University of British Columbia
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A Commitment to Change:
Downtown Community Health Clinic's Chronic Disease Management Model

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A Commitment to Change: DCHC's Chronic Disease Management Model

Purpose

The first purpose of this report is to highlight what we have learned through our research and collaboration with the Downtown Community Health Center (DCHC). Secondly, we will outline a user-friendly clinic-specific chronic disease management (CDM) model that we have adapted for use at DCHC. This model is intended to standardize chronic disease related quality improvement initiatives at DCHC thereby improving care processes, outcomes and reducing cost. This same model has the added benefit of being adaptable for use by clinicians at a patient level.

Vision

Our hope is that this model will complement and contribute to the realization of DCHC's vision of achieving excellence in Inner City Primary Health Care.

Introduction

The UBC SoN Synthesis Project pairs undergraduate nursing students with partners in healthcare agencies to collaborate on projects to improve healthcare delivery. "By working together on practice-based projects, students, faculty and practice partners will build stronger, more meaningful relationships. Through project work and enhanced relationships, capacity will grow to mobilize knowledge and ensure better, evidence-informed practice." (MacPhee, M., 2012).

The DCHC aims for excellence in Inner City Primary Health Care and has a large population of clients living with chronic diseases however it is lacking a consistent and systematic approach to CDM. We were invited by Barb Eddy, NP to work with DCHC to develop a clinic-specific CDM model to guide future quality improvement (QI) effort related to chronic disease care.

In our research we have explored many CDM models and QI tools but found that the most evidence-based and widely recognized models were already in use in some capacity by DCHC. Rather than reinvent the wheel, we thought it would make most sense to adapt the existing models for our use. The success of innovations is most greatly influenced by the way they are perceived. This perception is dependent on the innovation's simplicity, its relevance to stakeholders and the involvement of those stakeholders in its development (Berwick, 2003). In other words, the simplification and local adaptation of an innovation is the key to its success.

The adapted model we propose is based on the BC Expanded Chronic Care Model (Barr et. al, 2003) and The Model for Improvement (Langley et. al, 1996). The Chronic Care Model is a CDM model used worldwide and shown to be effective at improving care in health systems at the community, organization, and patient levels (Improving Chronic Illness Care, 2012). The BC Expanded Chronic Care Model is a version of this CDM modified to fit clinical scenarios within the province, including the Vancouver Coastal Health Authority. It provides the comprehensive framework from which we have adapted our model (Barr et. al, 2003).
The Model for Improvement is a simple QI tool used in diverse fields but used extensively in healthcare to accelerate the change process. The model consists of three initial questions to identify an intervention followed by a continuous trial and error process, the Plan-Do-Study-Act (PDSA) cycle (IHI, 2011). The Institute for Healthcare Improvement (2011) gives an excellent introduction to this model and can be referred to for further information.

In trying to simplify and adapt these models to DCHC's needs we found that parts of them were counterintuitive. Primarily, we felt that the BC Expanded Chronic Care Model lacks "motion" and is difficult to understand as a model for action. The PDSA cycle is a useful tool but it is limited without a model to help you choose which interventions to make. For this reason we decided to combine the two models to bring the CDM model to life and streamline the process of moving from problem to solution. We also felt that a large part Expanded Chronic Care Model was redundant and could be collapsed into the main body of our adapted version. The relationships between the patient/community and the practice team/community mentioned in the original model are included within the body of the model.

The model as we present it is by no means complete. The ideal model has ongoing input from DCHC stakeholders, and changes with the needs of the organization. It requires your input to be functional.
Using the Model: A Three-Part Process

Part I:
DCHC Chronic Disease Management Model Core components

- The DCHC CDM model is meant as the underpinning for any change initiative. It outlines broad areas for continual change and improvement that need to happen in order for DCHC to provide the highest quality of care. Within each heading are examples and suggestions for focusing change projects. Coming to the CDM model should be the first step in any change initiative.

I. Health System Level (DCHC):

A. Self-management

- Patient’s role in care and management:
  - Ensure patient has a central role in managing her or his health (Rand et. al., 2006);
    - Patient develops personal health goals
    - Develop collaborative health goals
A COMMITMENT TO CHANGE

- SMART goals: specific, measurable, achievable, resources available, and timely.
  - Assess patient readiness for change using change theory (Schaefer, 2007).
  - Identify barriers to change and strategies to address these (Schaefer, 2007)
  - Identify barriers to medication/treatment concordance
  - Care team support
    - Clinician implements current research and evidence-based tools
    - Treatment planning
    - Appropriate referrals
  - Care Plans
    - EMR, flowsheets, and documentation
  - Establishing contact with relevant community resources
    - Friend and family inclusion in care
    - Group involvement
    - Peer support
  - Patient Education
    - Share evidence-based information with patients (Renders et. al., 2001; Rand et. al., 2006)
    - Use proven education methods for clients (Rand et. al, 2006)
    - Improve illness-specific health literacy of patients (BC Ministry of Health, 2011)
    - Confirm patient understanding of knowledge

B. Decision support:

- Incorporate evidence-based practice guidelines into daily clinic practice (Rand et. al, 2006)
- Bring in value-added specialist expertise and primary care into client care (Rand et. al, 2006)
- Family meeting and case conferencing opportunities
- Resources on alternative, evidence-based treatment options
- Apply the Transtheoretical Model of Change to develop clinician support strategies and training (BC Ministry of Health, 2011).
- Clinician continuing education opportunities
- Identify relevant sub-populations who may need more involved care (Rand et. al, 2006), and provide sub-populations with tailored support.
- Enact informed consent principles
  - Comprehensive patient education
  - Provide opportunities for second opinion
  - Informed consent forms
  - Ongoing patient-clinician dialogue
- Create policy for decision support

C. Information systems:

- Ensure timely appointment reminders (Renders et. al., 2001; Rand et. al, 2006).
• Document and communicate individualized care plans (Rand et. al, 2006)
• Share information between patient/family and providers to coordinate care (Rand et. al, 2006)
• Train care providers in EMR
• Register patients by specific illness/condition (Bonomi et. al, 2002)
• Develop quick-access process for looking at patient treatment plans (Bonomi et. al, 2002)
• Track treatment results, compliance, patient satisfaction, outcomes, etc.
• Create year-to-year statistics to measure treatment effectiveness and outcomes (Renders et. al., 2001)
• Input patient demographic data accurately (Graf et. al, 2012)

D. Delivery system design/Reorient health services:

• Clearly identify practice team roles, functioning and leadership (Bonomi et. al, 2002; Rand et. al., 2006)
• Evidence-based, standardized visit schedule for chronic care management (Bonomi et. al, 2002)
• Ensure continuity of care, internally and externally (Bonomi et. al, 2002)
• Planned screening and vaccinations
• Assign case manager for clients with complex health issues (Rand et. al, 2006)
• Provide culturally-sensitive, inclusive care (Rand et. al, 2006)
• Discuss delivery system challenges through formal communication systems (meetings, feedback forms, etc.)

II. Community Level:

E. Build healthy public policy

• Advocate for policies to improve patient care.
  - Advocating for and participating in DTES population-specific research
• Develop and implement policies designed to improve population health (Barr et. al., 2003)
  - Lobby government for healthy public policies that support DTES population.

F. Create supportive environment

• Conduct thorough assessments of community supports to identify gaps in programs and services.
• Assess community supports for accessibility and for potential barriers to access.

G. Strengthen Community Action

• Build and strengthen partnerships with community organizations (Improving Chronic Illness Care, 2012)
• Build and strengthen university and community partnerships.
• Empower target community (Barr et. al, 2003).

**Part II:**
**Applying the Model for Improvement**

• Once an area for improvement has been identified using the CDM model, the Model for Improvement can accelerate change within that area. The first steps of the model are to create an aims statement for what you’re trying to achieve, decide how you’re going to measure your success in achieving your aim and decide what precise intervention you’re going to do in order to create that change. The next step of the model is to try your intervention using the PDSA cycle. If it doesn’t work or if your aim could still be improved upon, try another intervention.

I. Aims

• Create a goal statement
• Diagnose problem in specific areas
• State purpose and scope of goal
• Form a QI team, including relevant stakeholders (ImpactBC, 2012)

II. Measures

• Establish measurable objectives - SMART goals
• Establish indicators of success

III. Identify Changes

• Identify appropriate intervention(s) (ImpactBC, 2012)

IV. The PDSA cycle

i. Plan

• Identify appropriate models/guidelines/pathways/etc. to use
• Appraise available funding and resources
• Foster staff buy-in
  - Examples:
    - Garner staff feedback and support
    - Staff education and training relevant to change
    - Quality improvement literacy

ii. Do

• Apply intervention to practice

iii. Study
• Measure impact of intervention based on SMART goal indicators

iv. Act

• Evaluate success
• Report on outcomes
• Identify if objectives are achieved
• Consider modifications to plan and alternative solutions (Chronic Illness Care, 2012)
• Begin cycle again
References


Additional resources

- http://yukonhospitals.ca/qualitysafecare/integratedqualitymanagementmodel/
- http://www.reproline.jhu.edu/english/6read/6pi/pi_advances/pdf/pi_advances.pdf