Examining Whether a Self-Care Program Reduces Healthcare Use and Improves Health among Patients with Acute Heart Failure -- The GUIDED HF Study

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What was the research about?
Heart failure occurs when the heart doesn't pump blood as well as it should. When heart failure occurs or gets worse suddenly, it's called acute heart failure, or AHF. Patients with low incomes or who are racial or ethnic minorities are more likely to have AHF events than patients from other backgrounds.

Many patients with AHF go to the emergency room, or ER, for treatment. In this study, the research team tested how well a self-care program supported patients with AHF after they left the ER. The team looked at whether this program improved patients’ health outcomes and need for health care after leaving the ER compared with usual care.

What were the results?
After one month, compared with patients who weren't in the program, patients in the program had

- Fewer deaths from AHF
- Fewer visits to the ER, hospital, or clinic due to AHF
- Higher ratings of their health

After three months, patients didn't differ in these outcomes.

At one and three months, patients in the program knew more about AHF than patients who weren't in the program. Patients didn't differ in satisfaction with care or in symptoms of anxiety and depression.

Who was in the study?
The study included 491 patients leaving the ER with AHF. Of these, 63 percent were African American, 33 percent were non-Hispanic White, 2 percent were White Hispanic, and 2 percent were another race. The average age was 63, and 64 percent were men.

What did the research team do?
The research team recruited patients from 1 of 15 medical centers. The team assigned patients by chance to receive the program or not.

In the program, a self-care coach visited patients within seven days after they left the ER and called patients twice a month. The coach created a custom care plan for patients that included help to find the right medicine and make follow-up appointments. The plan could also include advice on diet, weight, AHF warning signs, and quitting smoking.

Patients who weren't in the program received usual care. In usual care, ER staff reviewed patients’ current medicines and helped patients schedule a follow-up visit seven days later.

The research team called patients and reviewed health records for information about patient deaths and hospital, ER, or clinic visits.
Patients with AHF, caregivers, and advocates provided input during the study.

**What were the limits of the study?**
Patients who weren't in the program had fewer health events from AHF than the research team expected, making it hard to detect differences between those who were and weren't in the program.

Future research could look at how to maintain benefits of the self-care program after one month.

**How can people use the results?**
Hospitals can use the results when considering ways to support patients with AHF after they leave the ER.

*To learn more about this project, visit [www.pcori.org/Collins349](http://www.pcori.org/Collins349).*