Chronic Disease Prevention & Management

Why all the buzz ?

Chronic Disease Prevention and Management Workshop

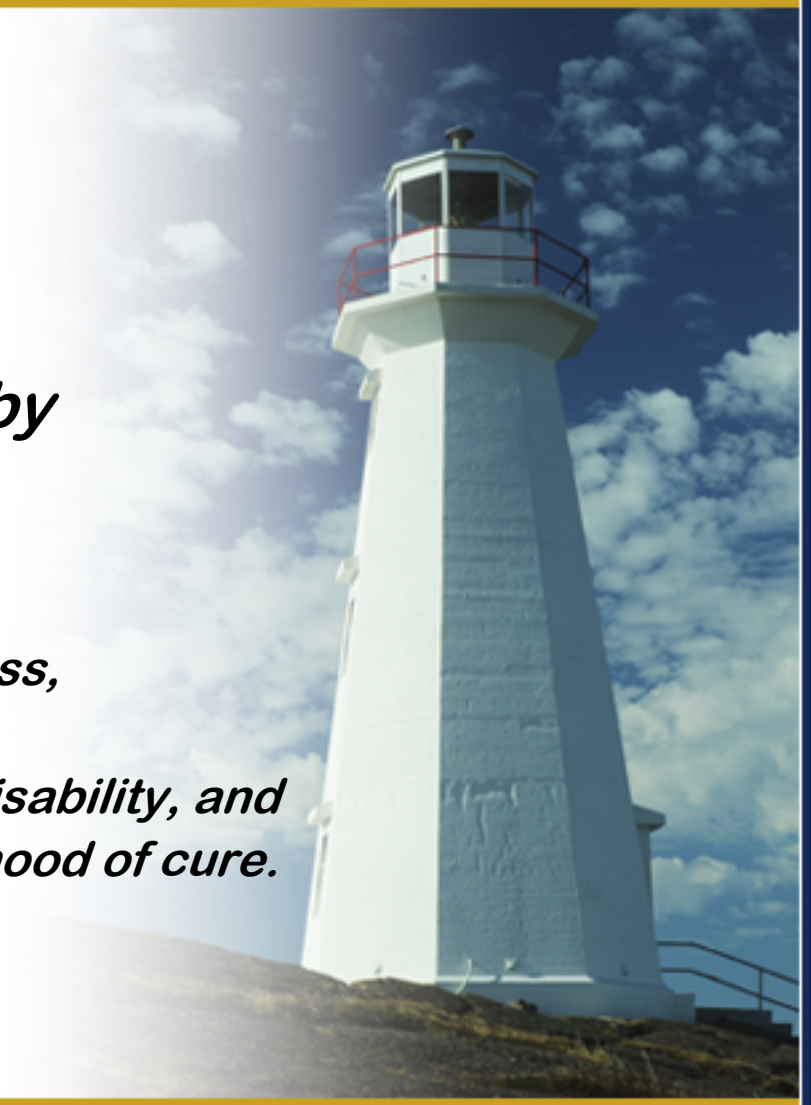
Canadian Community Health Nurse Conference
May 16, 2011
Karen Milley
Karen Curry

Agenda

- Discuss the Context of CDPM
- Introduce the Chronic Care Model
- Highlight Community Health Nurse Role in CDPM
- Introduce Dr. Michael Vallis

Defining Chronic Disease

- *Chronic diseases can be*
  - *communicable or non-communicable,*
  - *physical or mental*
  - *usually characterized by*
    - *complex causality,*
    - *multiple risk factors,*
    - *a long latency period,*
    - *a prolonged course of illness,*
    - *persistence symptoms,*
    - *functional impairment or disability, and*
    - *in most cases, the unlikelihood of cure.*



Defining Chronic Disease

Chronic diseases are best managed using a client centered, systematic, effective and coordinated strategy that includes prevention through the continuum to management and tertiary treatment of illness.

Global Numbers

- In 2005, 35 million deaths, represents 60% of all deaths globally, were related to cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases.
- Approximately 16 million deaths involving people less than 70 years of age
- Worldwide, overweight and obesity cause more deaths than underweight.

Chronic Disease in Canada

- In Canada between 1994 and 2005, the rates of high blood pressure increased 77%, diabetes increased 45% and obesity increased 18%.
- Rates among younger Canadians age 35-49 increased even more significantly with high blood pressure increasing 127%, diabetes by 64% and obesity by 20%.
- The Canadian-led global study on risk factors for acute myocardial infarction (AMI) reported that smoking, increased lipids, hypertension, diabetes and obesity accounted for 80% of the risk for AMI.

Chronic Disease in Canada

- Twenty percent of Canadians will personally experience a mental illness during their lifetime.
- By 2020, depressive disorders are expected to be second to heart disease in the global burden of disease.
- Depression often accompanies chronic illnesses such as heart disease, stroke, Alzheimer's disease, Parkinson's disease, epilepsy, diabetes, cancer and HIV/AIDS.
- Individuals with depression have a 1.6 times great risk of developing coronary artery disease, are four times as likely to have an MI and are twice as likely to have a stroke as non-depressed individuals.

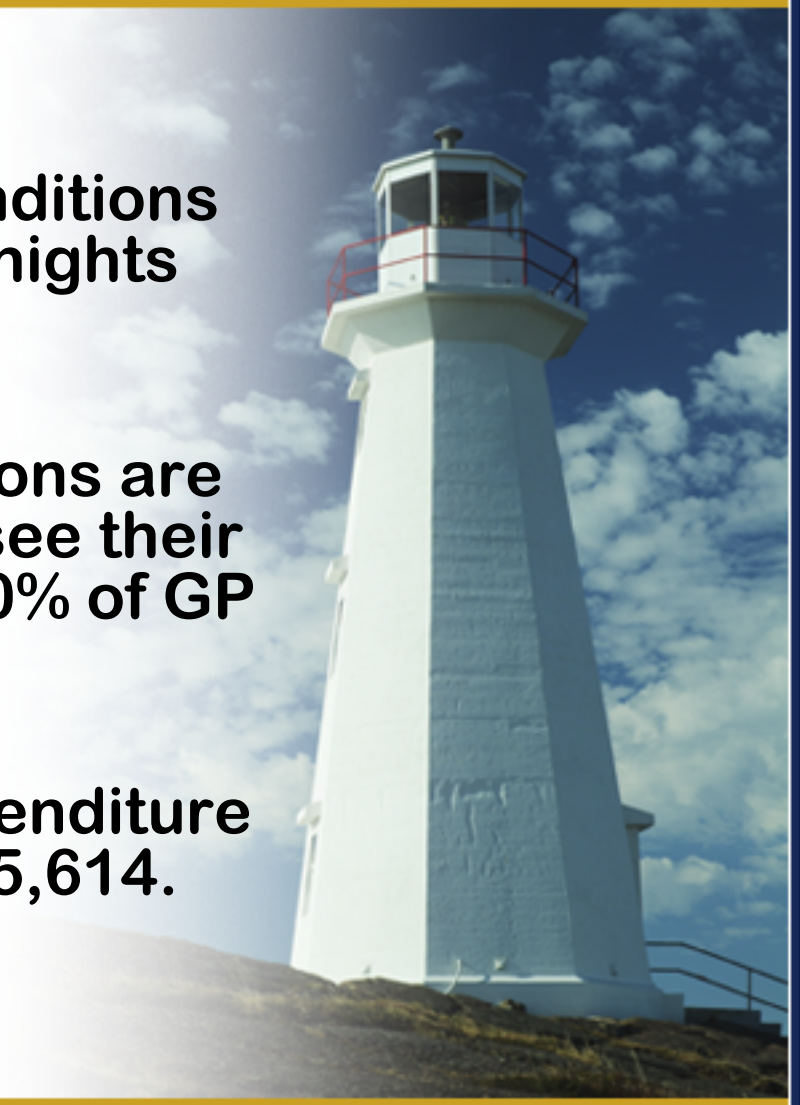
Chronic Disease in Canada

- Between 2000/01 and 2004/05, the proportion of Canadian adults diagnosed with diabetes by a health professional increased by 26.9% among women and 28.8% among men

- 63% of adults with diabetes (1.3 million Canadians) also had a diagnosis of hypertension-3 times more often then those without diabetes

The Cost of Chronic Disease

- Canadians with chronic conditions account for over 70% of all nights spent in hospital.
- People with chronic conditions are significantly more likely to see their GP, accounting for about 80% of GP consultations.
- In Canada, total health expenditure per capita is estimated at $5,614.



Risk Factors

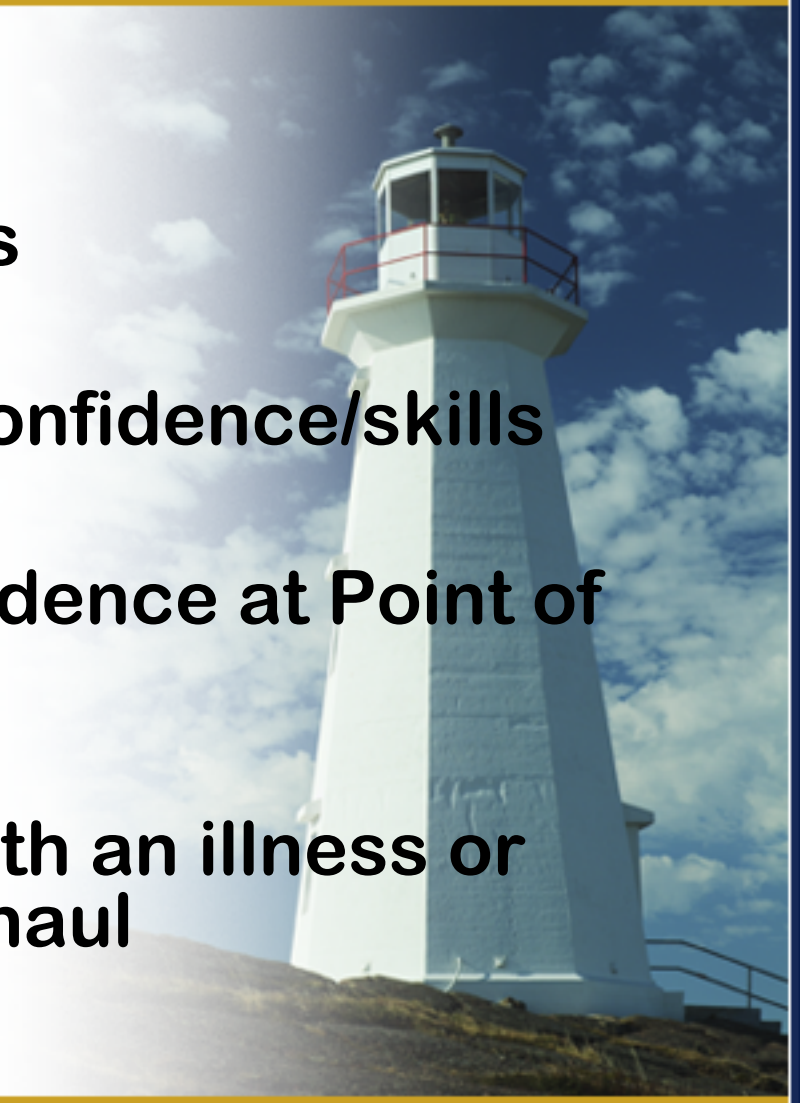
- Approximately 4 of 5 Canadians have at least one modifiable risk factor for chronic disease
- 49.5% of Canadians over age 12 reported physical inactivity
- 50.9% of Canadians, self reported being overweight or obese.
- 56.2 % of Canadians report that they consume less then the recommended daily servings of fruit and vegetables.

The Contradiction

We say that we…

- **Deliver client & family-centered care**
- **Work with patients as equal partners in care**
- **Make evidence-based decisions**
- **Promote independence**

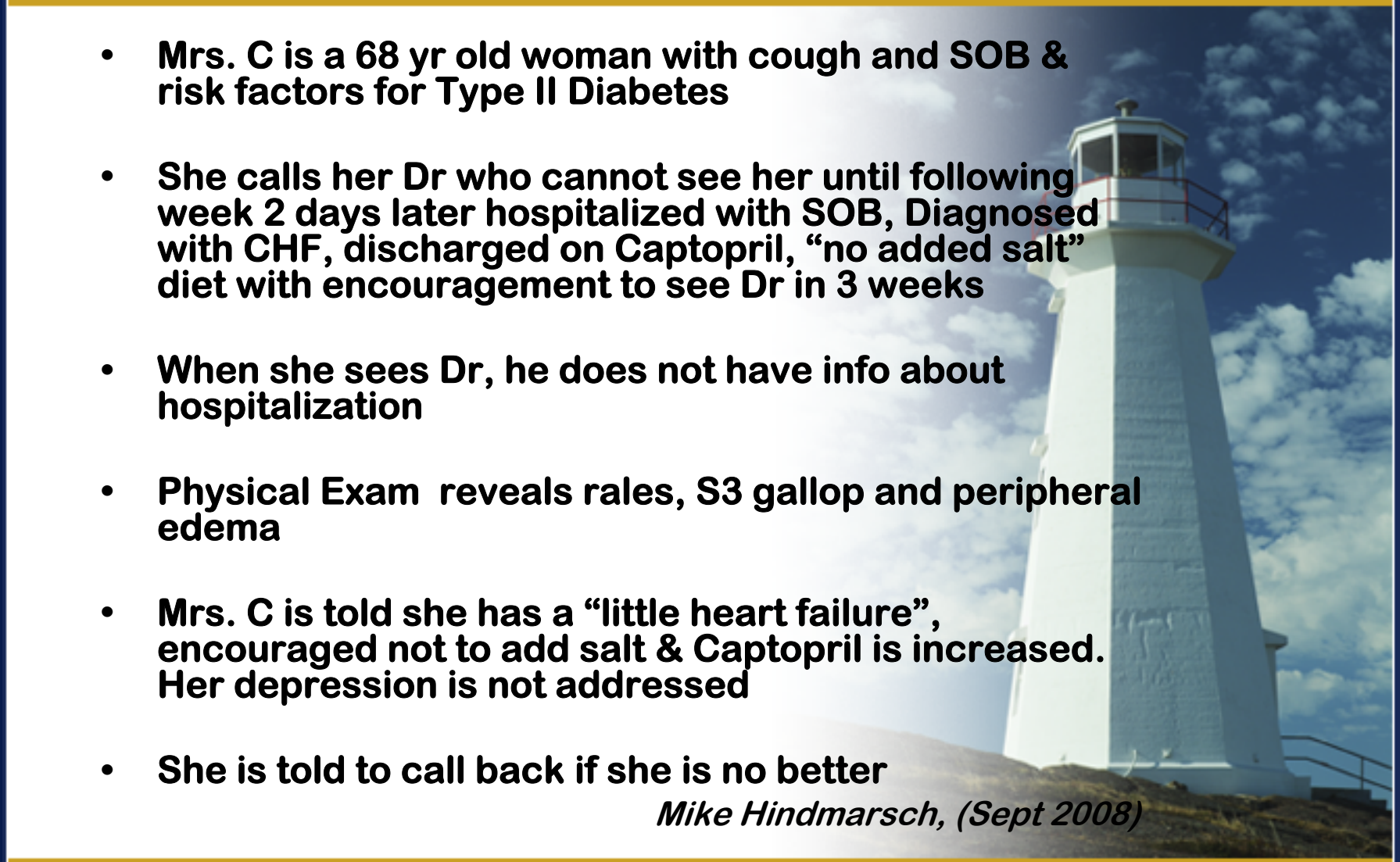
The Contradiction



but we don't…

- **Develop providers' skills**
- **Help patients develop confidence/skills**
- **Have easy access to evidence at Point of Care**
- **Support people living with an illness or condition over the long haul**

Does this sound familiar?



- Mrs. C is a 68 yr old woman with cough and SOB & risk factors for Type II Diabetes
- She calls her Dr who cannot see her until following week 2 days later hospitalized with SOB, Diagnosed with CHF, discharged on Captopril, “no added salt” diet with encouragement to see Dr in 3 weeks
- When she sees Dr, he does not have info about hospitalization
- Physical Exam reveals rales, S3 gallop and peripheral edema
- Mrs. C is told she has a “little heart failure”, encouraged not to add salt & Captopril is increased. Her depression is not addressed
- She is told to call back if she is no better

Mike Hindmarsch, (Sept 2008)

Mrs. C story continues..

- 2 weeks later Ms. C calls 911 because of severe breathlessness & is admitted to hospital
- Fuller Hx reveals that she has not been taking the Captopril prn because it seems “strong” and she has never added salt to her diet, so her diet hasn’t changed
- Further tests reveal elevated BG & she is warned of impending diabetes
- She is discharged feeling ill & frightened

Mike Hindmarsch, (Sept 2008)

The Perfect Storm

Contact with Health Providers

Client time with Health Care Provider over 1 year:

- General Practitioner visits per annum
  - 1 hour
- Visits to specialists
  - 1 hour
- Nurse, PT, OT, Dietician
  - 10 hours

Total = 12 hours

Clients are self managing care 364.5 days or 8748 hours per year managing on their own

(Barlow, J. 2003)

How do we move from acute care to chronic care?

The key is system redesign that:

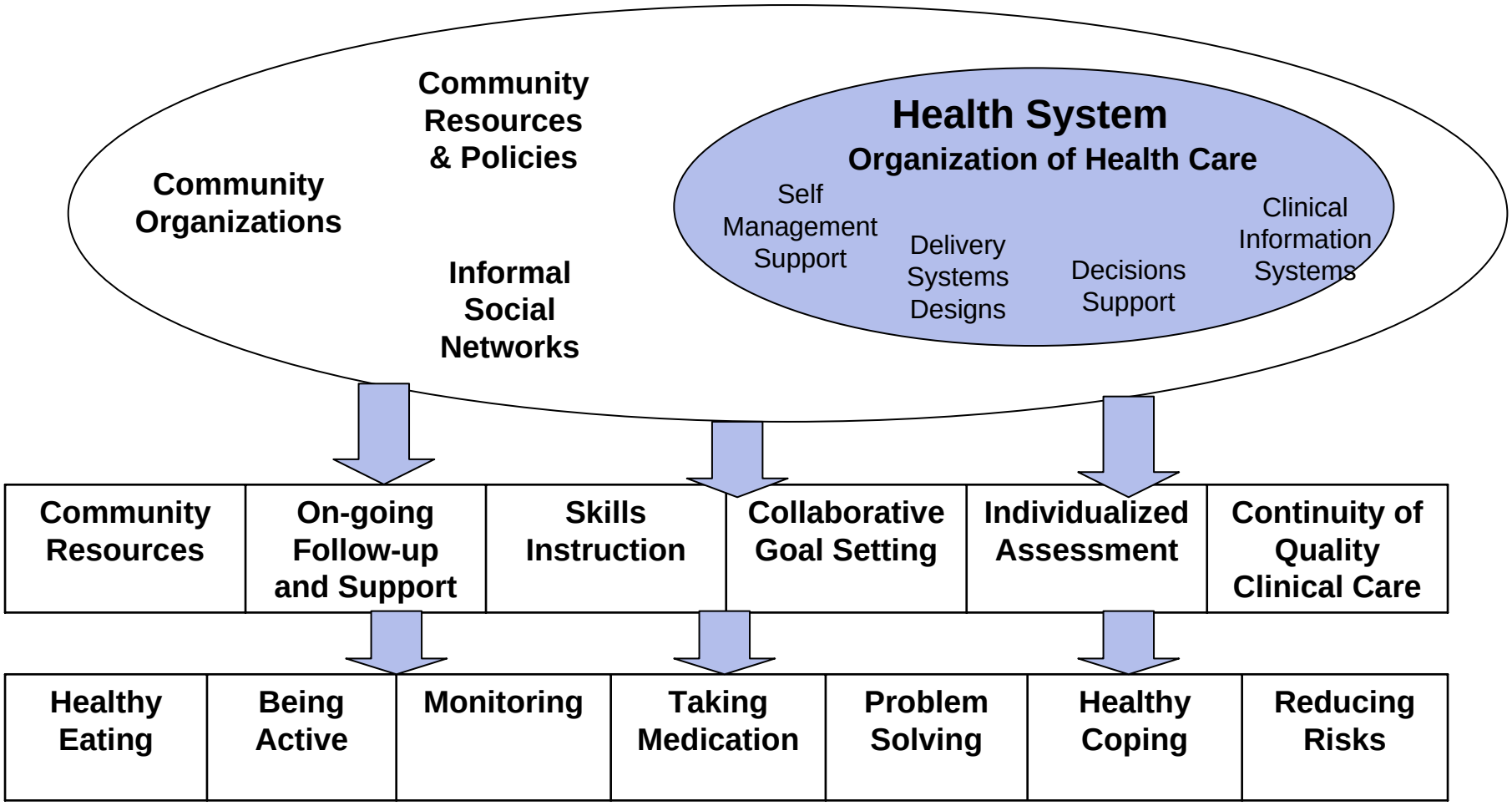
- Delivers self-management support
- Ensures planned care at every encounter
- Provides care coordination across systems
- Accesses community resources & supportive services

MODELS OF CARE FOR CHRONIC DISEASE PROGRAMS

Chronic Disease Prevention and Management Continuum

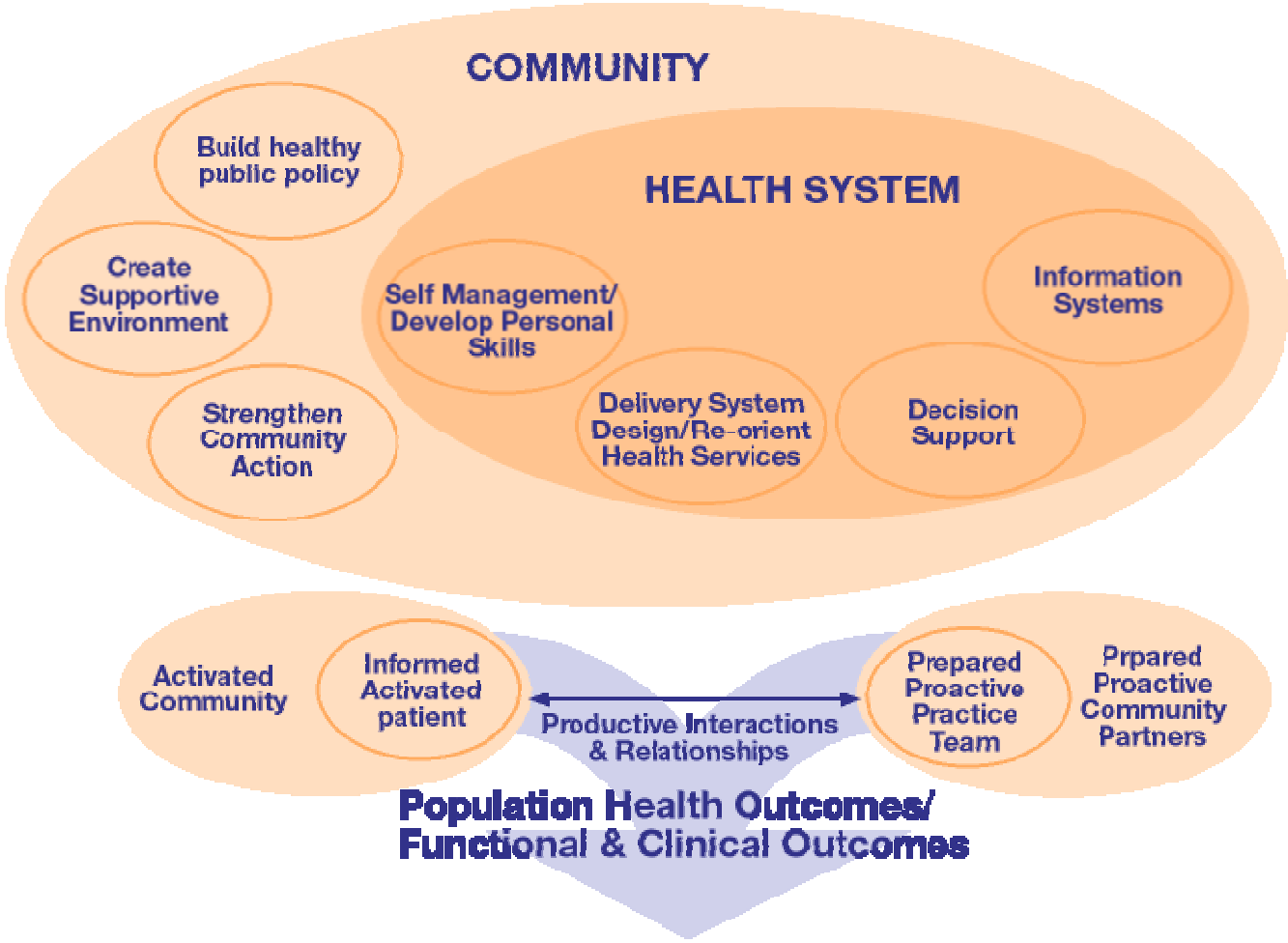
Well Population Primary Prevention	**At Risk Population Secondary prevention**	**Established Disease**	**Controlled Chronic Disease**
• Surveillance of disease & risk factors • Promotion of healthy behaviours • Creation of supportive environments • Universal & targeted approaches	• Screening • Case finding • Periodic health examinations • Early intervention • Medication to control • Universal & targeted approaches	• Treatment and acute care • Complications Management • Self-management	• Continuing Care • Maintenance • Rehabilitation • Self-Management
Health Promotion	**Health Promotion**	**Health Promotion**	**Health Promotion**
	Prevent Movement To at-risk group	**Prevent Progression to established disease**	**Prevent progression to complications and/or hospitalizations**

Tri-Level Model of Self-Management and Chronic Care
Ed Fisher, Washington University



Clinical Status & Quality of Life

BC Expanded Chronic Care Model



Created by: Victoria Barr, Sylvia Robinson, Brenda Marin-Link, Lisa Underhill, Anita Dotts & Darlene Ravensdale (2002)
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Expanded Chronic Care Model Elements

Core Elements: Health System

- All levels of the organization support high quality care
- There are effective improvement strategies aimed at comprehensive system changes, including open and systematic handling of errors and quality problems
- Agreements to facilitate care coordination within and across organizations.
- A free flow of ideas, resources and people between community and the health system

Health System: Clinical Information System

- Registry of patients with specific conditions
- Reminders and prompts to providers
- Feedback for teams
- Patient treatment plans, including self management goals

Community

- Linkages between health delivery system and community resources ie. Community Advisory Committees
- Partnerships with community resources
- Utilizing NGOs in delivering self management programs and-or provider education

Building Health Public Policy

- Reducing inequities
- Ensure safer and healthier goods, services and environments
- Enabling easier health choices for individuals, companies, organizations and governments
- This would be accomplished by diverse but complimentary strategies including legislation, taxation and organizational change.

Creating Supportive Environments

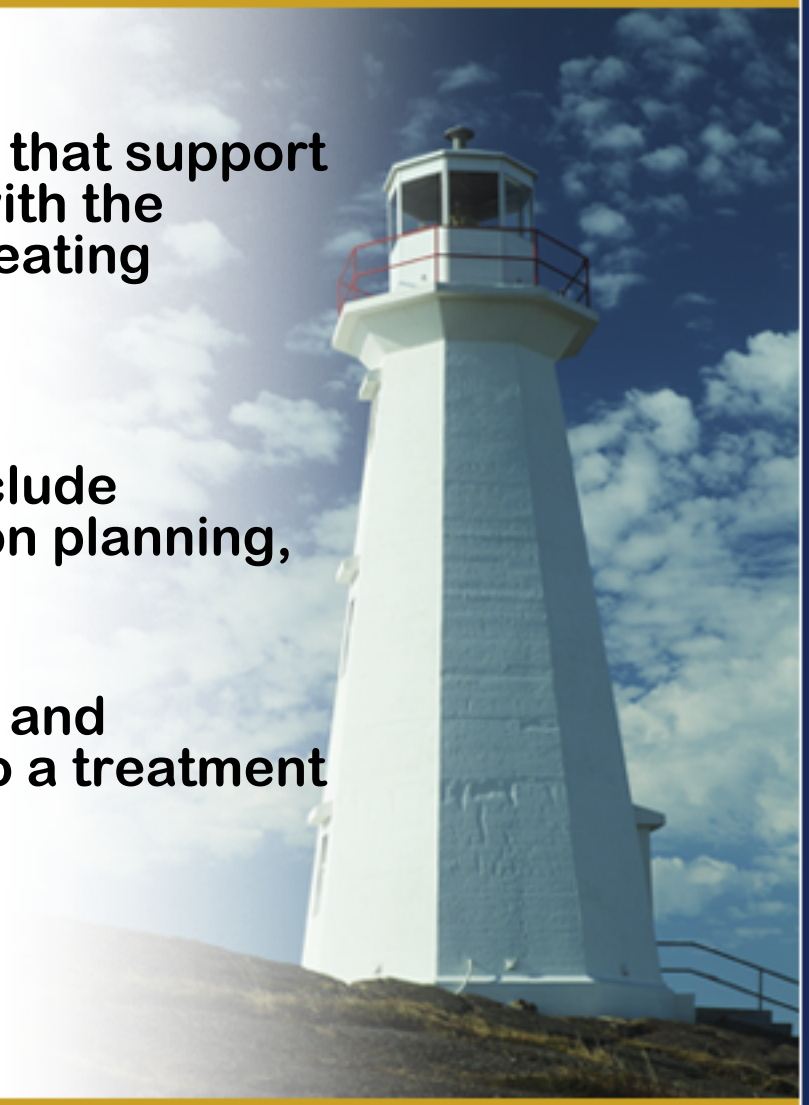
- Addressing inequities related to housing, employment
- Fostering conditions that lead to optimal levels of health in social and community environments
- Linking with outside resources

Strengthening Community Action

- An empowered community is the key!
- Working with community groups to set priorities and goals to enhance health
- Encourage public participation
- Health care workers can act as advocates for healthy changes

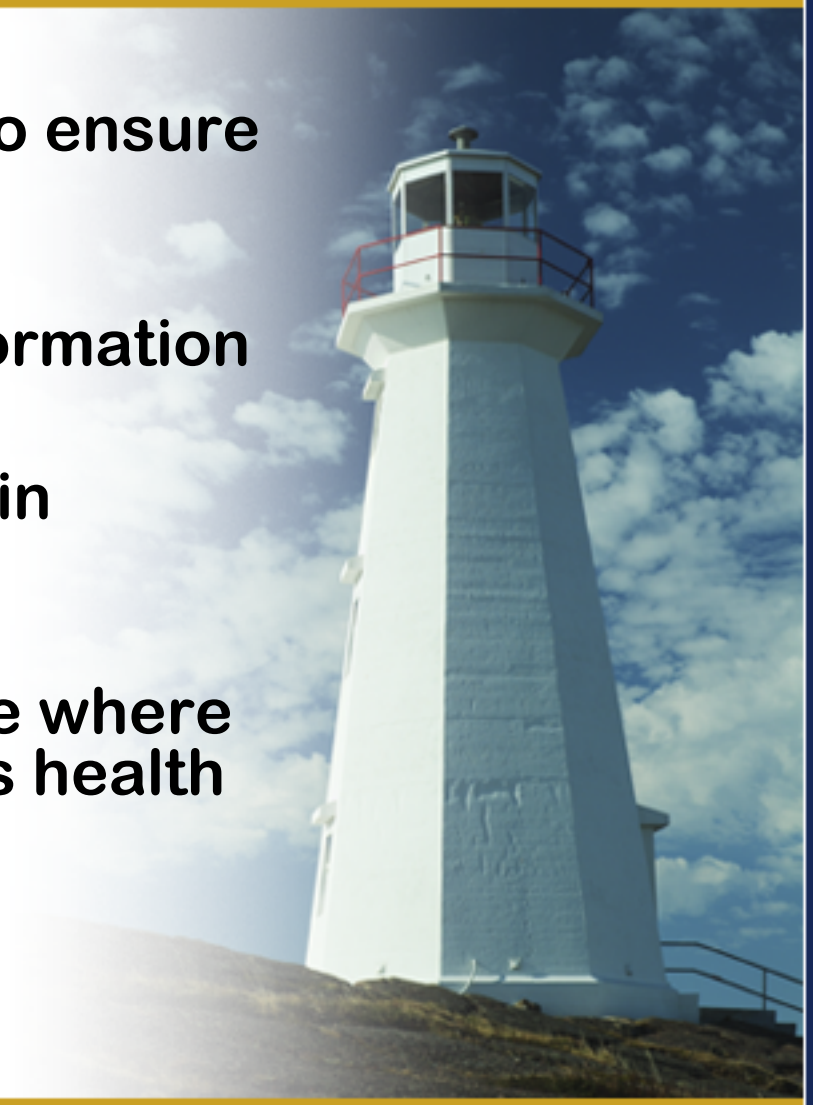
Health System :Self-Management

- Development of personal skills that support patients and families to cope with the challenges of living with and treating chronic disease and reducing complications and symptoms
- Effective strategies need to include assessment, goal setting, action planning, problem-solving and follow-up.
- Self care is regularly assessed and recorded using a form linked to a treatment plan.



Delivery System-Redesign

- Clarifying roles and tasks to ensure care is obtained
- Centralized, up-to-date information
- Clinical case management in complex cases
- Expanded, holistic mandate where health not illness underpins health care services



Health System Decision Support

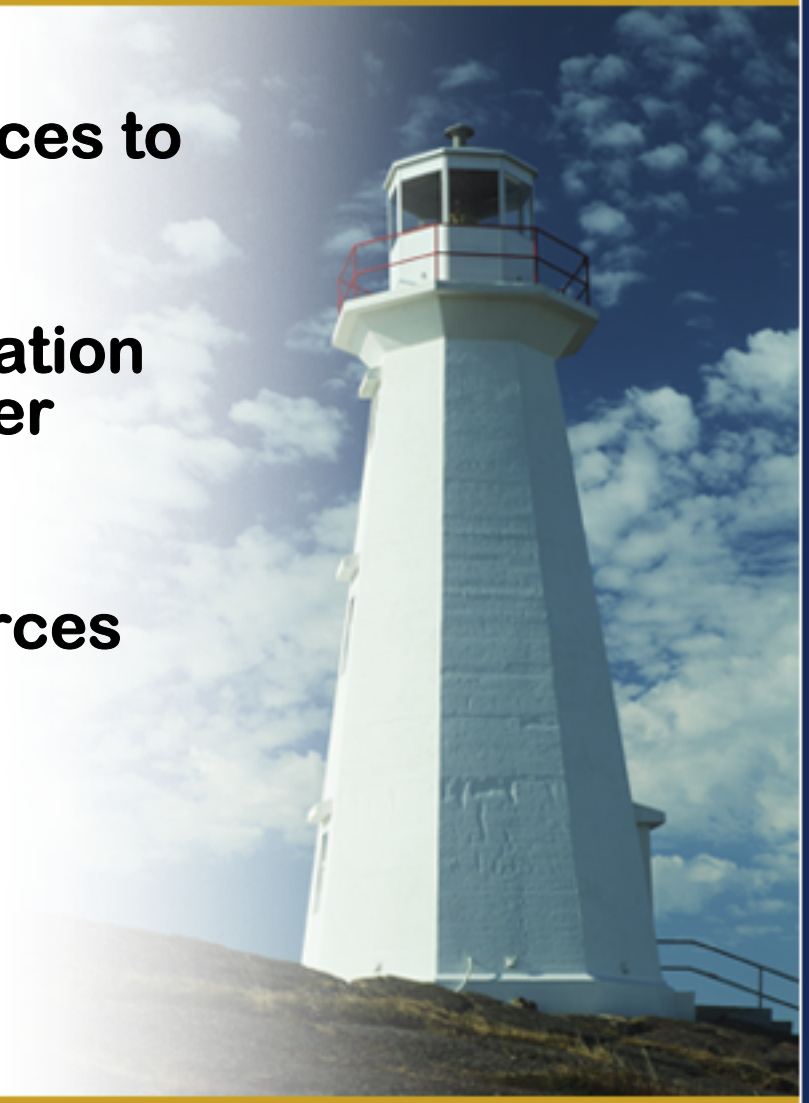
- Access to evidence-based information, including evidence-based practice guidelines or protocols so that treatment decisions are supported by research evidence.
- Access to specialty consultation, provider education
- Collaboration between health promotion and general practitioners related to community-based best practice

Best Practices In Delivery Of Chronic Care

- Provide appropriate services within a community setting to meet client's needs
- Whenever possible, manage chronic conditions through primary and community care
- Promote and enable patient self-management
- Provide sustained, proactive follow-up

Best Practices In Delivery Of Chronic Care

- Mobilize community resources to meet client needs
- Facilitate active communication amongst clinicians and other participants
- Utilize health human resources effectively



Lessons Learned

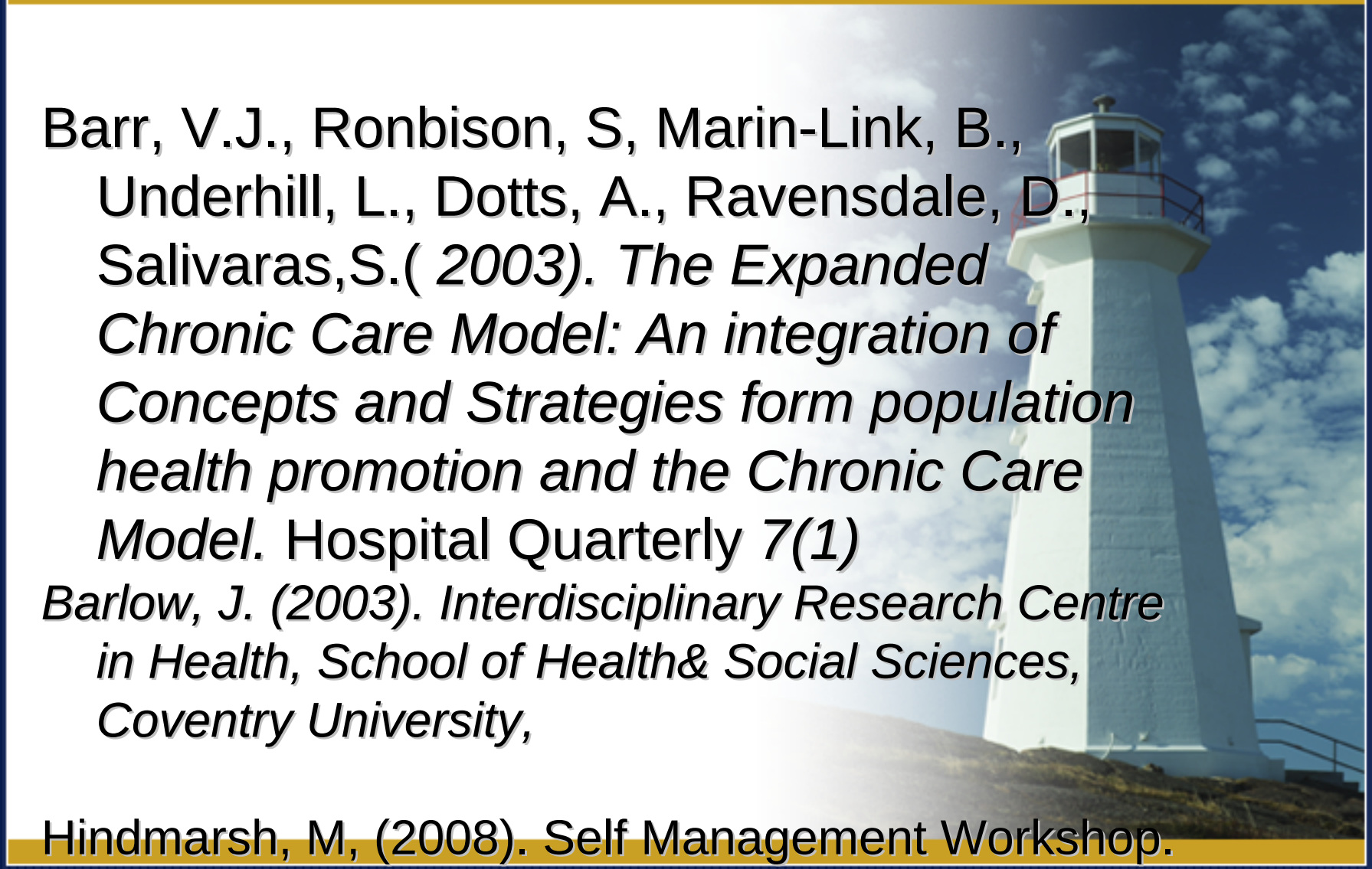
- Barriers to implementation are significant when Health Care System is at preliminary stage of transformation
- Collaboration crucial within complex health care organizations & systems
- Anticipate resistance to change
- Never underestimate the power of teams!

Courage for Change

"Courage does not always roar. Sometimes it is a quiet voice at the end of the day saying.. "I will try again tomorrow".

(Mary Anne Radmacher)

References



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