
Abstract

Engaging Heart Failure Patients with Interactive Voice Response Calls and Multimedia Programs as They Transition from Hospital to Home

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Abstract

Background: When people with heart failure (HF) are discharged from hospitals, they need to manage their condition. Patients are overwhelmed and feel poorly. To avoid complications and readmissions, it's essential they quickly engage in new behaviors, such as weighing themselves each day. Patients often do not start or maintain these behaviors.

Objective: Researchers sought to measure the impact of a user-centered, interactive voice-response (IVR) phone call and multimedia program series (EmmiTransition®) to educate, and motivate patients to take self-care actions post-discharge.

Methods: Researchers analyzed call records and conducted aggregate analysis from patients who interacted with the series between August 2013 and May 2016 at UAB Medicine and other healthcare organizations. The 45-day IVR series explains key concepts and behaviors and asks patients to report information like their daily weight. Short multimedia programs provided additional information. Call records from 4,503 patients who completed the series were analyzed. There were 3,615 people who answered and interacted with the calls. Interactions were analyzed to identify the impact on driving people to report their weight daily post-discharge. The percentage of patients who reported weighing themselves daily increased steadily over the first two weeks. After viewing a multimedia program, patients could take an optional survey from Emmi Solutions. Responses and comments were tabulated.

Results: On day one of the IVR calls, 66% of UAB Medicine patients who answered the call reported their weight. On day 14 of the calls, 89% of UAB Medicine patients who answered the call reported their weight, comprising a 36% increase in reporting in two weeks. The behaviors seen over the first two weeks were sustained. For the remaining 30 days of the series, 93% of patients who answered calls continued to report their weight. There were 936 patients who opted to take the post-multimedia program survey. The survey findings were as follows: 66% showed increased confidence to ask questions; 75% were prepared to manage their health condition; 75% were more motivated to take their medications; 89% were more aware of how their lifestyle impacts health; 87% were willing to take new action to manage their health; and 88% indicated that they were motivated to change their lifestyle. Examples of patient comments follow: "Read labels and try to decrease processed foods and transfer to whole fruits and vegetables utilizing herbs for seasoning"; "making sure I have a calendar over the bathroom scales to keep track of weight instead of going my memory"; "was not aware diet soda contained high salt count. I will not drink diet sodas as often maybe a glass once or twice a week"; "I will get a flu and pneumonia shot every year. This is not something I did in the past."

Conclusions: Most patients who engaged in this series started a new behavior, regularly reporting they weighed themselves. Most people continued this behavior throughout the 45-day series. Most patients who viewed a multimedia program and completed the survey expressed plans to take specific actions or behavior changes based on information offered by the program about how to weigh themselves, reduce sodium, or manage their fluids.

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KEYWORDS

adherence; congestive heart failure; engagement; heart failure, heart failure, congestive; interactive voice response; Internet-informed patient; multimedia; online survey; patient activation; patient communication; patient education

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