The Effect of a Heart Failure Education Program on Nurses Knowledge and 30-day Readmission Rates: A Quality Improvement Project

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Abstract

Heart failure (HF) has increased and is the highest cause of death in the United States today. Despite state of the art medical management, HF rates continue to rise.

Methodology. The purpose of this quality improvement (QI) project was to determine if an education program at Kootenai Health (KH) Hospital: 1) increased nurse's HF patient education knowledge and 2) decreased 30-day readmission rates. Utilizing an existing validated HF knowledge survey, nurses HF knowledge was evaluated. The baseline HF knowledge results and literature review was utilized to develop a HF class. Following the completion of the HF class, nurses knowledge was re-evaluated with the same HF survey. Additionally, readmission percentage rates (%) rates before and after the HF class were evaluated, to determine if the HF class had any effect on decreasing HF readmission rates.

Results. Nurse's HF survey scores were high following the completion of the HF classes. Concluding, it was determined that nurses HF knowledge was found to be lacking in certain key areas, such as NSAID use, potassium-based salt substitute use, weight monitoring, weight gains reporting, and dizziness / lightheadness reporting. Additionally, readmission rates decreased to 16.13% and 6.66% in February and March 2016 respectively, reduced by 12.14% from the previous rate of 18.8%. However, the following month of April 2016, HF readmission rates increased to 15.15%. Despite HF class intervention implemented with positive HF knowledge results, HF readmission rates continued to be elevated at KH.

Implications for Practice. Proficient HF care relies on nurses current and updated HF knowledge, with which nurses care for HF patients. An education intervention was successful in raising nurses awareness of HF knowledge and providing support for the continuing of HF education. Readmission rates were shown to decrease following the HF class, specifically in the month immediate
month of March following the HF class. Decreasing HF readmissions is not only linked with improving financial reimbursement and decreasing unnecessary healthcare spending, but patient morbidity and mortality rates have also shown to decrease when HF readmission rates are reduced.