



THE CHAMPLAIN  
CARDIOVASCULAR DISEASE  
PREVENTION NETWORK

# IDOCC NEWS

The Improved Delivery of Cardiovascular Care (IDOCC) Program is a regional program designed to assist primary health care providers in the Champlain district improve the delivery of evidence-based prevention and management strategies for heart disease, stroke and diabetes within their practice.

## HYPERTENSION: THE FACTS

- Hypertension (HTN) is the leading diagnosis resulting in visits to physician offices in Canada.<sup>1</sup>
- 90% of hypertensive Canadians have other cardiovascular risk factors.<sup>2</sup>

### IDOCC HTN FAST FACTS: PHASE 1

Number of patients in IDOCC with HTN	73.71% (1,228)
• Patients with HTN who had 1 BP reading done in previous year	94.13% (1,155/1,227)
• Patients with HTN who had 2 BP readings done in previous year	78.00% (957/1,227)
• Patients with HTN who had 3 BP readings done in previous year	63.02% (772/1,225)

Percent of patients w/ HTN meeting target after 1 BP measurement (<140/90 mmHg)	59% (677/1154)
Percent of patients w/ HTN & Diabetes meeting target after 1 BP measurement (<130/80 mmHg)	24% (118/503)
Percent of patients w/ HTN & CKD meeting target after 1 BP measurement (<130/80 mmHg)	37% (85/230)

### RISK REDUCTION

Small reductions in BP of 10-15/5-6 mmHg can result in large decreases in the risk of stroke, coronary artery disease, cardiovascular death and overall mortality by 14-42%.<sup>3</sup>

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## CHALLENGES IN MANAGING HTN PATIENTS

### Diagnosis

- Equipment concerns, such as BP cuff size, can influence measurement accuracy when testing for HTN. Undersized cuffs may yield too high a pressure, whereas oversized cuffs yield too low a pressure.

### Medication

- Among patients who are prescribed HTN medication, it is estimated that only 25-40% of patients achieve their BP goals. A major reason for this is non-adherence to prescribed medication regimes. Estimates of non-adherence range from 50-70%.<sup>5</sup>

### Patient Knowledge

- Patients' knowledge and beliefs about the condition may be inaccurate. A study published in the Canadian Journal of Cardiology (2005)<sup>4</sup> found that:
  - 44% of people could not identify a normal or a high BP
  - 80% of people were unaware of the association between HTN and heart disease
  - 63% believed that HTN was not a serious condition
  - 38% of people thought that they could control high BP without the help of a health professional

Ask your IDOCC Outreach Facilitator about **VALIDATED QUESTIONS** to assess medication adherence among your patients.

When prescribing medications keep in mind that simple medication regimes are the easiest to adhere to:

- Use long-acting, once daily medications
- Use fixed-dose, combination regimes
- Use unit-of-use packaging

What else can you do to improve medication adherence?

A 2006 Cochrane Review<sup>7</sup> of interventions used to improve control of BP in patients with HTN concluded that:

- An organized system of registration, recall and regular review, combined with a vigorous stepped care approach to anti-hypertensive drug treatment appears to be the most effective way to improve the control of high BP
- Self-monitoring was associated with a significant decline in diastolic BP
- Education alone, whether to health professionals or patients, does not appear to be associated with large net reductions in blood pressure

If you believe that your patients would benefit from more specific advice, ask your IDOCC Outreach Facilitator about a **MEDICATION ADHERENCE TIPS** sheet for your patients.

*"Increasing the effectiveness of adherence interventions may have more impact on the health of the population than improvements in specific medical measures."<sup>6</sup>*

## WHY DON'T PATIENTS TAKE HTN MEDICATIONS AS PRESCRIBED?

<i>Duration of therapy</i>	<i>Is this for life?</i>
<i>Lack of symptoms</i>	<i>I feel fine, so I must be fine.</i>
<i>A belief that they can tell when their BP is high, and only need medication on those occasions</i>	<i>If my BP doesn't feel high today I don't need my medication.</i>
<i>Unpleasant side effects of medication</i>	<i>These make me feel worse than I did without them.</i>
<i>Complicated drug regimes</i>	<i>I take too many pills to remember them all.</i>
<i>A lack of understanding of the HTN management</i>	<i>Why is this so important?</i>
<i>Cost of medications</i>	<i>These cost too much.</i>
<i>Lack of motivation</i>	<i>I don't see the benefits. Why should I take these?</i>
<i>Taking medication may challenge individual beliefs about health and illness</i>	<i>I don't need drugs to manage my health.</i>

### References:

1. IMS HEALTH Canada 2002
2. Emberson et al. Eur Heart J. 2004; 25:484-491.
3. Lancet 1990; 335:827-38, Arch Fam Med 1995; 4:943-50
4. Can J Cardiol 2005;21:589-93
5. *Adherence to Long Term Therapies: Evidence for Action.* Sabatane et al. WHO 2003
6. Sabate E. *WHO Adherence Meeting Report* WHO 2001
7. Fahey T, Schroeder K, Ebrahim S. *Interventions used to improve control of blood pressure in patients with hypertension.* Cochrane Database Syst Rev 2006 Oct 18; (4):CD005182

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## TALK BACK



Working with our IDOCC Facilitator for over a year, our team initiated a HTN clinic to better screen and manage our HTN clients. We are now seeing clients for confirmation of HTN via the use of BpTRU and 24 hr ABPM, with our RN lead booking clients in a 2 hr window once weekly. While still in need of more training with an RN focus on monitor use and MD interpretation of results, we are using the HTN flow sheet developed with our IDOCC Facilitator to record and track our results with success.

- Phase I Physician



## Upcoming CME Events

### 2<sup>nd</sup> IDOCC Network Meeting

Friday, October 30<sup>th</sup>, 2009  
Time: 11:00am-12:30pm  
Location: The Hampton Inn Ottawa & Conference Centre

### Pfizer Multi-Therapeutic Day

Friday, October 30<sup>th</sup>, 2009  
Time: 12:00pm-4:45pm  
Location: The Hampton Inn Ottawa & Conference Centre

### 5<sup>th</sup> Annual Update in Endocrinology and Diabetes

Friday, November 20<sup>th</sup>, 2009  
Location: The Hampton Inn Ottawa & Conference Centre

## Internet Resources



Internet Resources for You - CHEP 2009 Updates  
<http://hypertension.ca/chep/wp-content/uploads/2009/04/chep-eng-09-pages-v7.pdf>



Internet Resources for Your Patients  
2008 Patient Recommendations on Hypertension  
<http://hypertension.ca/bpc/wp-content/uploads/2008/02/2008publicrecommendations.pdf>



Physical Activity can help lower your Blood Pressure  
[http://www.nhlbi.nih.gov/hbp/prevent/p\\_active/p\\_active.htm](http://www.nhlbi.nih.gov/hbp/prevent/p_active/p_active.htm)



My Heart & Stroke Blood Pressure Action Plan  
[http://ww2.heartandstroke.ca/hs\\_Risk.asp?media=bp\\_hsfhomepage](http://ww2.heartandstroke.ca/hs_Risk.asp?media=bp_hsfhomepage)



Sodium101.ca Get the Facts!  
<http://www.sodium101.ca/en/>

## Fast Facts – IDOCC Phase III

IDOCC is rolling out in three phases in the Champlain district. Phase II is underway, and has a record 32 practices enrolled. Phase III recruitment began in September 2009 and will encompass practices in Renfrew County & District, Southern parts of Ottawa & Eastern Counties, and Central/East Ottawa.

Number of physicians enrolled in IDOCC Phase II: 80\*

Number of practices enrolled in IDOCC Phase II: 32\*

Number of facilitators out in the field: 4

Regions represented in Phase II:

Lanark, Leeds and Grenville, Central/South Ottawa, East Ottawa

Number of charts abstracted: 1,399\*

Number of FHTs enrolled: 5\*

Number of FHGs enrolled: 5\*

Number of CHCs enrolled: 6\*

Number of FHOs enrolled: 4\*

Number of solo-practitioners: 10\*

\*estimates only – data collection not complete and verified at time of printing

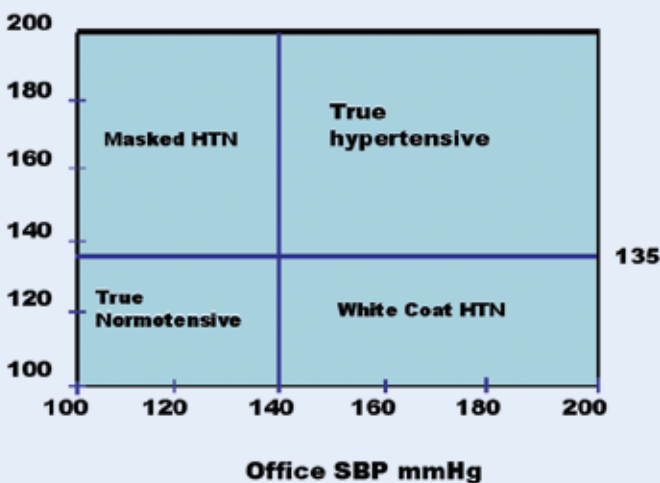
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## DID YOU KNOW? BLOOD PRESSURE MONITORING

Since hypertension is a major health risk factor, regular and accurate BP readings are essential to diagnose and treat hypertension. Calibrate your BP machine regularly, and always take multiple readings.

- Up to 25% of patients' BP measured in their physician's office is higher than their typical BP.<sup>1</sup>
- 30-40% of patients with white coat HTN who are diagnosed based on a single Annual Blood Pressure Monitoring (ABPM) session will have true HTN on re-testing.<sup>2</sup>
- The prevalence of masked HTN is approximately 10% in the general population, but is higher in patients with diabetes.<sup>3</sup>

## The Concept of Masked Hypertension



(CHEP 2009 – slide 16)<sup>2</sup>

**CHEP 2009 RECOMMENDATIONS** for clinical setting BP measurements

“Use a mercury manometer or a recently calibrated aneroid or a validated automated device. Aneroid devices should be calibrated every 12 months. Always use appropriate cuff size.”<sup>4</sup>

### IDOCC GUIDELINES

“Take at least two measurements on the same arm during one visit to determine accurate BP.”<sup>5</sup>

See page 13 of your Champlain Primary Care CVD Prevention & Management Guideline for detailed measurement information.

Finding the time to complete this process can be challenging, but there is an option that can help: BpTRU BPM-100 Blood Pressure Monitor

“BpTRU has the potential to be used in the clinic setting to help overcome the difficulties caused by the white coat affect, without the cost of having to conduct frequent 24 hour ABPMs.”<sup>6</sup>

The BpTRU BPM-100 Blood Pressure Monitor is an automated non-invasive blood pressure monitor that is reliable, accurate, and easy to use. It automatically takes up to six measurements, discards the first reading and displays the average of the subsequent readings. This eliminates the risk of first reading inaccuracy. The interval of the readings can be varied from 1 to 5 minutes depending on user preference, and it can also take single point measurements. The BpTRU BPM-100 Blood Pressure Monitor can operate independently, which allows the health care professional to undertake other tasks while the patient's BP measurement is being taken.<sup>7</sup>

For more information visit [www.bptru.ca](http://www.bptru.ca) or speak to your IDOCC Outreach Facilitator.

### References:

1. Jhalani, Juhee; Goyal, Tanya; Clemow, Lynn; Schwartz, Joseph E.; Pickering, Thomas G.; Gerin, William. *Anxiety and outcome expectations predict the white-coat effect*. 2005 Dec; 10(6):317-319
2. CHEP 2009 Recommendations: <http://hypertension.ca/chep/recommendations-2009/>
3. *J Hypertension* 2007; 25:2193-98
4. CHEP 2009 Recommendations
5. The Champlain Primary Care Cardiovascular Disease Prevention & Management Guideline, Pg.13
6. <http://www.biomedcentral.com/1471-2261/5/18>
7. [www.bptru.ca](http://www.bptru.ca)

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The IDOCC program is being coordinated by the Élisabeth Bruyère Research Institute in collaboration with the Department of Family Medicine at the University of Ottawa, the University of Ottawa Heart Institute, and the Champlain Regional Stroke Program.

[www.idocc.ca](http://www.idocc.ca)

Working Together to Prevent Heart Disease & Stroke in Champlain Region IDOCC is one of six priority initiatives of the Champlain CVD Prevention Network (CCPN), a network of health and community partners from across the Champlain District - dedicated to the prevention of CVD. The CCPN is implementing a five-year CVD prevention strategy in our region.

[www.ccpnetwork.ca](http://www.ccpnetwork.ca)

## OTHER WAYS TO REDUCE HTN:

### SODIUM REDUCTION TIPS FOR YOUR PATIENTS

#### Regional Campaign aims to help decrease consumption of sodium among Champlain residents

A diet high in sodium increases BP, a key risk factor for stroke, heart attack, kidney disease, and congestive heart failure. In Canada, HTN is by far the leading diagnosis for visits to physicians.<sup>2</sup> In the Champlain Region, 147,785 residents have HTN. That's 14% of the Champlain population.<sup>3</sup>

The Champlain Cardiovascular Disease Prevention Network (CCPN), in collaboration with five regional health partners and the MoHLTC, recently launched a bilingual mass-media campaign designed to help residents of the Champlain Region between the ages of 35 and 50 decrease their consumption of sodium.

Canadians consume twice the daily recommended amount of sodium, a considerable 3100 mg of sodium per day, excluding the salt they add to their food.<sup>1</sup>

The CCPN developed the "Give Your Head a Shake" campaign featuring easy nutrition tips to help your patients make small but meaningful changes to their diet, particularly when it comes to processed foods.

To see the campaign TV spots and nutrition tips visit [www.giveyourheadashake.ca](http://www.giveyourheadashake.ca).

EATING BEHAVIOUR	HEALTHY ALTERNATIVE
Using canned peas or beans?	Rinse and drain them first.
Using soya sauce?	Dilute your soya sauce with half water.
Buying packaged frozen meals?	Read the Nutrition Facts Table and choose the product with the lowest % Daily Value for Sodium.
Thinking of going out for dinner for the third time this week?	Make a simple dinner at home. Try scrambled eggs with vegetables and toast.
Buying packaged rice or pasta dishes?	Buy plain rice and pasta and add your own vegetables and herbs for seasoning.

**Ask your IDOCC Outreach Facilitator for more tips and how to obtain tear-away nutrition tip pads to help increase your patients' sodium awareness.**

### References:

1. 2004 Canadian Community Health Survey
2. IMS Health Canada. Canadian Disease and Therapeutic. [www.imshealthcanada.com](http://www.imshealthcanada.com)
3. Statistics Canada's health indicators data and Statistics Canada, Canadian Community Health Survey (CCHS) 2005; Population Estimates from Statistics Canada, 2006 Census of Population



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