Implementing a Palliative Approach to Care (earlier) for Persons Living with Chronic Heart Failure

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Acknowledgements

1. Heart and Stroke Foundation of Ontario
2. Canadian Institutes of Health Research: College and Community Innovation Program-Industrial Research Chairs for Colleges Grant
3. Schlegel-UW Research Institute on Aging
Objectives

- What is heart failure?
- What is palliative care?
- Do heart failure therapies have a role in palliative care?
- Advanced care planning: Considerations for heart failure management.
- How can better interprofessional practice help?
- Next steps.
What is Heart Failure (HF)?

Complex syndrome in which abnormal heart function results in, or increases the subsequent risk of, clinical symptoms and signs of low cardiac output and/or pulmonary or systemic congestion.

Cardiac output falls because the left ventricle is:
- stiff and under filled (HFPEF), or
- weak and not emptying well (HFREF)
Clinical Features of HF

Fluid retention
- Swelling
  - Ankles, legs, sacrum, scrotal
- Shortness of breath
  - Exertional
  - Lying flat
  - At night
- Gut: pain, bloating, anorexia

Poor cardiac function
- Fatigue
- Weakness
- Sarcopenia
- Cold extremities

Non-specific symptoms
ANY sudden change
- Delirium
- Function, self-care, activities of daily living
- Mobility: taking to bed, falls

Changes at night
- worsening sleep
- increased urination

“Not themselves today”
Changing Population Demographics and the Effect on the Number of Persons with HF

Adapted from Statistics Canada, Populations Projections for Canada 2005

RS McKelvie 2015
More Malignant than Cancer

Survival over time for various conditions in women and men, showing higher survival rates for women compared to men for conditions like MI, Bladder, Bowel, Ovarian, Heart Failure, Lung, Breast, MI, Bladder, Prostate, Bowel, Heart Failure, Lung.
Hospital Separations for HF and all Other Causes, Canada (excludes Quebec), 2005-2006

<table>
<thead>
<tr>
<th></th>
<th>Heart failure</th>
<th>Other causes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people hospitalized</td>
<td>33,693</td>
<td>1,779,230</td>
<td>1,812,923</td>
</tr>
<tr>
<td>Number of hospital separations</td>
<td>42,399</td>
<td>2,415,128</td>
<td>2,457,527</td>
</tr>
<tr>
<td>Total number of comorbidities</td>
<td>166,084</td>
<td>5,589,258</td>
<td>5,755,342</td>
</tr>
<tr>
<td>Mean number of comorbidities* per separation</td>
<td>3.9</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>In-hospital mortality (% of separations)</td>
<td>13.3</td>
<td>4.4</td>
<td>4.6</td>
</tr>
<tr>
<td>Mean LOS* (d)</td>
<td>12.0</td>
<td>6.4</td>
<td>6.8</td>
</tr>
</tbody>
</table>

LOS, length of stay.
*Significant difference (t test).

Dai et al Can J Cardiol 2012
HF trends among Medicare Beneficiaries

Bueno et al JAMA 2010

Figure 1. Secular Trends for Length of Stay, Discharge Disposition, and Unadjusted Mortality and 30-Day All-Cause Readmission Rates In Medicare Fee-for-Service Patients Hospitalized for Heart Failure Between 1993 and 2006
## Disposition of HF Patients by Age, Ontario (2011)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Discharged Home</th>
<th>Transfers</th>
<th>Other</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Support Services</td>
<td>With Support Services</td>
<td>Acute Inpatient Facility</td>
<td>Continuing Care Facility</td>
</tr>
<tr>
<td>20-24</td>
<td>0.1%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>25-29</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>30-34</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>35-39</td>
<td>0.6%</td>
<td>0.1%</td>
<td>0.7%</td>
<td>0.1%</td>
</tr>
<tr>
<td>40-44</td>
<td>1.0%</td>
<td>0.1%</td>
<td>1.5%</td>
<td>0.2%</td>
</tr>
<tr>
<td>45-49</td>
<td>1.6%</td>
<td>0.6%</td>
<td>3.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>50-54</td>
<td>3.2%</td>
<td>1.4%</td>
<td>3.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>55-59</td>
<td>5.2%</td>
<td>2.2%</td>
<td>6.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>60-64</td>
<td>8.2%</td>
<td>3.5%</td>
<td>10.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>65-69</td>
<td>10.7%</td>
<td>6.5%</td>
<td>13.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td>70-74</td>
<td>13.9%</td>
<td>8.0%</td>
<td>15.0%</td>
<td>6.6%</td>
</tr>
<tr>
<td>75-79</td>
<td>15.8%</td>
<td>14.6%</td>
<td>16.7%</td>
<td>11.1%</td>
</tr>
<tr>
<td>80-84</td>
<td>18.3%</td>
<td>22.0%</td>
<td>14.8%</td>
<td>20.1%</td>
</tr>
<tr>
<td>85-89</td>
<td>14.3%</td>
<td>23.3%</td>
<td>10.9%</td>
<td>28.6%</td>
</tr>
<tr>
<td>90+</td>
<td>6.7%</td>
<td>17.6%</td>
<td>3.0%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Totals</td>
<td>50.1%</td>
<td>23.0%</td>
<td>3.6%</td>
<td>13.3%</td>
</tr>
</tbody>
</table>
### Ontario Home Care clients with HF (2004-7)

Foebel, Hirdes, Heckman et al, Age & Ageing 2011

<table>
<thead>
<tr>
<th>Variable</th>
<th>HF Sample N = 21,968</th>
<th>Non-HF Sample N = 154,898</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (SD) years</td>
<td>82.8 (7.2)</td>
<td>81.2 (7.3)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>58.8%</td>
<td>64.1%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Living Alone</td>
<td>33.4%</td>
<td>35.4%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Cognitive Performance Scale &gt; 0</td>
<td>53.8%</td>
<td>55.9%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Depression Rating Scale &gt; 0</td>
<td>37.4%</td>
<td>37.4%</td>
<td>0.75</td>
</tr>
<tr>
<td>ADL Hierarchy Scale &gt; 0</td>
<td>44.2%</td>
<td>39%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Aggressive Behavior</td>
<td>10.0%</td>
<td>12.7%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Comorbid Conditions</td>
<td>4.0 (2.0)</td>
<td>3.3 (1.8)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Medication Count</td>
<td>8.44 (4.0)</td>
<td>6.8 (3.9)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

### Home Care Service Use

- Homemaking: 35.9% vs 31.4%, <0.001
- Nursing: 33.9% vs 25.3%, <0.001
- Physical Therapy: 11.1% vs 12.3%, <0.001
HF with Preserved Systolic Function

• Main causes are coronary disease and hypertension
  – control of these as per guidelines

• Rate control

• Diuretics to control congestion and edema

• Therefore, ACE inhibitors or ARBs, and beta-blockers should be considered for most patients

• MRAs may reduce hospitalization rates
Treatment Principles

• Acute phase / new diagnosis
  – Get them out of “heart failure”
  – Start *disease modifying* medications

• Chronic phase
  – Optimize *disease modifying* medications
  – Monitor to keep them out of heart failure
  – Treat symptoms
KEY POINTS:

1. ACEi > ARB

2. ACEi, ARB, MRA, βB improve symptoms!
73-year Old Male

- First HF hospitalization
  - History of AF, CAD / CABG
  - No other comorbidities

- Presented with exertional dyspnea, orthopnea, PND
  - Excellent response to diuretics
  - Angiogram: grafts patent -> medical management

- Discharged home: NYHA I-II
73-year Old Male: Investigations

- Echocardiogram: EF 35%
- ECG: LVH, QRS 120 msec
- Labs (all stable):
  - creatinine 87
  - Na 137
  - K 4.4
- Ramipril 10 mg po od
- Bisoprolol 10 mg po od
- Spironolactone 12.5 mg po od
- Furosemide 40 mg po od
- Warfarin
Does this Man Require Palliative Care?

1. Yes
2. No
3. Need more information
Does this Man Require Palliative Care?

1. Yes
2. No
3. Need more information
Palliative Care Defined

A patient-centred and family-centred approach that:

• improves the quality of life of patients and their families facing the problems associated with life-threatening illness,

• through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.

• It is applicable early, as well as later, in the course of illness, in conjunction with other therapies that are intended to prolong life,

• including but not limited to in the setting of HF, oral pharmacotherapy, surgery, implantable device therapy, hemofiltration or dialysis, the use of intravenous inotropic agents, and Ventricular Assist Devices.

Adapted from the WHO definition for palliative care, http://www.who.int/cancer/palliative/definition/en

McKelvie et al, CJC, 2011
Key Highlights

• Improves quality of life of patients and their families facing the problems associated with life-threatening illness

• Each death in Canada affects immediate well being of an average of five other people, or more than 1.25 million Canadians each year

Canadian Hospice Palliative Care Association 2008
Key Highlights

- Early identification and impeccable assessment and treatment of pain and other problems

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Disclosure</th>
<th>Documentation</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>88%</td>
<td>70%</td>
<td>66%</td>
</tr>
<tr>
<td>Social/functional</td>
<td>87%</td>
<td>43%</td>
<td>30%</td>
</tr>
<tr>
<td>Psychological</td>
<td>100%</td>
<td>33%</td>
<td>28%</td>
</tr>
</tbody>
</table>
The provision of palliative care to patients with HF should be based on a thorough assessment of needs and symptoms, rather than on individual estimate of remaining life expectancy.

(Strong recommendation, low quality of evidence)

McKelvie et al, CJC, 2011
Key Highlights

• Applicable early, as well as later, in the course of illness, in conjunction with other therapies that are intended to prolong life
End-of-Life Trajectories

Cancer trajectory

– Relatively easy to predict life-expectancy once advanced

– Admission criteria for palliative care based on known limited life expectancy
Patient centered outcomes

1. Optimal HF therapies through to advanced stages

2. Engagement of patients and caregivers in self-care
   i. To monitor symptoms and weights for decompensation detection and timely intervention
   ii. Define care goals
   iii. Advance care planning

Medical Complexity, Mental Health and Frailty
Burden on patient, caregiver, and health care system

Disease modification
Optimize quality of life
Optimize longevity

Symptom palliation
Optimize quality of life

Optimization of therapy, including surgery or devices
Terminal phase
Ideal course
Usual course
Time

Independent Community living
Rehabilitative / community support services
Institutionalization/ Hospice palliative care

Arrows = death
Trigger Points to review care plans

- At diagnosis (or soon thereafter)
- Episodes of decompensation
- When considering an invasive intervention
- Frequent or continuous iv therapy
- Poor Q of L
- Intractable symptoms
- Cardiac cachexia
- When the patient requests it!
- “Early and often”

O’Leary, N. Current Opinion in Supportive and Palliative Care 2009; McKelvie et al, CJC 2011; Kini Current Opinion in Supportive and Palliative Care 2013
Surrogate Decision Makers

• Identify surrogate decision-maker early

• Clarify and articulate patients’ values over time

• Establish leeway in surrogate decision making: SDM should never be “painted into a corner”
Topics to Address

• Uncertainty of the HF trajectory

• Patients’ values and preferences for advance care planning and treatment goals

• This is an ongoing conversation: The illness evolves and so do patient wishes
Examples of “Opening Lines”

• “You have developed heart failure. Heart failure is a very serious disease, from which many patients ultimately die. Thankfully we have some extremely good treatments to manage heart failure and to make you feel much better and for longer.”

• “If you were to get very sick, is there anyone you trust to make medical decisions for you, and have you talked with this person about what is important to you? Can we talk about this today?”
Back to the Case

• Man is now 75 years old
  – Followed in a HF clinic for frequent admissions, IV Lasix in ER
  – Optimal ACEi, Beta-blocker, Spironolactone, Digoxin, Furosemide 120 mg od, prn Metolazone
  – Not a revascularization candidate

• Labs (all stable):
  – EF 20%, creatinine 145, sodium 133
  – ECG: LVH, LBBB QRS 150 msec
What Might this Man Require?

1. Referral to a HF specialist?
2. Referral to a Palliative care specialist?
3. Referral to a Geriatrician?
4. Closer involvement of the family doctor?
5. All of the above?
What Might this Man Require?

1. Referral to a HF specialist?
2. Referral to a Palliative care specialist?
3. Referral to a Geriatrician?
4. Closer involvement of the family doctor?
5. All of the above?
What Could be Going on?

- Anxiety?
- Depression?
- Cognitive impairment?
- Frailty? Functional decline?
- Pain?
- Caregiver stress?
- Would he benefit from Cardiac Resynchronization Therapy (CRT)?
We recommend that the presence of persistent advanced HF symptoms (NYHA III-IV) despite optimal therapy be confirmed, ideally by an inter-disciplinary team with expertise in HF management, to ensure appropriate HF management strategies have been considered and optimized, in the context of patient goals and co-morbidities.

(Strong recommendation, low quality of evidence)
Which of these Treatments are Palliative?

1. Morphine

2. ACE inhibitors

3. Cardiac Resynchronization Therapy

4. All of the above
Which of these Treatments are Palliative?

1. Morphine

2. ACE inhibitors

3. Cardiac Resynchronization Therapy

4. All of the above
Symptom Management

- **Dyspnea**
  - Low dose opiates
  - Care with metabolites: Fentanyl > Hydromorphone > Morphine

- **Pain**
  - Avoid NSAIDS

- **Anorexia**
  - Catabolism
  - ACE; Carvedilol
  - Avoid Megestrol

- **Nausea**
  - Intestinal perfusion/congestion
  - Antinauseants
  - Rx constipation

- **Cough**
  - ACE -> ARB
  - Diuresis
  - Dextromethorphan; opiates

- **Depression (35%)**
  - SSRIss
  - Avoid TCAs
  - Methylphenidate?

- **Anxiety**
  - Non-pharmacological
  - Short-acting benzos

- **Sleep disorders**
  - 50% sleep disordered breathing: CPAP; nocturnal O2

- **Delirium**
  - Consider meds (hypotension; ADEs)
  - Non pharmacological (Modify the environment)
  - Low dose Haloperidol

---

Murtagh et al., 2007; Harris and Heil, 2013.
Table 1. Conventional medical HF management in advanced HF and last days of life.

<table>
<thead>
<tr>
<th>Drug</th>
<th>HF survival improved?</th>
<th>HF symptoms improved?</th>
<th>Common side effects</th>
<th>Advanced HF</th>
<th>Last days of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Inhibitor</td>
<td>Yes</td>
<td>Yes</td>
<td>Cough, ↓BP, ↑K⁺, renal impairment</td>
<td>Continue if tolerated (except during hypovolaemic illness)</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>No</td>
<td>Yes</td>
<td>Nausea, liver and thyroid dysfunction, QT prolongation</td>
<td>Continue if required for arrhythmia control unless significant adverse effects</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Angiotensin receptor blocker</td>
<td>Yes</td>
<td>Yes</td>
<td>↓BP, ↑K⁺, renal impairment</td>
<td>Continue if tolerated (except during hypovolaemic illness)</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Aspirin</td>
<td>No (unless recent infarct)</td>
<td>No</td>
<td>GI irritation and haemorrhage</td>
<td>Discontinue unless significant vascular disease/recent infarct</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Beta blocker</td>
<td>Yes</td>
<td>Yes</td>
<td>↓HR, ↓BP, cold peripheries, nightmares, fatigue</td>
<td>Continue if tolerated</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Digoxin</td>
<td>No</td>
<td>Yes</td>
<td>↓HR, nausea and GI disturbance, agitation, drowsiness</td>
<td>Continue if tolerated but vigilance required to avoid toxicity</td>
<td>Discontinue but may still provide symptom relief so could continue</td>
</tr>
<tr>
<td>Diuretic</td>
<td>Possibly</td>
<td>Yes</td>
<td>↓K⁺, dehydration, gout</td>
<td>Continue with dose titration as required</td>
<td>Discontinue but may still provide symptom relief so could continue</td>
</tr>
<tr>
<td>Ivabradine</td>
<td>Yes</td>
<td>Yes</td>
<td>↓HR, visual disturbance, headache, GI disturbance, headache, flushing</td>
<td>Continue if tolerated</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Hydralazine</td>
<td>Yes (with nitrate)</td>
<td>No</td>
<td>GI disturbance, headache, flushing</td>
<td>Continue if tolerated</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Mineralocorticoid receptor antagonist (eplerenone/spironolactone)</td>
<td>Yes</td>
<td>Yes</td>
<td>↑K⁺, renal impairment, GI disturbance, gynaecomastia (spironolactone only)</td>
<td>Continue if tolerated (except during hypovolaemic illness)</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Nitrate</td>
<td>Yes (with hydralazine)</td>
<td>Yes</td>
<td>Headache, GI and sleep disturbance</td>
<td>Continue if tolerated</td>
<td>Discontinue</td>
</tr>
<tr>
<td>Statin</td>
<td>No</td>
<td>No</td>
<td>Liver dysfunction, myalgia, myositis</td>
<td>Discontinue</td>
<td></td>
</tr>
</tbody>
</table>
So, how do we organize care for people with HF?
How is HF treated?

• **Medications**
  – Disease modifying (and symptom control)
  – Symptom control
  – Occasional devices

• **Diet**: Try to limit salt as this can cause more water retention and make breathing and swelling worse

• **Monitoring**: engaging patients AND caregivers
  – SYMPTOMS
  – WEIGHTS
Weight Change is an Early Indicator

Chaudry Circ 2007

• Case control study of HF patients in telemonitoring program
  – 134 with HF hospitalization, 135 without
  – Weights diverge 30 days prior to admission (p<0.001)

30 days!!!
HF in LTC
Heckman, Boscart, & McKelvie et al 2014

• Affects at least 20% of nursing home residents

• As many as half die within a year of admission to nursing home

• Heart failure is responsible for up to 2 in 5 transfers of nursing home residents to hospital

• Poor quality of life
Managing HF in Frail Seniors is Challenging

Concerns:
- multiple co-morbidities
- adverse drug reactions
- generalizability and relevance of trials
- diagnostic uncertainty: autopsy study found 30% of HF deaths misdiagnosed

Symptoms are non-specific
- ANY change: delirium, function, self-care, activities of daily living
- mobility: taking to bed, falls
- Changes at night
  - worsening sleep
  - increased urination

“Not themselves today”
Staffing: Example of LTC
Hirdes CanStrive 2013

- **Registered Nurse**: at least one RN at any one time
  - 8% of nursing time

- **Registered Practical Nurses**: 1 RPN for XXX residents
  - ~12% of nursing time

- **Personal Support Workers**
  - 80% of nursing time

- **Family physician**: variable visits/ratios
Adapting the CSS Recommendations on HF for LTC: A consensus with stakeholder input

• Funded July 2009 – June 2012, Heart and Stroke Foundation of Ontario

• Develop HF care processes for LTC
  – based on the CCS HF guidelines
  – that optimally utilize skill sets of all LTC staff roles
  – Are minimally disruptive to work routines
  – focus on achieving outcomes relevant to LTC residents

• Consultative process to identify barriers and formulate solutions
Overarching Themes

Strachan 2014; Heckman 2014; Newhouse 2012; Marcella 2012; Kaasalainen 2013

• Communication Gaps
  – Interprofessional within LTC home
  – With residents / families
  – External agencies

• Knowledge Gaps
  – Basic physiology
  – Clinical skills: Recognition, diagnosis
  – Procedural skills: Management

• Health system factors
  – Workload issues
  – Communication between LTC and other providers
  – Limited resources: Specialists, Diagnostics
EKWIP-HF: Enhancing Knowledge With Inter-Professional care for HF

Addresses key barriers to HF care

• Knowledge: clinical and procedural
• Inadequate interprofessional Care
EKWIP-HF: Enhancing Knowledge With Inter-Professional care for HF

Phase 1: Broad-based education for nursing and PSWs

Phase 2: Workshop to develop communication strategies for 5 key HF episodes
   1. New residents
   2. Physician rounds
   3. Team huddles at shift change
   4. Monitoring weights
   5. Ad hoc events

Phase 3: MD training

Phase 4: Full interprofessional integration with specialist back-up
   1. Bedside rounds
   2. Case discussions
Pilot in 2 LTC homes

• In-house teams developed
  – Lead identified (RN, PSW)
  – Members with specific interest after education session

• Champions of Communication processes

• Identified residents with potential / diagnosed HF
  – Biweekly physician rounds
  – Three physicians participated in HF rounds

• “Core Heart Team” led the HF assessments
  – ANEWLEAF useful template
Increasing Staff Knowledge

• All participating team members believed that their knowledge, understanding of the condition, and their assessment skills were enhanced as a result of the EKWIP-HF intervention.
Reflective Consideration of HF and Differential Syndromes

• Team members, stated that, as individual care providers, they were much more aware of non-specific signs and symptoms of HF.

• Members recognized the importance of considering HF signs and symptoms within the larger context of the chronic disease(s) and the resident’s presentation as important to confirm or rule out any other syndrome.
“This thing [EKWIP-HF intervention] has really trained us with that knowledge. It has helped us **think about things in a bigger perspective.** A lot of symptoms, like the delirium or the restlessness at night, I would have just thought, like before this all started, ‘It’s dementia, it’s dementia,’ and I think that is a mentality in our homes and probably in long-term care in general, right? It’s such a broad statement but now, it’s like ‘ok...it might not be. **Let’s look into this.**’” – PSW
• Members described the value of gaining expertise in reflective consideration of HF and differential syndromes at a team level to allow for better preventative strategies or more organized follow-up for residents with suspected of confirmed HF.

• EKWIP-HF equipped staff with the knowledge to attribute certain signs and symptoms to HF, which in turn allowed for timely intervention to prevent further decline or rapid worsening of HF.
Team ‘Awareness’ of HF Signs and Symptoms

“We have been more vigilant. I think we have been a little better at identifying cases of heart failure...I think it’s pretty high on our radar from this project on who’s in the train wreck category for heart failure.” - RN
Team members described that the increased knowledge and awareness led to feeling more confident to reflect on and plan for implementation of appropriate care protocols.

This translation from ‘knowledge to action’ was encouraged throughout the intervention with case studies, demonstrations of assessments, bedside consultation rounds, and team discussions.

Team members discussed how these carefully planned encounters allowed for translating theoretical knowledge into active care patterns.
“We have one [resident] right now that’s travelling the world at night, out through the wall...out through the window. He’s flying all night looking for free air and cold water. Last week, he was flying to Austria – mountains in Austria (PSW). It’s so hard to get up and around...he’s been telling me everywhere he’s been (RN). He’s very short of breath...He didn’t have a diagnosis of congestive heart failure (PSW); he had coronary heart disease (RN).” – PSW and RN
• This resident was not yet diagnosed with HF, so the team used this information to develop several **evidence-informed actions**: documenting and communicating the observations, advanced assessments, developing an individualized care plan, and evaluating the care delivered on resident outcomes.

• This proactive practice required **high knowledge levels** and a **strong team approach** amongst the group to formulate diagnostic hypotheses.

• One member provided a remarkable example...
“Now that we are a little more educated with heart failure, we are actually trying to **identify new people**. So, for example, when we were talking about [resident], how she sleeps, always sitting up. The team thought she could be a **perfect candidate for heart failure** and I know we spoke about possibly doing doctor’s rounds and doing her as our next resident to see. Unfortunately, the doctor was not available but...the really cool thing was that **as a heart team of PSWs, we decided to do an assessment** with [resident] using just the **ANEWLEAF strategies** [one of the teaching tools used during EKWIP-HF for recognition of signs and symptoms of HF].” – PSW
A-N-E-W-L-E-A-F

- A: Agitation, anxiety (especially if new)
- N: Nights are bad: trouble breathing, urinating more
- E: Edema (swelling you can leave fingerprints in)
- W: Weight gain (from water retention)
- L: Light-headed, dizzy
- E: Extreme trouble breathing lying flat
- A: Abdomen – belly bloated, pain, not hungry
- F: Fatigue, tired
Communication and Information Exchange as the Foundation for HF Care

• EKWIP-HF strengthened the information exchange between all members of the team.
• Team members perceived that they were more engaged in direct communication with others and felt acknowledged for their contributions by their colleagues.
• Team members recognized that strong IP communication and documentation are the pillars of good HF care.
Recognition of Each Others’ Values and Skills

“I must say, it was really nice to have that clear communication right through because [RN] and I [RN] are the middle men, right? We get all the reports from the PSWs, then we tell [physician], then he writes the orders.” – RN
Appreciation for Each Role and Team Function

“The main doctor-PSW communication has been the HF rounds that were done every two weeks...having the team there was good because, I [nurse] don’t see her [resident] every day and they [PSWs] do, and they’d say: ‘oh yeah, her [resident] edema is much better.’” - RN
Recognition of Previously Under Appreciated Opportunities

“I think basically everybody should be talking to everybody, and I’ve had the housekeepers come up to me and say: ‘I kind of mentioned it to the nurse a couple of times; it didn’t go into the book. Will you come look at this? This rash on the leg doesn’t look great to me’...I would rather somebody do that than miss somebody having shingles on day two when I could still do something about it.” – MD
• The increase in IP communication was not only evident between the initial team members, but expanded to other LTC staff as well, including team members in recreation, dietary, therapy and housekeeping staff.

• All members valued the strengthened communication amongst all team members and realized that this information exchange is advantageous in the care for residents.
Building and Sustaining a Core Heart Team

• The Core Heart Team (CHT) started out as a working group of IP staff with an interest in caring for residents with HF.

• This group attended workshops, participated in team meetings, were part of the bedside mentoring session, and organized case reviews.

• Their knowledge and skills in HF expanded exponentially, thereby increasing their confidence to act as a valuable member of the CHT.
Being Part of a Team

“What this [the EKWIP-HF intervention] has taught us is so valuable for so many – for everyone in this home...I would still love to have a heart team committee...I think just to go over our experiences and successes, how powerful is that? And it started with a presentation and a little card.” - PSW
“If [team members] are concerned about Jane Doe, we go into the room. It’s your chance to talk directly to the doctor; well, the whole team. It’s our chance as a whole team to spit out diagnoses, medications; what [team members] are seeing...appetite problems...everything from everyone’s perspective...we spit it out fast and [team members] are there with your concerns, and we could sort of discuss it quickly and should be out of there.” -RN
Supportive and Supporting Leadership

- Encouraging leadership was perceived as necessary in order to achieve the overall aims of better HF care.
- Team leaders ensured that all CHT members felt valued through recognition, consultation, and inclusion in all aspects of care.
“The Core Heart Team identified another resident...as a possible resident with CHF. Unfortunately, [physician] was not available until next week to do rounds with the team. As a team we decided to do our own assessment... [PSWs] took the lead with the questions, only referring to the ANEWLEAF reference a few times. They also physically examined [resident’s] legs for edema. There was no swelling or edema in legs/feet... It was amazing to witness how natural and informal their assessment was with [resident]. I believe this has a lot to do with the relationship-based care the team has developed with [resident].” - PSW
Engaging Others

• Once the CHTs were well established, participants started to discuss the importance of engaging all other LTC staff in this initiative.

• Several strategies were used to extend the CHTs to include different LTC staff roles.

• One member described the empowerment of taking on a leadership role from the perspective of a PSW, still somewhat harbouring a traditional image of the physician’s role on a care team...
“I think it is so empowering and powerful that a doctor has that willingness to do that. I think it is very sustainable. I think the fact that they’ve let us into their medical world to take over...that willingness to give up that control. Like, I am the boss. So you are just breaking down those walls. I think, it got the docs thinking differently too; so not only did it break down our mental fear of approaching the doctor and even, sometimes it’s even hard to ask a certain doctor a question. Now we’re asking, ‘hey, can we go on a round with you and lead it?’ I think that was, yeah, just unbelievable and unheard of. I think other docs would be just freaking out.” – PSW
Conclusions

• Heart failure is a chronic condition
  – Unpredictable at the individual level
  – Requires close management

• A palliative approach is needed early
  – Planning
  – Attention to symptoms
  – Heart failure, geriatric, and other
Conclusions

• Optimal management requires:
  – Knowledge about heart failure
  – Knowledge about palliative care
  – A truly interprofessional and engaged team

• Pilot study of EKWIP-HF suggests feasible, acceptable in LTC
  – Principles likely applicable in other sectors
Resources


• Cardiac Care Network Provincial Strategy: http://www.ccn.on.ca/ccn_public/uploadfiles/files/Strategy_for_Community_Mgmt_in_HF_in_ON.pdf

• Canadian Cardiovascular Society Guidelines Library: http://www.ccs.ca/en/heart-failure-program
Questions?

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