

# **EXECUTIVE SUMMARY**

## **Telehomecare and Remote Monitoring-An Outcomes Overview Advanced Medical Technology Association November 2007**

Management of chronic diseases such as diabetes, congestive heart failure and chronic obstructive pulmonary disease occurs away from health care facilities, requires patient self management and behavior modification and depends on the regular collection of patient status data in real-life settings (monitoring). Measurements such as capillary blood glucose, blood pressure, respiratory peak flow rate and weight allow patients to self-administer appropriate amounts of medication in response to dietary and activity variations (insulin), adequacy of medication dose (anti-hypertensives) and excessive fluid accumulation (suggesting deteriorating heart function leading to compromised breathing). Electronic data capture and Internet-enabled timely review by clinicians (remote monitoring) can enable immediate and preventative management adjustments between office visits (telehomecare).

Telehomecare and remote monitoring are increasingly recognized as valuable tools for enhancing care quality in chronic disease management. They have the potential to deliver new savings for both patients and providers. For patients, this means fewer office and emergency room visits, fewer and reduced duration of hospitalizations, reduced patient travel time and expense, and increased access (for the elderly, the physically challenged, the homebound, and especially for rural patients). For clinicians, it means more informed decision-making, enhanced patient compliance and more efficient outreach case management.

The results of studies to date are promising and show clear value in remote monitoring and telehomecare. But they also point to technology, infrastructure, access and reimbursement issues that must be addressed for maximal care quality improvement and cost savings. These are multi-faceted issues that will require careful and coordinated evaluation by payors (Medicare, Medicaid and private insurers), government (federal, state and local), care providers (physicians and nurses, hospitals, home health agencies, and nursing facilities), and employers, as well as an assessment of technology needs (medical technology, infrastructure, and telecommunications).

While most published studies are small, some are contradictory, and the need for large well-controlled trials remains, evidence supporting the value and the potential of telehomecare is clear and growing.