Title: Remote Monitoring Technologies in Long-Term Care: Implications for Care Team Organization and Training

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Objective: To examine how remote monitoring programs are preparing and leveraging the health care workforce to care for patients with chronic illness and long-term care needs who are living at home.

Data/Setting: We constructed a literature review using PubMed, CINAHL, Google Scholar, Cochrane, and PLOS databases to identify relevant publications and conducted key informant interviews with managers, front-line staff, and researchers engaged with remote monitoring programs.

Design/Methods: The literature review informed the identification of remote monitoring programs and individuals with remote monitoring expertise to serve as key informants for 20 semi-structured interviews. We focused on technologies most associated with 1 of 4 key chronic conditions. A snowball sampling method was used to identify case study sites and interviewees.

Results: Patient-centered monitoring technologies have the potential to improve the efficiency, cost, and accountability of chronic health care delivery and will require appropriate medical professional support, training, and role distinction. Well-established remote monitoring programs use a team-focused approach, which requires technology that facilitates effective communication. Registered nurses often play a central role in care coordination and conveying information to other health professionals and patients.

Conclusions: An expanded effort to share information across remote monitoring programs would accelerate learning and enhance successful implementation. Additional research is needed to identify best practices and standards for alerts and intervention. As health care organizations face greater pressure to improve the quality of care while controlling costs, they will need to accurately determine the costs of each of the components of remote monitoring programs and assess their value.

Key Words: Remote monitoring technologies, home-based care, chronic conditions

HWRC Website Link:
http://healthworkforce.ucsf.edu/sites/healthworkforce.ucsf.edu/files/ABSTRACT.FINAL1_.Remote Monitoring.pdf