

Health Improvement Solutions from Inverness Medical Innovations, Inc. and Alere® Living with Heart Failure

Inverness Medical Innovations, Inc. and Alere LLC comprise a family of highly innovative and successful companies that employ health information technology, home monitoring services, rapid diagnostic testing, clinical outreach, and health coaching to enhance individuals' health and wellbeing. We add value to the nation's healthcare system by collaborating with providers, health plans, employers and patients to improve clinical outcomes and produce more health for the resources expended.

Our Heart Failure program is an excellent case in point.

The Problem

Nearly 5 million Americans are living with heart failure (HF), and it is the nation's leading cause of hospitalizations.¹ Heart failure is the only major cardiovascular disease rising in both incidence and prevalence, with 4.8 million afflicted Americans and 400,000 to 700,000 new cases diagnosed each year.² The estimated direct cost for heart failure is approximately \$29.6 billion annually in the United States alone.³

Heart failure is a chronic condition that occurs when the heart muscle does not pump as much blood as the body needs, and usually there is no cure. But many people with heart failure lead full, enjoyable lives when the condition is closely monitored and carefully managed with medications and healthy lifestyle changes.

The Alere Approach

Our Heart Failure (HF) Program reduces costly hospitalizations by helping participants with HF to understand the serious health effects of not adhering to their care plans; to recognize symptoms that could worsen their condition or lead to other illnesses; and to modify unhealthy lifestyle behaviors regarding weight, diet and activity levels.

Through educational materials and guidance from our nurses, we help participants with HF to take better care of their overall health and to combat symptoms of HF, such as fatigue, shortness of breath and swelling from fluid retention. By working with participants to alter their regular routines, we help them reduce disabling symptoms that result in a diminished quality of life.

In order to prevent disease progression, disability and the development of other chronic conditions, we focus on treatment plans, medication compliance and modifying unhealthy lifestyle behaviors.

Through educational materials, Web tools and telephonic interactions, we help people with HF learn how to quickly recognize the early warning signs of this disease. Our specialized nurses help participants take better care of their heart failure symptoms, which allows them to better combat this disease and to prevent a worsening of their condition, which can lead to heart attack, stroke, kidney failure and respiratory illness.

Our HF program is designed to help participants comply with their doctor's care plan by taking control of their own health while remaining at home. We track their adherence to key clinical performance indicators that are based on national standards for managing heart failure, and report back measurable results to show the

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program's impact on patient compliance. Alere's Scientific Advisory Board, composed of our industry experts, guides and directs appropriate protocols for all of our programs.

The HF Program is based upon national guidelines from the:

- American Heart Association
- American College of Cardiology
- Institute for Clinical Systems Improvement

For high-risk patients with HF, we provide the Alere DayLink® Monitor, which is a biometric measurement device that records participants' weight and/or their answers to pre-programmed questions regarding their symptoms. This health information is then sent daily via a phone line to Alere clinicians so that they can provide immediate guidance and/or alert the participant's physician if symptoms or change in weight signals a worsening of the condition. The Alere DayLink® Monitor and our clinicians can thereby act as the physician's "eyes and ears" between the patient's medical appointments, allowing for a highly cost-effective way to improve quality of care and reduce avoidable hospitalizations.

If symptoms and weight changes suggest that a patient is going into acute heart failure, the test that a physician most often orders to confirm the diagnosis is a rapid diagnostic test produced by the company and available in hospitals, ERs and doctors' offices. Our Triage® BNP test measures B-type Natriuretic Peptide in whole blood or

plasma and is used as an aid in the diagnosis and assessment of severity of heart failure. When BNP is elevated, the physician can intervene to prevent unnecessary hospitalization.

Heart Failure Outcomes

The **HF Program** has produced the following results for a range of clients:

- Reduced short-term mortality by 56 percent
- Reduced hospitalizations by 29.5 percent and per member per month (PMPM) hospitalization costs by 14 percent
- Reduced emergency room visits by 27 percent and PMPM emergency room costs by 28 percent
- Reduced hospital days by 17 percent
- Reduced pharmaceutical PMPM costs by 9 percent
- Reduced total PMPM costs by 9.5 percent

References

1. American Heart Association, Heart Disease and Stroke Facts, 2006.
2. Heart Failure Society of America (www.hfsa.org), Quick Facts and Questions about Heart Failure, June 24, 2007
3. American Heart Association et al.