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# Effect of Continuous Education on Readmission Rates for CHF Patients

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### PATIENT CARE ISSUE

# What is Congestive Heart Failure (CHF)?

 An abnormal clinical syndrome that involves inadequate pumping and/or filling of the heart (Lewis, 2014)

### So what?

- Greater than 50% of patients are readmitted to the hospital within 6 months of discharge (Desai, 2012)
- 5.1 million people in the United States have heart failure and The American Heart Association estimates that over 600,000 new cases will be diagnosed each year (Lewis, 2014)
- Heart Failure is estimated to cost the United States 32 billion dollars each year (Heart Failure Fact Sheet, 2013)

# **EVIDENCE-BASED PRACTICE QUESTION**

- P: Patients with Congestive Heart Failure (CHF)
- I: Increase the amount of time the patient is educated
- C: Standard of care of discharge education for CHF patients
- O: Decreased readmission rate
- T: 30 days after patient discharge

# **REGISTERED NURSE INTERVIEW**

A cardiac specialized RN was interviewed:

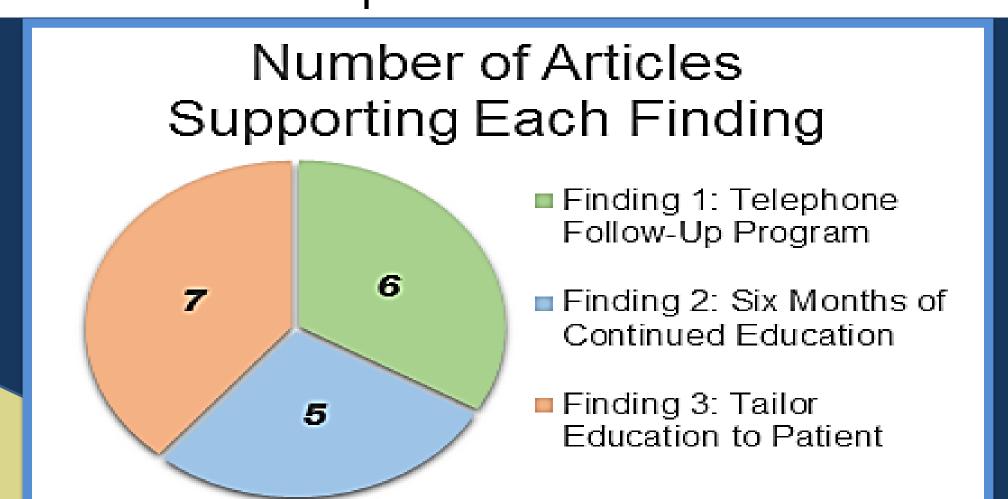
- Q: What is your opinion on preventing CHF patient readmission?
- **A:** Follow-up education is very important and helpful. CHF readmission is very common and is something that needs to be addressed.
- Q: Could patient education during and after discharge be improved in any way?
- **A:** Yes, there needs to be some sort of follow-up and it doesn't necessarily have to be from the hospital. A possible support group or volunteer program that could contact the CHF patient and check in on how things are going would be beneficial.
- **Q:** What do you think about follow-up CHF education via phone call? **A:** Yes, that would be a great idea, however this may be too taxing on a nurse who has a very busy schedule, which is why a volunteer system would be beneficial.

### REFERENCES

- Adib-Hajbaghery, M., Maghaminejad, F., & Abbasi, A. (2013). The role of continuous care in reducing readmission for patients with heart failure. Journal of Caring Sciences, 4, 255–267. doi: 10.5681/jcs.2013.031
- Andrietta, M. P., Lopes Moreira, R. S., & Bottura Leite de Barros, A. L. (). Hospital discharge plan for patients with congestive heart failure. Revista latino-americana de enfermagem, 6, 1445–1452. PMID: 22249681
- Basoor, A., Doshi, N. C., Cotant, J. F., Saleh, T., Todorov, M., Choksi, N., Patel, K. C., DeGregorio, M., Mehta, R. H. and Halabi, A. R. (2013), Decreased Readmissions and Improved Quality of Care With the Use of an Inexpensive Checklist in Heart Failure. *Congestive Heart Failure*, 19: 200–206. doi: 10.1111/chf.12031
- Clark, R. A., Inglis, S. C., McAlister, F. A., Cleland, J. G. F., & Stewart, S. (2007). Telemonitoring or structured telephone support programmes for patients with chronic heart failure: systematic review and meta-analysis. BMJ: British Medical Journal, 334(7600), 942. doi:10.1136/bmj.39156.536968.55
- Desai, A. S. & Stevenson, L.W. There Must Be a Better Way: Piloting Alternate Routes Around Heart Failure Hospitalizations. *Journal of the American College of Cardiology*. 2013;61(2):127-130. doi:10.1016/j.jacc.2012.10.015.
- Giordano, A., Zanelli, E., & Scalvini, S. (2011). Home-based telemanagement in chronic heart failure: an 8-year single-site experience. *Journal Of Telemedicine & Telecare*, 17(7), 382. doi:10.1258/jtt.2011.110201
- Otsu, H. & Moriyama, M. (2012), Follow-up study for a disease management program for chronic heart failure 24 months after program commencement. Japan Journal of Nursing Science, 9: 136–148. doi: 10.1111/j.1742-7924.2011.00194.x
- Heart Failure Fact Sheet. (2013, December 3). Retrieved October 26, 2014, from http://www.cdc.gov/dhdsp/data\_statistics/fact\_sheets/fs\_heart\_failure.htm
- Lewis, S. (2014). Heart Failure. In Medical-surgical nursing: Assessment and management of clinical problems (9th ed., p. 766, 779-783). St. Louis: Mosby.
- Regalbuto, R., Maurer, M. S., Chapel, D., Mendez, J., & Shaffer, J. A. (2014). Joint Commission requirements for discharge instructions in patients with heart failure: is understanding important for preventing readmissions? *Journal of cardiac failure*, 9, 641–649. doi: 10.1016/j.cardfail.2014.06.358
- Sales, V. L., Ashraf, M. S., Lella, L. K., Huang, J., Bhumireddy, G., Lefkowitz, L., Feinstein, M., Kamal, M., Caesar, R., Cusick, E., Norenberg, J., Lee, J., Brener, S., Sacchi, T. J., & Heitner, J. F. (2013). Utilization of trained volunteers decreases 30-day readmissions for heart failure. *Journal of cardiac failure*, 12,842–850. doi: 10.1016/j.cardfail.2013.10.008.
- Slater, M., Phillips, D., & Woodard, E. (2008). Cost-effective care a phone call away: a nurse-managed telephonic program for patients with chronic heart failure. Nursing Economics, 26(1), 41-44.
- VanSuch, M., Naessens, J. M., Stroebel, R. J., Huddleston, J. M., & Williams, A. R. (2006). Effect of discharge instructions on readmission of hospitalised patients with heart failure: do all of the Joint Commission on Accreditation of Healthcare Organizations heart failure core measures reflect better care? Quality & Safety in Health Care, 15(6), 414–417. doi: 10.1136/qshc.2005.017640

# SYNTHESIS OF EVIDENCE

- Major, mutual, overlapping findings were found in all articles:
  - 1. Telephone follow-up education program
  - 2. Six months continued education
  - 3. Tailor education to patient



# **EVIDENCE-BASED PRACTICE RECOMMENDATIONS**

- Continuous education has been found to be effective and helpful in preventing CHF readmission and exacerbations in discharged CHF patients
- Research strongly suggests that hospitals should contemplate looking into other forms of education administration to CHF patients upon discharge
- Follow-up telephone programs, a minimum of 6 months of follow-up and tailored patient education has shown statistically significant findings in reducing CHF readmission rates

### **METHODS**

- Databases and search engines used: Google, DogPile, PubMed, OneSearch, and CINAHL
- **Key Terms:** CHF, congestive heart failure, readmission, 30 day, rate, education, teaching, methods, hospitalization, upon discharge, heart failure, continued, and nursing
- Inclusions criteria: a) English language, b) published in 2004 or later,
   c) discussed CHF readmission rate and nursing education, d) compared post-discharge education to standard care education
- Of 25 articles read, 10 articles were used in the review of literature

	LOE1	LOE2	LOE3	LOE4	LOE5	LOE6	LOE7
Article 1				X			
Article 2				X			
Article 3				X			
Article 4		X					
Article 5	X						
Article 6		X					
Article 7		X					
Article 8					X		
Article 9					X		
Article 10			X				

# **RESULTS**

- Increased time of continued education is believed to be effective in decreasing the readmission of CHF patients within 30 days of discharge
- Our research has shown that by educating the CHF patient multiple times on measures to prevent CHF exacerbations is likely to prevent the readmission of that patient

### LIMITATIONS

- Reviewed only articles in the English language
- Reviewed only a small portion of articles on this topic, not comprehensive
- Sample size in selected articles may not be fully representative of the population