MUHC-ISAI 2014 Annual Conference

Patient Engagement

Living Well with COPD: Integrated care model with collaborative self-management

From family physicians to specialists

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The origins of Living Well with COPD (LWWCOPD)

LWWCOPD ≠ only tool/material but it is an approach of care based on IDM as the model

Integrated Disease Management (IDM):

•a system of **coordinated healthcare interventions** and **communications** for patients with chronic disease in which **patient self-management** is significant.

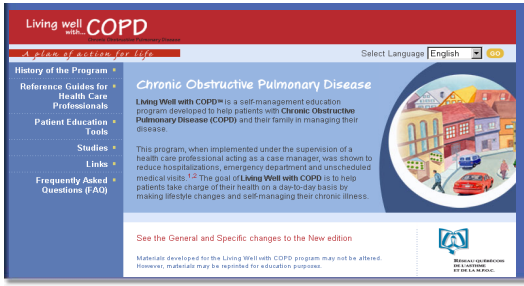
IDM **Model**: LWWCOPD … the beginning

	1997 – 1998
Region	Québec
Milestones	LWWCOPD 1st Edition
Knowledge translation	Program development in English and French
Context	Pilot project: 16 patients and 5 health professionals

The "**Canadian**" **Model**: LWWCOPD "Self-management" RCT

	1997 – 1998	1998 – 2000
Region	Québec	**Québec***
Milestones	LWWCOPD 1st Edition	**Studies: RCT**
Knowledge translation	Program development in English and French	**1st edition: 7 home education sessions, case manager support**
Context	Pilot project: 16 patients and 5 health professionals	**Moderate to Severe COPD**

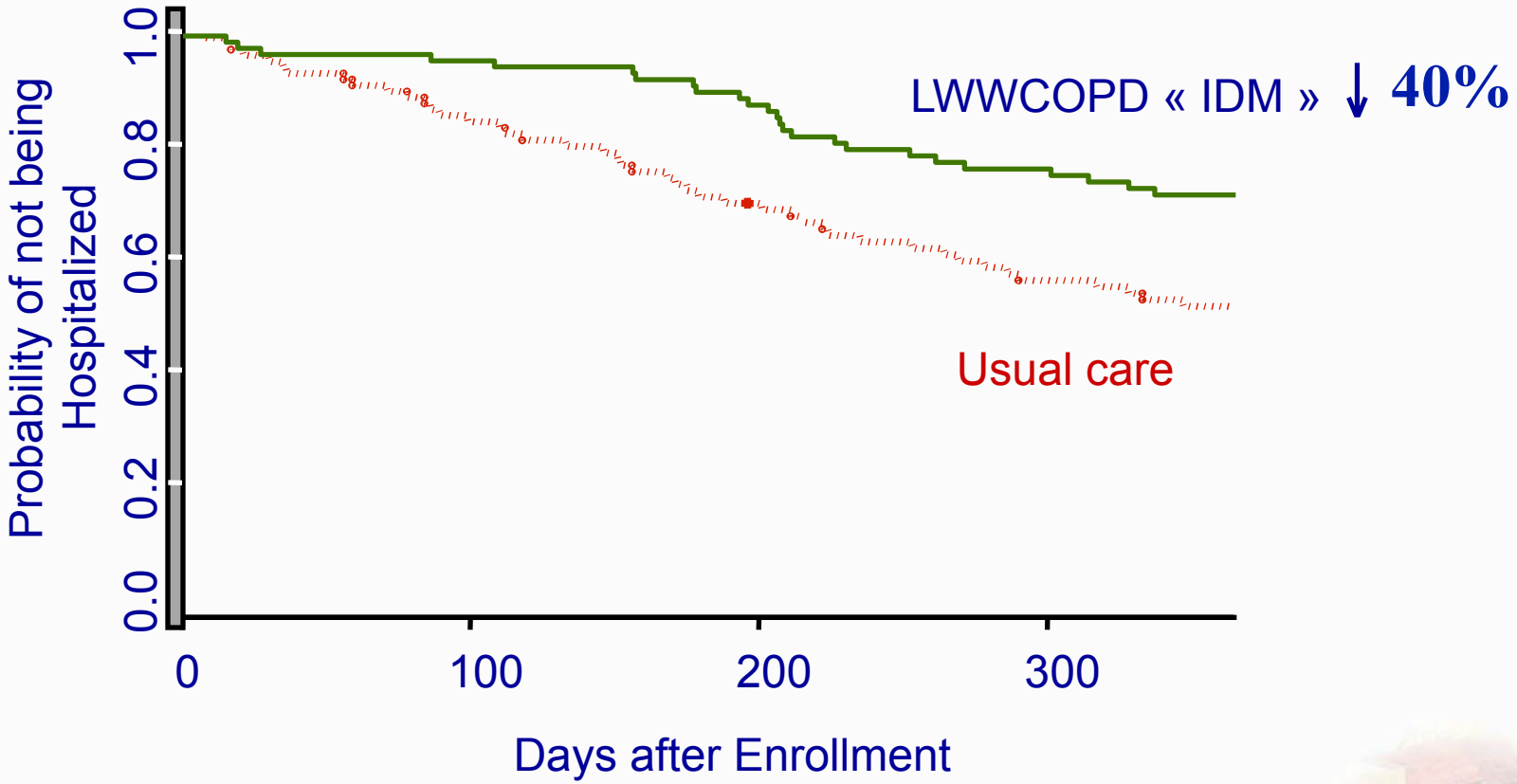
Funding: BI & Fonds de la recherche en sante du Quebec (FRSQ)



Key **success components** of «Living Well with COPD»

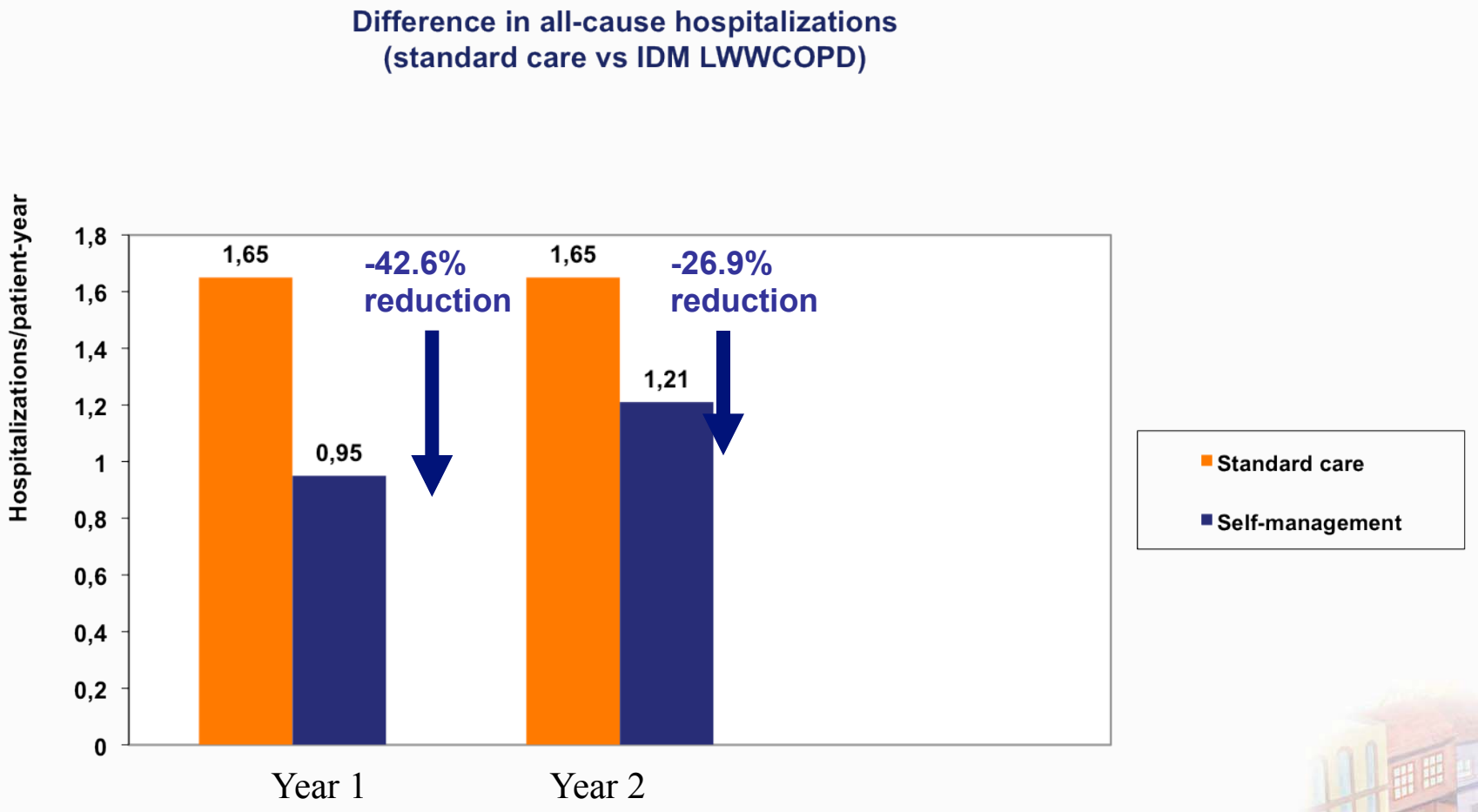
Component	Intervention « Chronic care model »
Patient self-management support	**Patient educational sessions** **Material LWWCOPD:** - Educational materials (modules, written action plan) - Référence guides to the HCP
Delivery system design	**Practice team with defined roles** **Regular follow up and coordination of care by physician and case manager** - Assess patient's needs and define goals - Help patient/family integrate in daily life the skills and healthy behaviours learned, evaluate and reinforce - Provide an Action Plan and support its use - Do proper referrals within hospital and in community
Decision support	**Evidence-based practice → LWWCOPD/Guidelines** **Referrals to programs and/or for f/u co-morbidities** **Performance review and identification of barriers**
Clinical information systems	**Provincial inter-establishment reference system** - Standardized criteria of reference for services in the community - Specific formulary for COPD patients and Electronic database (post hosp. D/C)

Multicentre RCT « Living Well with COPD »
Reduce Hosp admissions, ER, physician visits



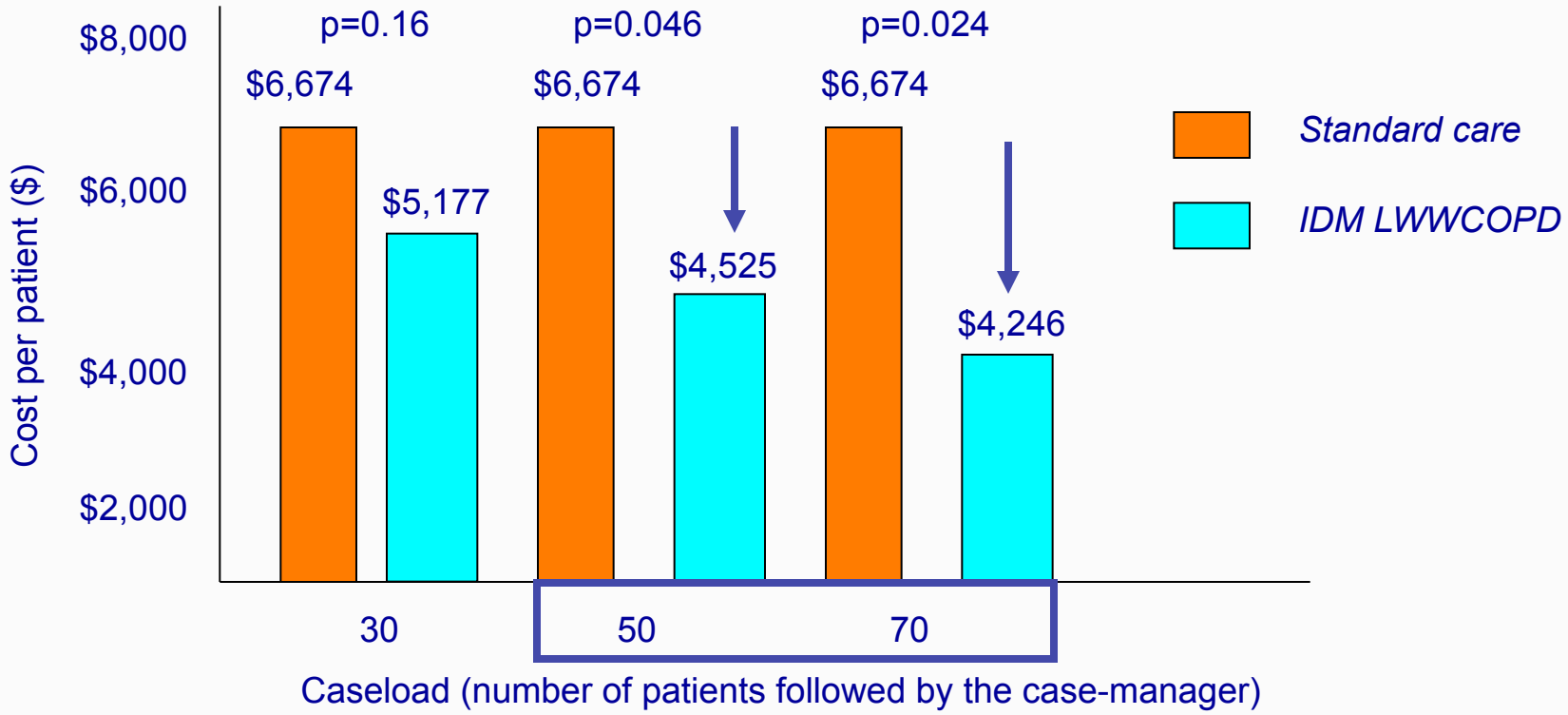
Bourbeau J, et al. Arch Int Med 2003

« Living Well with COPD » : **Sustainability on long term (2 years)**



Gadoury M-A, et al. Eur Respir J 2005

« Living Well with COPD » : **Could yield cost savings**



Cost per patient: All health care resources used during the one year follow-up were considered.
All costs are expressed in year 2004 Canadian dollars.

Bourbeau J, et al. Chest 2006.

The IDM **Model**: LWWCOPD… Dissemination & Implementation

	1997 – 1998	1998 – 2000	2003 – To date
		*	† ± §
Region	Québec	Québec	**Québec**
Milestones	LWWCOPD 1st Edition	Studies: RCT	
Knowledge translation	Program development in English and French	1st edition: 7 home education sessions, case manager support	**Involvement of provincial health board and health ministry**
Context	Pilot project: 16 patients and 5 health professionals	Moderate to Severe COPD	**COPD clinics, PR programs and Resp home services**

Study publications:

•Bourbeau 2003 (Reduction of hospital utilization in patients with COPD)

† Bourbeau 2004(Self-management and behaviour modification in COPD)

± Gadoury 2005 (Self-management reduces both short- and long-term hospitalization in COPD)

§ Bourbeau 2006 (Economic benefits of self-management education in COPD)

The IDM **Model**: LWWCOPD… Dissemination & Implementation

	1996 – 1998	1998 – 2000	2003 – To date	2004 – 2006
		*	† ± §	
Region	Québec	Québec	Québec	**Canada**
Milestones	LWWCOPD 1st Edition	Studies: RCT		LWWCOPD **2nd Edition**
Knowledge translation	Program development in English and French	1st edition: 7 home education sessions, case manager support	Involvement of provincial health board	**Development of new edition and website creation**
Context	Pilot project: 16 patients and 5 health professionals	Moderate to Severe COPD	COPD clinics, PR programs and Resp home services	**Program used across Canada** **Program delivered and training RQAM**

Study publications:

* Bourbeau 2003 (Reduction of hospital utilization in patients with COPD)

† Bourbeau 2004(Self-management and behaviour modification in COPD)

± Gadoury 2005 (Self-management reduces both short- and long-term hospitalization in COPD)

§ Bourbeau 2006 (Economic benefits of self-management education in COPD)

The "Canadian" Model

	1997 – 1998	1998 – 2000	2003 – To date	2004 – 2006	2005 – 2008
			*	†± §	×
Region	Québec	Québec	Québec	Canada	**Canada**
Milestones	LWWCOPD 1st Edition	Studies: RCT		LWWCOPD 2nd Edition	**Studies: RCT**
Knowledge translation	Program development in English and French	1st edition: 7 home education sessions, case manager support	Involvement of provincial health board	Development of new edition and website creation	**PR to be done at home** (CIHR funded)
Context	Pilot project: 16 patients and 5 health professionals	Moderate to Severe COPD	COPD clinics, PR programs and Resp home services		Use as part of COPD Integrated Care programs and **Pulmonary Rehab.**

Study publication:

* Bourbeau 2003 Arch Int Med (Reduction of hospital utilization in patients with COPD)

† Bourbeau 2004 Patient Educ and Counseling (Self-management and behaviour modification in COPD)

± Gadoury 2005 Eur Respir J (Self-management reduces both short- and long-term hospitalization in COPD)

§ Bourbeau 2006 Chest (Economic benefits of self-management education in COPD)

X **Maltais and Bourbeau 2008 Ann Intern Med (Home rehabilitation: RCT**)

The **IDM Model LWWCOPD: … moving forward**

Health-care delivery should be adapted to the patient needs and better integrated/more coherent, that is, strategic alliance between primary and secondary care :

- **COPD clinics for patients with high burden of disease**
- COPD patients in primary care

IDM program adaptated to respond to patient needed (disease severity, co-morbidities)

- Objective
  - To assess success of a customized self-management program in COPD clinic, aligned with the goals of the program, i.e., patients' use of the WRITTEN **ACTION PLAN** in the event of an exacerbation
- Study Design
  - Retrospective study using chart review
- Selection of patients
  - COPD clinic at the Montreal Chest Institute, MUHC
  - 100 COPD patients randomly selected
    - *50 in 2006*
    - *50 in 2009*
- Intervention in COPD clinic
  - Living Well with COPD and Case manager (COPD nurse)

Bourbeau et al. Respiratory Medicine 2013

Patient characteristics and management according to 2005-06 and 2008-09

Characteristics	2006 (N=48)	2009 (N=46)	P-value
Age,yrs	70.26 ± 9.87	69.74 ± 9.50	0.7
Sex, male	27 (56%)	25 (54%)	0.8
Smoking			
• Smokers	9 (19%)	6 (13%)	0.5
• Ex Smokers	39 (81%)	40 (87%)	0.5
FEV1 (L)	.98 ± .41	.85 ± .37	0.14
FEV1, % predited	40%± 18%	34% ± 15%	0.17
FEV1/FVC	0.45 ± 0.15	0.43 ± 0.15	
Nomber of exacerbations	126 (2.6 exacerbations/pt)	167 (3.6 exacerbations/pt)	0.03

Case manager (tel, visits) and physician visits according to 2005-06 and 2008-09

	2006 (N=48)	2009 (N=46)	p-value
Tel. calls **(case manager)**	382	590	< 0.001
Visites in the clinic **(case manager)**	184	113	< 0.001
Visites in the clinic **(consultation with MD)**	179	167	0.024

Self-management behavior and Health service use according to 2005-06 and 2008-09

	2006 (N=126)	2009 (N=167)	p-value
Self-management behavior (use of antibio/prednisone)	54 (42%)	101 (60%)	0.05
Health service use (hospitalization or urgence)	72 (57%)	66 (39%)	0.02

The **IDM Model LWWCOPD: … moving forward**

Health-care delivery should be adapted to the patient needs and better integrated/more coherent, that is, strategic alliance between primary and secondary care :

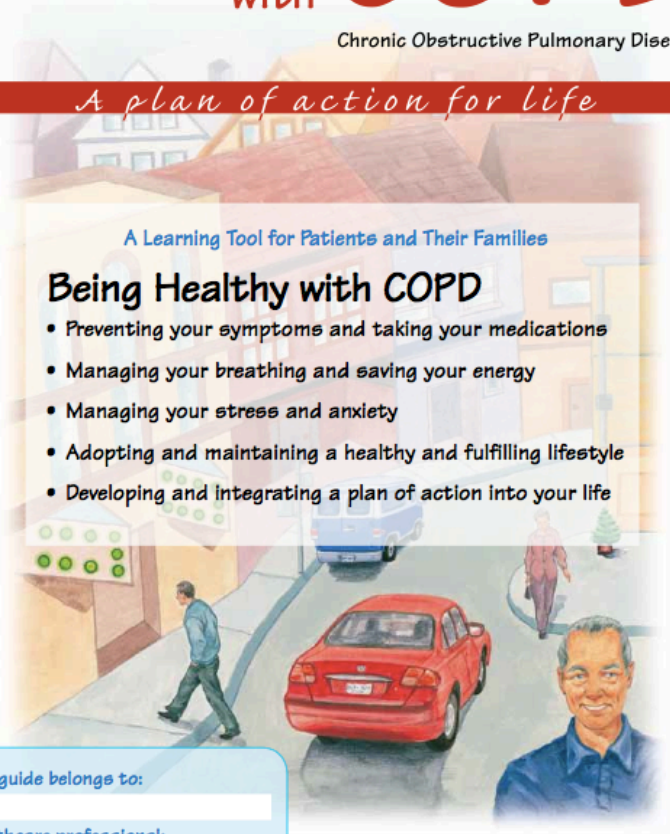
- Pulmonary rehabilitation
- COPD clinics for patients with high burden of disease
- **COPD patients in primary care**

Primary Care – COPD Program
"Being healthy with COPD"

Living Well with COPD™

Chronic Obstructive Pulmonary Disease

A plan of action for life



A Learning Tool for Patients and Their Families

Being Healthy with COPD

- Preventing your symptoms and taking your medications
- Managing your breathing and saving your energy
- Managing your stress and anxiety
- Adopting and maintaining a healthy and fulfilling lifestyle
- Developing and integrating a plan of action into your life

This guide belongs to:

Healthcare professional:

Institution:

March 2012, adapted from the 2nd edition

Prioritize the topics you need to review

Identify, with the help of your resource person, the subjects on which you need additional information to better manage your COPD. In the following table, check off each subject that interests you or is important for you at this time.

	Subject	Pages	Date
☐	What is COPD and how did I develop this disease	7-11	
☐	How to recognize and manage the factors that worsen my respiratory symptoms	12-15	
☐	How do my medications work on my COPD	16-22	
☐	I want to ensure that I take my medications correctly	23-28	
☐	How to manage my breathlessness in different situations	31-39	
☐	Coughing and secretions bother me. What can I do?	40-41	
☐	How can I conserve my energy to control my shortness of breath	42	
☐	I would like to better manage my stress and anxiety	45-51	
☐	I want help in living in a smoke free environment	53-55	
☐	I want to comply with my prescription, without forgetting	56	
☐	How to eat in a healthy and balanced way	57-60	
☐	Are physical activity and exercise good for me?	61	
☐	I have sleep problems	62	
☐	I would like to improve my sexual life	63	
☐	What is a "Plan of Action" for COPD	66-69	
☐	Are there ways to better manage a worsening of my respiratory symptoms? Who can help me?	70-78	
☐	I would like to follow-up on the attainment of my self-management objectives	81-82	

You can also indicate the date when you discussed each subject with your resource person. In this way, during following visits, you can go back to some questions, or choose new subjects.

Remember:

You are in the process of integrating new strategies and knowledge into your life that will help you to live a healthy life with COPD.

The **IDM Model LWWCOPD: … moving forward**

COPD patients in primary care:

2 major multisites NEGATIVE RCTs[1,2]

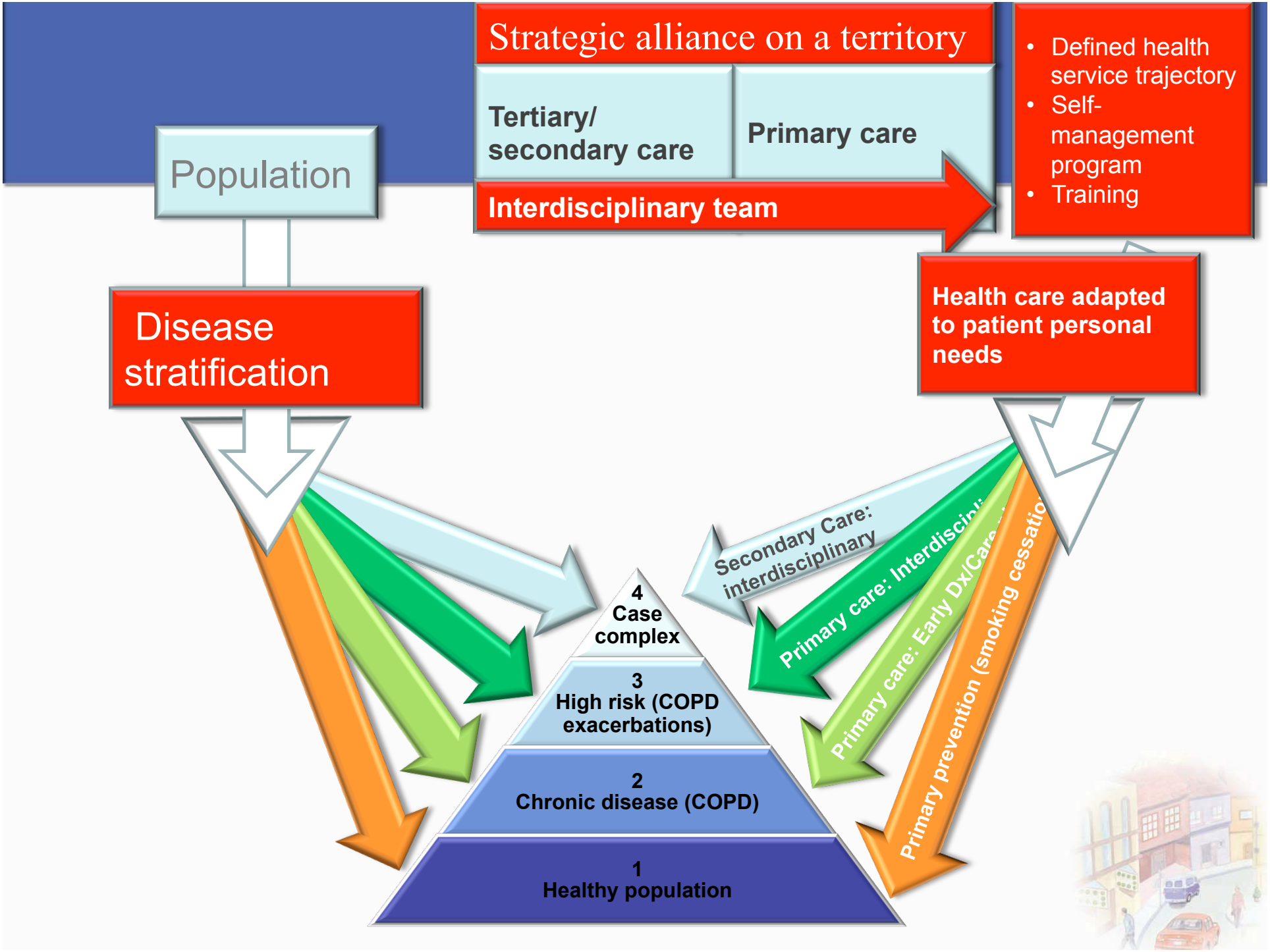
- **We still have a lot to learn about how to make it work in primary care**

1. Bischoff EW, Akkermans R, Bourbeau J, van Weel C, Vercoulen JH, Schermer TR. Comprehensive self management and routine monitoring in chronic obstructive pulmonary disease patients in general practice: randomised controlled trial. *BMJ* 2012;345:e7642.
2. Kruis AL, Boland MR, Assendelft WJ, et al. Effectiveness of integrated disease management for primary care chronic obstructive pulmonary disease patients: results of cluster randomised trial. *BMJ* 2014;349:g5392.

The **IDM Model LWWCOPD: … moving forward**

- What we still need to learn is how best to deliver healthcare that is better integrated and more coherent. That is, care based on a strategic alliance between primary and secondary care and supported when needed by interdisciplinary teams for patients with high risk and complex COPD.

Bourbeau J, Saad N. Integrated care model with self-management in chronic obstructive pulmonary disease: from family physicians to specialists. Chron Respir Dis 2013; 10(2): 99-105.


Strategic alliance on a territory
Tertiary/ secondary care
Primary care
Interdisciplinary team
Defined health service trajectory
Self-management program
Training
Population
Disease stratification
Health care adapted to patient personal needs
Secondary Care: interdisciplinary
Primary care: Interdisci
Primary care: Early Dx/Care
Primary prevention (smoking cessatio
4 Case complex
3 High risk (COPD exacerbations)
2 Chronic disease (COPD)
1 Healthy population

Acknowledgements

RECRU, Montreal Chest Institute, MUHC, McGill University

RQAM
RÉSEAU QUÉBÉCOIS DE L'ASTHME ET DE LA MPOC
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Québec

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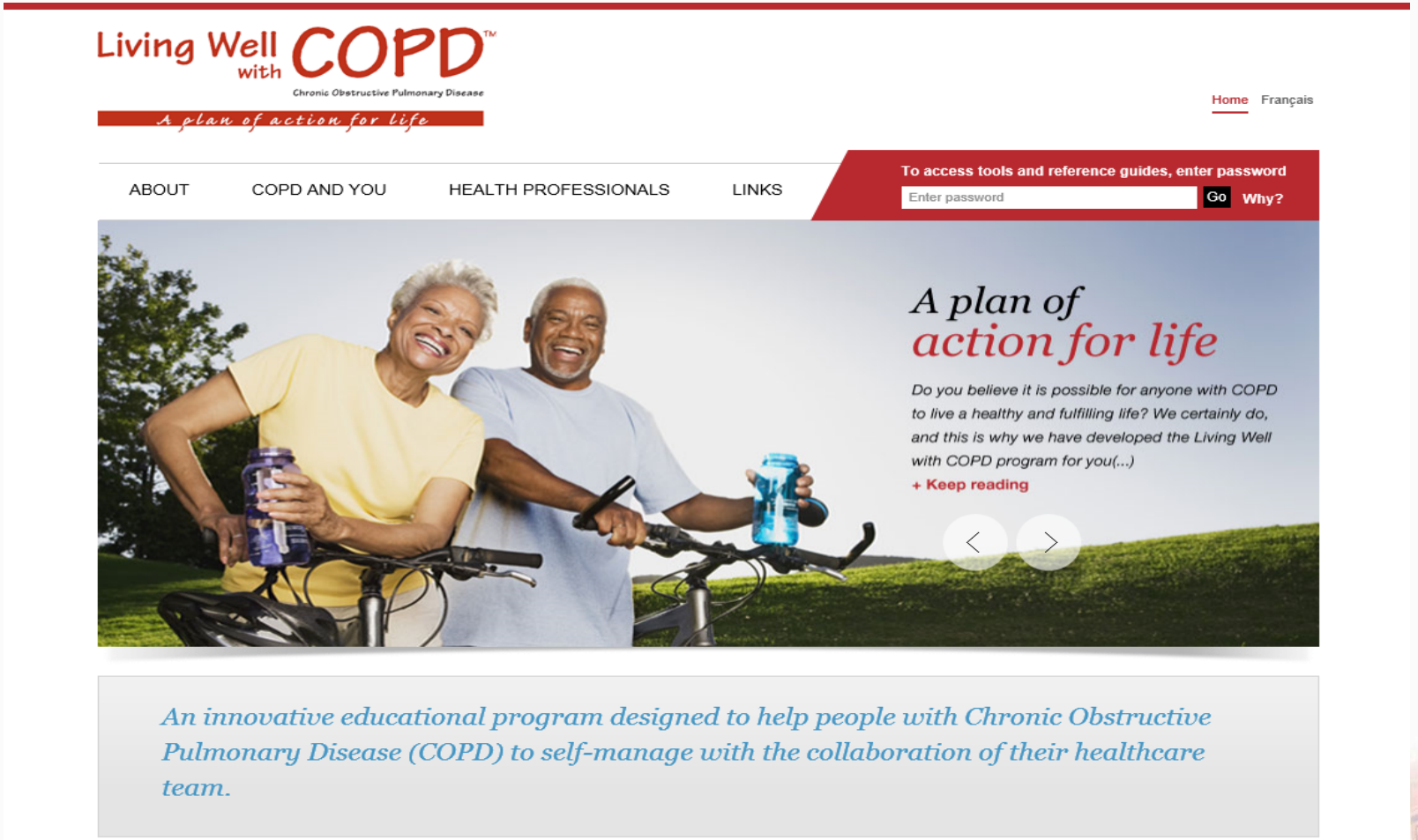
Sponsors

•Non commercial: CIHR, FRQS, RI MUHC, RQAM

•Commercial: BI, Pfizer, GSK, Novartis, AZ, Almirall

Most important: All the COPD patients

Questions and discussion



www.livingwellwithcopd.com