Blood Pressure Ministry

A Guidebook for WELS Parish Nurses
I Peter 3:15:  But in your hearts set apart Christ as Lord.  Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have.  But do this with gentleness and respect.

The information presented in this guidebook has been summarized from The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure, published in August 2004.
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Introduction

Hypertension is a major threat to the health and wellness of people in the United States. It is also preventable and treatable. Parish nurses have a unique opportunity to screen members of their congregations for hypertension. Experts agree that when screenings and services are provided by people who share the same values as the target population, such as Parish Nurses, the probability of success increases.

The information presented in this guidebook has been summarized from The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure, published in August 2004.

This blood pressure screening guidebook may be used by Parish Nurses as they begin/refine their blood pressure screening ministry. Any of the information in this guidebook can be reproduced. There are two places in the policy (A and C) where the parish nurse can complete the blank spaces to fit their blood pressure ministry. Since these are evidence based guidelines, it is important that no changes are made to the referral guidelines. Any of the appendices can be altered to meet your ministry needs.
Blood Pressure Guidelines

Purpose: To provide members of the congregation with an accurate blood pressure and appropriate follow up instructions.

I. Policy:

A. Blood pressure monitoring is a core competency of a registered nurse. At least _____ RNs (needs to be at least 1) will be scheduled for each screening and will provide education as needed. Other health professionals, including physicians, nurse practitioners, physician assistants, EMTs, LPNs, paramedics, certified nursing assistants, student nurses, and medical assistants who have been trained in taking blood pressures may assist at the screening.

B. It is the responsibility of the RN, NP, or the physician to evaluate all blood pressures and pulse rates and give feedback to each person. Other volunteers may be used for taking BPs, but RNs or physicians must review the readings.

C. Blood pressure screenings will be held ______________ (frequency) __________ (before, after, etc… services).

D. The program should have a blood pressure coordinator who is responsible for the following:
   a. recruiting volunteers
   b. scheduling volunteers for screenings
   c. posting screening dates in church newsletters, bulletins, etc…
   d. obtaining and maintaining educational materials
   e. reviewing equipment needs and blood pressure guidelines annually
   f. developing documentation systems
   g. calibrating equipment

E. Necessary equipment includes:
   a. BP cuffs – standard adult, large adult, pediatric (if pediatric blood pressures offered)
   b. tables/chairs
   c. documentation forms
   d. drug reference books
   e. educational materials
   f. client blood pressure pocket card
   g. hand sanitizing gel
   h. .5% bleach wipe/solution or 70% isopropyl alcohol
   i. alcohol wipes

F. Screenings will take place in the Parish Nurse office or another quiet place. Parishioners, knowing that nurses are good listeners and will keep matters confidential, will ask other health related questions or share personal concerns. A wise Parish Nurse will be regular in worship and bible class in order to give comfort from God’s word as needed. Referring them to appropriate resources may also be indicated.

G. Equipment cleaning will occur after each screening or more frequently if needed using the following guidelines:
   a. stethoscopes – use 70% isopropyl alcohol or alcohol wipes to clean all parts
   b. blood pressure cuffs
      i. wipe the aneroid gauge, inflation bulb, and valve with 70% isopropyl alcohol
         wipe/solution
      ii. wipe the blood pressure cuff with either a .5% bleach or 70% isopropyl alcohol
          wipe/solution
II. Procedure

A. Have client sit, with fully exposed arm extended, palm up on a supportive surface
B. Apply an appropriately sized cuff snugly to the upper arm, centering the cuff’s bladder over the artery and leaving a space of one inch above the antecubital area for placement of the stethoscope.
C. The cuff should cover no less than one-half and not more than two-thirds of the upper arm. The cuff bladder should cover 80-100% of the circumference of the arm.
D. Palpate the brachial or radial artery and inflate the cuff until the palpated pulse is lost plus an additional 20mm of mercury (Hg) beyond the disappearance of the pulse.
E. Apply the stethoscope over the brachial artery using the diaphragm.
F. Release cuff pressure at an approximate rate of 2mm Hg/second.
G. Note the phases of “Korotkoff” sounds:
   a. Phase I: First appearance of faint clear tapping sounds – the systolic pressure
   b. Phase II: Sounds are like a swishing murmur
   c. Phase III: Sounds are crisper
   d. Phase IV: Abrupt muffled sound
   e. Phase V: Sounds disappear – the diastolic pressure
H. Understand the factors that can influence accuracy of blood pressure. See Table 1.
I. Document blood pressure in two even numbers indicating position and limb used, as well as the size of the cuff.
J. If blood pressure is greater or equal to 160/99 (either number):
   a. have client sit quietly for 5 minutes
   b. repeat blood pressure
K. Document the following on the Blood Pressure Screening Record:
   a. all blood pressures
   b. radial pulse rate and rhythm
   c. medication and weight changes
   d. referrals, education, or comments
L. Provide client with a blood pressure pocket card and remind them to bring it with them each month.

III. Interventions for clients whose blood pressure is not within the normal range (see Table 2)

A. Assess reason for change or continued high blood pressure
   a. medications/substances that can cause high blood pressure
      i. corticosteroids
      ii. estrogens
      iii. weight loss agents
      iv. stimulants such as nicotine or amphetamines
      v. licorice
      vi. antidepressants
      vii. St. John’s Wort
      viii. Cocaine
      ix. Ectasy
      x. contraceptives
      xi. high sodium consumption
   b. high alcohol consumption – see below
   c. weight change – increase of 10lbs can have a significant effect on blood pressure
   d. lack of physical exercise
   e. stress
B. Provide education – answer any questions client has regarding blood pressure and encourage them to take written materials. Instruct on any of the following:
   a. goal blood pressure for client – if unknown, encourage client to ask their health care provider what their goal is
   b. importance of medication adherence
   c. possible need for more than one medication to control blood pressure
   d. weight management – a reduction of even 10lbs can reduce blood pressure, but reaching ideal body weight or BMI is recommended
   e. diet – following the DASH diet can reduce blood pressure by 8-14mm Hg. This diet includes (daily recommendation unless otherwise specified):
      i. 7-8 servings of whole grains
      ii. 4-5 servings of vegetables
      iii. 4-5 servings of fruit
      iv. 2-3 low-fat or fat-free dairy foods
      v. less than 2 servings of meats, poultry and fish
      vi. 4-5 servings per week of nuts, seeds, and dry beans
      vii. 2-3 servings of fats or oils
      viii. 5 servings per week of sweets
      ix. 1500-2400mg of sodium
   f. exercise – 30 minutes per day has been found to decrease systolic blood pressure by 4-9 mm Hg. (clients should check with their health care provider before beginning an exercise program)
   g. alcohol intake – no more than 2 servings/day for men and 1 serving/day for women
   h. tobacco cessation – smoking raises short term blood pressure and causes heart disease
   i. stress management techniques
   j. caffeine – raises blood pressure short term, but no studies to support a direct relationship between sustained caffeine intake and hypertension

C. Refer
   a. If a repeat blood pressure is needed and the second blood pressure is:
      i. high (≥140/90), recommend that client get a repeat blood pressure within two months and follow up with their health care provider if it remains high
      ii. very high (≥160/99), recommend that client get a repeat blood pressure within 1 month and follow up with their health care provider if it remains high
      iii. dangerously high (≥180/100), and
         1. client is asymptomatic, recommend follow up with their health care provider within 1 week
         2. client has symptoms such as shortness of breath, altered mental status, dizziness, blurred vision, or headache, recommend immediate follow-up at the emergency room and advise client not to drive him or herself
   b. Document all blood pressures on the blood pressure screening record. If the blood pressure is dangerously high, complete the Immediate Referral form and:
      i. give the original to the client
      ii. keep the duplicate for the parish nurse file

Proverbs 14:30: A heart at peace gives life to the body.
Table 1: Factors Influencing Accuracy of Blood Pressure

<table>
<thead>
<tr>
<th>Factor</th>
<th>False High Reading</th>
<th>False Low Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuff size</td>
<td>Too narrow or small</td>
<td>Too wide or large</td>
</tr>
<tr>
<td>Cuff wrapping</td>
<td>Too loosely on arm</td>
<td></td>
</tr>
<tr>
<td>Cuff deflation</td>
<td>Cuff not deflated between readings</td>
<td>Cuff deflated too rapidly to identify Korotkoff sounds</td>
</tr>
<tr>
<td>Arm placement</td>
<td>Below heart</td>
<td>Above heart</td>
</tr>
<tr>
<td>Positioning</td>
<td>Back unsupported/legs crossed</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Classification of Blood Pressure for Adults/Recommendations for Follow-up

<table>
<thead>
<tr>
<th>Classification</th>
<th>Systolic mmHg</th>
<th>Diastolic mmHg</th>
<th>Follow-up Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;120</td>
<td>and &lt;80</td>
<td>Recheck in 2 years</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120-139</td>
<td>or 80-89</td>
<td>Recheck in 1 year</td>
</tr>
<tr>
<td>Stage 1 hypertension</td>
<td>140-159</td>
<td>or 90-99</td>
<td>Confirm within 2 months</td>
</tr>
<tr>
<td>Stage 2 hypertension</td>
<td>≥160</td>
<td>or ≥100</td>
<td>Evaluate or refer to source of care within 1 month. For those with higher pressures (e.g., &gt;180/110 mmHg), evaluate and treat immediately or within 1 week depending on clinical situation and complications</td>
</tr>
</tbody>
</table>
APPENDIXES

The following appendixes will help you develop your blood pressure ministries.

A. True/False Quiz
B. Team Discussion
C. Ten Commandments for Parishioners with High Blood Pressure
D. Blood Pressure Screening Referral
E. Blood Pressure Screening Quarterly Report
F. Collective Blood Pressure Screening Record
G. Individual Blood Pressure Screening Record
While you are waiting for your blood pressure to be taken, please answer the following questions. Answer true or false to each question. These questions will increase your understanding of high blood pressure. Ask your Parish Nurse for the correct answers.

<table>
<thead>
<tr>
<th>TRUE</th>
<th>FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hypertension is another name for high blood pressure.</td>
<td></td>
</tr>
<tr>
<td>2. High blood pressure runs in families.</td>
<td></td>
</tr>
<tr>
<td>3. Blood pressure is written in two numbers. The systolic pressure is on the top, and the diastolic pressure is on the bottom.</td>
<td></td>
</tr>
<tr>
<td>4. High blood pressure can be diagnosed by one blood pressure reading.</td>
<td></td>
</tr>
<tr>
<td>5. A person’s blood pressure would be considered ‘normal if it is consistently measured at 134/84 mm Hg.</td>
<td></td>
</tr>
<tr>
<td>6. When you feel good, and your blood pressure has returned to normal, you can stop taking your blood pressure medicine.</td>
<td></td>
</tr>
<tr>
<td>7. If you have high blood pressure, it is very important to tell your doctor about any and all prescription and over the counter medications you are taking.</td>
<td></td>
</tr>
<tr>
<td>8. Uncontrolled high blood pressure can lead to loss of vision.</td>
<td></td>
</tr>
<tr>
<td>9. Uncontrolled high blood pressure increases the risk of heart failure.</td>
<td></td>
</tr>
<tr>
<td>10. Uncontrolled high blood can lead to kidney failure.</td>
<td></td>
</tr>
<tr>
<td>11. Two of the most important changes you can take to lower your blood pressure include limiting salt intake and losing excess weight.</td>
<td></td>
</tr>
<tr>
<td>12. People with high blood pressure should not smoke.</td>
<td></td>
</tr>
</tbody>
</table>
Use these points as to reinforce how to apply the Blood Pressure Screening Guidelines

What would you do in the following situations?

1. A 45 year old woman with a blood pressure of 118/92 and a pulse of 54?
2. A 20 year old man with a blood pressure of 128/88 with a pulse of 94?
3. A 77 year old man with a blood pressure of 154/80 and a pulse of 48?
4. A 44 year old with a blood pressure of 240/140?
5. A woman who is on HCTZ with readings of 142/86, 138/84, 148/78, and 150/68?

Review the following questions:

6. What does smoking do to blood pressure?
7. What educational materials can we provide?
8. What is our referral policy?
10 COMMANDMENTS FOR PARISHIONERS WITH HIGH BLOOD PRESSURE

1. Know your blood pressure. Have it checked regularly.

2. Know what your weight should be. Keep it at that level or below.

3. Do not use excessive salt in cooking or at meals.

4. Eat a low-fat diet according to your doctor’s recommendations.

5. Do not smoke or use tobacco products.

6. Take your medicine exactly as prescribed. Do not run out of pills even for a single day.

7. Keep your appointments with the doctor. Take your blood pressure medicine on your appointment day even if it is a water pill!

8. Follow your doctor’s advice about exercise.

9. Live a normal life in every other way.

10. My flesh and my heart may fail, but God is the strength of my heart and my portion forever. Psalm 73:26.
Place your logo here

Name: ____________________________________________  Date: _____________________

Blood Pressure Readings:  Symptoms:
#1: __________________________  † shortness of breath
#2: __________________________  † altered mental status
  † dizziness
  † blurred vision
  † headache

Your blood pressure readings are high.
  † Have your blood pressure rechecked within one month.

Your blood pressure readings are very high.
  † Have your blood pressure rechecked within one to two weeks.

Your blood pressure is dangerously high. This increases your risk of serious medical problems.

  † You have indicated that you do not have any of the symptoms listed above.
    † See your doctor within one week.

  † Symptoms are present.
    † Go to the doctor or emergency room immediately. **Do not drive yourself.**

I have been given a copy of the above noted recommendations and I understand the instructions given to me by the Parish Nurse.

Signed: _________________________________  Signed: _________________________________
  (participant)  (parish nurse)

This should be a duplicate form so that one copy can go to participant and one to parish nurse files.
Appendix E

BLOOD PRESSURE SCREENING QUARTERLY REPORT

Parish Nursing
Blood Pressure Screening Program
__Quarter __ Year

Nurse Volunteers:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Systolic mmHg</th>
<th>Diastolic mmHg</th>
<th>Number of Blood Pressures in Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;120</td>
<td>and &lt;80</td>
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<td>≥160</td>
<td>or ≥100</td>
<td></td>
</tr>
</tbody>
</table>

Screening Results:

Total number of blood pressures taken: ____________

Comments:

Submitted by:
<table>
<thead>
<tr>
<th>Date: _________________________</th>
<th>Time: ____________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>BP</th>
<th>Arm</th>
<th>HR</th>
<th>Rhythm</th>
<th>Cuff Size Position</th>
<th>Change in weight</th>
<th>Change in Meds</th>
<th>Education Provided</th>
<th>Referral Initiated</th>
<th>Comments</th>
<th>RN Initial</th>
</tr>
</thead>
</table>

Collective Blood Pressure Screening Record

Appendix F

WELS Nurses Association - Blood Pressure Ministry Guidelines
<table>
<thead>
<tr>
<th>Date</th>
<th>BP</th>
<th>Arm</th>
<th>HR</th>
<th>Rhythm</th>
<th>Cuff Size</th>
<th>Position</th>
<th>Change in weight</th>
<th>Change in Meds</th>
<th>Education Provided</th>
<th>Referral Initiated</th>
<th>RN Initial</th>
<th>Comments</th>
</tr>
</thead>
</table>

Pertinent Medical History: __________________________

Name:  _____

Appendix G

WELS Nurses Association - Blood Pressure Ministry Guidelines