

Use of a Mobile App for Heart Failure Patients to Decrease Hospital

Readmissions

Colleen Blackburn DNP
OSF Saint Francis Medical Center

Background

- Heart failure affects 6.7 million U.S. adults.
- National 30-day HF readmission rate: 25%; OSF SFMC FY24: 21.83%.
- Readmissions drive mortality, burnout, and financial penalties.

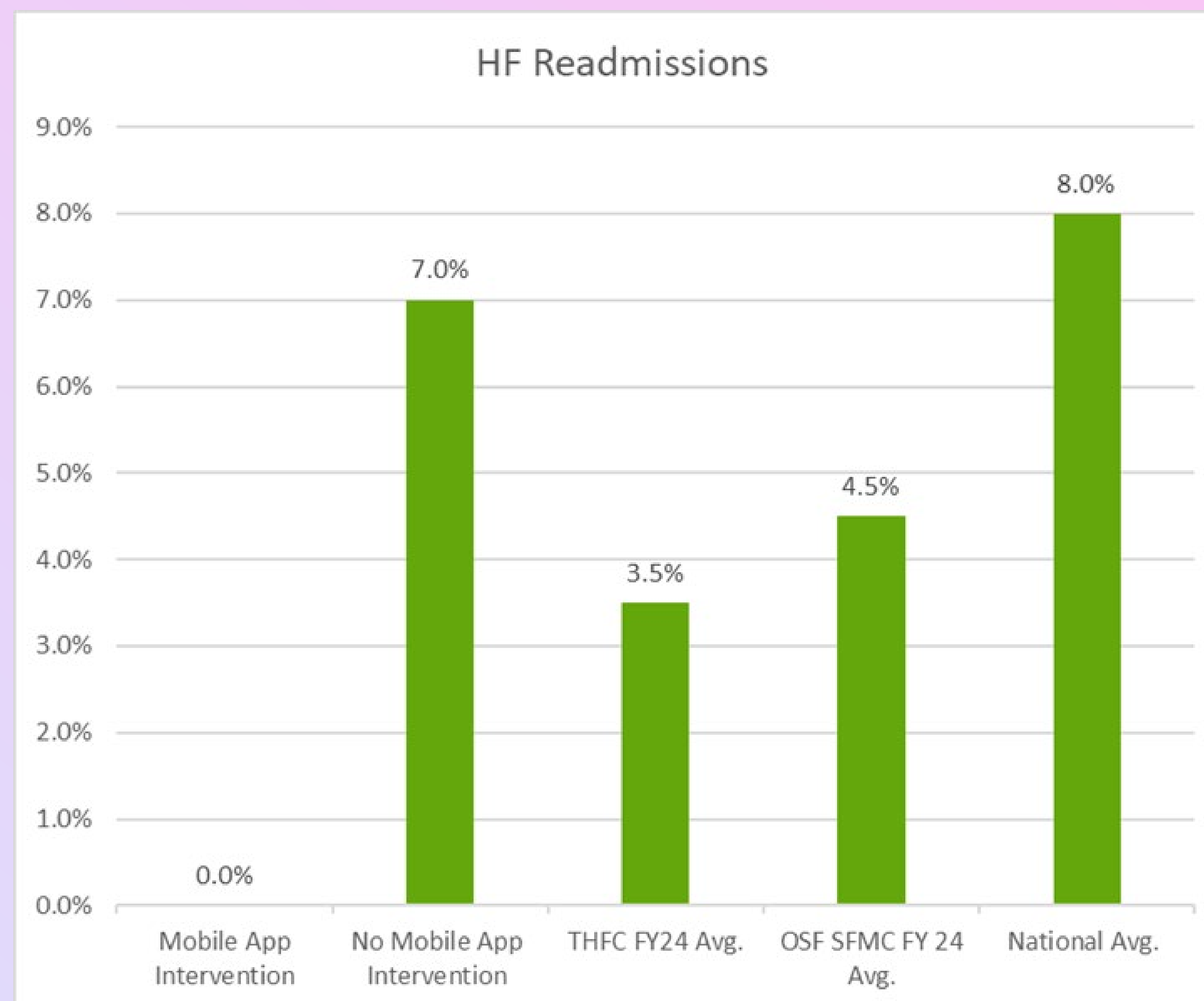
PICO Question

In adult HF patients in the THFC, does using the AHA HF Helper mobile app— compared to no app— improve 30-day readmission rates over 12 weeks?

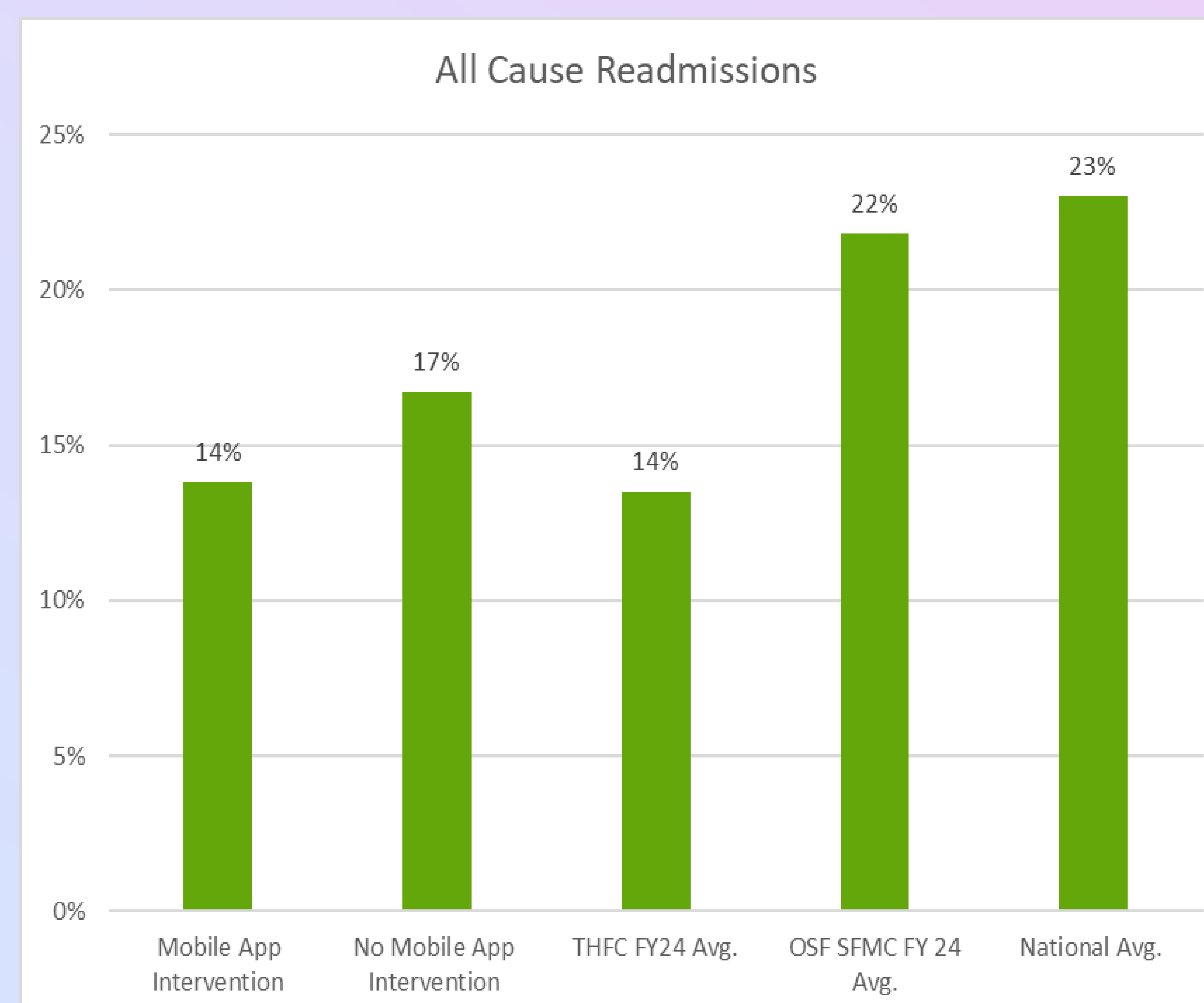
Methods/ Analysis

- **EBP Model:** Stetler Model
- **Design:** Systematic review + 12-week mobile app implementation
- **Participants:** Eligible HF patients in the transitional heart failure clinic
- **Intervention:** HF Helper app for weight tracking, medication adherence, and education
- **Measures:** 30-day readmissions, participation, compliance

Heart Failure Readmission



All Cause Readmission



Results

- 30-day principal HF readmission: App 0%, Non-app 7% ($p=0.16$)
- 30-day all-cause readmission: App 7%, Non-app 14% ($p=0.62$)
- Participation: 49%
- Compliance: 9%
- Unintended findings: Passive use via notifications; high non-smartphone ownership

Conclusion

- App use reduced HF readmissions, though not statistically significant.
- Engagement and technology access were major barriers.
- Program continuation recommended with modifications.

Implications

- Supports national goals to reduce HF hospitalizations.
- Potential cost savings (~\$90,000).
- Highlights need for ongoing staff education and patient tech support