# The impact of a multidisciplinary, information technology supported program on blood pressure control in primary care

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
29/06/2004		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
22/07/2004	Completed	[X] Results		
<b>Last Edited</b> 01/02/2019	Condition category Circulatory System	[] Individual participant data		

#### Plain English summary of protocol

Not provided at time of registration

#### Contact information

#### Type(s)

Scientific

#### Contact name

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#### Additional identifiers

ClinicalTrials.gov (NCT)

NCT00374829

#### Protocol serial number

DCT 67995

# Study information

#### Scientific Title

The impact of a multidisciplinary information technology-supported program on blood pressure control in primary care.

#### **Study objectives**

It is hypothesised that blood pressure control will be improved in patients receiving the program by increasing compliance with pharmacotherapy, the use of higher doses of anti-hypertensive agents and the use of more anti-hypertensive agents when appropriate, without adversely impacting quality of life.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approval received from the local ethics committee (Cité de la Santé de Laval Comité d'éthique et de la recherche) in November 2003.

#### Study design

Randomised controlled trial

#### Primary study design

Interventional

#### Study type(s)

Treatment

#### Health condition(s) or problem(s) studied

Hypertension

#### **Interventions**

Intervention:

We have developed an Information Technology (IT)-based system to help empower patients to be responsible for monitoring their Blood Pressure (BP) and compliance and to facilitate communication with healthcare providers. The IT-based system links with actual pharmacy prescription refill and renewal data. Using these data as well as responses to questions on compliance and BP control that patients provide, the system:

- a. offers patients counselling and telephone reminders
- b. generates prescription refill and renewal reminder calls
- c. monitors patient recorded BP

The system generates monthly reports to the treating physician and pharmacist on compliance and blood pressure control, a retroaction that we expect will guide therapy. The system also links patients with a nurse if BP is inadequately controlled and/or if patients are non-compliant. These nurses can then provide appropriate counselling to patients and refer the patients to their physician or pharmacist as appropriate.

#### Control:

The control group will receive standard care with no access to the IT-based system and multidisciplinary approach.

#### Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome(s)

The primary objective of this study is to evaluate the impact of a multidisciplinary, information-technology supported hypertension management program on the mean change in 24-hour systolic and diastolic BP levels measured using Ambulatory Blood Pressure Monitoring (ABPM) compared to usual care.

#### Key secondary outcome(s))

- 1. To assess the likely mechanisms that account for the results for the primary objective by measuring refill compliance and the number and dosage of anti-hypertensive agents assessed through pharmacy prescription data records over the 12-month study period as well as the number and nature of interventions by pharmacists, nurses and physicians
- 2. To assess the effect of the program on mean daytime and nocturnal BP, office BP measured, the proportion of subjects who achieve target office BP
- 3. To assess the impact of the program on patients perceived health related quality of life
- 4. To assess the impact of the program on the incidence of adverse cardiovascular events, including hospitalisation for uncontrolled hypertension, new onset angina, myocardial infarction, hospitalisation for unstable angina, hospitalisation for congestive heart failure, hospitalisation for stroke, hospitalisation for other vascular event, and cardiovascular death
- 5. To evaluate the potential economic benefits of the intervention, from a third-party payers perspective

#### Completion date

01/02/2008

# **Eligibility**

#### Key inclusion criteria

- 1. Male and female uncontrolled hypertensive subjects
- 2. 18 years of age or more

#### Participant type(s)

**Patient** 

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Sex

All

#### Key exclusion criteria

- 1. Having a life-threatening disease
- 2. Chronic atrial fibrillation
- 3. Unable to use an ordinary telephone
- 4. Pregnant at the initial visit
- 5. Participating in another clinical trial
- 6. Living with another subject that is currently participating in the study

#### Date of first enrolment

01/05/2004

#### Date of final enrolment

01/02/2008

#### Locations

#### Countries of recruitment

Canada

# Study participating centre University of Montreal

Montréal, QC Canada H2L 4M1

# Sponsor information

#### Organisation

Canadian Institutes of Health Research (CIHR) (Canada)

#### **ROR**

https://ror.org/01gavpb45

# Funder(s)

#### Funder type

Research organisation

#### Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - http://www.cihr-irsc.gc.ca (ref: DCT 67995)

#### **Funder Name**

Pfizer Canada Inc. (Canada)

# **Results and Publications**

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Not provided at time of registration

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/05/2009	01/02/2019	Yes	No