Picking Up the Pace

How to accelerate change in primary health care

Heart Failure Network

A System Wide Approach to Chronic Heart Failure Care

Alberta Health Services – South Zone
We Know

- HF remains the most common diagnosis that brings a patient to hospital for medical admission

- The greatest cost of treating the HF population is hospitalization

- HF affects 500,000 Canadians with 50,000 new cases diagnosed annually
We Know

- Strategies incorporating post discharge follow-up by multidisciplinary teams in specialty HF clinics have been shown to reduce mortality and all-cause hospitalizations

- Patients with recent or recurrent hospital admissions for HF benefit most from this multidisciplinary approach to HF care
What is the Alberta Cardiac Access Collaborative?

- Provincial project to improve access to adult cardiac services across the patient journey in Alberta
- To improve access to quality and timely cardiac care through provincial collaboration and system reorganization
A SYSTEM WIDE APPROACH
Targeting the larger heart failure population

We are providing quality care and achieving good outcomes in the HFC (specialty service).

We are consulting on only a fraction of a very large population of patients.

We have a responsibility to collaborate with our health care partners to support delivery of quality heart failure care across the continuum of care.
HFN as a Framework

• Creates a **NETWORK** of providers across the continuum of care

• Targets **high risk** population

• Insists on system wide **accountability**

• Acknowledges the **needs of the patient** and builds a system that supports them where they are

The Heart Failure Network
Heart Failure Network

HFN

Hypothesis

- Improve evidence guided care
- Improve Access
- Improve Navigation
- Improve Quality of Life
- Enhance appropriate utilization of specialty services
- Reduce
  - Admission rates
  - Readmission rates
  - Length of stay
  - Emergency room access
Who comes to the HFN?

- Patients who visit the ER, are treated for HF and discharged

- All patients admitted to acute care facilities with Heart Failure

- Community care patients with frequent episodes of instability in their HF management
Heart Failure Network (HFN)

- 3 Visits:
  - Initial (1)
    - Within 7-14 days of discharge
    - Reconcile medications
    - Reinforce self management *(JUST IN TIME TEACHING)*
    - Clinical assessment
    - Diagnostic test as required
    - Access Resources
    - Communicate with Health Care Providers
    - Confirm appointments
Heart Failure Network (HFN)

- Visit #2
  - Heart Failure Education Class
    - Lethbridge: twice monthly
    - Taber, Raymond, Pincher Creek, Cardston, Crowsnest Pass: monthly
  - Within 30 days of discharge/referral
Heart Failure Network (HFN)

- Visit #3
  - Within 30-60 days of discharge/referral
    - Clinical assessment
    - Self management strategies (JUST IN TIME TEACHING)
    - Medication reconciliation
    - Linkages:
      - BHL Classes
      - Pharmacy
      - Community Care
      - Social Services
      - Access Center
Spectrum of Care

- Primary care clinics: rural and urban
- Community care - agency mentorship
- Designated assistant living
- Acute Care - HF liaison nurse - dedicated pharmacist - standardized discharge care plan
Building a “NETWORK” of support

6 Communities with acute/primary care facilities accepted local accountability for HFN navigation and resources
Conclusions
A System Wide Approach to HF Care

What are we seeing?

- Improve evidence guided care → Yes
- Improve Access → Yes
- Improve Navigation → Yes
- Improve Quality of Life → Not formally measured
  Anecdotally Yes
- Enhance appropriate utilization of specialty services → Yes
- Reduce
  - Admission rates → Yes
  - Readmission rates → Yes
  - Length of stay → Yes
  - Emergency room access → Yes
Physician sees pt with Dx of CHF or pt presents with active CHF

Referral to HFC (see Note 1)

Physician advises patient of diagnosis and discusses the following:
• Prescription changes & develops a diuretic action plan
• Recommends further lab work (lytes,Cr)
• Arranges visit with clinical educator for JIT education
• Informs pt of heart failure education classes
• Informs pt that there will be a f/u visit with Dr & education within 2 wks

Clinical Educators “Just in Time Teaching” includes the following:
• Gives pt HF Education bundle
  - Daily wt log
  - HF Management Guide
  - Living well with HF book
  - HF Brochure
• Explains daily wts mandatory
• Explains ↓Na+ restriction and high salt foods
• Explains S&S- Chronic HF Action Plan (red/yellow/green)
• Reviews diuretic action plan
• Informs pt of importance of f/u labs, dx testing, and books f/u combo (DR/RN) appt in 2 wks
• Encourages attendance to HF education class. Booking clerk to call referral to BHL for HF education class.

Book 2 week f/u combo visit

consider referral to HFC

BHL calls pt and books them into HFC or HF Ed class

BHL receives referral

Booking Clerk to fax BHL referral for HFC or HF Ed Class (see Note 2)

April, 2009
ED Activity - HF
Chinook Regional

- 2006/07: 286
- 2007/08: 265
- 2008/09: 241

16% decrease in HF ED activity

45 visits x cost of ER visit for HF
- Cardiology/Internal Med consult
- Diagnostics
- EMS

Source: ED/Comm Care Meditech Visit Report
% Heart Failure Readmissions in 30 days

Chinook Regional Hospital

- 2006/07: 13.64%
- 2007/08: 12.45%
- 2008/09: 8.71%

% Heart Failure Re-Admissions within 30 days

Source: ED/Comm Care Meditech Visit Report
Readmission within 30 days – Speciality Chinook Regional Hospital

![Bar chart showing readmission rates for HFC and Non HFC specialities in 2007/08 and 2008/09.]

**Source:** ED/Comm Care Meditech Visit Report
ALOS – Speciality
Chinook Regional Hospital

Source: ED/Comm
Meditech Visit Report
ALOS
Chinook Regional Hospital

- 2004/05: 8.3
- 2005/06: 7.9
- 2006/07: 8.4
- 2007/08: *9.7 (14.7)
- 2008/09: *9.2 (14.1)

Source: CIHI portal

*Red data: Typical Cases ALOS
*( ) data: All Cases ALOS
AHS: Chinook Regional Hospital
2007/2008: pulled using Most Responsible Diagnosis (ICD–10-CA) range of I50.0 to I50.9 and I26.0
2008/2009: pulled based on CMG 196: Heart Failure Without Cardiac Catheterization

**ALL CASES**

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<td></td>
<td># PTS</td>
<td>TOTAL DAYS</td>
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<tr>
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<td>TOTAL CASES</td>
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<td>3192</td>
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All Cases includes both:
Atypical Cases: cases that do not receive the normal or predicted course of treatment associated with inpatients in a specific CMG
Typical Cases: cases that have undergone a normal and expected course of treatment for a specific CMG

3192 – 2476 = 716 days
716 x $1104.00 = $ 790,464
**Acute Days**

**Chinook Regional Hospital**

**Typical Cases**

- **2004/05** (1292)
- **2005/06** (1284)
- **2006/07** (1244)
- **2007/08** (1158)
- **2008/09** (1165)

06/07 – 08/09 = **79 days saved**

79 days x $1104.00 = **$87,216**

**Typical Cases**: cases that have undergone a normal and expected course of treatment for a specific CMG

**Atypical Cases**: cases that do not receive the normal or predicted course of treatment associated with inpatients in a specific CMG
Typical **Cases** HF
Chinook Regional Hospital

- **2004/05:** 154
- **2005/06:** 162
- **2006/07:** 148
- **2007/08:** 120
- **2008/09:** 127

Source: CIHI Portal
All Cases
CMG 196 Heart Failure without Cardiac Catheterization
AHS-Chinook: Region Wide Acute Care Facilities

- # Cases All Facilities
  - 2004/05: 355
  - 2005/06: 320
  - 2006/07: 360
  - 2007/08: 311
  - 2008/09: 267

Source: CIHI portal
# of Cases
- 2004/05: 223
- 2005/06: 214
- 2006/07: 202
- 2007/08: 198
- 2008/09: 183

Source: CIHI portal
Heart Function Clinic
AHS - Chinook
Annual Referral Rates Jan. 1 – Dec. 31

- Referral Rates
  - 2003: 58
  - 2004: 35
  - 2005: 38
  - 2006: 36
  - 2007: 56
  - 2008: 76
  - 2009: 108
Heart Function Clinic  
AHS - Chinook  
Average # Referrals per month

- Average # Referrals
  - 2003: 3.8
  - 2004: 2.8
  - 2005: 3.2
  - 2006: 3.0
  - 2007: 4.7
  - 2008: 6.3
  - 2009: 9.0

Average Referral Rates
Heart Function Clinic
(based on calendar Year)