



APPLIED
RESEARCH CHAIR

Health Services and Policy Research on
CHRONIC DISEASES IN PRIMARY CARE

Canadian Institutes of Health Research - Institute of Health Services and Policy Research /
Canadian Health Services Research Foundation /
Centre de santé et de services sociaux de Chicoutimi

Better Care for People with Multiple Chronic Conditions
October 22, 2013

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Centre de santé et de services sociaux
de Chicoutimi



Centre hospitalier affilié universitaire régional



Acknowledgements





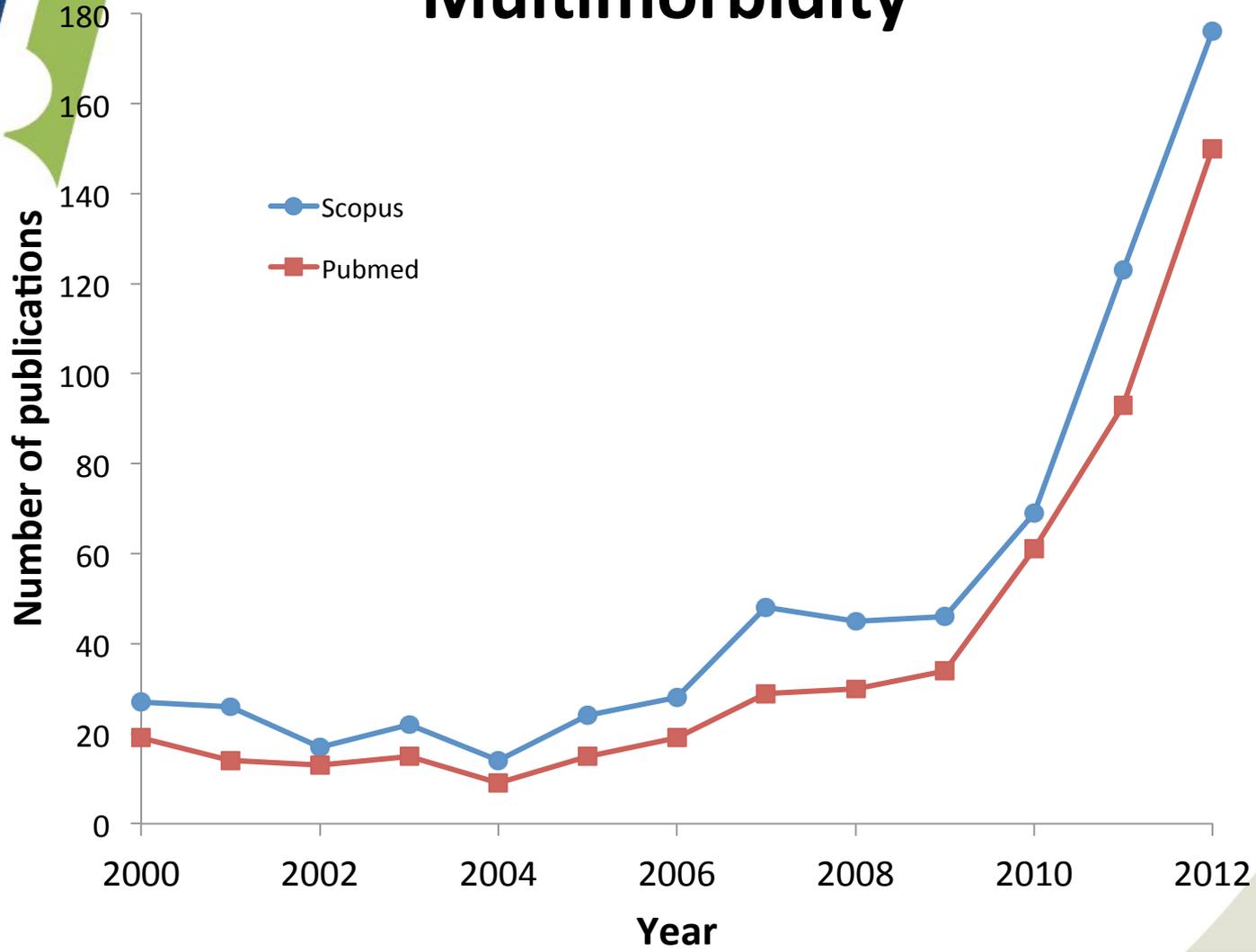
- The clinical face of multimorbidity
- PR1MaC
- PACE in Multimorbidity



Multimorbidity in primary care:
Recognizing & dealing with

THE **ELEPHANT** IN THE **ROOM**

Multimorbidity



Mr. Bouchard

- 57-year old farmer (married) from a rural community in Eastern Quebec
- Current smoker with Sx of COPD
- 1998: Developed osteoarthritis that limited his mobility and led to significant weight gain
- 2009: Onset of type 2 diabetes, hypertension
- 2011: Other diagnoses: Hypercholesterolemia, chronic kidney disease

His life transformed from ...





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His life transformed from ...

One of
Autonomy

to

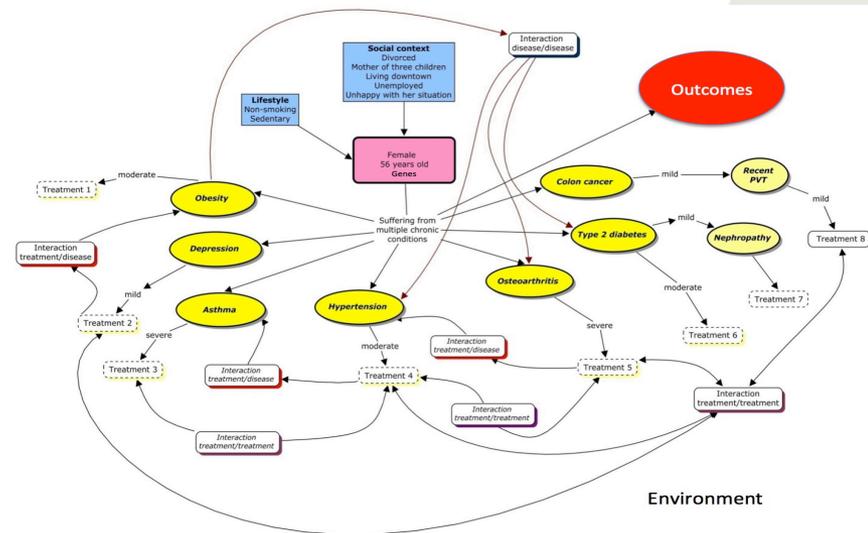
One in which he
spends his time
trying to
negotiate his
way

through

Increasingly
complex &
fragmented
healthcare
system

Ms. Tremblay

- 61-year old divorced housekeeper living in an urban community in Québec
- Moderate asthma since childhood
- 1995: Developed depression recurring 3 times in the following years
- 2002: Onset of type 2 diabetes
- 2005: Treated for a colon cancer
- 2008: Hypertension, osteoarthritis

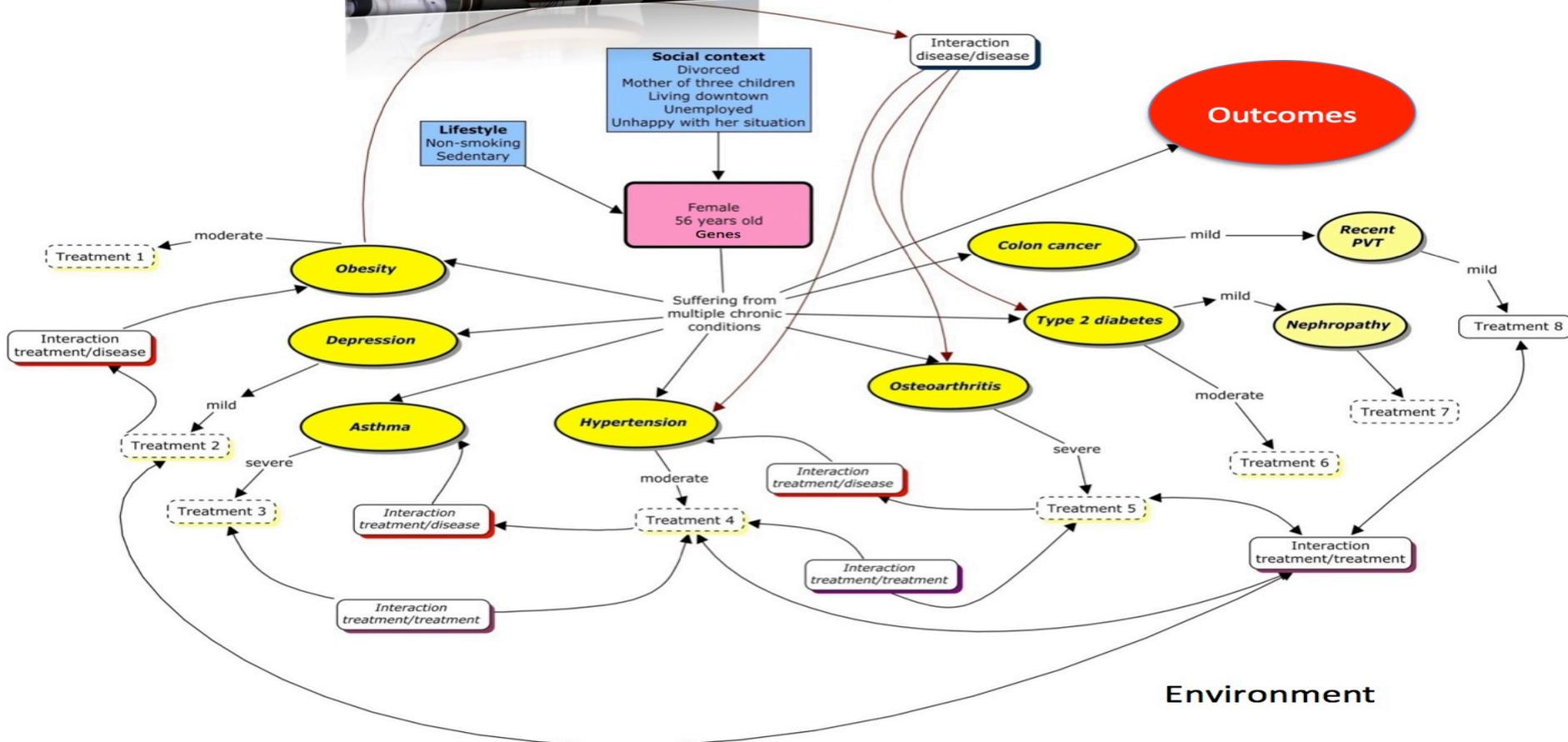




Ms. Tremblay

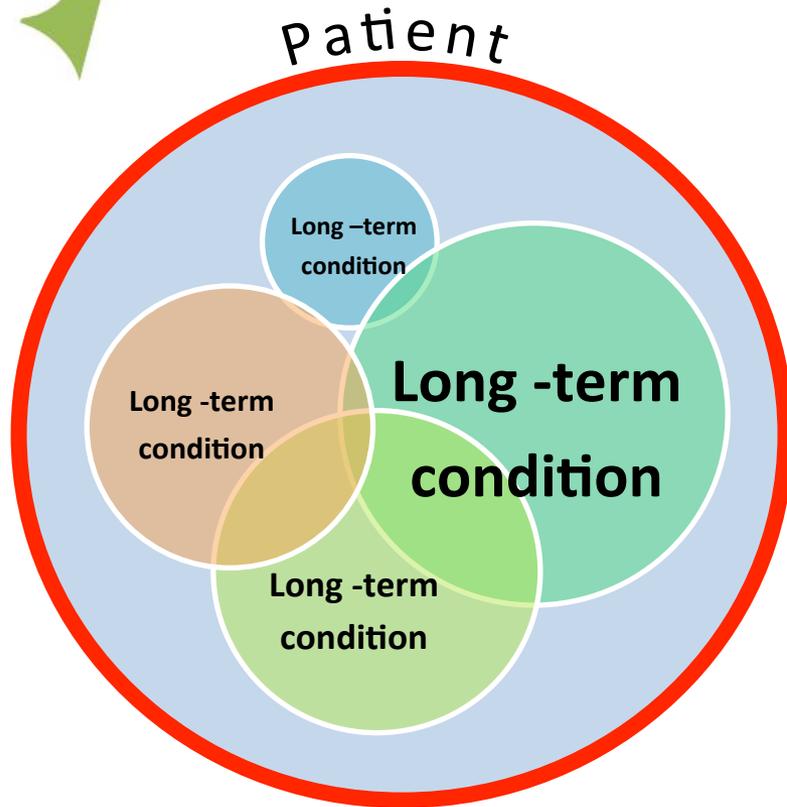


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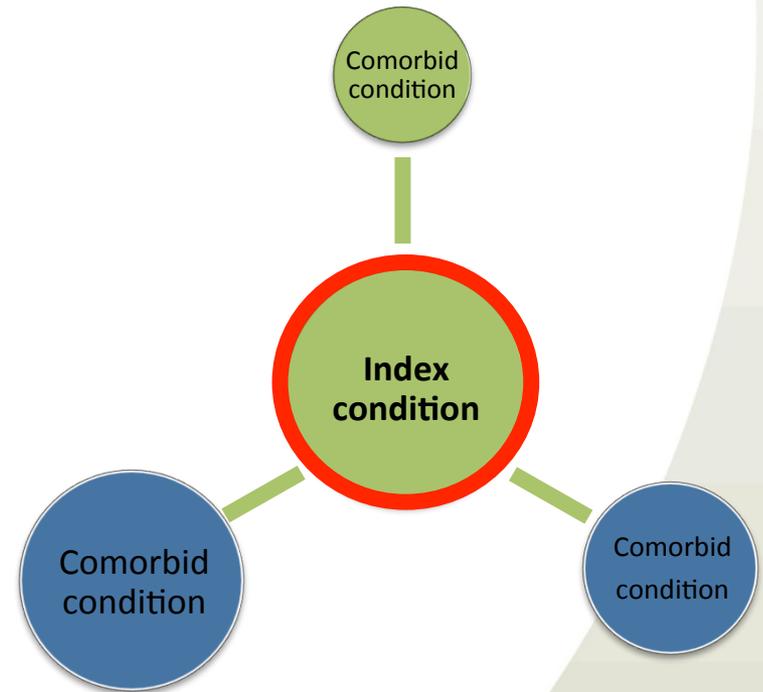




Multimorbidity vs comorbidity



Multimorbidity



Comorbidity



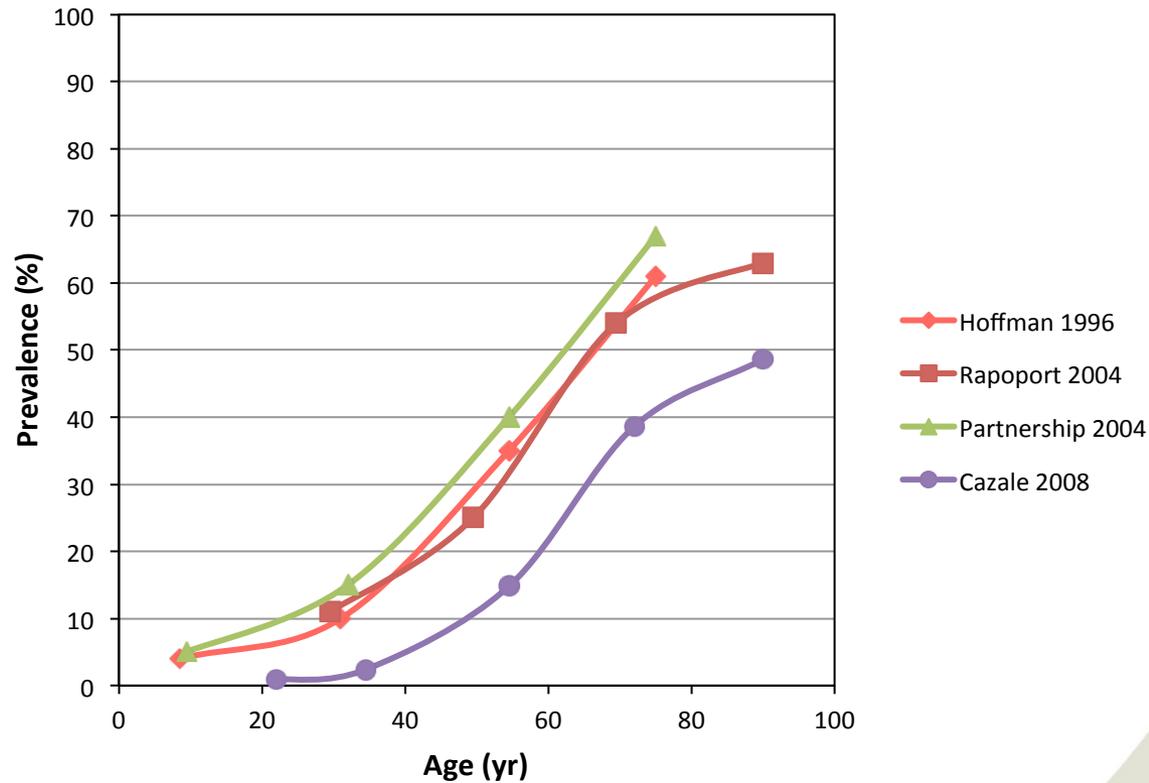
Multimorbidity and complexity





Multimorbidity in the population

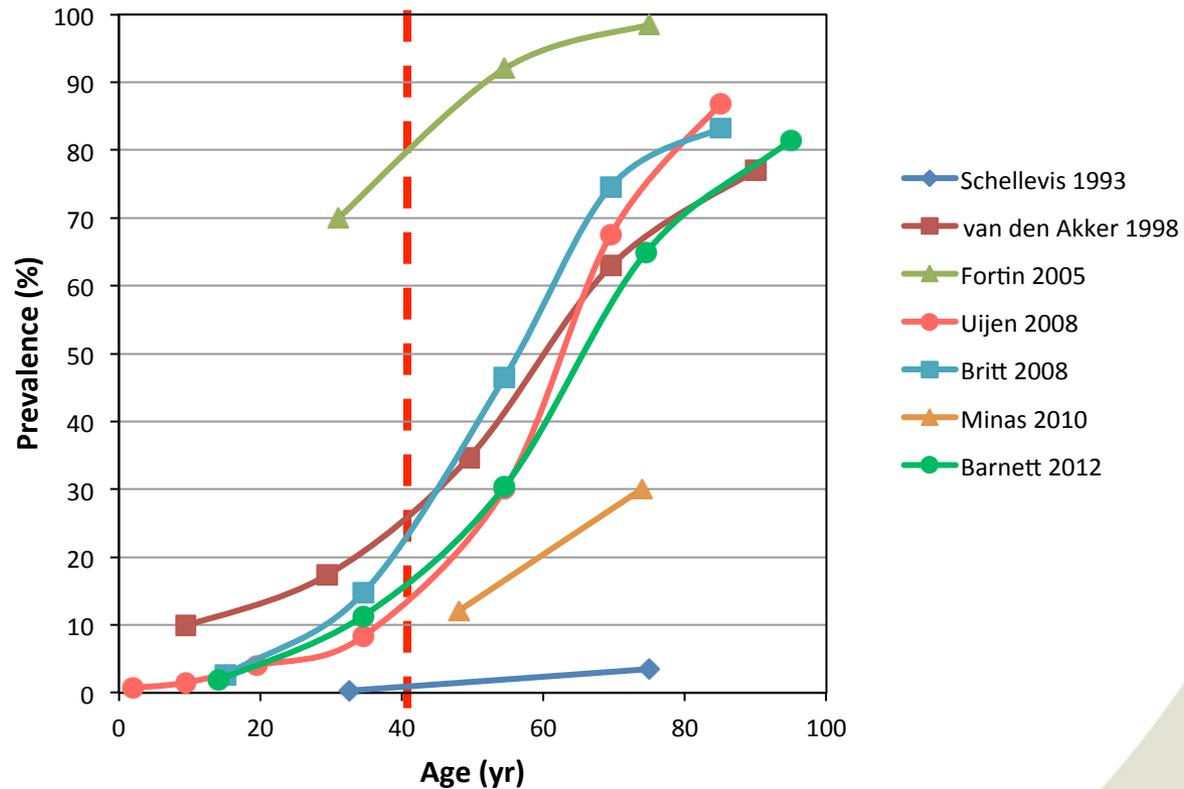
Multimorbidity and age





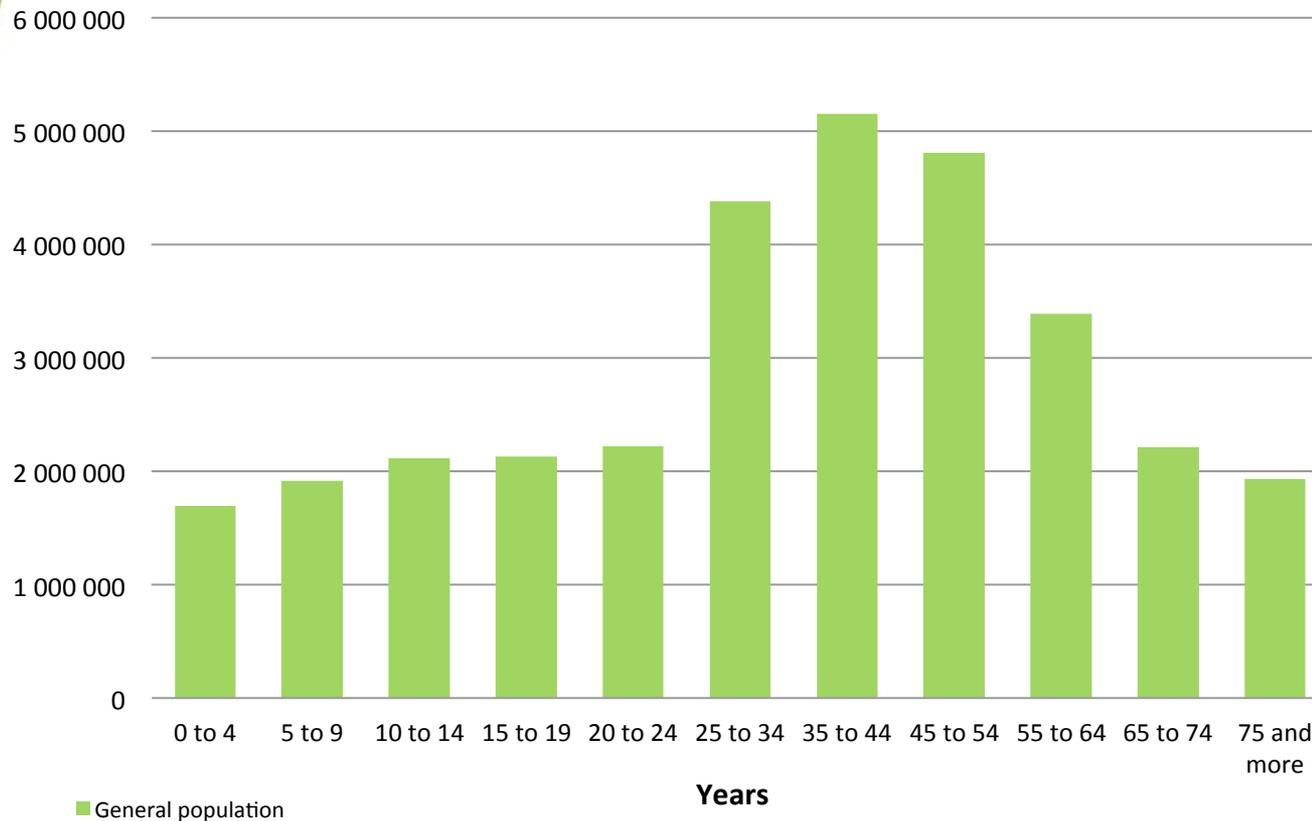
Multimorbidity in primary care

Multimorbidity and age



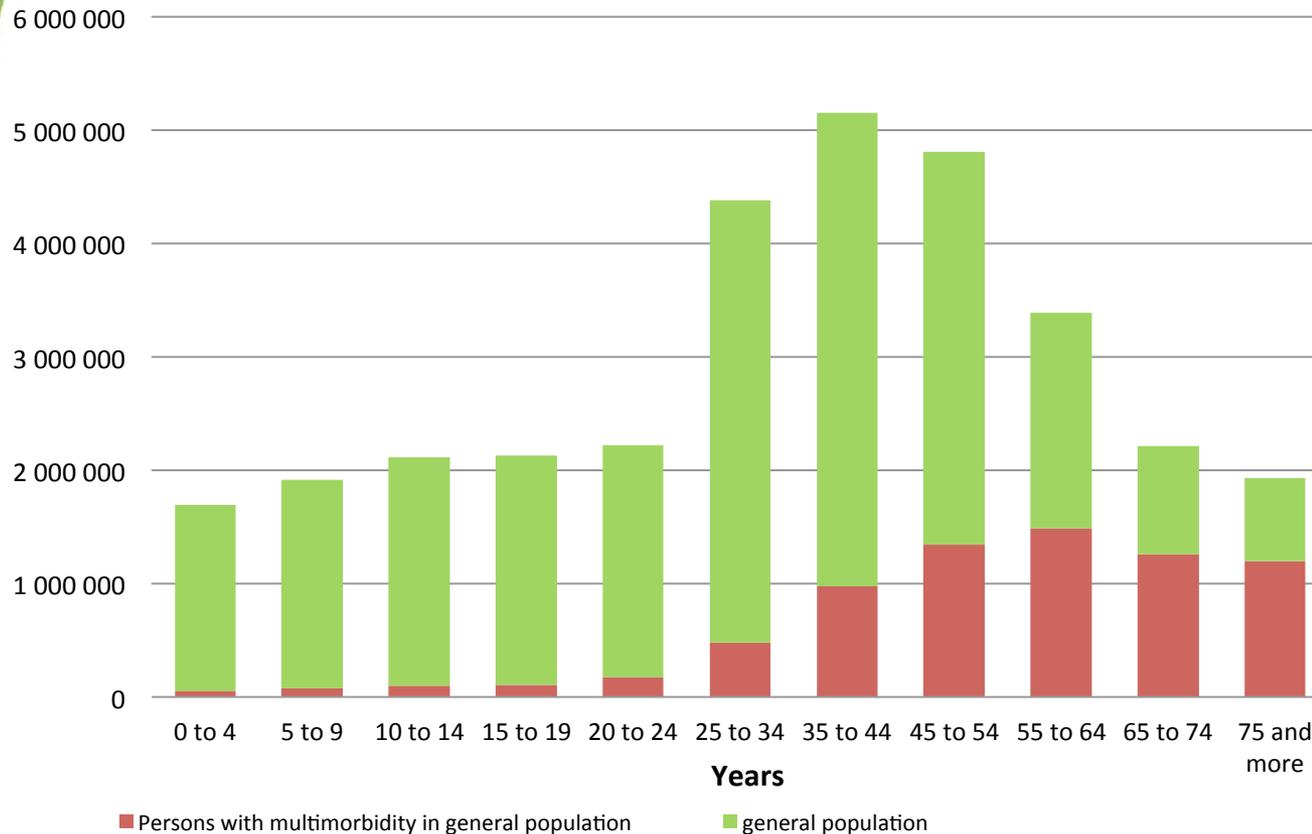


Canadian demography and multimorbidity



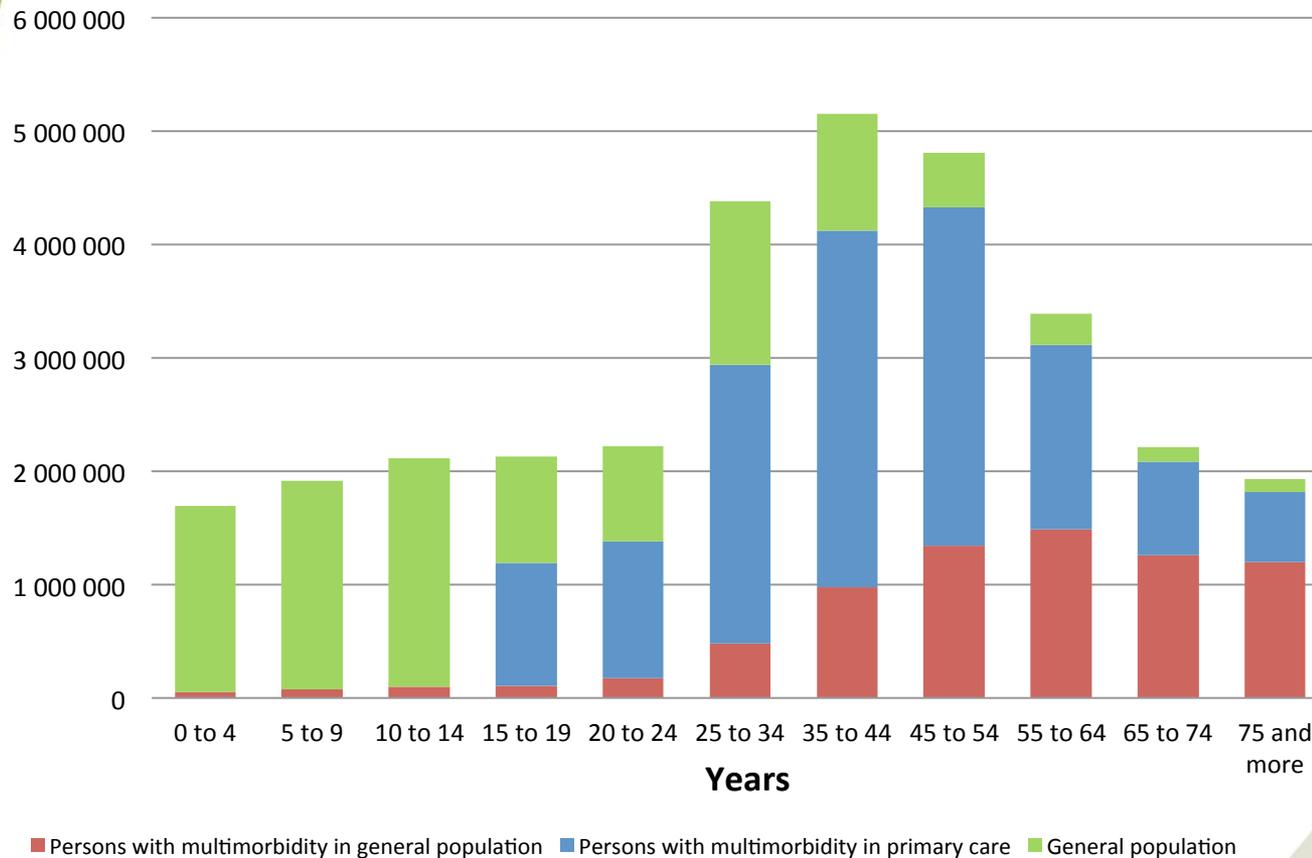


Canadian demography and multimorbidity



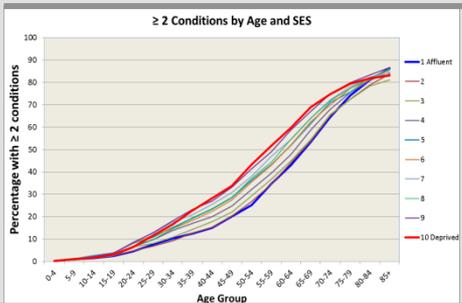


Canadian demography and multimorbidity



Multimorbidity

EPIDEMIOLOGICAL MULTIMORBIDITY

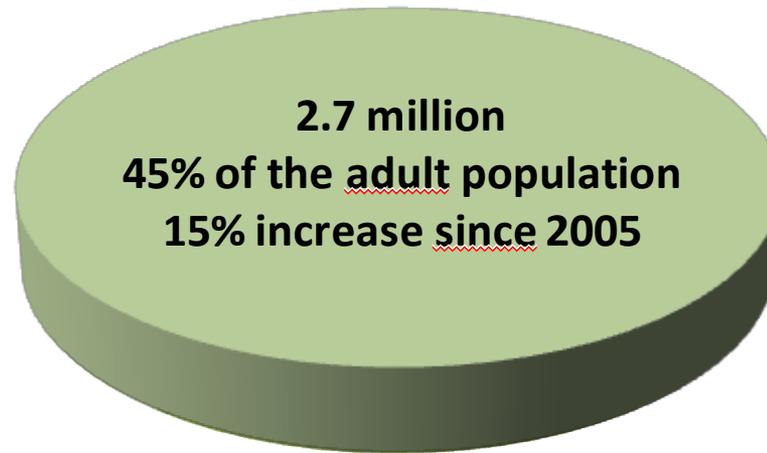


CLINICAL MULTIMORBIDITY

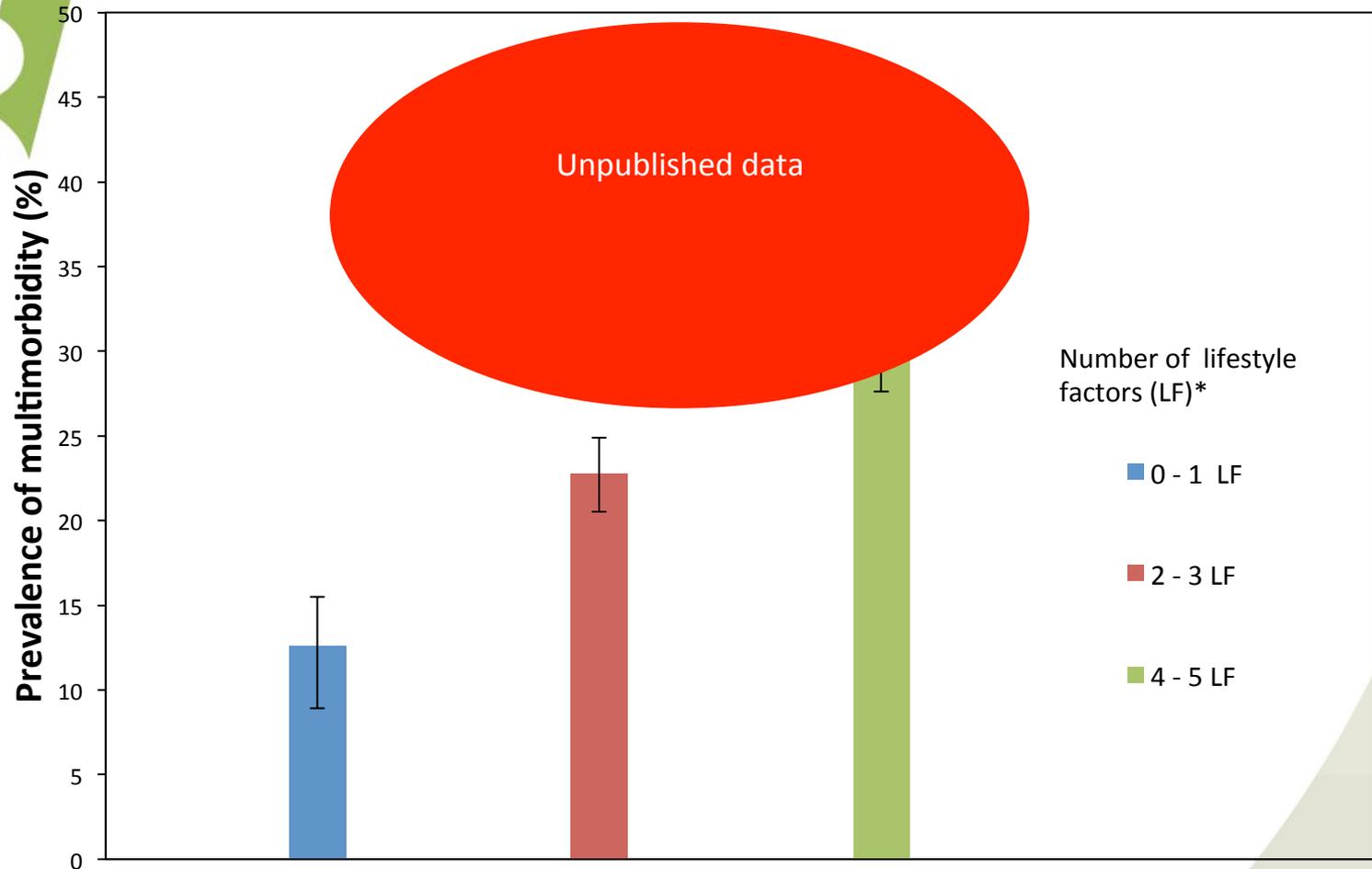




Prevalence of multimorbidity in Quebec



Multimorbidity and lifestyle risk factors

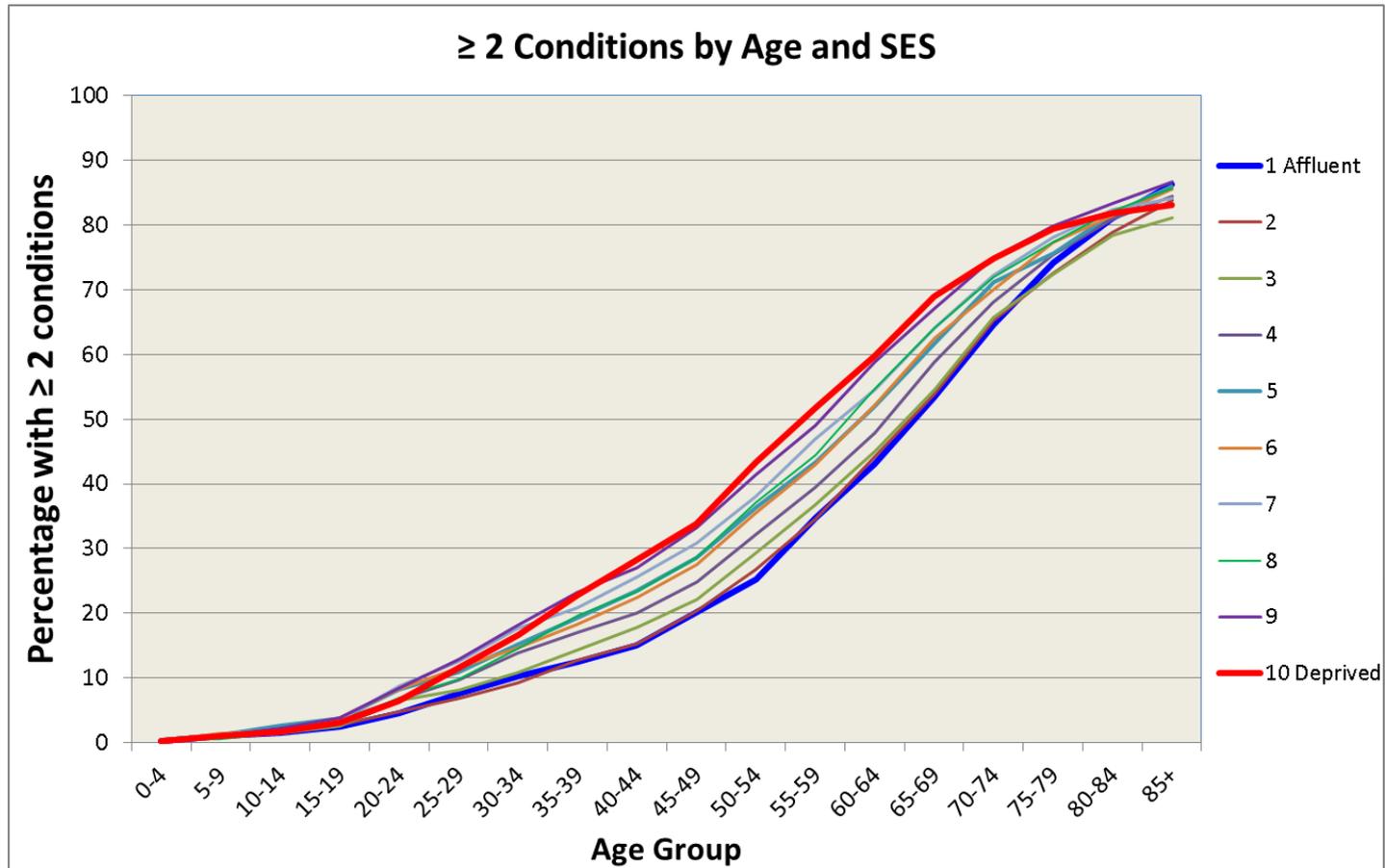


*LF: smoking, alcohol, physical activity, fruits and veg consumption, at risk BMI



Poverty and multimorbidity

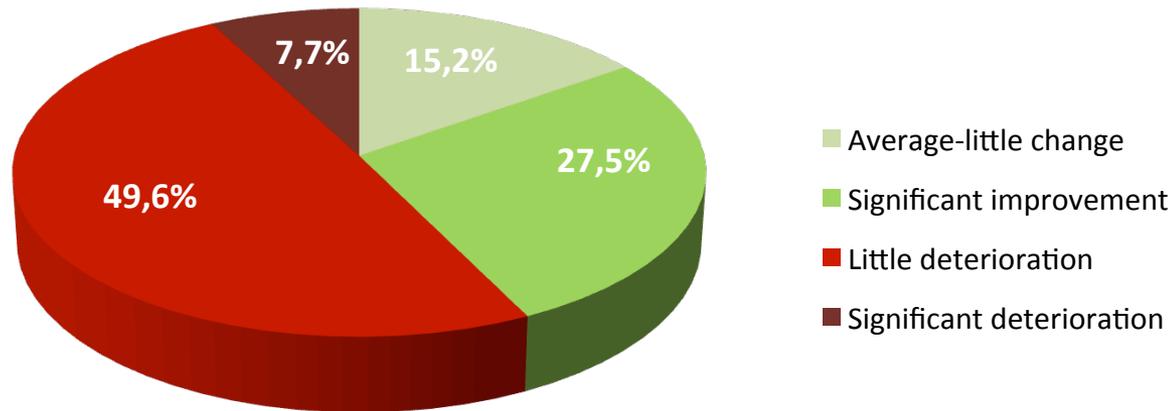
In Scotland, people living in more deprived areas develop multimorbidity 10 years before those living in the most affluent areas





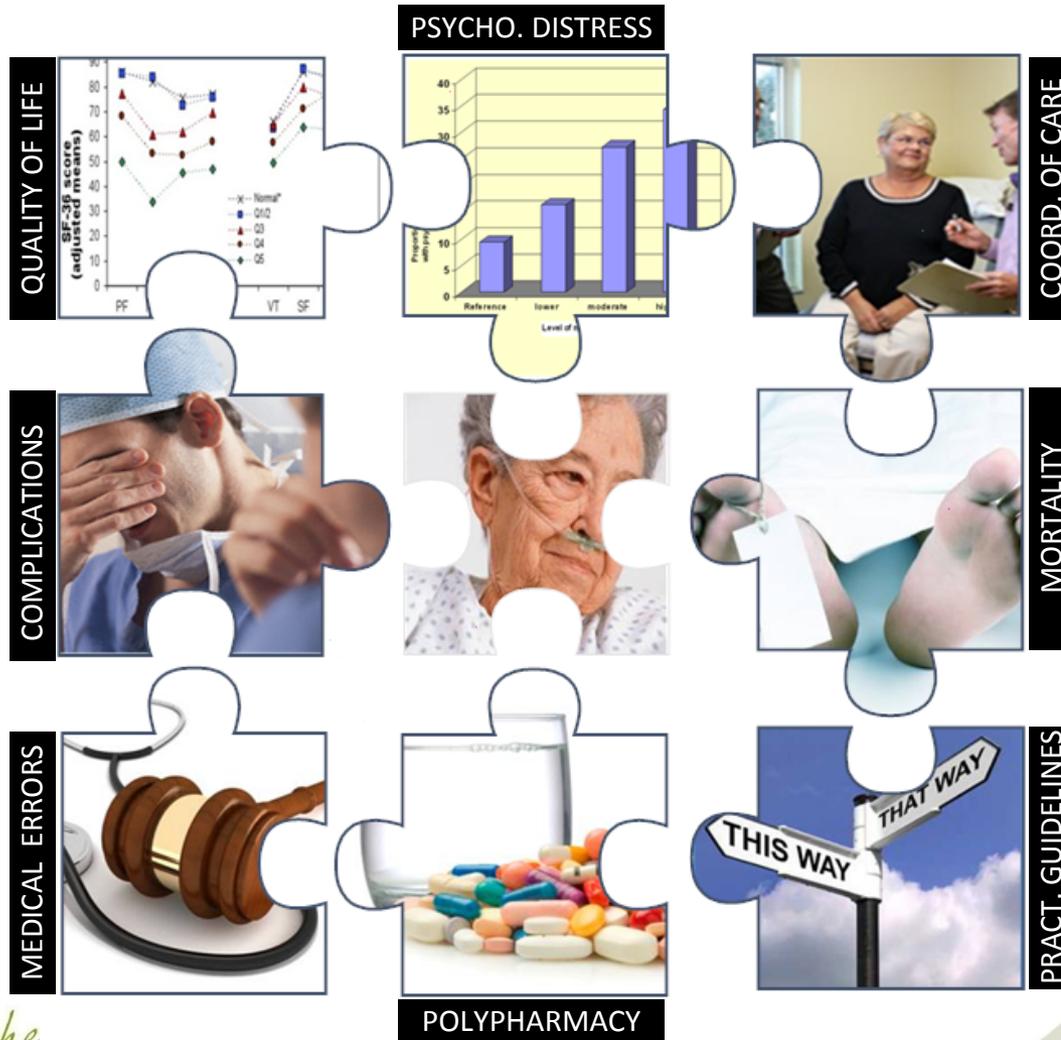
Multimorbidity trajectory

Unpublished data





Multimorbidity and the patient





Multimorbidity and the healthcare system



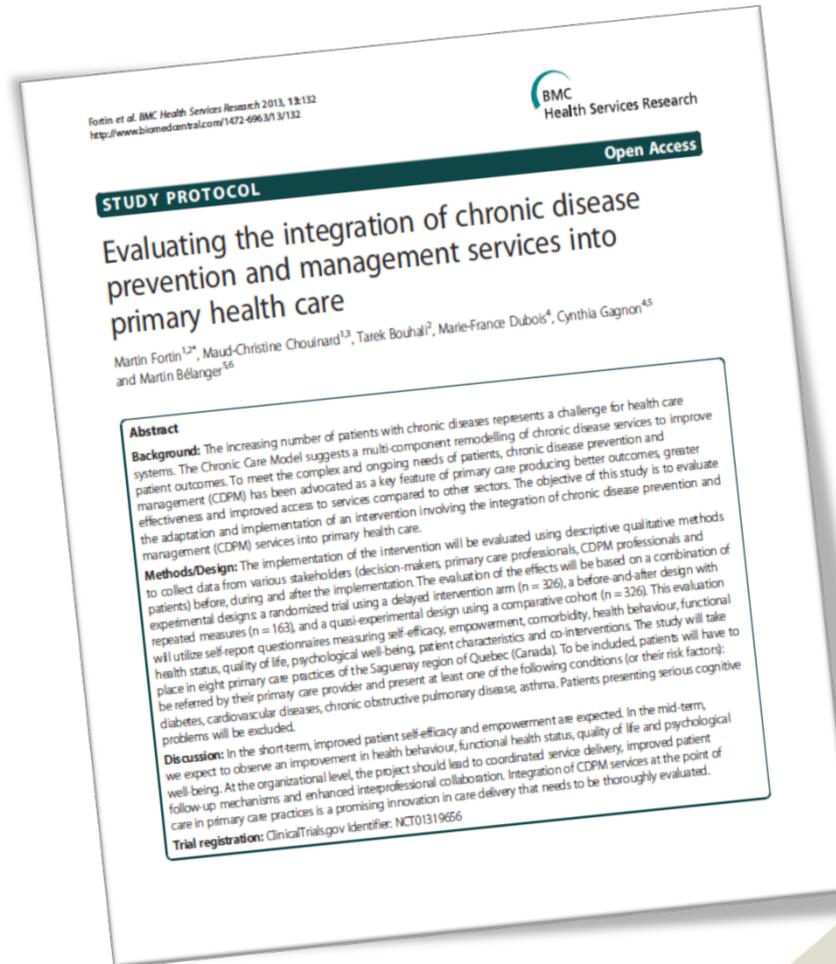


KEY MESSAGES

- ☑ Multimorbidity is the rule in primary care and not limited to the elderly
- ☑ Consequences of multimorbidity are numerous and sometimes dramatic
- ☑ Multimorbidity being the norm, it calls for some « re-thinking » of care delivery



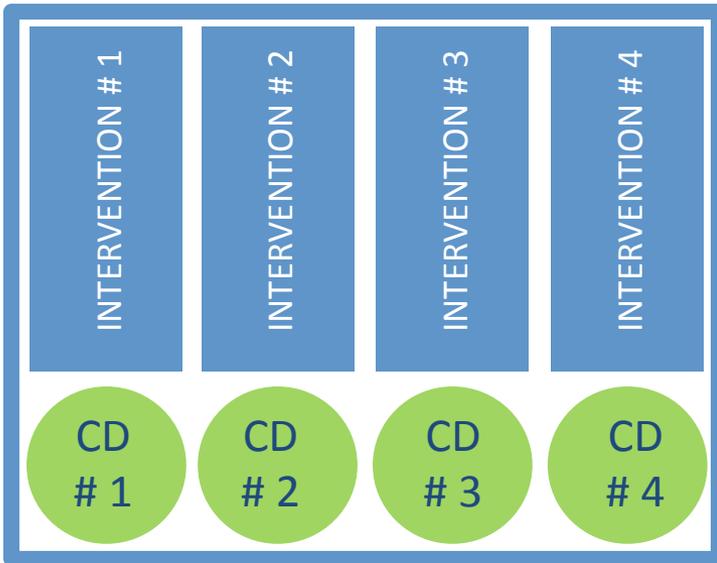
Study protocol





Traditional CDPM services

SPECIALIZED HEALTH CARE SERVICES



Example of targeted CD:

- cardiovascular disease (CVD)
- heart failure
- chronic obstructive pulmonary disease (COPD)
- asthma
- diabetes

aim to:

- reduce and correct modifiable risk factors
- strengthen individual self-efficacy
- optimize functional autonomy, biopsychosocial balance and health
- support self-management

Services offered to people mainly after an acute episode of care or hospitalization.

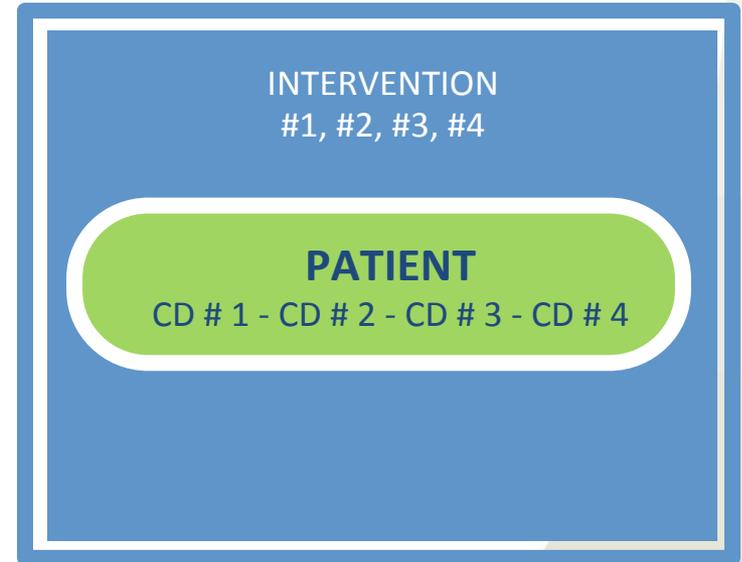
CDPM services



SPECIALIZED HEALTH CARE SERVICES



PRIMARY HEALTH CARE SERVICES





Objective

To integrate and evaluate CDPM services at the point of care in primary care practices

Target conditions: diabetes, COPD, asthma, CVD, risk factors

The evaluation-specific objectives are to:

- **measure the effectiveness of interventions among primary care patients**
- **assess the implementation of CDPM services**

Design:

- **pragmatic randomized controlled trial**
- **realist evaluation**

Intervention

PATIENT-CENTERED CARE

Specialized Healthcare Services

Nutritionist

Physical Activity Therapist

INTERPROFESSIONAL COLLABORATION

SELF-MANAGEMENT SUPPORT

Primary Care

Patient

Provider

Respiratory Therapist

MOTIVATIONAL INTERVIEWING

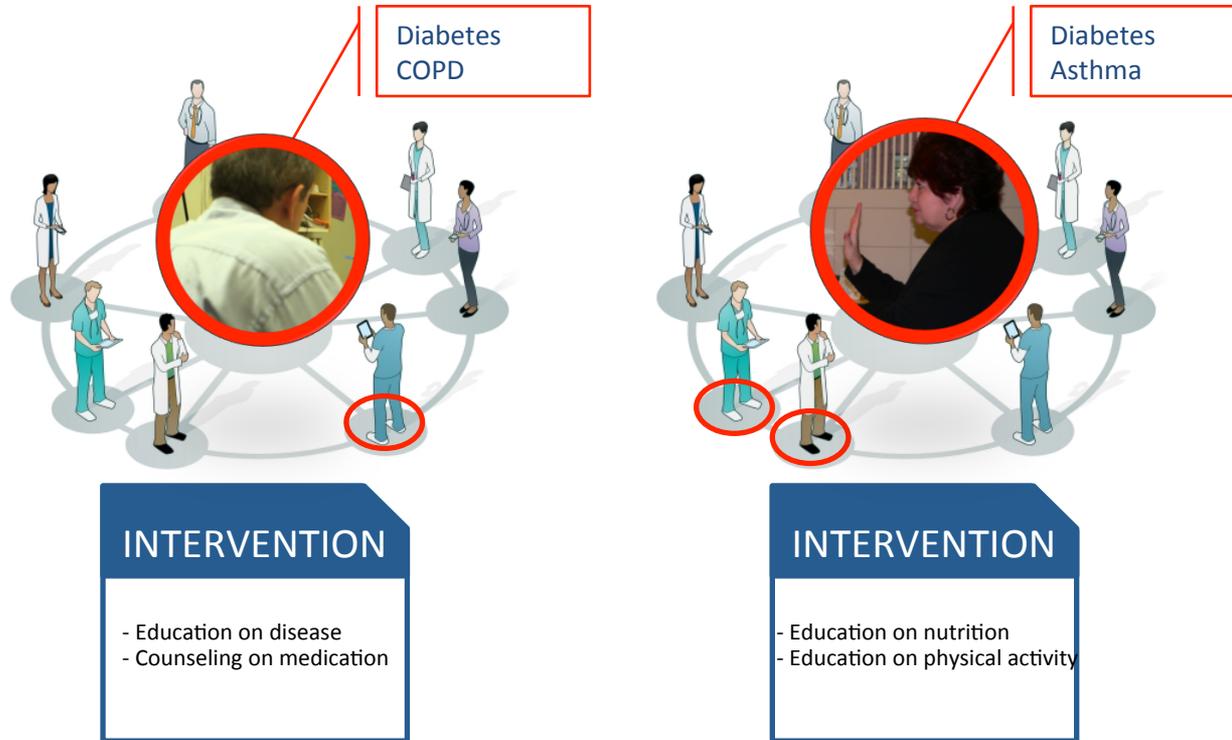
Nurse

INTEGRATED SERVICES



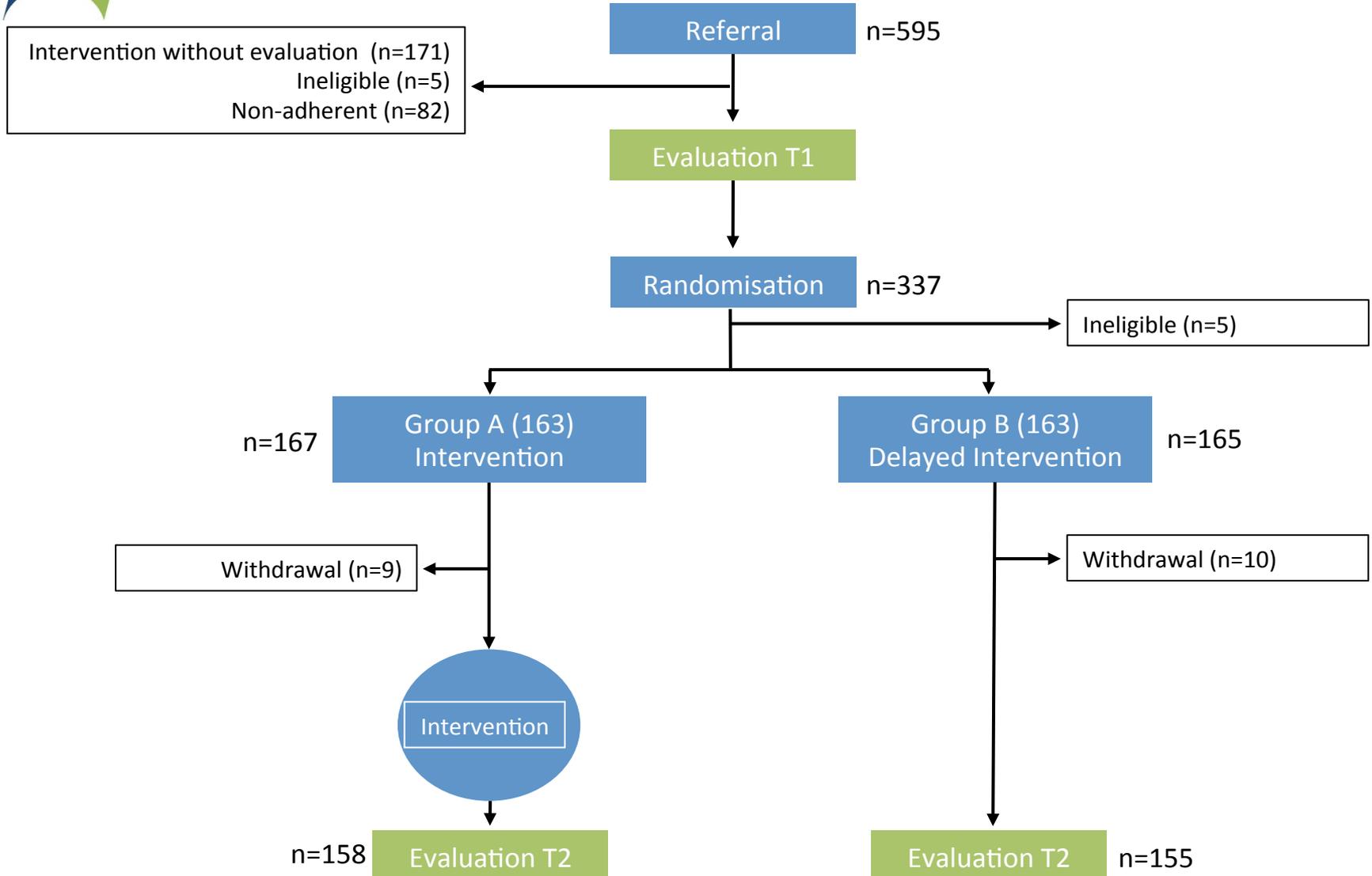


2 patients - 1 profile - 2 intervention plans



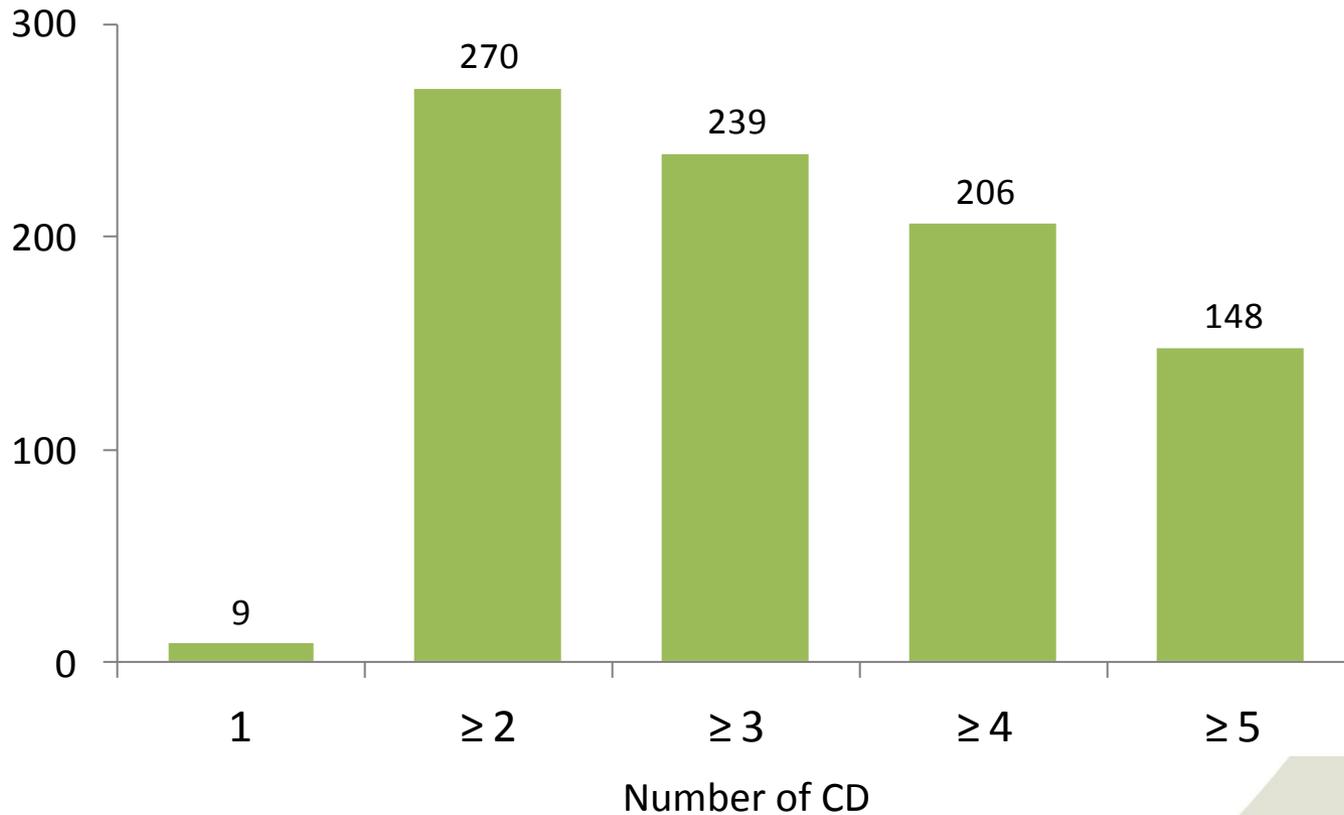


Results





Number of chronic diseases



Missing data: n=34



Health Education Impact Questionnaire (heiQ)

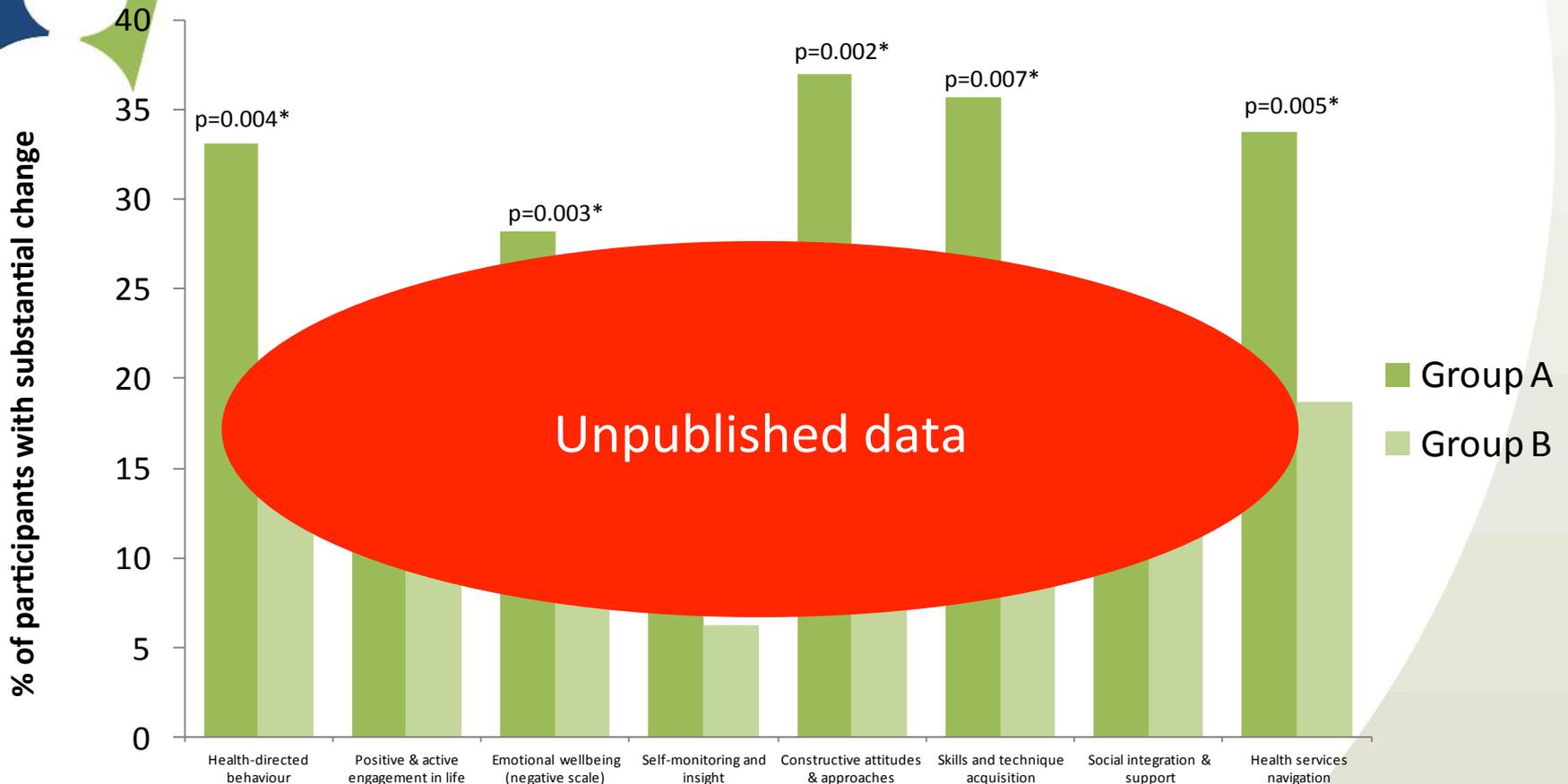
40 questions grouped into 8 different domains:

- Domain 1 **Health-directed behaviour**
- Domain 2 **Positive and active engagement in life**
- Domain 3 **Emotional well-being**
- Domain 4 **Self-monitoring and insight**
- Domain 5 **Constructive attitudes and approaches**
- Domain 6 **Skills and technique acquisition**
- Domain 7 **Social integration and support**
- Domain 8 **Health services navigation**

Cronbach's alphas from 0.70 to 0.89 according to the domain; ≥ 0.80 for 7 out of 8 domains

Health education impact Questionnaire

HeiQ - Group A – Groupe B

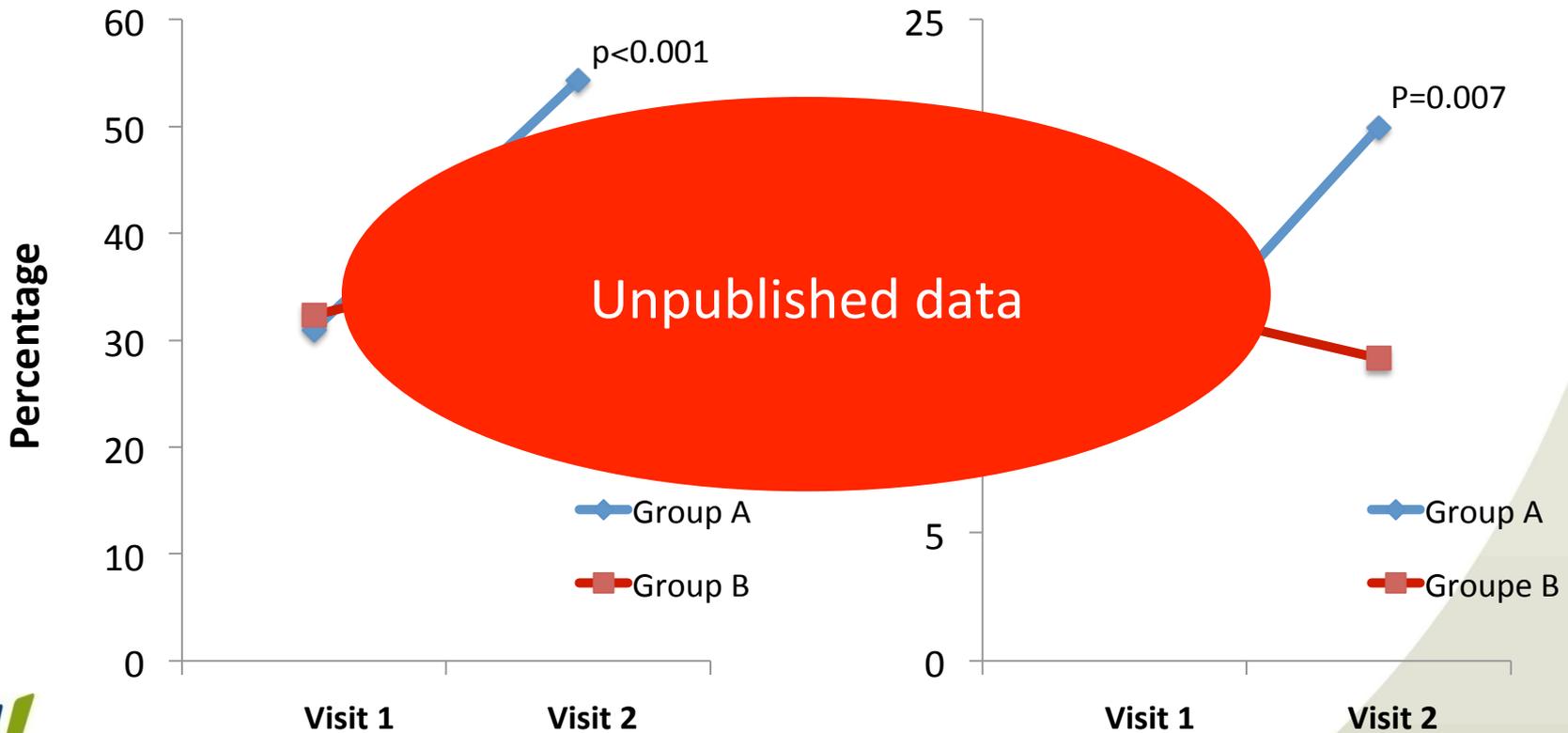


*Logistic regressions adjusted for referral for CVD, referral for risk factors, DBMA, number of CD.

Health behavior

Consumption of fruit and vegetables (≥ 5 portions/day)

Physical activity (20 to 30 min., 4 times / week)





Discussion

- The effectiveness of the integration of CDPM services in primary healthcare was shown by several intermediate outcomes
- Control group of motivated patients
- Need for further studies on targeted groups
- Sustainability of changes will be evaluated after 12 months



KEY MESSAGES

- ☑ The integration of allied professionals into primary care practices is a promising intervention
- ☑ Patients with multimorbidity may benefit from this intervention

PACE *in*

M U L T I M O R B I D I T Y

Patient-Centred Innovations for Persons with Multimorbidity
Moira Stewart, PhD; Martin Fortin MD, MSc, CFPC



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RESEARCH PLAN

OBJECTIVE 1

IDENTIFY SUCCESSES & FAILURES

Environmental scan

(Study 1.1)

Current CDPM programs
linked to PC reforms

Identification & collection of
program-level data

Conduct realist synthesis of
current programs
(Study 1.2)

Building blocks

Chronic Care Model

Self-Management

PC Reform

Innovations

Appropriateness for
multimorbidity

Patient-centred
partnerships between
patients & providers

Patient-centred
coordination/
Integration/Transition

PARTNERSHIP

OBJECTIVE 2

TRANSFORM PROGRAMS

Alignment with promising
interventions

Test of transformed
innovations

Qualitative:
Context and process
(Study 2.1)

Quantitative:
Effect on outcomes
in at least 2 jurisdictions
(Study 2.2)

Quebec

Ontario

OBJECTIVE 3

FOSTER SCALING-UP OF INNOVATIONS

Conduct research on different
approaches to scaling-up
(Study 3.1)





Our Research Team...

Thank you



**We write, blog and tweet about
Multimorbidity**

www.usherbrooke.ca/crmcspl

<http://pages.usherbrooke.ca/crmcspl-blog>

twitter.com/ChaireRechMC

