**Appendix 1** (as provided by the authors): Characteristics of the interventions<sup>1</sup> (reproduced under Creative Commons Attribution License 4.0 International).

### **CDPM practitioner** Theoretical training on: training

- Motivational interviewing
- Function of the respiratory system
- Function of the cardiovascular system
- Diabetes
- Risk factors
- **Existing CDPM services**

Practical training:

Three-week mentoring in specialized CDPM services facilities.

#### **Preliminary clinical** evaluation

The clinical evaluation of participants includes:

Anthropometric characteristics

Medical history

Medication

Functions (respiratory, cardiovascular, endocrine, gastro-

intestinal)

Lifestyle habits and risk factors

Patient's preoccupations and objectives

Previous interventions (nutrition, physical activity,

respiratory, smoking cessation),

Recent changes (weight, alcohol consumption)

# in the intervention

**Disciplines involved** The interventions, based on a referral from a family physician or nurse, are provided by professionals in the following disciplines:

Clinical coordination

Nursing

Physical activity therapy

Nutrition

Respiratory therapy

Smoking cessation therapy

### **Implemented** interventions

The interventions implemented are:

Self-management support

Education on diseases (diabetes, COPD, asthma,

cardiovascular)

Education on risk factors (pre-diabetes, high blood pressure, dyslipidemias, obesity, physical inactivity, smoking)

Counseling on medication

Motivational interviewing

Education about nutrition

Education about physical activity

Counseling on smoking cessation

### **Tools and support** material

Each intervention is supported by print and other material to ensure that patient engagement is maintained even between the interventions. These include documents on:

Chronic disease management

Asthma, COPD

Diabetes

Cardiovascular

Metabolic syndrome

Hypo/hypertension

Tools for smoking cessation

Stress management

Blood pressure monitoring journal

Personal objectives journal

Physical activity journal

## coordination

**Communication &** The CDPM practitioners in our study work within primary care settings which enhances communication with primary care physicians, nurses and staff. The clinical coordinator ensures optimal communication and transition of care between the project team, the primary care professionals and specialized services. Special attention is given to the distinction of tasks fulfilled by project CDPM practitioners and tasks fulfilled by primary care nurses.

#### Integration

Prior to the implementation of interventions, a pre-implementation evaluation is conducted to identify the needs for CDPM services and the contextual factors of the participating PC clinics in the follow-up of CD patients. The pre-implementation evaluation of the project promotes the sharing of a common positive vision of an intervention that focuses on prevention, earlier support for patients in the course of their disease, interprofessional collaboration, services integration, motivational

interviewing and self-management support.

**Participating** 

Participating primary care professional include:

primary care professionals

Family physicians (63)

Nurses (5)

Participating primary care settings:

Four (4) clinics

Four (4) family medicine groups

Participating specialists

Participating specialists include:

Cardiologists

Internal medicine specialists

Endocrinologists Pneumologists

### **Reference:**

1. Fortin M, Chouinard MC, Bouhali T, et al. Evaluating the integration of chronic disease prevention and management services into primary health care. *BMC Health Serv Res* 2013;13:132.

Subjects who had a reliable improvement in the self-management domains.

### Domain (heiQ)

### Subjects with reliable improvement, n (%)

_	Intervention	Control	
	(Total = 166)	(Total = 166)	
Health directed behaviour	48 (28.9)	28 (16.9)	
Positive & active	31 (18.7)	21 (12.7)	
engagement in life			
Emotional wellbeing	38 (22.9)	22 (13.3)	
Self-monitoring and insight	24 (14.5)	10 (6.0)	
Constructive attitudes and	36 (21.7)	15 (9.0)	
approaches			
Skill and technique	51 (30.7)	30 (18.1)	
acquisition			
Social integration &	23 (13.9)	20 (12.0)	
support			
Health service navigation	29 (17.5)	15 (9.0)	

	Group	Baseline		3 n	nonths	Mean difference (Baseline vs. 3			
	Group	Du		iic 3 months		months)			
		n	Mean (SD)	n	Mean (SD)	Within group*	Between- groups**; Cohen's d	p***	
	Intervention	153	7.5	152	8.0	0.5 (0.3 to	0.2 (-0.1 to 0.5);		
			(1.8)		(1.6)	0.8)	0.18	0.21	
Score SEM-CD		160	7.3	158	7.7	0.4 (0.2 to			
			(2.0)		(1.7)	0.6)			
PCS	I	155	42.7	155	45.8	3.1 (1.8 to	1.6 (0.2 to 3.1);	0.03	
Intervention	intervention		(9.7)		(9.3)	4.4)	0.04	0.03	
	Control	161	44.6	160	45.4	0.9 (-0.1 to			
			(10.6)		(10.0)	1.8)			
MCS	ICS Intervention	155	46.7	155	49.8	3.1 (1.7 to	1.1 (-0.5 to 2.7);	0.19	
			(10.7)		(9.9)	4.5)	0.04		
	Control	161	47.9	160	49.4	1.5 (0.3 to			
			(10.8)		(9.4)	2.9)			
SF-6D	Intervention	154	0.683	153	0.729	0.044 (0.026	0.021 (0.00 to	0.05	
			(0.131)		(0.134)	to 0.062)	0.043); 0.00	0.03	

	Control	160	0.715	159	0.729	0.012 (-0.002		
			(0.129)		(0.126)	to 0.026)		
		152	32.0	148	31.5	-0.31 (-0.95	-0.27 (-1.14 to	
]	Intervention		(7.2)		(7.4)	to 0.46)	0.61); 0.04	0.55
BMI (Kg/m <sup>2</sup> )		155	31.2	157	31.2	0.02 (-0.42 to		
			(7.0)		(6.8)	0.53)		

<sup>\*</sup> Mean with 95% confidence interval. Mean difference = mean score 3 months – mean score Baseline.

SEM-CD = Self-Efficacy for Managing Chronic Disease; HRQoL = Health Related

Quality of Life; PCS = Physical Component Summary of SF-12v2; MCS = Mental

Component Summary of SF-12v2; SF-6D = Single index of SF-12v2; BMI = Body Mass Index.

<sup>\*\*</sup> Mean with 95% confidence interval. Mean difference = adjusted mean 3 months 'Intervention' – adjusted mean 3 months 'Control'.

<sup>\*\*\*</sup> ANCOVA comparing scores after 3 months, adjusted for baseline.