

A study to determine if the Fluid Heart Tracker App supports patient decision-making at the onset of worsening heart failure.

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Background

Delay in seeking early intervention for worsening heart failure (HF) can result in poorer patient outcomes, with increased risk of mortality and increases in hospital admissions (Andersen 2017, Matsue et al. 2017, Mikami et al. 2021).

Despite the availability of health-related mobile apps for HF selfcare, no study has focused on whether apps designed for HF weight monitoring make a meaningful contribution to the decision-making process of HF self-care.

The Fluid Heart Tracker App

The Fluid Heart Tracker App idea was conceived by a heart failure nurse and developed by an Open-Source Volunteer team during covid.

The app, which is CE approved, focuses on weight monitoring, with no symptom interpretation needed. In addition to availability on the app store in Ireland and UK, the app is available to download from the Irish Heart Foundation website.

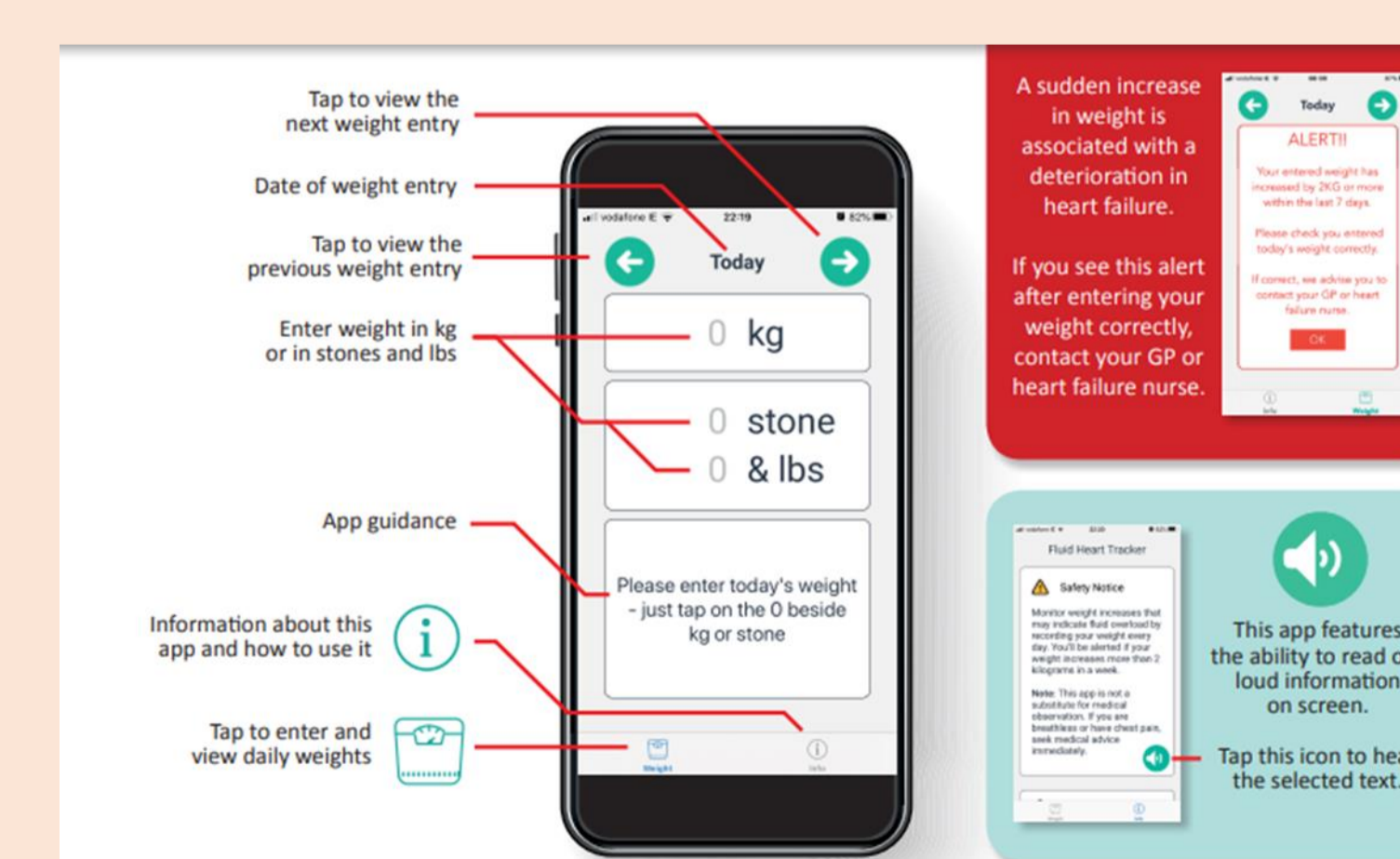
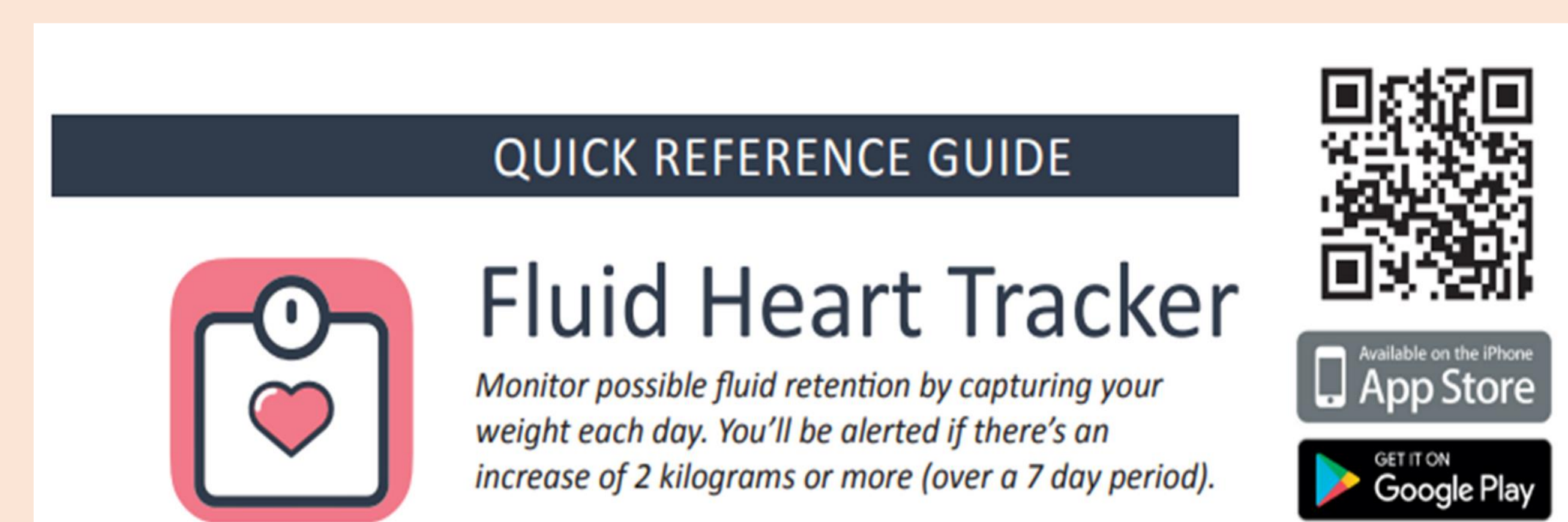
It is listed as a patient resource in the Irish National Model of Care for Heart Failure

Pilot Study

A pilot study was undertaken in three Irish hospitals to assess the Fluid Heart Tracker-App in terms of acceptability and usefulness, and to establish a need for modification.

Thirty-one participants downloaded and used the app for two weeks before completing the short survey that comprised five questions with dichotomous answers.

- All participants (100%) found the app useful, recommending it to other heart failure patients.
- All except one (n=30) participant used the app daily; one used it every alternate day.
- Participants found the app easy to use.



Current Study

Study aim:

The aim of this current study is to determine the impact, use and the effect of the Fluid Heart Tracker App on patient decision-making in HF.

Primary Outcomes:

- 1) Compare if using the app improves engagement patterns for weight monitoring.
- 2) Determine factors that influence engagement with the app.
- 3) Determine the impact of an alert from the app to the patient to seek medical attention for worsening heart failure.

Progress to date:

Recruitment ended early November 2023. There are 179 participants recruited from 12 HF sites in Ireland. The data are currently being checked before the onset of statistical analysis. This investigation has been undertaken as part of a PhD study in Trinity College Dublin.

References: available on request.

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