



# CHAP in Thorold

## *Cardiovascular Health Profile of Older Adults*

FALL 2006

This community health profile focuses on cardiovascular risk factors, using data from the **Cardiovascular Health Awareness Program (CHAP)** that was conducted in 20 Ontario communities in the Fall of 2006. The report builds on an earlier profile available at [www.CHAPprogram.ca](http://www.CHAPprogram.ca). The participation of CHAP community partners is described. Demographic characteristics and cardiovascular disease risk factor information are presented for participants in Thorold and across all CHAP communities. This information can be used to guide the development of local cardiovascular health promotion activities, including a sustainable CHAP program integrated with Family Health Teams.

### The Cardiovascular Health Awareness Program

CHAP focuses on the prevention of stroke and cardiovascular disease in older Ontarians. The program aims to increase cardiovascular health awareness, promote healthy lifestyles and support regular blood pressure monitoring with linkage to care providers.

In the Fall of 2006, CHAP was launched in 20 communities across Ontario. Over the course of ten weeks, all residents aged 65 or older in the program communities (~60,000) were invited to attend two or more CHAP pharmacy-based sessions. A variety of methods were used to invite participants, including personalized letters from family doctors, distribution of 'tickets' by doctors and pharmacists and community-wide advertising.

At the CHAP sessions, volunteer Peer Health Educators (PHEs) assisted participants to measure blood pressure using an accurate automated device and record additional self-reported risk factor information. Based on the participants' risk profile, the volunteers provided targeted educational materials and local resources for addressing modifiable risk factors. Participants received a copy of their results, which could also be sent to their family physician or regular pharmacist.

In the event of a very high blood pressure reading, an on-call nurse reassessed the participant and arranged follow-up care. A pharmacist was available to consult with participants about medication-related issues.



### Why CHAP?

In Canada, stroke and heart disease are among the leading causes of death, affecting about one in four adults. High blood pressure, or hypertension, is a common risk factor for stroke and heart disease. Evidence shows that as people grow older, their blood pressure increases. About one in three Canadians aged 65 to 74 years has hypertension, and those who do not have hypertension by the age of 55 have a 90% chance of developing the condition over time. Although hypertension is prevalent among older adults in Canada, many people are unaware they have the condition.

Hypertension is preventable and treatable by making healthy lifestyle modifications or using anti-hypertensive medications in conjunction with lifestyle modifications. However, hypertension can be difficult to diagnose and manage effectively. Blood pressure measured in health care settings is often inaccurate, resulting in sub-optimal detection, treatment and control of hypertension. Community-based initiatives aim to decrease the public health burden of cardiovascular disease and stroke by reducing risk factors across populations. Community programs emphasize partnerships, collaboration, and community mobilization.

# Participation & Assessment Results

## CHAP Participation in 20 Communities

The CHAP program was a tremendous success with 20 local lead organizations, 341 family physicians, and 129 pharmacies involved across Ontario. Over 10 weeks, 15,889 community members attended 1,265 pharmacy-based sessions, representing approximately 25% of the total senior population in the CHAP communities. At the three-hour sessions, 577 volunteer PHEs assisted with 27,358 cardiovascular and stroke risk assessments including blood pressure measurement and distributed educational materials and community-specific resources.

## CHAP Participation in Thorold

In Thorold, CHAP was led by Local Coordinator Marlene Slepov from VON Niagara. The Thorold community showed plenty of support for the program, with 7 participating family physicians, 3 pharmacies, and 18 volunteer PHEs involved. During 10 weeks of sessions, 621 community members attended 30 CHAP assessments at 8 participating pharmacies (representing 10% of Thorold's senior population). Participant characteristics and risk factors for Thorold and the CHAP communities overall are provided in the table below.

## Demographics & Risk Factors of CHAP Participants

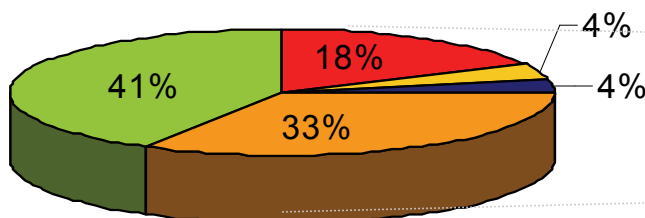
Characteristic (Self Reported)	Overall CHAP Program (n = 15,889)	Thorold (n=377)	Characteristic (Self Reported)	Overall CHAP Program (n = 15,889)	Thorold (n=377)
Age (y): mean (SD)	71.9 (9.7)	74.1 (7.1)	High blood pressure (Systolic $\geq 140$ mmHg or $\geq 130$ if diabetes mellitus; %)	36.9	38.7
Female (%)	59.5	59.2	Smokers (%)	8.7	8.5
Diagnosed with Diabetes (%)	15.1	16.2	Physically inactive (%)	20.1	21.2
Diagnosed with High cholesterol (%)	40.8	40.3	Low fruit & vegetable intake (< 5 servings/day; %)	37.0	31.0
Diagnosed with Hypertension (%)	53.8	58.6	Body Mass Index (>25; %)	62.5	57.6
History of Transient Ischemic Attack (%)	7.9	10.6	High Alcohol Consumption (2 or more drinks/day; %)	10.1	14.6

## Blood Pressure Status of CHAP Participants

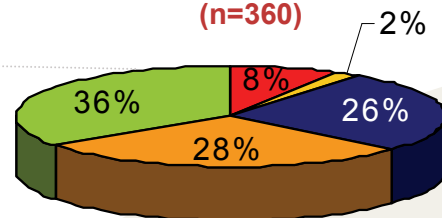
CHAP aims to promote regular blood pressure monitoring and follow up. A substantial number of the older adult participants in the 20 program communities had undiagnosed or uncontrolled elevated blood pressure. Overall, 36.9% (5867/15889) of participants had elevated blood pressure ( $\geq 140/90$  or  $\geq 130/80$  mmHg if diabetes reported) at their first visit. Of these, 64.5% (3784/5867)

were diagnosed with hypertension and/or reported treatment but were not controlled. The participants (31.0%, 1816/5867) who were not aware of their elevated blood pressure represent potential new cases of hypertension. In Thorold, 38.7% (146/377) of participants had elevated blood pressure at their first visit. Blood pressure status for all CHAP participants and for Thorold is shown below.

**Diagnosis and Control of Blood Pressure Among CHAP Participants in 20 Communities (n=10,275)**



**Diagnosis and Control of Blood Pressure Among CHAP Participants in Thorold (n=360)**



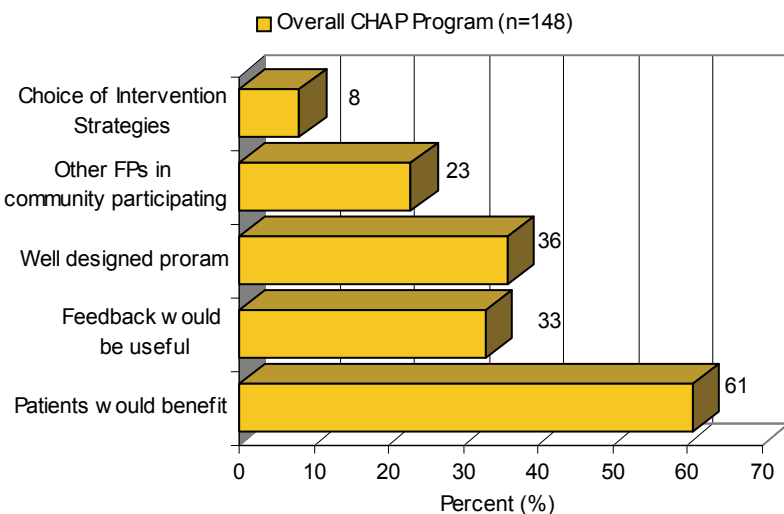
■ Elevated & unaware ■ Diagnosed, not treated or controlled ■ Treated & uncontrolled ■ Diagnosed, not treated, normal ■ Treated & controlled

# Family Physicians

## Family Physicians in 20 Communities

The participation of local family physicians was important in promoting attendance at sessions and providing follow-up. CHAP is designed to assist physicians to diagnose and manage hypertension by providing additional accurate blood pressure readings and other risk factor information. Three months after the program, surveys were sent to family physicians who had agreed to receive patient feedback. Overall, 43% (136/313) questionnaires were completed. Of the physicians who responded, 79.7% (118/148) reported using CHAP feedback. After participating in the program, the majority of physicians (77%, 95/124) said they would recommend CHAP to their colleagues.

### Family Physician Reasons for Participating



## Family Physicians in Thorold

In Thorold, 7 family physicians participated in the program. Post-program questionnaires were received from 5 physicians. Of these, 20% (2/5) reported using the CHAP feedback and 60% (3/5) reported that some of their patients brought a copy of their CHAP session feedback to their doctor's appointment. Participating family physicians reported that feedback on patients risk factors (60%, 3/5), educational resources (60%, 3/5), and patients receive a copy of their results (20%, 1/5) were among the appreciated aspects of CHAP Sessions. Family Physician reasons for participating and identified benefits of CHAP are below.

### Family Physician Identified Benefits of CHAP

Identified Benefits of CHAP	Overall CHAP Program (n=148)	Thorold (n=5)
Case Finding	51%	40%
Additional Blood Pressure Readings	57%	20%
Increased coverage of older adults	29%	20%
Recall of Patients for Follow Up	27%	20%

# Pharmacists

Pharmacists were available during CHAP sessions to provide advice about drug-related problems related to hypertension. As well, pharmacists could communicate directly with a participant's physician when such problems were identified. Pharmacist assessments were completed for 206 CHAP participants. A post-program questionnaire was mailed to pharmacists to learn about their experience.

Questionnaires were completed by 61 of 129 pharmacists (47%) across 20 communities. An average of 17 CHAP participants were seen by each pharmacist. Few difficulties with patient assessments were identified. Overall, pharmacists reported that they did 'reasonably well' in documenting participant care (41%), resolving problems (39%) and identifying drug related problems (36%).

In Thorold, 5 local pharmacies were involved. Pharmacist assessments were completed for 4 CHAP participants. Four pharmacists returned a questionnaire. One respondent noted that although the sessions were busy, few participants were referred to the pharmacist.

## Understanding of the CHAP Program & the Pharmacist Role in Thorold

*"To understand importance of blood pressure monitoring and impact of high blood pressure on the body"*

*"Provide assessment for drug-related problems; Provide follow up on drug related issues for interested patients; Contact their physician when needed and at the consent of the patient"*

*"Make patients aware of their blood pressure and their risks for worsening CVD [cardiovascular disease]"*

*"Do a medical profile review, ensure compliance, help to ensure talking to MD and talk to MD about alternatives to help fix problem"*

# Volunteer Peer Health Educators

The volunteer Peer Health Educator was an essential role in the implementation of CHAP. Volunteers assisted with blood pressure measurement (using the BpTRU device), completed cardiovascular disease and stroke Risk Profiles, and provided participants with educational materials and local resources to help reduce modifiable risk factors.

To understand the volunteer experience, a survey was conducted following the program. Across 20 communities, 60% (346/577) volunteers responded to the survey. In Thorold, 14 volunteers returned a questionnaire.

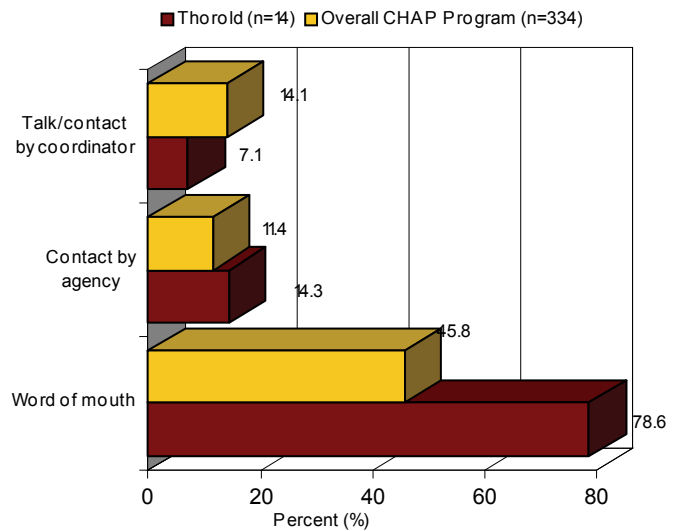
Volunteers understanding of the program goals and the value of the program in the community are important to their satisfaction with their contributions. Overall, volunteers felt that their involvement in CHAP was rewarding and that the program was appreciated in the community. Additional perspectives from all CHAP volunteers and for Thorold volunteers are described below.

## Motivation for Volunteering

Mean agreement rated on a 5-pt Likert scale, 5=strongly agree

Motivation for Volunteering	Overall CHAP Program (n=346)	Thorold (n=13)
Enjoy meeting people	4.6	4.7
Contribute to community	4.6	4.2
To be informed about Heart Health	4.0	4.1
To provide health education to my peers	4.0	3.9
Seniors need more health education	3.9	3.6
Program has personal relevance	3.9	3.3 (n=11)

## Volunteer Recruitment Strategies



## Volunteer Experience at Sessions

Mean agreement rated on a 5-pt Likert scale, 5=strongly agree

Volunteer Experience at Sessions	Overall CHAP Program (n=346)	Thorold (n=14)
I knew who to contact if I had a question	4.8	5.0
My questions were always handled well	4.8	5.0
Session procedures were easy to follow	4.6	4.4 (n=14)
I was confident in my role as a PHE	4.4	4.5 (n=13)
I was able to give participants useful info	4.3	4.3 (n=13)
I sometimes felt overwhelmed by responsibilities	1.9	2.2 (n=12)

## Next steps: Awareness to Action

A new CHAP initiative is underway: the Cardiovascular Health Awareness Program + Action Plan (CHAP+AP). The aim is to create a sustainable model of CHAP for long-term implementation, and to expand several components of the program to help older adults with modifiable risk factors for cardiovascular disease and stroke take steps to improve their health. We are continuing to work with local partners in the CHAP communities and seeking to integrate CHAP with the activities of Family Health Teams serving these areas. This CHAP-based profile can be used to involve collaborators in CHAP+AP.

At the community-based sessions, there will be emphasis on moving from 'awareness to action'. The volunteer PHEs will assist high-risk participants to use the web-based Heart & Stroke Foundation Blood Pressure Action Plan™ tool to obtain a stroke and cardiovascular disease risk assessment and tailored plan to improve management of modifiable risk factors. Volunteers will provide guidance and support based on the plan to assist participants with lifestyle changes and self-management strategies. Further, pharmacists will be able to more actively provide medication review and anti-hypertensive medication assessment to CHAP participants.



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For more information, please contact the local CHAP partner or a member of the project team, or visit: [www.CHAPprogram.ca](http://www.CHAPprogram.ca)

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