18 years.¹ Of the 15 counties in North Carolina with the highest percent of older adults, 10 are in WNC, and, based on 2000 data, the population aged 65 years and older in WNC is proportionately greater than for North Carolina and the US (17.8%, 12.0%, and 12.4%, respectively).² Already, the ratio of physicians to population in WNC is substantially below the statewide average (14.8% and 20.7%, respectively),³ and as the population ages, they require more health care services.^{4,5}

The State Needs to Consider New Options and Alternatives for Training Medical Students

The NC IOM task force has recommended that North Carolina medical schools expand their enrollment by 30% in order to meet the future shortages. An increase of this magnitude would push existing schools well

beyond their facility and faculty capacity, leading to potential quality concerns. A more reasonable approach would be to consider off-campus teaching sites in WNC hospitals and private practices for up to a total of 100 third-year and fourth-year students. With additional resources, these sites could utilize existing faculty from community hospitals, including the 750-bed Mission Hospitals regional referral center, and Mountain Area Health Education Center (MAHEC) residency programs. These types of rotations would be new to the region but have proven successful in other states such as Michigan, Indiana,

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and South Carolina. It is believed that this method would be a more economically feasible approach to increasing practitioner supply because existing community hospitals and MAHEC resources could reduce program costs to the state.

Why Utilize Western North Carolina for Training Medical Students?

Western North Carolina possesses assets that make the region ideal for training medical students. The region is relatively compact but offers a wide range of characteristics including metropolitan areas and relatively isolated rural communities, a growing elderly population, a strong tradition of collaboration, a sophisticated and high quality medical community, and recognized successful residency programs. The region can stand apart in offering programs for training practitioners for a variety of settings and environments.

Much of the region is nestled in areas somewhat isolated by the topography of the southern Appalachian mountains. The area is composed of many close-knit communities and residents depend on their local hospital and health care providers for their primary care needs. This setting exposes medical students to genuine rural practice with reasonable access to a large major tertiary care hospital. As more students are exposed to this environment and become integrated into the community, more may decide to practice in the rural settings,⁶ which often have the greatest demand for physicians.

The quality of health care in WNC has received national recognition. Mission Hospitals has been ranked as a "Top 50" and "Top 100" hospital in several clinical areas such as cardiology, cardiovascular surgery, and orthopedic surgery. Several other WNC hospitals have been recognized nationally for their quality health care services. In addition, the utilization and cost data in WNC is also perceived as low cost, as demonstrated by the Dartmouth Atlas database. The region has every major specialty

covered and provides all 3 levels of care.

The region also has a very successful history of collaboration among health care providers. The 16 WNC hospitals, MAHEC, and 14 public health departments work together closely through the WNC Health Network with the goal of improving access, enhancing quality, and reducing the costs of health care throughout the region. The hospitals formed one of the first initiatives in the country, the WNC Data Link project, to access and exchange electronic patient data across the region to facilitate care and treatment of patients. Western North Carolina community colleges and universities have a cohesive bond with the hospitals and MAHEC to project future demand for health care services and provide adequate training for professionals offering these services.

The region also has experience developing and maintaining very successful residency programs. Led by MAHEC, Mission Hospitals, and Margaret R. Pardee Memorial Hospital, with the cooperation and support of other regional hospitals, these programs have proven successful in attracting and maintaining health care practitioners in WNC. The residency programs boast a retention rate of 56% since their first graduating classes in 1978.⁷

Similar to other areas of the state, WNC has experienced a steep decline in the number of furniture, textile, and other manufacturing jobs over the past decade. The hospitals have partnered with AdvantageWest, the regional economic development team, to enhance and promote the region's strong health care services in order to attract more business and industry. A medical student training program could boost those efforts and help the economic development of the region.

Through the resources and attributes noted above, Western North Carolina can provide a high quality educational experience for third-year and fourth-year medical students. We are prepared to explore the feasibility of this program to ensure an adequate supply of physicians for our future. **NCMJ**

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