Chronic Disease Management

A Region-Wide, Integrated Approach

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Chronic Disease Management

May, 2007

Capital Health Region

- Largest of 9 regional health authorities in Alberta
- One of largest health authorities in Canada:
  - 1.6 million people
  - 29,000 health staff
  - 2,400 physicians
  - 13 hospitals
  - 37 community health centres/clinics

Tell us about your initiative

What is the main objective / vision?

What health outcomes are you trying to improve?

What are you measuring?

Are you at all interested in improving the way care is delivered?

Are you aiming to offer a cost-effective/saving solution for the health care system?

CDM Philosophy

We are responsible for the care of every individual in the region who is at risk of, or presents with, chronic disease.

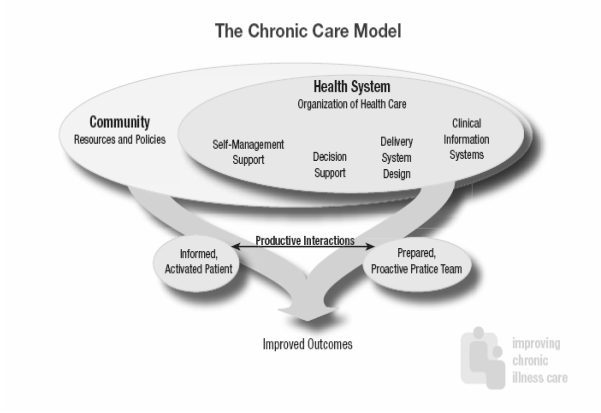
New CDM Integration Initiative: Principles

- Responsible for entire region population
- Primary care MD central to coordination
- Priority on community-based care
- Patient self-management
- Planned follow-up and intervention
- Evidence-based medicine
- Delegated care: right provider, right time, right place
- Measurement tools to track

Targeted Chronic Diseases

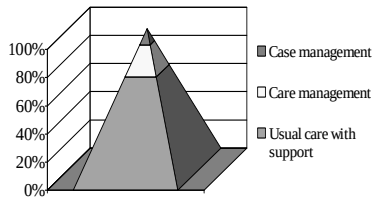
- Diabetes
- Obesity
- Asthma
- COPD
- Heart failure
- Cardiovascular risk (CAD, hypertension, dyslipidemia)
- Chronic renal disease

Chronic Care Model



Emphasis on Primary/Community Care

- Case management
  - 10% of patients
  - Most complex & challenging
- Care management
  - 20% of patients
  - Specialist or specialty clinic care for complex cases
- Primary care
  - 70% of patients
  - Managed by primary care MDs & teams



How do we Re-engineer our CDM System?

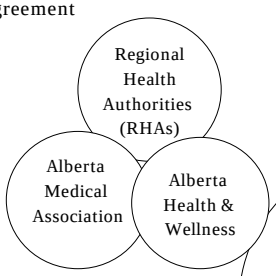
1. Philosophical shift in approach to care
   - Emphasis on primary & community care
   - Patient self-management
2. Plan start with one disease area: diabetes
   - Central access, triage & needs assessment
   - Care delegated to most appropriate provider
   - Structured, planned interventions & follow-up
   - Evidence-based care & evaluation

How do we Re-engineer our CDM System?

3. Develop new primary care infrastructure: Primary Care Networks
4. Redesign information management infrastructure
5. Identify region-wide (multi-disease) supports/programs for patients
6. Apply findings, successes from diabetes to planning for other chronic diseases
7. Restructure ER/acute care system.

Primary Care Networks

8-year Tripartite Agreement



Primary Health Care Strategy: Priorities

Access
- Increase access to Primary Health Care
- 24/7 access to appropriate services
- Connect people to a family physician

Coordination
- Coordinate care between physician and others
- Promote interdisciplinary teams
- Coordinate and link with acute/specialty care

Service Delivery Models
- Physician payment methods
- Roll out chronic disease management
- Establish Primary Care Networks

Information Management
- Use of the Electronic Health Record (netCARE)
- Expand access using Capital Health Link
- Access to health information

What about the specialists ?

Who Should The Specialist See?

- Complex patients
- Atypical patients
- Uncontrolled patients
- Patients where the family physician needs guidance
- Teaching patients
- Other

Information Management Redesign

- Critical components:
  - Electronic Health Record (EHR)
  - Electronic Medical Record (EMR)
    - CDM software
    - PCN/CDM registry
    - Alberta NetCARE CDM Infoway Project
  - Enterprise-wide Master Person Index (EMPI)
  - Move to Epic software Region-wide

What does this mean for the patient ?

- Health Care not “Illness Care”
- Personal responsibility
- Strong emphasis on staying healthy with support to do this !
- The health care team works with the patient to be pro-active in maintaining health (e.g. assesses risk for conditions, keeps up to date with routine interventions such as immunization, Pap smears, blood pressure checks)

What does this mean for the patient (cont’d)?

- Increased community supports (in collaboration with Capital Health)
- Increased access to information (e.g. patient portal)
- Care coordinated and managed by primary care team
- Less reliance on just physicians, increased access to other health care professionals
- Specialists see more complicated patients
- Ability to access appropriate care, at right place, right time (i.e. shorter waiting lists or no waiting lists)
- All health care needs are addressed, not just a single problem

What does this mean for the patient (cont’d)?

Electronic records allow:

- No need to repeat medical history over and over, carry pill bottles to appointments
- Increased safety (allergies, drug reactions, medical conditions are know by the medical team and pharmacist)
- Flags people that may be at high risk for certain conditions (e.g. colon cancer, breast cancer)
- Alerts / reminders for abnormal tests, tests that are due, etc.
- Real-time access to accurate information

Tell us about your initiative

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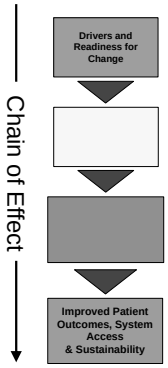
Four key components are tracked by the evaluation framework



- **Drivers and Readiness for Change** – with consideration for the environmental and organizational context, as well as the provider team effectiveness level
- **Integration Strategies** – for tracking of the best practice interventions identified within integration
- **Improved Patient, Provider and System Processes** – for evaluating the near and mid-term impacts of the interventions on the processes that affect the health system and its stakeholders
- **Improved Patient Outcomes, System Access and Sustainability** – to reflect the ultimate impact of the interventions on the health system and its stakeholder

Integration Strategies

Measures of Success

Evaluation example - diabetes:

1. CDM committee established
2. Disease patients identified (registry)
3. Care maps or plans in place
4. Patients put on care paths
5. Items from care maps being carried out (e.g. yearly ophthalmologist visit)
6. Reduction in intermediate markers (e.g. hemoglobin A1c) – consider averages and proportions
7. Soft endpoints reduced (emerg visits, hospitallization)
8. Hard endpoints reduced (premature MI, dialysis, etc.)

sequential

Measures of Success

Other outcomes:

- Patient reported outcomes to assess quality of life in all its domains
  - helps proactively identify patients at risk
- Economic outcomes
  - individual including QALY's
  - program
  - system

CDM Outcomes and Key Performance Indicators

- The CDM initiative will provide several measurable outcomes in the categories that drive improved quality for Capital Health. Outcomes derived from the CDM initiative include:

Dimensions of Quality

Acceptability
- Improved patient and provider satisfaction

Accessibility
- More comprehensive case finding for individuals with chronic disease
- Chronic disease patients have a primary care physician
- Chronic disease patients have better access to specialty and community services

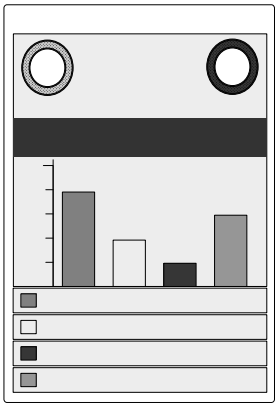
Efficiency
- Reduced duplication of chronic disease services

Effectiveness
- Prevent and/or slow down the progression of chronic diseases and related complications

Safety
- Decrease the health risk associated with multiple chronic disease treatment regimens

Appropriateness
- Decrease use of inappropriate or unnecessary healthcare services at all levels of care

Example of dashboard indicator



A1C Glycemic C

40%

Population of diabetics in the optimal range for glycemic control

Current

50%

n = 200

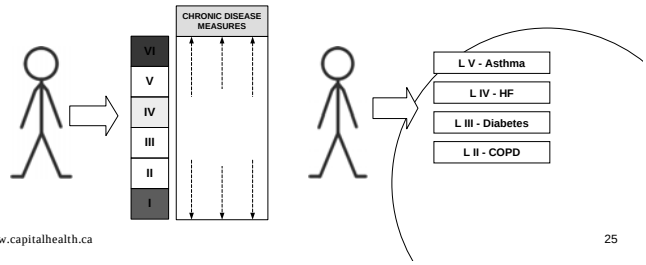
Measurement Framework Concept

The concept **extends across all managed Chronic Diseases**

CDM LEVEL	PATIENT STATUS	CHRONIC DISEASE						
		ASTHMA	COPD	CV RISK	DIABETES	HF	OBESITY	RENAL
VI	SEVERE, MOST COMPLEX CASE							
V	MANY CD ISSUES, COMPLICATIONS							
IV	MODERATE CD ISSUES							
III	ISOLATED CD ISSUES							
II	WELL-MANAGED CD							
I	AT RISK FOR CD							

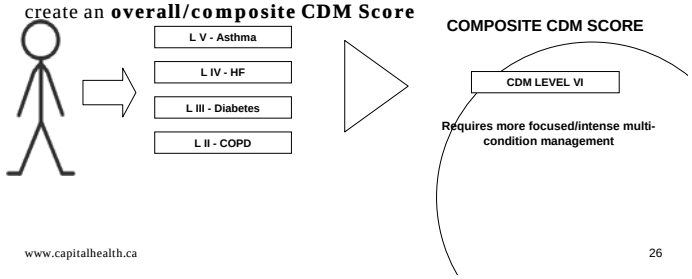
Patient Classification

- Patients are classified in the CDM grid according to **clinical, functional, and social characteristics**, consistent with the Wagner model
- Patients are assigned a CDM level **for each chronic condition**



Determining Overall Status

Knowing the CDM level across multiple conditions allows us to create an **overall/composite CDM Score**



Tell us about your initiative

Are you assessing health care system impact?

Who do you expect to benefit from your intervention? (patient / professionals / health authorities…)

What is the stage of development of your initiative?

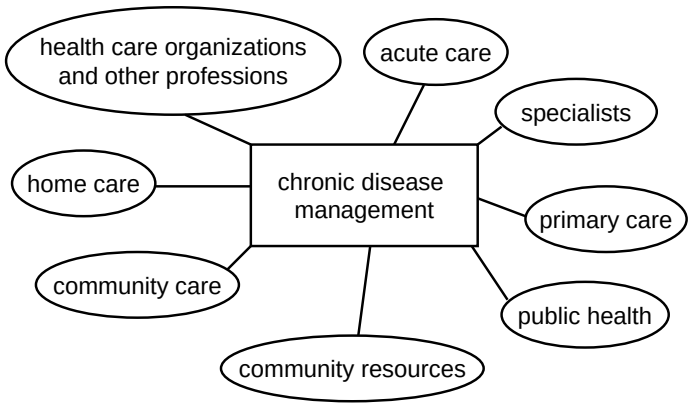
What is 'special' about your program?

Capital Health and CDM – unique attributes

- Responsibility for entire geographic population
- Involvement of Primary Care
- Involvement of specialists
- Information technology; EMPI, CDM software
- Cross-sectoral integration (e.g. mental health, chronic pain, palliative care)
- Obesity as a CDM program
- Involvement of Acute Care sector

Who are the key stakeholders/partners in this project?

Key chronic disease management interactions



What do we integrate with in CDM ?

- Family doctors
- PCN's
- Community pharmacists
- Community partners (e.g. Running Room, Weight Watchers)
- AMA
- College of Physicians and Surgeons
- Patient advocacy groups (e.g. CDA, Lung Association)
- Cultural groups
- Multicultural brokers
- ER's
- Geriatrics
- Continuing care
- Chronic pain
- Psychologists
- Nurses
- Nurse-practitioners
- Dietitians
- Disease specific specialist groups
- Kinesiologists
- CH Finance
- CH Public Affairs
- CH IT
- Medical Affairs
- Human Resources
- Site administrations
- Site Medical Directors
- Palliative care
- Mental health
- Community care
- Public health
- Health Link
- AH&W
- Public Health Agency of Canada
- Health Canada
- Alberta College of Pharmacists
- Pharmacy owners' association
- specialist groups
- Faculty of Medicine
- Faculty of Nursing
- Faculty of Education
- Faculty of Pharmacy
- Faculty of Rehabilitation Medicine
- Faculty of Physical Education and Recreation
- Department of Medicine
- Department of Pediatrics
- Department of Psychiatry
- Department of Surgery
- Canadian Obesity Network
- Other Health Regions
- Other Provinces
- Emergency planning

Who are the key stakeholders/partners in this project?

How/why were they selected?

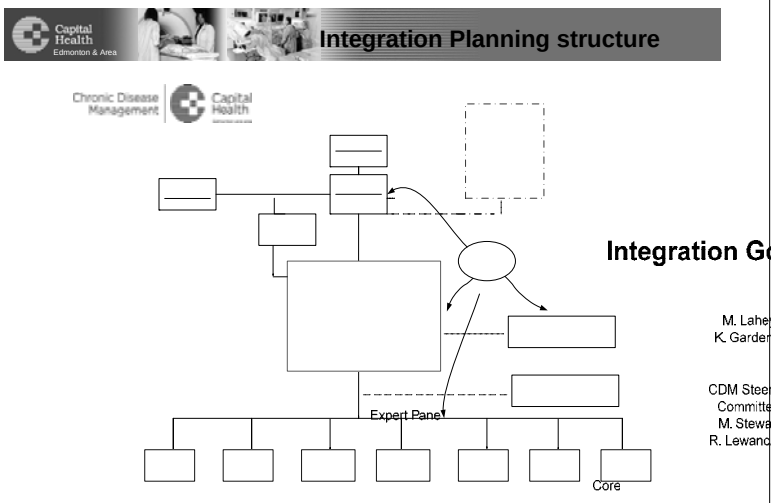
What do each of them bring to this partnership?

What do they want to get out of this partnership?

Has partner involvement been a key success factor to your initiative? Absolutely

What is your internal governance structure?

Who is the 'owner'/champion of the project/program?



Does your program have any links to government?

- very loose, they are aware of what we do and help support some provincial joint initiatives

Would your program have benefited from government involvement?

- having Regional autonomy allows us to tailor our CDM programs to our needs. Further understanding is necessary on the part of government.
- However, government has funded the underlying infrastructure (PCN's) that allowed us to introduce CDM

What are the pros and cons of working within a multi-stakeholder partnership?

- multiple meetings
- communication

What are your main sources of funding?

- Operating budget: NO PILOT PROJECTS !!!

How is information communicated?

- Steering committee
- One on one
- Public Affairs support (newsletter, internal website)

Are there any conflicts of interest identified?

- No

Were you able to involve in your partnership all the relevant groups that have a stake in your initiative?

- As many as possible

What were the main obstacles you encountered in development/execution? How were these tackled?

Technical – the science

- no one in Canada had integrated totally vertically (i.e. from patient to community to primary care to specialty to acute care), nor horizontally (considering all patient conditions)

Logistical – the timing and operations

- no one had a background in CDM
- used planning expertise

Organizational – the governance and management

- convince executive and stakeholders
- inclusive yet "nimble" (Steering versus core committees)

Financial – the funding

- financial arguments had to be made
- ROI calculations
- collect economic data

political – special considerations:

What lessons have you drawn from your experience? If you were to develop a new program what would you do differently?

CDM Integration Initiative: Lessons Learned

- Clear organizational vision critical
- Visible support from senior executives
- Dedicated planning resources & funding
- Buy-in from physicians → Need MD champions
- Commitment to multi-sector, multi-disciplinary planning & communication
- Manage contradictory perceptions: rapid change vs slow progress
- Early success breeds confidence: confidence breeds success
- Resources and time devoted to change management

Questions?