



Title	Physiologic Telemonitoring in Congestive Heart Failure
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Reference	VA Technology Assessment Program Short Report, January 2001, Number 5

Aim

To determine the effectiveness of physiologic telemonitoring in patients with congestive heart failure (CHF).

Conclusions and results

Do telephone management protocols for patients with CHF diminish hospitalizations and emergent care visits for CHF, improve patient satisfaction, and enhance patient quality of life? Six articles met the inclusion criteria. The results indicate that most patients with CHF are candidates for multidisciplinary management programs, eg, physiologic telemonitoring. Physiologic telemonitoring led to a reduction in resource use and an increased functional level in patients. In addition, patients tended to be satisfied with telemonitoring devices and their care. Within the VHA there is interest in managing patients through telemonitoring.

Recommendations

Evidence shows the feasibility of telemonitoring and its potential for clinical and economic benefits, but limitations in study design prevent drawing definitive conclusions.

Methods

Comprehensive literature searches were conducted using MEDLINE, HealthSTAR, EMBASE, Current Contents, and the Cochrane Library from 1995 to 2000. Search strategies aimed to retrieve peer-reviewed published literature using a variety of terms indicating telephone, telemetry, telemonitoring, remote monitoring, telemedicine, congestive heart failure or heart diseases, quality of life, patient satisfaction, and terms for systematic review. Citations were also obtained from INAHTA, evidence-based medicine communities, and the VA for ongoing or proposed activities involving physiologic telemonitoring. The search yielded 155 citations. Original controlled studies published in English that addressed outcomes using telemonitoring systems in the home setting were included.

Further research/reviews required

Basic research is needed to define target populations for telemedicine services and associated interventions, develop standardized tools to measure effectiveness and harm, and assess the effect of different methods of delivery and payment. Randomized clinical trials are needed to determine the relative cost effectiveness of telemedicine strategies.