Care Transformation

Patient Centered
Team Delivered
Caring
Inspired
Engagement
“Patient” Partner

Innovating – Transformation Teams – Leading the Way
META Council

Frontline Leadership Mobilized
Process Flows - In Thru Out
Documentation - IPoC
IPoC CARE Rounds

Weekly Inter-Professional
Collaborative Approach to Relevant Education
Right
1st
TIME
I-CARE

4 - “Stepping Up” - Intensively - CARE Fully
Transitions
RAPID Rounds

Daily
Team
0800h

Review-Assess-Plan-Imminent-Discharge
U AH GIM Acute Intake

Weekly Intake
Aug 2009 - Jul 2010
From UAH Flow Dashboard

Weekly Intake
Aug 2010 - Jul 2011
From UAH Flow Dashboard
UAH GIM Throughput

Inflow and Outflow Trend
Aug 2009 - Jul 2010
From UAH Flow Dashboard

Inflow and Outflow Trend
Aug 2010 - Jul 2011
From UAH Flow Dashboard
## General Internal Medicine CMGs

<table>
<thead>
<tr>
<th>Top 10 CMGs (n= sample size)</th>
<th>CIHI ELOS Median (days)</th>
<th>GIM ALOS Median (days)</th>
<th>ELOS - ALOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Obstructive Pulmonary Disease (n=106)</td>
<td>6.9</td>
<td>5.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Heart Failure w/o Cardiac Catheter (n=89)</td>
<td>7.1</td>
<td>4.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Lower Urinary Tract Infection (n=66)</td>
<td>7.5</td>
<td>5.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Viral Unspecified Pneumonia (n=60)</td>
<td>6.9</td>
<td>5.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Other/Unspecified Septicemia (n=46)</td>
<td>8.5</td>
<td>5.6</td>
<td>2.9</td>
</tr>
<tr>
<td>General Symptoms/Signs (n=46)</td>
<td>6.2</td>
<td>3.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Diabetes (n=41)</td>
<td>9.6</td>
<td>7.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Organic Mental Disorder (n=41)</td>
<td>7.6</td>
<td>5.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Pulmonary Embolism (n=37)</td>
<td>7.1</td>
<td>4.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Poisoning/Toxic Effect of Drug (n=36)</td>
<td>7.6</td>
<td>6.7</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Top 10 = 46% of all CMGs
Strategic Communities of CARE
Revolutions in General Internal Medicine

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Assistant Professor, Department of Medicine, University of Toronto
Adjunct Professor, Rotman School of Management
Disclosures

1. Board of Directors, PCAS (Makers of Pharmatrust medication delivery system)
2. CICC has received funds from Sanofi Aventis and Boehringer Ingelheim
3. Lean and regional integration consulting with Deloitte Healthcare
4. RBC bank has sponsored a medical career guide – “Taking Control of your medical career”
Are we set for a revolution?
Rev-o-lu-tion

1. A revolution is a dramatic and wide-reaching change in the way something works or is organized.
2. Revolutions occur when significant change does not happen through natural evolution.
The Perfect Storm
An expression that describes an event where a rare combination of circumstances will aggravate a situation drastically.
Patients are **living longer** with **chronic, complex conditions** such as heart failure and cancer. The system was built on a model of episodic care. This makes up only a minority of the services currently delivered.

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**The Exponential Use Effect**
Hospital use rises exponentially with age

The take-off point is around age 65

**Complicated Systems and Perverse Incentives**

25%  22%

Xray  CT scan  Blood work consultation

40-50% admitted to GIM

75%

Nursing home  rehab  Home

Case Studies: Revolutions at work

1. Operational improvement
2. Using data to change behavior
3. Clinical communication
Case Study 1:
Operational Improvement
1. A difficult and complicated process of working through complexity and understanding all hospital operations
2. Process that requires effort and years of work
Q1. Why are admissions to GIM increasing?

- Volume funded services are incented to drive procedure volumes.
- There is no incentive to continue providing “downstream” care.
- Care (and the financial and human resource deficit) is transferred to non-volume funded services, primarily GIM.
- GIM tries to borrow specialty beds to unclog the ED.

Q2. Why have strategies to reduce boarders failed?

Q3. Can GIM operational efficiency improve?

Daily discharge rate = \[
\frac{\text{Number of discharges over a 24 hour period}}{\text{Total Census at the start of the 24 hour period}} \times 100\%
\]

- conceptually simple
- generated in near real-time
- calculated using readily available hospital administrative data
- granular enough to reveal detail needed to focus improvement
- correlates well with other valid indicators of operational efficiency


Redesign of Strategies

Smooth discharges over the course of the week

Restructure GIM clinical team admitting schedule from ‘bolus’ to ‘drip’

Quantify the role of social work in efficient patient discharge

GIM median length of stay ↓ 0.3 days

Retention of 1 FTE Social Worker


Case Study 2: Using data to change behaviour

1. Balanced Scorecards have been proven to effectively measure a hospital’s overall performance by utilizing metrics.
2. This project derives metrics from domains of patient care to create a team-based scorecard that can evaluate and report weekly performance on a team (rather than system) level.
Team-based Scorecard

Teams are evaluated on four quadrants of care and performance, with an emphasis on real-time reporting and feedback for quality improvement.
Patient Satisfaction

Patient satisfaction is captured in real-time and disseminated to the teams that provided care.

<table>
<thead>
<tr>
<th>Question</th>
<th>Average Response</th>
<th>This Cycle</th>
<th>Last Cycle</th>
<th>GIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Average Overall Care Rating</td>
<td>8.54 ↓</td>
<td>8.90</td>
<td>8.70</td>
<td></td>
</tr>
<tr>
<td>Q2: Average Likelihood of Recommendation Rating</td>
<td>9.45 ↑</td>
<td>8.80</td>
<td>9.12</td>
<td></td>
</tr>
</tbody>
</table>
Case Study 3: Clinical Communication

1. This project focuses on how to improve interprofessional clinical communication to improve efficiency and quality of care.
Antiquated technology in healthcare

Approximately 100,000 die each year due to medical errors. 80% of these are communication related.
Innovative clinical messaging

The way we communicate, share and receive information must has changed in every respect, except within healthcare. **Innovative clinical messaging** is the **next major revolution** for healthcare.
We're working on it

We have published numerous articles and have several in press about this problem, and our work to improve and revolutionize clinical communication.
Improve **Quality and Safety** in Health Care


Clinical Message capability is a joint venture between:

- Interprofessional Communication
- Patient Handoff
- Electronic Kardex
- Flexible Patient Care Teams
- Most Responsible Clinician
- Closed Loop Communication
- Interprofessional Collaboration
- ED Consult Time
- Real-Time Performance Communication and Analytics
- Learning Organization
- Knowledge Diffusion
- Global Community of Patient Safety Professionals

http://qrs3E.com/cm
Thank you
Progressive Partnerships: Integrated Community Care

Dr. Nigel Murray
President and Chief Executive Officer
Fraser Health
About Fraser Health

BC’s most populated and fastest growing health authority

Health Authorities in British Columbia
Interior Health
Fraser Health
Vancouver Coastal Health
Vancouver Island
Northern Health
Provincial Health Service

20 Municipalities
1.5 million residents
Our Challenges

Growing aging population
- age 65+ to grow from 14.7% to 24% over next 25 years

Increasing complex and chronic conditions
- 34% have 1+ chronic conditions; use 80% of health care resources

Supply of and relationship with General Practitioners
- Providing necessary supports and building trust
Our Challenges

Physician Supply per 100,000 population
The Big Shift

...and how we’re doing it at Fraser Health

➤ From acute to community services
➤ From hospitals-first to ‘home-first’
➤ From independence to collaboration
➤ From silos to integration

Keys to our success (so far):

➤ Enabling structures
➤ New and effective partnerships
➤ Service coordination/integration
Elements of Success

• Importance of partnership at all levels
• Trust
• Shared accountability
• Enhanced collaboration
• Present problems, not solutions
• Senior executive support (health authority and government) for integrated community care
• Clinical practice benefits for practitioners
• Focus on needs of patients and community
Community Partners

Healthier community partnerships

- Formal, action-oriented partnerships with municipalities
- Forms the ‘big picture’ for integration

Municipalities can . . .

- Consider healthy living strategies when developing by-laws, zoning and other policies
- Incorporate healthy living strategies in official community plans and other community planning
- Conduct social marketing and education campaigns
Governance

The Foundation for Change

Ministry of Health and BC Medical Assn.

- Primary Care Charter, funding
- General Practice Services Committee

Fraser Health, BCMA, Ministry of Health

- Collaborative Services Committee
  - Composed of Division, Ministry, and health authority members (starting point)
  - Collaborative guidance to complex and inter-connected issues related to the delivery of health services
  - Senior administration and clinical leadership participation
Physician Partnerships

A structure and funding for collaboration

- Family physicians voluntarily organized in their community
- Partner with Fraser Health and Ministry/GPSC to address primary health care issues in their communities

... Physicians shift from being isolated to being genuinely involved and having influence in the system
Divisions of Family Practice

Divisions are an affiliation of family physicians with common health care goals that reside in the same geographic area.

Divisions can:

- Give GPs a stronger collective voice
- Offer comprehensive patient services
- Share in health service decision-making
- Provide personal and professional support for physicians
Partnership in Action

Example: Fraser Health GP / Home-Health Partnerships

- Home Health Case Managers embedded in family practices, planning and coordinating care with GPs to support older adult patients

GP + patient + family + case manager

Intensive case management, care coordination, self-management support, proactive monitoring and early detection of illness; intervention of declining status, referrals to community services, home health

Creates capacity for GP / enables and deepens patient attachment
House Doc Program

Example: Fraser Health GP / Acute Partnerships

Outcomes at six months:

• Average Length of Stay decrease by 16%

• Improved physician engagement in hospital care and multidisciplinary input to patient care

• Utilization statistics suggest improvements in length of stay and discharge rates are equivalent to increasing bed base by 20 beds
Technology as an Enabler

*Improved Communications & Connections*

- **MyHealthPlan** – Developed by Fraser Health
- An electronic-based care planning tool with on-line portal for access by GPs, patients and allied health

**Physician Office Integration (POI)**
**Physician Information Technology Office (PITO)**
Supporting development and implementation of systems of electronic medical records (EMRs)
Outcomes to date

- Healthy Community Partnerships
- Divisions of Family Practice
  - Increased attachment of unattached patients
  - Divisional affiliation of isolated physicians
  - Physician engagement in health care system planning and enhanced clinical programs
- Improved partnerships between health care providers and community stakeholders
- MyHealthSystem and MyHealthPlan
The Fraser Health Model

*Integrated Primary and Community Care*

- High quality, patient-centered, continuous, coordinated, seamless care
- Improved population health
- Improved patient/provider experience
- System sustainability

All communities by 2015
Divergent Thinking: Mental Health Crisis ER Diversion

CEO Forum 2012

Shirlee Sharkey
President & CEO
Saint Elizabeth
Saint Elizabeth

Home & Community Care
-5 million visits/year

Timely Expert Care
-6,000 employees

Saint Elizabeth
-Honouring the Human Face of Health Care
Bridging Gaps in Thinking & Structure
Re-Routing Solutions
North York Hospital Emergency Department Diversion Program

2010-2011 Program Goals and Objectives:

• Divert repeat ER visits

• Divert avoidable admissions

• Improve ER wait times

• Facilitate discharge & reintegration

• Facilitate use of community services
EDDP Flow @ Hospital and Community

Saint Eliz Crisis Worker(s) in Hospital

Day Treatment -- In-patient -- ER -- Day Hospital

Community Crisis Resources (incl. Saint Eliz)
Bridging Gaps

Mental Health Crisis Program Services:

✔ Crisis visits/phone calls
✔ Information/resources
✔ Peer support
✔ Safe bed option
✔ Short-term case management
Program Evaluation

Evaluation Framework – Areas of Focus:

- Program Access
- System Navigation
- Client Profile
- System Utilization
- Discharge
- Follow-up
- Client Engagement
Program Results & Highlights

• Program **met or exceeded** objectives

• About 80% of **clients not aware** of community crisis supports

• Clients still **not happy with wait times**

• **Increased understanding** and appreciation
Implications & Recommendations

- Develop and implement an education campaign
- Ensure that referral sources have correct program information
- Evaluate the client pathway and consider other models for diversion
- Further explore how seniors could be referred to the EDDP
More Implications & Recommendations

• Further examine best practices for integrated mental health service

• Regularly review case management capacity

• Explore why limited number of patients referred and why clients fail to follow up

• Ensure training emphasizes client-centred approach
Key Success Factors

What’s the difference? Key informant interviews tell us...

- 24/7 access to care/support
- Peer support
- Priority access to short-term case management
Formula for Optimal Care

Healthy Lifestyle

Access to Primary Health Care

ER and Hospital Supports

Access to Virtual and e-Care

Access to Community Supports and Services
“I am impressed that such a program exists. That is remarkable!”

-Program client