

# PILOT STUDY UNDERLINES FEASIBILITY OF DELIVERING CARE TO HEART FAILURE PATIENTS ONLINE

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The British Columbia Alliance on Telehealth Policy and Research (BCATPR) conducted a *Pilot Study of Remote Management of Heart Failure Patients Using the Internet* (Virtual Heart Function Clinic) in 2006 to examine the feasibility of a website designed to assist patients in self-monitoring their heart failure (HF) symptoms.

## BACKGROUND

HF is a leading cause of morbidity and mortality among the elderly and is associated with high rates of re-hospitalization and emergency department visits. Taking into account the increasing prevalence of Internet use among older populations, this pilot study examined the feasibility of a website designed to deliver a recognized standard of care to HF patients by enabling them to self-monitor their weight and symptoms.

Seventeen out of twenty HF patients recruited from the Heart Function Clinic at St. Paul's Hospital in Vancouver, BC, completed the study. Participants entered their weight and symptoms each day for six months into the website. Their responses were monitored by a nurse who received alerts when participants encountered adverse weight changes and symptoms. Follow-up of alerts was performed by telephone to assess the patient and to provide necessary support.

## KEY POINTS

- Throughout the study, significant improvement was observed for the maintenance and confidence subscale of the Self-Care of Heart Failure Index. A trend towards improvement in the six-minute walk test, and the quality of life scale demonstrated that this intervention was safe and effective.
- When interviewed, participants reported a favourable uptake of the intervention, stating that it made them aware of the importance of monitoring their weight and symptoms, and that they found the website very easy and simple to use. Participants were quoted as saying:
  - *"I found it very useful because it helped me correlate my checking my weight (to my well-being)... It helped me to see what happens when I do fluctuate between weight."*
  - *"It made me understand to look for any of the symptoms I used to shrug off as just something else. Now I'm more concerned with what my body is actually doing."*
- Nurses also reported a favourable uptake of the website and felt that it may be useful for patients who do not have regular access to healthcare, or who are unstable. Nurses were quoted as saying:
  - *"The program would be most beneficial for people who have no access to a heart function clinic, who just need that extra support."*

## CONCLUSIONS & RECOMMENDATIONS

With affirming feedback from participants regarding the favourable uptake of the intervention, an Internet based website presents a sustainable, effective and inexpensive way to assist patients in monitoring their HF. Additionally, as put forth by a clinical nurse specialist involved in the study, "It is becoming clear that we need a chronic disease web program rather than just a heart failure one because if patients have diabetes and renal failure and heart failure, you can then tailor the web site to their needs." Thus, aside from being able to reach patients who are not able to receive optimal HF management, this modality also has the potential to instil self-monitoring abilities in patients who are suffering from multiple chronic diseases.

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