The Effect of Home Health Care in Reducing Hospital Readmissions: A Systematic Review

Lindsay McGraw, SPT
Dr. Tracey Collins, PT, PhD, MBA, Board Certified Geriatric Specialist in Physical Therapy

Background (continued)

Transitional care models are implemented for older adults who are hospitalized to facilitate a safe discharge and decrease hospital readmission.

It is imperative to establish an effective model while keeping common goals in mind such as:

Decreasing hospital readmissions

Maintaining a high level of patient satisfaction

-manage their health

Purpose

The purpose of this systematic review was to determine if home health care was effective in reducing hospital readmissions in adults.

Methods

Databases: CINAHL, HealthSource: Nursing/Academic Edition, PubMed, and ProQuest Central

Search Terms: (home care OR home health) AND (rehospitalization OR readmission OR hospital readmission) AND (physical therapy or physiotherapy or rehabilitation)

Methods

Records identified through database searching (n=601)

Additional records identified through other sources (n=0)

Records after duplicates removed

PRISMA

Results

5 studies were included[2-6]

MINOR scores ranged from 15/24-17/24 with an average score of 15.6

Sample size ranged from 68-1,348 subjects

Results

Results (continued)

3 of the 5 studies found a statistically significant decrease in hospital readmission.[2,3,5]

Average decrease of 51.4%

2 of the 5 studies reviewed patients with congestive heart failure and also found a statistically significant decrease in hospital readmission.[3,4]

Average decrease of 46.6%

Results (continued)

One study found that home care had a low rate of negative outcomes of 6.7%.[6]

Negative outcomes were defined as death and hospital readmission

One study determined home health care showed statistically significant improvements in quality of life and patient satisfaction.[2]

One study noted a statistically significant increase in patient compliance.[3]

Conclusion

There is moderate evidence to support the implementation of multidisciplinary home health care to reduce hospital readmission among patients years old.[2-6]

The most effective outcomes were found with treatment lasting 6 months, however, similar results were found with home health care lasting 1 month.[2-6]

Home health care improved patient compliance, physical and emotional quality of life, and patient satisfaction.[2,3]

Limitations

One study had a small sample size of 68 individuals[3]

All databases were not searched

Lack of explanation of interventions performed by the physical therapists as well as the members of the multidisciplinary team

Recommendations

Future research should consider:

- Larger sample sizes of patients
- Patients with varying diagnoses
- Including a detailed explanation of interventions

Clinical Relevance

Multidisciplinary home health care should be considered by physicians in order to reduce hospital readmissions.

This will simultaneously reduce the increasing health expenditures pertaining to hospital readmission.

Reducing hospital readmission will optimize patient outcomes, improve quality of life, and increase patient satisfaction.

Acknowledgements

Dr. Tracey Collins, PT, PhD, MBA, Board Certified Geriatric Specialist in Physical Therapy

Dr. Renee Hakim PT, PhD, Board-Certified Neurologic Specialist in Physical Therapy

Dr. John Sanko, PT, EdD

students

References

1. Greysen SR, Cenzer IS, Auerbach AD, Kovinsky KE. Functional impairment an hospital readmission in medicare seniors. *JAMA Intern Med*. 2015; 175(4): 559 565.

2. Watkins L, Hall C, Kring D. Hospital to home: a transition program for frail older adults. *Prof Case Manag*. 2012; 17(3):117-123.

3. Maliakkal AV, Sun AZ. Home care program reduces hospital readmissions in patients with congestive heart failure and improves other associated indicators of health. *Home Health Care Manag Pract.* 2014;26(4):191-197.

4. Miller A, Edenfield EE, Roberto J, Erb JK. Reduction in re-hospitalization rates utilizing physical therapists within post-acute transitional care program for home care patients with heart failure. *Home Health Care Manag Pract.* 2017;29(1):7-12.

5. Tinetti ME, Charpentier P, Gottschalk M, Baker, DI. Effect of restorative model of posthospital home care on hospital readmissions. *J Am Geriatr Soc*. 2012;60(8):1521-1526.

6. Bharadwaj *Aust Health Rev*. 2014;38:506-509.

Questions?