The Effect of Nurse Coordinated Transitional Care on Unplanned Readmission for Patients with Heart Failure:

A Critical Literature Review

LP LAI

Nurse Consultant
(Cardiac Care / Department of M&G / TMH)
Study Questions

1. Would patients with chronic heart failure receiving nurse coordinated transitioning of care report a lower readmission rate than those who do not?

2. Are there any factors in nurse coordinated TC influencing its effects on CHF patients care journey?
Background

- Heart disease contributed to the 2nd highest reason of unplanned readmission in HA (Wong et al, 2011)
- Patients with CHF rank 2nd after those with chronic obstructive pulmonary disease in terms of readmission rate (Ma et al, 2005)
- HF upholds a high predicted probability in readmission in HA (Ng et al, 2011)
- Hospital readmission rate (WHO, 2005)
  - an important indicator of patient health outcome
  - a key undesirable outcome of health care systems
- Nurse-coordinated TC
  - positive effects on reducing readmission rates of older CHF patients hospitalized with various health conditions (Naylor et al, 1999)
Services at A Glance in HA

Integrated Discharge Support Program for the Elderly Patients (IDSP)

Target Patients
- Elders aged 60 or above
- HA-wide admission risk prediction score* > 0.2 or by clinical referral
  - High readmission risk (e.g., those diagnosed with congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD))
  - High rehabilitation needs (e.g., those with stroke, proximal hip fracture or falls)
  - High personal care needs and high readmission risk

EBP = QUALITY

Heart Failure Pathway

Caritas Medical Centre
Community Geriatric Assessment Team

Congestive Heart Failure Reduction Program in Private Nursing Home
Feb 2012

A Sustainable Service Model to deliver Cardiac Ambulatory Care at Cardiac Day Centre of Queen Elizabeth Hospital

Congestive Heart Failure (CHF) Clinic
Services provided:
- To promote/improve health seeking self-help behavior
- To improve quality of life and symptoms monitoring
- Medication titration according to pre-set protocol
- Telephone hotline support during office hours
- Collaborate with NGOs/patient self-help groups for continuation of care
EBP is often discovered through methods in what are referred as qualitative **meta-synthesis** and **integrative review** (Houser, 2008).

**Integration** is about making connections between ideas, theories, and experiences (Polit et al, 2001).

**LR is a research methodology** because it involves an understanding of the interrelationship between theory, method, research design, practical skills and particular foundation (Hart, 1998).

LR is the most useful research method for an investigation about the effectiveness of an intervention in healthcare (Guyatt et al, 1993).
Literature Search

Critical Appraisal

Literature Review

(Hart, 1998)
**Heart failure**

- Nurse coordinated*
  - OR Nurse supported*
    - OR Nurse liaised*
      - OR Nurse initiated*

- Transition* care
  - OR Transition* program
  - OR Hospital to home
    - OR Care transition*
      - OR Care coordinat*

- Readmis*
  - OR Rehospital*
  - OR Readmission rate*
  - OR Admission* rate
    - OR Unplanned readmission*
      - OR Emergency room visit*

**Heart disease**

- Care coordination
  - OR Continuity of patient care*
    - OR Patient care plan*
      - OR Patient discharge* plan
        - OR Case management*

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**Inclusion criteria**

- Research based and within the parameters of nurse coordinated transitioning care of heart failure patients
- Focus on the significance of heart failure patients with and without transitioning care
- Published by recognized academic publishers
- Published in refereed academia journal
- Published within the period from year 2001 to 2012
- Articles provide both the abstract and full content
- Primary source

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**Exclusion criteria**

- Research not focus on heart failure patients
- Research focus on health professionals other than nurses
- Research result have no data about readmission rate
- Published before year 2001
- Provide only the abstract or summary
- Published in non-English content
- Secondary sources
- Non-research articles
- Opinion articles
<table>
<thead>
<tr>
<th>Article</th>
<th>Literature</th>
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- **US, Taiwan, HK, UK, Canada**
- **2001 – 2011**
- **Quantitative design**
  - Randomized control trial (4)
  - Quasi-experimental (2)
  - Observational (2)
  - Undefined but convenience sampling (2)

Believability of the research
- Writing Style
- Author
- Report title
- Abstract

Robustness of the research
- Purpose/Research problem
- Logistical consistency
- Literature review
- Theoretical framework
- Aims/objectives/research question/hypothesis
- Sample
- Ethical consideration
- Operational definitions
- Methodology
- Data analysis/results
- Discussion
- References

Trustworthiness

Applicability to nursing practice
Reduced readmission range from 28-day to 12 months

- Eight articles
- Two articles showed inconclusive results
  - no statistically difference in both intervention and usual care groups. But,
  * intervention group have lesser healthcare utilization

Others findings

| ↑ Functional status | ↑ Independence | ↓ Symptom distress |
| ↑ QOL | ↑ Patient satisfaction |

The empirical findings from the ten articles do support the need of nurse coordinated transitioning of care across healthcare settings
Conclusion – Answer to Q1

Nurse Coordinated Transitioning of Care for Chronic Heart Failure Patients enables to lower Hospital Readmission
Critical Analysis of the Findings

Fishbone diagram

- Identify factors emerged from the researches’ findings that influence CHF readmission in nurse coordinated transitional care service
- Compare & categorize factors to generate themes

Thematic analysis

- Rebuild and re-structure each individual theme into a connected whole which provides insight and answers to the research question 2
  - Are there any factors in nurse coordinated TC influencing its effects on CHF patients care journey?
Conclusions - The Six Themes

Patient and Caregiver Engagement & Empowerment
- caregiver engagement
- self-care strategy

Continuity of Care
- patient-provider communication
- patient information transfer
- telephone follow-up
- home visit
- timely follow-up

Enhanced Standard of Care
- intense education/counselling
- evidence-based practice
- HF guideline booklet
- written protocols
- care planning

Duration of Transitioning of Care
- short term
- long term

Professional Attribute of Nurse
- master prepared
- heart failure specialist
- cardiovascular nurse
- advanced practice nurse

Mode of Transitional Care
- multidisciplinary
- multi-component

Change in hospital readmission of CHF patients in nurse-coordinated TC service
Recommendations

- Develop TC model in heart failure management with bundles of care standards
- Incorporate TC in cardiac rehabilitation
- Develop nurse provider training program on effective discharge planning and transitional care
References


