

RQHR Cardiology Team: Clinical Practice Standards - Heart Failure

Background:

HF is a condition that is associated with significant morbidity, mortality and hospital admissions. In addition, 23.6% of those patients were readmitted within one year.¹ Heart failure is one of the top diagnoses for which patients are admitted to hospital in the RQHR.

With the high rate of suboptimal medication use, frequency of admissions and high rates of mortality, there is considerable need for pharmacist involvement in a multidisciplinary healthcare team approach in the management of heart failure patients.

Objectives:

The following three CSHP 2015 objectives inspired the RQHR specific cardiology heart failure clinical practice standards:

- **Goal 3:** Increase the extent to which hospital and related healthcare setting pharmacists actively apply evidence-based methods to the improvement of medication therapy.
- **Objective 3.1:** In 100% of hospitals and related healthcare settings, pharmacists will be actively involved in providing care to individual patients that is based on evidence, such as the use of quality drug information resources, published clinical studies or guidelines, and expert consensus advice.
- **Objective 3.4:** 90% of hospital pharmacies will participate in ensuring that patients hospitalized for congestive heart failure will receive angiotension-converting enzyme inhibitors or angiotension receptor blockers at discharge

Clinical Practice Standards-Heart Failure

The following is a summary of the ongoing work of the RQHR cardiology pharmacist team with a goal of establishment by the end of 2012.

- **Objective:** 90% of patients admitted to target care areas (3F, CSU/ST) will be assessed by a pharmacist to optimize outcomes in heart failure* (HF)

*Types of HF patients included are those with:

- ✓ Known systolic dysfunction (first or previous diagnosis)
- ✓ Documented EF less than 40%
- ✓ Admissions do not have to be HF related

Methods:

Pharmacists optimize outcomes in heart failure patients on 3F and CSU/ST by:

Standard #1:

Mondays-Fridays during the hours of 8am and 4pm, the pharmacist will review the medications for identified patients on admission within 24 hours and whenever possible review the discharge prescriptions for completeness and accuracy.

- On admission or transfer, ensure that the medication regimens are accurate through patient interviews and consultation with their community pharmacist
- During the above days and hours, the pharmacist will review the discharge prescription to ensure:
 - medications and doses are current and correct
 - new medications are included
 - discontinued and/or modified medications are addressed
- When being transferred to another enhanced/targeted unit or facility:
 - Information communicated to the receiving pharmacist
 - Outstanding issues resolved where possible

Standard #2:

For those patients admitted with HF, the pharmacist will interview the patient and determine if there are identifiable reasons for exacerbation.²

- Through patient interview and review of prescription databases, will identify reasons for exacerbation. Examples include:
 - excess salt or fluid
 - medication non-compliance
 - drug interactions
- The pharmacist will provide patient education, reviewing:
 - Avoidance of over the counter medications containing NSAIDs

Standard #3:

The pharmacist will educate the patient on HF medications, self-monitoring², need for HCP contact and avoidance of exacerbations.

- For all HF related medications, patients will be receive education on:
 - benefit
 - dosing and target doses
 - side effects and management

Standard #4:

The pharmacist will assess and recommend evidence-based medications and achievement of target doses.²

- Assessment of medications and doses continued in hospital to ensure that doses are not held or reduced unless clinically necessary
- Recommendation of clinically appropriate HF dose regimens that match evidence-based recommendations
- Where possible, communication to patient and other HCPs to further titrate doses.

These standards are achieved with the use of RQHR heart failure tailored patient-specific monitoring forms, standard HF education tools, and HF disease, self-care and medication information discharge education sheets.

Results:

With targeted pharmacist intervention on the RQHR Cardiology wards, it is anticipated that a greater percentage of patients will be discharged on evidenced-based therapies (including ACE-I/ARBs, beta-blockers and aldosterone antagonists) at or near target doses. Errors and/or omissions in discharge/transfer prescriptions should be reduced.

Conclusion:

Pharmacists can play a very important role in the management of HF patients. Through education, HF patients can be empowered to self- monitor and identify when they may be getting into trouble, thus potentially avoiding hospitalizations.³ Pharmacists can help to ensure that recommended therapies are not only being started and titrated but also adhered to in order to achieve maximum benefit. This translates into very meaningful benefit to the patient with reductions in mortality and improvements in quality of life.

References:

1. Bidwell, N, Assessing heart failure patients in the community setting. Pharmacy Practice Dec 2006: 1-8.
2. JMO Arnold, P Liu, C Demers, et al. Canadian Cardiovascular Society consensus conference recommendations on heart failure 2006: Diagnosis and management. Can J Cardiol 2006;22(1):23-45.
3. Thompson, CA. (2012) Bernstein, M. (2002). Pharmacy News. Integrated pharmacy practice helps reduce heart failure readmission rate. Retrieved from <http://www.ashp.org/menu/News/PharmacyNews/NewsArticle.aspx?id=3771>