

"IS YOUR BLOOD PRESSURE ON TARGET?"

A pilot project to determine the efficacy of blood pressure awareness buttons.



Report

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Southwestern Ontario Stroke Strategy

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The Blood Pressure Button Campaign

Background

The Southwestern Ontario Stroke Strategy (SWOSS) is part of the wider Ontario Stroke System whose vision is:

Fewer Strokes. Better Outcomes.

Hypertension is a primary focus for stroke prevention because¹:

- Hypertension is a significant risk factor for cerebrovascular disease, coronary artery disease, congestive heart failure, renal failure, peripheral vascular disease, dementia, and atrial fibrillation.
- Detection and treatment to target in persons less than 60 years of age reduces the risk of stroke by 42%; reduces the risk of a coronary event by 14%.
- Detection and treatment to target in persons 60 years of age and over reduces overall mortality by 20%, cardiovascular mortality by 33% and incidence of stroke by 36% and coronary event by 25%.
- A 10% reduction in blood pressure translates to a 45% reduction in cardiovascular disease.
- 1:5 adult Canadians have hypertension; of these, 2 do not know it, 1 knows but doesn't follow treatment, and 25% of those who are on treatment are not controlled by the treatment.
- 44% of people could not identify a normal or a high blood pressure; 80% of people were unaware of the association between hypertension and heart disease; 63% believed that hypertension was not a serious condition, 38% thought that they could control high blood pressure without the help of a health professional.
- There are evidence-based Canadian therapeutic and public guidelines for prevention and management of hypertension.

¹Canadian Hypertension Education program www.hypertension.ca

Premise and Roots of the Blood Pressure Button Pilot Campaign

In 2008, the Canadian Hypertension Education Program noted that:

All Canadian adults need to have blood pressures assessed at all appropriate clinical visits. One in five adult Canadians has hypertension and for those aged 55 with normal blood pressure 90% will develop hypertension if they live an average age. All adults require ongoing assessment of blood pressure throughout their lives.

Further it advised that most adults should maintain a blood pressure of less than 135/85 mm Hg while at home, less than 140/90 mm Hg in a clinical setting. Persons with diabetes or kidney disease should maintain a blood pressure of less than 130/80 mm Hg.

Given that hypertension is the most significant risk factor for stroke, there is a need to increase public awareness about the importance of blood pressure control. Inviting individuals to initiate conversations with health care providers about blood pressure will create opportunities to educate and initiate effective interventions that will prevent stroke and other vascular complications.²

The idea of wearing Blood Pressure target buttons originated on the inpatient Stroke Rehabilitation Unit at Parkwood Hospital, St. Joseph's Health Care London. At the time, that effort reported increased awareness among staff, patients and families about blood pressure targets.

Increasing awareness among these groups is a first step in achieving the outcomes of Ontario's Chronic Disease Prevention and Management Framework: informed, activated individuals and families and prepared, proactive practice teams.³

SWOSS wished to foster continued momentum for vascular prevention and hypertension management initiatives in the SW region. During a SWOSS regional workshop on hypertension in 2007, a task team of interested individuals established itself to broaden this initiative and pilot a "Blood Pressure button campaign" in a number of health care settings within the Southwestern Ontario Stroke Region.

² Canadian Hypertension Education Program.
<http://www.hypertension.ca/chep/recommendations/summaries/key-messages>

³ Ministry of Health and Long Term Care, HSSD Division. *Preventing and Managing Chronic Disease: Ontario's Framework.*

Objectives

To improve public awareness of the importance of maintaining a healthy blood pressure and to increase opportunities for individuals and health care providers to discuss blood pressure management, the group agreed to:

- Test the feasibility and utility of using lapel blood pressure buttons as a prompt for the health consumer to ask about blood pressure.
- Based on findings, make recommendations for next steps.
- Disseminate findings

Method

Heart-shaped lapel buttons were worn by health care providers in the course of their normal work schedule. There were two different wordings on the buttons:

- 1) “Do you know your Blood Pressure? Ask me!”
- 2) “Is your Blood Pressure on Target? Ask me!”



Each of the buttons was worn for at least a two week period. Data was collected relative to responses evoked by the buttons. (See Appendix B – Evaluation Questions) The project coordinator made an initial visit to all sites to deliver the buttons, to explain the process and timing, to review the evaluation/data collection tool and to answer any questions. The project coordinator also conducted a wrap-up focus group with each site at the end of the test period.

Education tools were reviewed with staff at each site visit and a collaborative decision was made to use adjunct resources: the Heart & Stroke Foundation booklet “Get Your Blood Pressure Under Control” and the most recent version of the pocket Blood Pressure Record. The project coordinator suggested using the 2008 public recommendations from Blood Pressure Canada as a resource (See

Appendix C). All sites were advised to download the Brief Hypertension Action Tool as an optional method of approach.⁴

There was full support for the project at each of the sites. Constructive ideas and questions were generated, including having some staff wear button #1 and others wear #2 to avoid “viewer fatigue” or people ignoring the second button.

⁴ <http://hypertension.ca/bpc/resource-center/educational-tools-for-health-care-professionals/>

Sites

Eighteen health-related settings participated, providing a rich cross-section and variety of programs. Staff participants included nurses, pharmacists, kinesiologists, administrative assistants, dieticians, and public health inspectors. The sites were:

- The Southwestern Ontario District Stroke Centres for Lambton, Chatham-Kent, Huron-Perth, Windsor Essex (with 3 sites), and Grey-Bruce
- Grey-Bruce Health Unit
- Grey-Bruce Health Services Diabetes Education Centre
- Grey Bruce Health Services Occupational Health
- Brockton Family Health Team
- St. Joseph's Health Care London Diabetic Education Centre
- St. Joseph's Health Care London -Parkwood (Day Hospital, CORP, Community Stroke Rehabilitation Team & Outpatient Fitness Centre)
- Community Pharmacy at Loblaws Superstore, St. Thomas
- Urgent TIA Clinic at University Hospital, London Health Sciences Centre (Regional Stroke Centre for Southwestern Ontario)

RESULTS⁵

Number of sites ⁶ :	18
Total Number of staff participants wearing buttons:	70
Total Number of consumer initiated responses to the buttons:	280

Data Summary

	Button 1 Do you know your BP?	Button 2 Is your BP on target?
1 Did the "button" evoke consumer/client questions? a) client acknowledged button & interaction went no further b) acknowledgement of button led to further interaction. <div style="text-align: right; margin-right: 20px;"><i>Total</i></div>	 105 32 137	 119 24 143
Total Number of Contacts	280	
2 Was Blood Pressure Measured? a) at this time or b) were they referred elsewhere? If Blood Pressure was high (>140/90) was there an intervention/suggestion for follow-up?	 22 5 11	 20 1 13
3 Please comment on the quality of the conversation. a) client knew their BP b) client was aware of the risks of hypertension c) client was well informed & interested to learn more d) other	 27 30 	 19
4 Was additional information/education given to consumer/client? Was information verbal or written? Verbal: a) did discussion provide referral information b) was Brief Hypertension Action Tool used? Written: a) brochure b) BP pocket record c) other	 12 5 12 8 1	 13 5 11 6 1

⁵ Some cells in some data report sheets were not completed; however, in the focus groups at those sites, staff discussed that they had taken BPs and referred clients elsewhere; therefore, additional data gathered from the focus groups was integrated into the results.

⁶ Also listed by number of responses in Appendix B.

Focus Groups

Staff Comments

- Secondary Stroke Prevention Clinics at Designated Stroke Centers may not be the place to target since usual care addresses all the risk factors at each visit and staff ensures that the clients have a record of their BP. “We focus so much on BP that the buttons seemed redundant”.
- In programs such as Day Hospital and Community Stroke Rehabilitation Team, clients have already been exposed to multi-faceted education of stroke and risk factors during their previous in-patient stay.
- The campaign ran through February - a heart-shaped button may be confused with Valentine celebration and may not stand out. This may not be the best ‘season’ to run the button campaign.
- At locations such as Diabetic clinics, clients are focused on their disease and specific issues such as insulin pumps.
- Have we overdone the “button” thing? Would small “give-aways” get more attention like balloons, suckers, pens, notepads, and magnets?
- Staff members reluctant to pursue the issue when they did not have the resources – time, place, equipment – to take a Blood Pressure according to Canadian Hypertension Education Program recommended technique⁷.
- Staff at the majority of sites expressed a sense of heightened awareness regarding the whole issue of blood pressure, i.e., the proper procedures, setting, and equipment as well as a renewed commitment to incorporating an accurate blood pressure into their assessment and ongoing client interaction.
- Even in cases where the clients knew their BP, the button created an opportunity to reinforce their knowledge and/or to provide more.
- Were buttons “too friendly”, i.e., easy to ignore.
- Secondary Stroke Prevention Clinic (SSPC) staff in Windsor was asked about buttons most often by other hospital staff. This relates to the Windsor program’s monthly Blood Pressure Screening, where 50 – 75% of participants are staff. SSPC staff partner with the Organizational Wellness committee for

⁷ Canadian Hypertension Education Program at www.hypertension.ca

these clinics. Many hospital staff came to the regular monthly clinics to monitor their BP.

Staff Suggestions

- Could buttons make more “impact”, if, for example, numbers were added such as target BP, stats such as 1:5 people have hypertension?
- Consider locations for screening where people have some time for discussion, such as waiting rooms, retirement homes, Long Term Care Homes, High Schools.
- Think about Maslow’s Hierarchy of Needs when considering who would entertain a discussion about BP. Are there other more paramount issues on their minds?
- Consider partnerships for screening/awareness activities, e.g., Cardiovascular Health Awareness Program, Community Health Centres, Seniors’ Fairs, Wellness Days, Stroke Awareness Days, other in-house events.
- Create BP awareness from the angle of the risk factors such as sodium or exercise.
- Community Health Centre and Family Health Teams would make good partners for another project like this.
- Reach out to where people are – community dinners, Wal-Mart, Ploughing Match, Legion, any existing venues.
- Have traveling clinics, use volunteers (like CHAP does), and partner with Seniors Fitness instructors.
- Ensure that staff has the capacity to take the BP, have policies and procedures in place to take a correct BP, provide a point of interaction, develop a Module of Learning with stage-based learning.

Discussion

Overall, the concept of the Blood Pressure Awareness “Button” Campaign was well received and supported by staff at all participating programs. Generally, they felt that it fit well with their roles and responsibilities and the mandate of their programs. Many were surprised that the response that promoted interactions was relatively low.

In summary, a total of 280 consumer responses were reported by 70 staff in 18 different sites across the Southwestern Ontario Stroke Strategy Region. Twenty per cent of the consumer responses to the buttons led to further interaction. Fifteen per cent of the consumer respondents had their Blood Pressure taken and of the Blood Pressures that were taken, 57 % were above target for their status (<130/80 or <140/90). The data suggests that there was no significant difference between Button # 1, “Do you know your blood pressure?” and Button # 2, “Is your blood pressure on target?” in terms of drawing consumers’ attention.

The data indicates that the more successful target locations were those where the general public could be reached. i.e., lobbies, waiting rooms and retail venues, as compared with health clinics and hospital programs.

Limitations

Several limitations need to be considered:

- Some interactions between staff and consumers may have been constrained by staff member’s comfort level about discussing and measuring blood pressure or ‘on-the-job’ time pressures
- The methodology was limited in terms of scientific rigor. Most of the conclusions were based on qualitative data gathered from staff interviews. While a quantitative approach was used to gather the statistical information, the qualitative input gained from staff afforded a better depth of understanding about the use of the buttons as a method of raising Blood Pressure awareness.
- There was variability in the data collection methods and reporting. Consequently, it was challenging to compare and interpret data from various sites.

Recommendations

- Disseminate final report to partners in the project; make available within the Ontario Stroke System. Provide highlights in a SWOSS newsletter.
- Bring project participants and task team together for a fall working meeting to discuss findings, their recommendations and commitments for further action, based on findings, lessons learned and recommendations.
- Consider using a button with a more 'home-made' appearance.
- Consider the possibility of ad hoc partnering with services such as Cardiovascular Health Awareness Program and Community Health Centres for blood pressure clinics at special events such as county fairs, ploughing matches, garden shows, providing them with buttons and signage to invite the public. Use the evaluation tool at these events.

Appendices

Appendix A

EVALUATION QUESTIONS

Button 1
(Do you know your BP?)

Button 2
(Is your BP on target?)

(circle the one used for this data)

1. Did the "button" evoke consumer/client questions?
 - a) client acknowledged button & interaction went no further
 - b) acknowledgement of button led to further interaction.

2. Was Blood Pressure measured
 - a) at this time or
 - b) were they referred elsewhere?If Blood Pressure was high (> 140/90) was there an intervention/suggestion for follow-up?

3. Please comment on the quality of the conversation.
 - a) client knew their BP
 - b) client was aware of the risks of hypertension
 - c) client was well informed & interested to learn more
 - d) other

4. Was additional information/education given to consumer/client?

Was information verbal or written?

Verbal:

- a) did discussion provide referral information
- b) was Brief Hypertension Action Tool used?

Written:

- a) brochure
- b) BP pocket record
- c) info magnets

Appendix B

Program	# of staff	# of responses
Grey Bruce PHU	10	120
Kent DSC	3	24
Parkwood (gym)	4	22
Essex DSC	3	21
Pharmacy	4	19
Grey Bruce DSC	3	12
Lambton DSC	3	11
Grey Bruce Health Team	3	10
Grey Bruce Diabetes Ed	10	8
Grey Bruce OHS		8
Grey Bruce FHT	15	8
Parkwood CORP	2	6
SJHC Diabetes Ed	5	4
Huron Perth DSC	3	3
Parkwood Day Hosp	2	2
Parkwood CSRT	2	2
LHSC Urgent TIA	3	0

Appendix C – Recommended Resources

1. HFSO booklet “Get Your Blood Pressure Under Control” downloadable from:
http://www.heartandstroke.com/atf/cf/%7B99452D8B-E7F1-4BD6-A57D-B136CE6C95BF%7D/BP_Brochure_ENG_HSF_Oct08.pdf
2. The 3-fold pocket BP record (order from
http://www.heartandstroke.on.ca/atf/cf/{33C6FA68-B56B-4760-ABC6-D85B2D02EE71}/250_HealthInfoResources_r7.pdf
3. Blood Pressure Canada 2008 Hypertension Public Recommendations. 2009 version available at;
<http://hypertension.ca/chep/recommendations-2009>