

# REDUCING THIRTY DAY HEART FAILURE READMISSIONS

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## Background

### Global Impact

- 195 countries suggested that the global burden of heart failure(HF) was high, and that the occurrence of HF nearly doubled from 33.5 million in 1990 to 64.3 million in 2017.<sup>2</sup>

### National Impact

- Heart failure diagnosis was estimated to increase by 46% between 2012 and 2030 and was listed as a cause of death on 379 800 death certificates out of 2 839,205 deaths in 2018.<sup>3</sup>

### Local Impact

- Fifteen out of fifty patients at a busy NY upstate clinic had HF-associated hospital readmission in six months and therefore a failure mode and effects analysis completed(Diagram 1).

## Purpose

To explore and synthesize evidence that supports the implementation of the American Heart Association(AHA)Transitions of Care(TOC) Scientific Guidelines<sup>1</sup> to decrease heart failure affiliated hospital readmissions.

## Methods

### Review Protocol

- Electronic databases searched: CINAHL, Cochrane Library, PubMed, Medline, Ovid, Proquest.
- Key search terms: heart failure associated readmissions, heart failure transition of care, reduced thirty-day readmission, American Heart Association recommendations, multidisciplinary.
- Search yielded 231 initial articles further limited to 54 articles then 15 articles for integrative review (Figure 1).

### Inclusion/Exclusion Criteria

- Inclusions: articles written between 1/2017 and 5/2022. Systematic and primary research articles. Articles written in English. Peer reviewed. Adult subjects with primary diagnosis of HF and an index HF admission.
- Exclusions: Articles published prior to 2017. Executive summaries and editorials. Non-peered reviewed. Patients without primary diagnosis of HF. Pediatric subjects.

### Data Analysis

- Effectiveness of AHA transition of care program examined.
- Themes identified through literature search and review.
- Fifteen articles reviewed independently focusing on outcomes of intervention applied to decrease HF-associated readmissions
- Articles summarized and organized alphabetically utilizing the Johns Hopkins Nursing Evidence-Based Practice Summary Tool

## Results

### • Multidisciplinary Follow-up

Multidisciplinary follow-up improved HF outcomes by utilizing a team-based approach to care.

### • Early Follow-up

Early discharge follow-up positively influenced HF prognosis.

### • Improved Quality of Life

Patients with HF have episodes of extreme fatigue and it is suggested that HF transitions of care programs can improve overall quality of life(QOL) but more studies to be conducted.

### • Improved Medication Adherence

Patients attending a HF TOC program received education about HF and were therefore more complaint with taking guideline directed medical treatment (GDMT).

### • Nurse-Led Transitions of Care

Nurse led HF transition of care(TOC) programs can improve the overall health outcomes for patients diagnosed with HF.

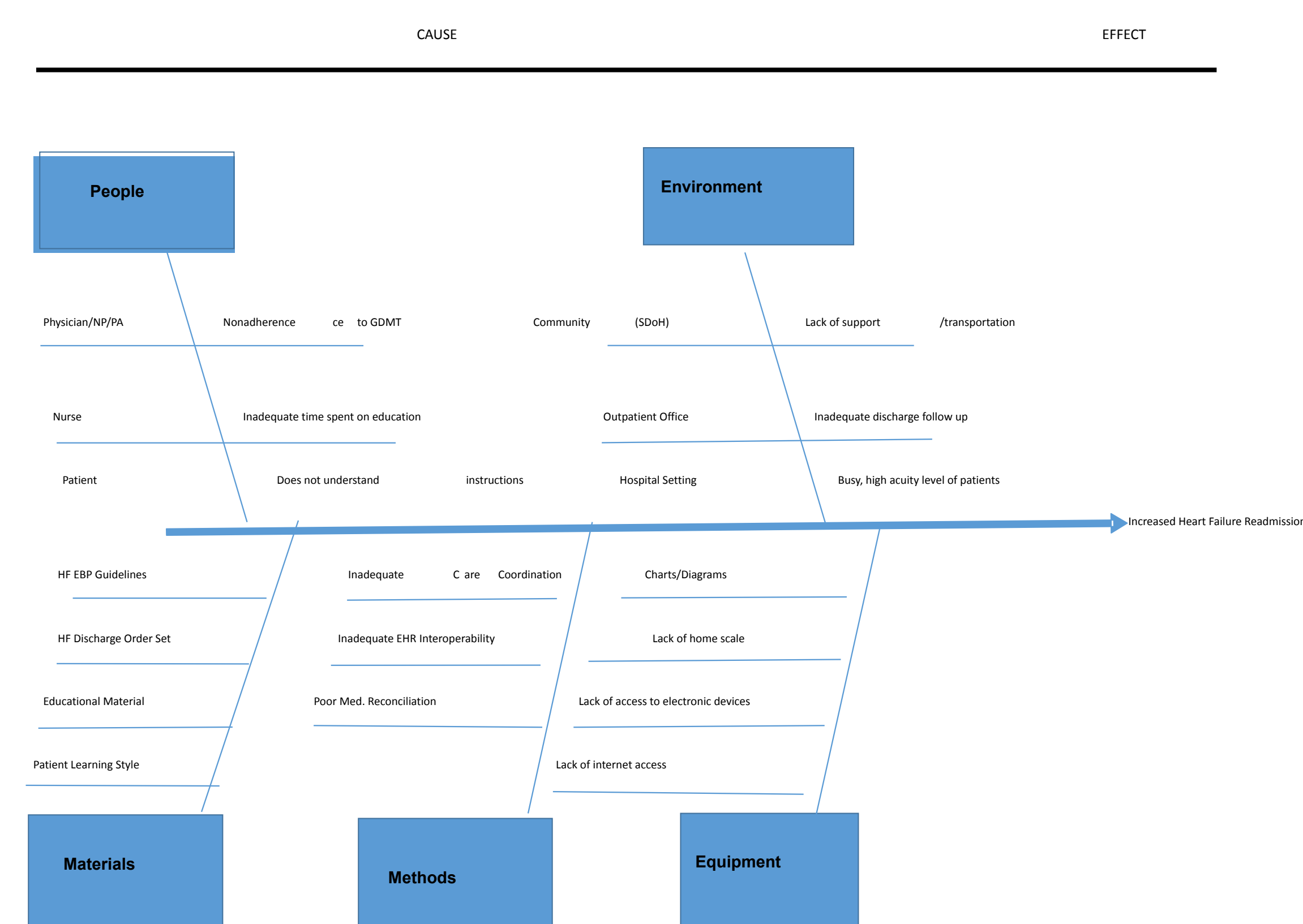


Diagram 1. Failure Mode and Effects Analysis Fishbone Diagram

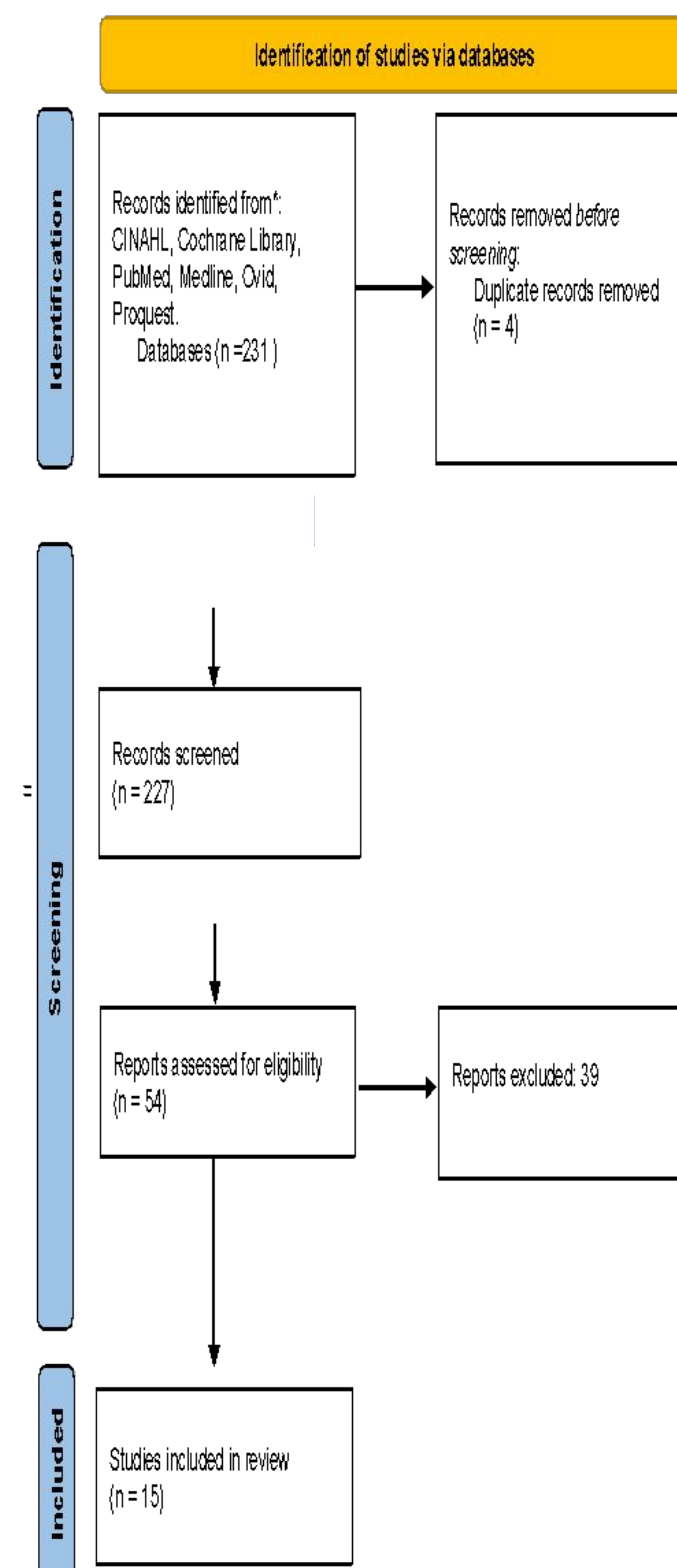


Figure 1. Flow Diagram

## Conclusion:

Recommendations for:

- More cohesive and effective collaboration of HF TOC.<sup>6</sup>
- More research and education to support teaching.<sup>4</sup>
- Advocacy for HF TOC to be offered as the standard of care.<sup>5</sup>

## Implications

- Findings serve as a source for improved clinical outcomes including decreased healthcare spending.
- Quality of life improvement for patients with HF.
- Improved interprofessional collaboration for nursing staff and nursing leadership.
- Blueprint for implementing HF transition of care programs in other affiliated practice sites.
- Improved care coordination.

## Limitations

- Lack of minority population.
- Some studies reported accessibility and distance as barriers for patients living in remote areas.<sup>4</sup>
- Most studies done in high-income countries with most done in the US, insufficient data from middle income countries with different healthcare systems.<sup>6</sup>

## Next Steps

- Implement HF TOC programs in under-represented populations to afford these populations access to high quality, collaborative, patient-centered care.

## References

- Albert, N.M., Barnason, S., Deswal, A., Hernandez, A., Kociol, R., Lee, E., Paul, S., Ryan, C.J., & White-Williams, C. (2015). Transitions of care in heart failure: A scientific statement from the American Heart Association. *Circulation Heart Failure*, 8(1), 384-409. <https://doi.org/10.1161/HHF000000000000006>
- Bragazzi, N. L., Zhong, W., Shu, J., Much, A. A., Lotan, D., Grupper, A., Younis, A., & Dai, H. (2021). Burden of heart failure and underlying causes in 195 countries and territories from 1990 to 2017. *European Journal of Preventative Cardiology*, 28(15), 1682-1690. <https://doi.org/10.1093/eurjpc/zwaa147>
- Center for Disease Control (2020). Facts about heart failure in the United States.
- Coffey, A., Mulcahy, H., Savage, E., Fitzgerald, S., Bradley, C., Benefield, L., & Leahy-Warren, P. (2017). Transitional care interventions: Relevance for nursing in the community. *Public Health Nursing*. 34(5), 454-460. <https://doi.org/10.1111/phn.12324>
- Li, Y., Fu, M.R., Fang, J., Zheng., H., & Luo, B. (2021). The effectiveness of transitional care interventions for adult people with heart failure of patient-centered health outcomes: A systematic review and meta-analysis including dose-response relationship. *International Journal of Nursing Studies*. 117(1), 1-11. <https://doi.org/10.1016/j.ijnurstu.2021.10392>
- Whitaker-Brown, C.D., Woods, S.J., Cornelius, J.B., Southard, E., & Gulati. (2017). Improving quality of life and decreasing readmissions in heart failure patients in a multidisciplinary transition-to-care clinic. *Heart and Lung*. 46(1), 79-84. <https://doi.org/10.1016/j.hrtlung.2016.11.003>

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