

Bringing Broadband to the Nursing Home Bedside

by

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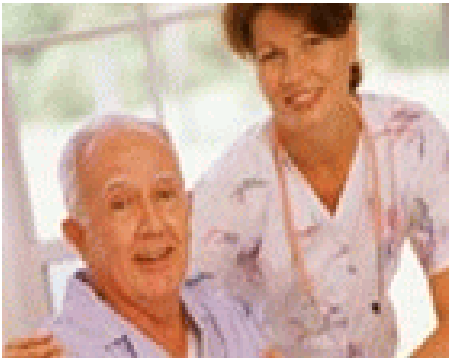
Making the decision to move to a nursing home can be a difficult proposition for many seniors and their families. In rural areas, nursing home life is complicated by limited access to services. Receiving speciality care often involves long waits for appointments or long drives at great discomfort to residents. Residents of the Au Sable Valley, Marwood Manor, and TenderCare



nursing homes in rural Michigan will no longer face these challenges. Michigan State University, in partnership with the Masonic Pathways Teaching Nursing Home, will deliver speciality care directly to patients in the comfort of their rooms using new technologies via a **Wireless Telehealth Network**.

Each nursing home will install a Wi-Fi system that extends wireless connectivity throughout the entire facility. Nursing home staff will be equipped with portable battery-powered notebook computers with video cameras attached. Setting up their tablet PCs at residents' bedsides, nursing home staff will establish virtual visits between residents and Michigan State University clinical faculty.

Traditional telemedicine systems require complex wiring of rooms that can be intrusive for the residents and costly for the nursing home. Other telemedicine projects in nursing homes place equipment in a centralized room to which residents must be transported, a great challenge for very ill patients. By combining Wi-Fi technology with portable PCs, Michigan State University's project will work within the existing structural models of the nursing home and fit comfortably within the residents' constraints and needs.



The demand for long term care will increase with our aging population. In 2000, there were 1.5 million people living in 17,000 nursing homes in the United States (American Health Care Association, 2001). In 2003, it is projected that federal, state, and local governments will spend almost \$70 billion on nursing home care. By 2050, the total number of nursing home residents will quadruple to almost seven million people (American Health Care Association, 2001). The Michigan

State University project will provide insights into how our Nation's health system can use technology to provide quality care at reduced costs for our aging population.