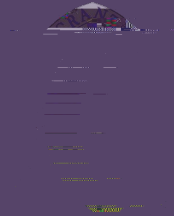


The Effect Of Home Health Care In Reducing Hospital Readmission For Individuals With Heart Failure: A Systematic Review

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Heart Failure Overview

- Heart failure (HF) is a term to describe a heart that cannot keep up with its workload body does not get oxygen it needs¹
- Chronic, progressive¹
- Leads to multiple etiologies
 - CAD, HTN, metabolic disorders²
- Requires long-term evaluation and medical care due to the progressive nature²

Importance of PT on Treatment Team



- Specialized, trained professionals ought to manage and monitor signs and symptoms;²
 - To monitor activity due to functional limitations²
 - To provide appropriate self-management training²
- American Heart Association (AHA) recommendations:
 - Regular physical activity²
 - PT referral²
- Transitional care programs usually only involve nurses and physicians²



Physical Therapy and Heart Failure

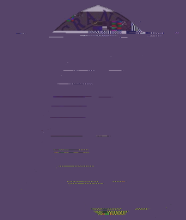
- Therapeutic goal of HF³
 - Avoid symptom aggravation
 - QOL
 - Decrease cost of health care
- Physical therapy goals:
 - Monitor and educate signs and symptoms of worsening HF²
 - Provide AHA recommended activity tolerance²
 - Provide functional training to achieve therapeutic goals²

Cardiac Rehab Programs for HF After Hospitalization

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Methods

Search Terms



(home care OR home health OR home health care)

AND

(rehospitalization OR readmission OR hospital readmission)

AND

(physical therapy OR physiotherapy OR rehabilitation)

AND

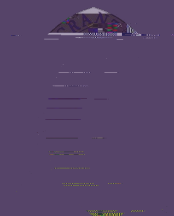
(heart failure)

Search Limits

- Peer-reviewed

-

Selection Criteria



- Adults over 18 years old
- Primary outcome measure including hospital readmission

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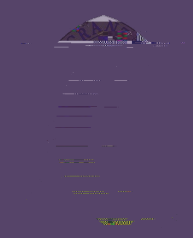
Records ID through
database searching
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Records after duplicates
removed
(n= 137)

Additional records ID through
other sources
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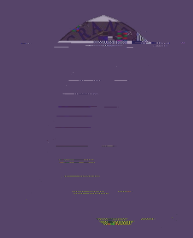


Results-MINOR's Score



- MINOR's Score
 - Range: 10-23/24
 - Average: 17.2/24

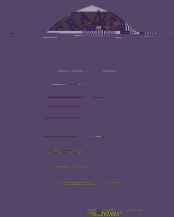
Results-Study Design



- Randomized Controlled: 2 Studies
- Retrospective: 2 Studies
- Non-Randomized Controlled: 1 Study

Results-Sample Size

Results-Age and Gender



- Age
 - Range: 58.76-82.36 years old
 - Average: 73.5 years old
- *Male:
 - Range: 31-226
- *Female:
 - Range: 6-45,429

* =1 study did not specify

- 5x/week

- 30 minutes

- 3 months

- Cardiologists, nurses and **physical therapists**

-

Results - Russel et al

Results - Miller et al²



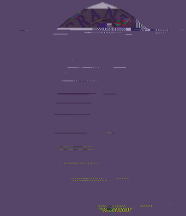
Program

- 1 year multidisciplinary transitional care program
- Referring physicians, nurses and **physical therapy**
- Goal: Address high risk readmission, maximize professional visits in home care

- Results

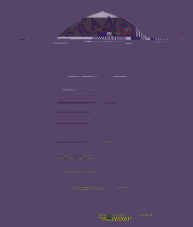
- Reduced readmission to 23.4% compared to before the program (39.5%)
- $p < .001$

Results-Summary



Author	Program	Readmission
Chen et al ³	Home based cardiac rehab	Decreased by 10%
Madigan et al ⁵	Home health care	26%
Russel et al ⁶	Heart failure transition program	43% less likely
Miller et al ²	1 year multidisciplinary transitional care program	Decreased by 23.4%
Young et al ⁷	-Patient Activated Care at Home (PATCH)	Increased at 30 days

Conclusion



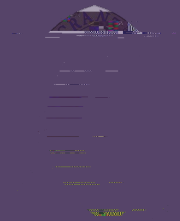
- There is moderate evidence supporting the value of home health care for hospital readmission reduction among patients with primary diagnosis of heart failure

Limitations



- Small sample sizes
- Short study period
- Low follow-up secondary to drop outs
- Do not consider HF stage or progression limits
generalizability

Future Research

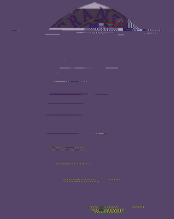


- Larger sample size
- Longer study period
- Consider disease progression and stage of heart failure

Clinical Relevance

- A multidisciplinary team approach for home health care

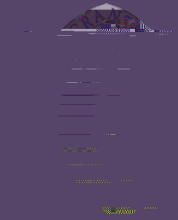
Acknowledgements



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Questions?



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