Access to Dermatology Care in Rural Populations

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DISCERNING DERMATOLOGY

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Dermatology nurse practitioners (NPs) interested in autonomy, a challenging work setting, and a chance to make a substantial difference for their patients, need look no further than rural practice settings. Because rural populations lack adequate access to primary care and even less to specialty care,[1-3] opportunities in rural health may offer a good fit for NPs looking to affect change in underserved communities.[4] Insufficient numbers of patients to support a specialist, transportation burdens, inability to pay for care, and financial inability of the community to entice specialists all contribute to inadequate dermatology care among rural populations.[3,5] The lack of consensus in defining what *rural* is and is not also impedes policies and funding. However, there are some estimates that up to 42% of the United States population reside in areas underserved by dermatologists.[6] Although no studies specifically address the rural needs for dermatology care, rural needs may be inferred from the population at large.[7]

Economic disparities are often enormous. Rural populations are poorer, often living below the poverty line. Almost a quarter of rural children live in poverty. For rural minority groups, the discrepancies are appreciable higher. Almost 25% of the US population resides in a rural area, yet only 10% of physicians practice in rural America. Fortunately, 20% of NPs provide care in rural communities.[5,8,9]

Skin problems are one of the most common reasons patients visit their primary care providers, yet inaccurate diagnoses of dermatologic conditions are well documented.[10,11] The cost of delayed diagnosis and treatment for skin disorders can be significant. Skin cancer is the most prevalent cancer, with over 3 million cases diagnosed every year. Early diagnosis and timely interventions not only reduce health care costs; they save lives.[12] Moreover, dermatologic problems affect the overall health, self-esteem, and comfort of all age groups, from infants to the elderly, males and females, and all races.[7,13]

Solutions to inadequate access to dermatology care among rural residents described in the literature are scarce. Although health care by NPs is not new to rural areas, dermatology NP specialists would be a novel solution to the disparities of underserved, often poor rural groups.

Implementing an NP-owned dermatology clinic in a central location within a rural region could address the unmet needs of underserved residents. Advantages of a dermatology NP-run clinic include lower costs for patients and insurance companies, and expedient access that results in early diagnosis and intervention, thereby improving outcomes for patients with skin problems. The financial burden of opening a new clinic, professional isolation, and stress from patient volume, long work hours, disparities in pay are disadvantages that must be carefully weighed before committing to this unique approach.[1,9,14]

Through the NP-run dermatology clinic, teledermatology could be used by primary care providers within the geographical area to consult with the NP dermatology expert. This well-suited use of telemedicine could increase accurate diagnosis and timely treatment. It could potentially provide additional revenue for the clinic and appropriate referrals. However, the cost of equipment and staff training are impediments that must be addressed in

the fixed and variable costs of the clinic. Fortunately, telemedicine is a rural priority, and funds have been allocated for implementation.[8] Lack of acceptance of doctorally trained dermatology NPs by physicians may continue to be an obstacle, but younger physicians tend to practice in rural areas[1] and may be more amenable to change than their elder colleagues.

Using a mobile health clinic as a means to access other health care provider clinics on specified days may be an effective time-management and cost-efficient strategy for experienced dermatology NPs to provide specialty care to primary care patients. The capital cost of a mobile unit can be one of the biggest disadvantages of this health care delivery model; however, this novel approach may be particularly appropriate for those seeking grant funding. Time lost to travel by the NP and staff must also be considered in the cost analysis of a mobile clinic.[15]

Access to specialty health care continues to be a hurdle for rural Americans. Dermatology NPs are in a unique position to offer specialty care to this consistently underserved group. Creative health care delivery models, such as those previously described, can also meet dermatology NPs' professional goals. JNP

References

1. MacDowell M, et al. A national view of rural health workforce issues in the USA. *Rural Remote Health*. 2010;10(3):1531.
2. National Center for Health Statistics. *Health, United States, 2010: With Special Feature on Death and Dying*. Hyattsville, MD: National Center for Health Statistics; 2011. http://www.cdc.gov/nchs/hus/special.htm. Accessed December 5, 2011.
3. Reschovsky JD, Staiti AB. Access and quality: does rural America lag behind? *Health Aff (Millwood)*. 2005;24(4):1128-1139.
4. McDaniel J, Strauss SS. Development of a nurse practice arrangement in rural Appalachia: triumphs and challenges. *Nurs Educ Perspect*. 2006;27(6):302-307.
5. Southwest Rural Health Research Center School of Rural Public Health. *Rural Healthy People 2010: A Companion Document to Healthy People 2010*. 2003. srph.tamhsc.edu/centers/rhp2010/Volume_3/Vol3rhp2010.pdf. Accessed December 5, 2011.
6. Shannon GW, Buker CM. Determining accessibility to dermatologists and teledermatology locations in Kentucky: demonstration of an innovative geographic information systems approach. *Telemed J E Health*. 2010;16(6):670-677.
7. Bickers DR, et al. The burden of skin diseases: 2004. A joint project of the American Academy of Dermatology Association and the Society for Investigative Dermatology. *J Am Acad Dermatol*. 2006;55(3):490-500.
8. Office of Rural Health Policy. 2009 Annual report. www.hrsa.gov/ruralhealth/pdf/annualreport2009.pdf. Accessed December 5, 2011.
9. Presley S. Rural NPs embrace private practice. *Am J Nurs*. 2010;110(5):21-22.
10. Federman DG, Concato J, Kirsner RS. Comparison of dermatologic diagnoses by primary care practitioners and dermatologists. A review of the literature. *Arch Fam Med*. 1999;8(2):170-172.
11. Halpern AC, Hanson LJ. Awareness of, knowledge of and attitudes to nonmelanoma skin cancer and actinic keratosis among physicians. *Int J Dermatol*. 2004;43(9):638-642.
12. Garg A, Geller A. Need to improve skin cancer screening of high-risk patients: Comment on "Skin cancer screening by dermatologists, family practitioners, and internists." *Arch Dermatol*. 2011;147(1):44-45.
13. American Cancer Society. Cancer Facts & Figures 2010. http://www.cancer.org/Research/CancerFactsFigures/CancerFactsFigures/cancer-facts-and-figures-2010. Accessed December 5, 2011.
14. Caldwell DR. Bloodroot: life stories of nurse practitioners in rural Appalachia. *J Holist Nurs*. 2007;25(2):73-80.
15. Moulavi D, et al. Thinking about a mobile health unit to deliver services? Things to consider before buying. *Aust J Rural Health*. 2000;8(1):6-16.

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