Patient Perceptions on Digital Interventions to Manage Heart Failure Medications

**VirTuAL Care to Manage Heart Failure Medications Pilot: VITAL-HF Pilot**

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**BACKGROUND**

- The use of guideline-directed medical therapy (GDMT) for heart failure with reduced ejection fraction (HFrEF) remains low
- HF guidelines have prioritized understanding systematic approaches to GDMT initiation and optimization as an area in need of further investigation.

**OBJECTIVE**

- Determine if a digital health tool can augment the management of patients with HFrEF
- Understand experiences of patients while undergoing virtual GDMT titration for HFrEF

**ELIGIBILITY**

- ≥ 18 years-old
- Symptomatic HFrEF
- LVEF ≤ 40%
- Access to a mobile phone with internet.

**METHODS**

- Participants were given a blood pressure cuff
- Data transmitted to the Story Health web-based platform
- Automated alerts were triggered based on pre-specified vital sign and laboratory data
- Health coaches assisted patients with medication education, pharmacy access, and lab access through text message and phone calls
- GDMT titration plans were individually created in the digital platform by local clinicians based on entry vitals and labs
- After 3 months, participants were invited to a group-based interview to share experiences and perspectives while participating in VITAL-HF

**STUDY SCHEMA**

**Principal Finding: Guideline directed medical therapy use during VITAL-HF Pilot**

![Graph showing blood pressure changes during VITAL-HF Pilot](image)

- N=12 participants

**Participant Experiences**

- "I did feel better knowing that somebody was paying attention to and you know monitoring it did make me feel much safer" (Participant 1)
- "...I love that I was able to check my blood pressure at any time and knowing that somebody was on the other end if something went wrong..." (Participant 2)
- "...what I didn’t like was that my medications were changed so much that I would go from I feel OK and then all of a sudden medications get changed and my body has to get used to them and then I didn’t feel the greatest for a few days until my body got accustomed to the medications and once my body got accustomed to the medications and I was OK..." (Participant 3)
- "Make sure that everything is looking right it was just a little feedback for me to know that yeah I’m on the right track and you know it also helped me remember to take my medication" (Participant 6)

**Virtual titration of HFrEF GDMT is feasible and appears to be a patient-centered approach to care**

**FIGURES**

- Change in heart rate during study
- Change in systolic blood pressure during study

**SAFETY**

- 4 patients required total 4 unplanned ER/hospitalizations
- 2 ER visits for cardiac reasons
- 1 ER visit for non-cardiac reason
- 1 hospitalization for non-HF related
- 45 laboratory assessments
- 2 hyperkalemia events requiring de-escalation, direct treatment, discontinuation of therapy, or hospitalization

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