Hypertension Diagnostic Criteria to Begin Treatment:
- Home BP monitoring devices:
- Screening tests:
  **If blood pressure is found to be high-normal (SBP 130-139 and/or DBP 85-89), patients should be followed annually.**
  Refer to Cardiac specialist.
- Healthy diet
- Healthy body weight
- Physical activity (goal of ≥ 150 minutes of aerobic exercise per week)
- Smoking cessation
- BP < 130/80 mmHg
- A1c ≤ 7%
- For high risk patients, include:
  - ACE-inhibitor or ARB
  - Statin* - Dose change or additional lipid therapy warranted if lipid targets (LDL ≤ 2.0 mmol/L AND total cholesterol / HDL ratio < 4) not being met
  - Anti-platelet agent** should be considered for secondary prevention. For primary prevention of cardiovascular events (with no other indication for its use), individual clinical judgment is required.

**Explanation updates since the most recent Preventive Care Checklist Form Explanations**

- Hypertension screening: Blood Pressure(B)
  - Treatment of hypertension in adults lowers risk of stroke, cardiac events and death (A recommendation)
  - Target blood pressure of 140/90 in most patients and 130/80 in patients with diabetes and chronic kidney disease
  - **If blood pressure is found to be high-normal (SBP 130-139 and/or DBP 85-89), patients should be followed annually.**
- Hypertension Diagnostic Criteria to Begin Treatment: unchanged from 2011 checklist explanations page
- Home BP monitoring devices: buy one with this logo and one that says “Recommended by Hypertension Canada.”

**Diabetes mellitus screening (Fasting Plasma Glucose):** Additional information that is helpful to know in addition to what's available on the checklist explanations:

- Screening for patients at high-risk for vascular event:
  - High risk is defined as having a 20% or greater 10-year risk of cardiac death or nonfatal myocardial infarction
  - Although most people with diabetes are at high risk of a coronary event, there is a subset of people with diabetes that are not
  - 2013 CPGs fine-tune the assessment to better identify the high risk individual so that appropriate interventions can be undertaken.

**In context of diabetes, if YES to any ONE of following, then patient is HIGH RISK for vascular event:**
- Age > 40 years old
- Diabetes > 15 years AND is age > 30
- Macrovascular disease? (≥ 1) - Cardiac ischemia (silent or overt), Peripheral arterial disease, Carotid disease, Cerebrovascular disease
- Microvascular disease? (≥ 1): Retinopathy, Nephropathy (ACR ≥ 2.0 in men, or ≥ 2.8 in women), Neuropathy
- Warrants therapy based upon other risk factors identified from CCS lipid guidelines

**Screening for CAD in patients with DM:**

<table>
<thead>
<tr>
<th>Any one of:</th>
<th>Screening tests:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 40</td>
<td>Resting ECG</td>
</tr>
<tr>
<td>DM &gt; 15 years</td>
<td>• At diagnosis (baseline)</td>
</tr>
<tr>
<td>End organ damage (microvascular, macrovascular)</td>
<td>• Every 2 years (if high risk)</td>
</tr>
<tr>
<td>Cardiac risk factors</td>
<td></td>
</tr>
<tr>
<td>Symptoms possibly due to CAD (including unexplained dyspnea)</td>
<td>Stress test</td>
</tr>
<tr>
<td>Abnormal resting ECG (Q-waves, ST-T abnormalities)</td>
<td>• Exercise ECG as first line</td>
</tr>
<tr>
<td>Signs/Sx vascular disease: Peripheral arterial disease, Carotid bru. TIA, Stroke</td>
<td><strong>Nuclear imaging or Pharmacologic stress Echocardiography if ECG abn preclude ECG stress testing or pt unable to exercise</strong></td>
</tr>
<tr>
<td>Ischemia at low exercise capacity on stress testing (&lt; 5 METS)</td>
<td>Refer to Cardiac specialist</td>
</tr>
</tbody>
</table>

**Recommendations for vascular protection:**
- For ALL patients with diabetes:
  - A1c ≤ 7%
  - BP < 130/80 mmHg
  - Smoking cessation
  - Physical activity (goal of ≥ 150 minutes of aerobic exercise per week)
  - Healthy body weight
  - Healthy diet

Dr. Michael Evans developed the One-Pager concept to provide clinicians with useful clinical information on primary care topics.
Breast Cancer screening: Mammography

- NOTE: recommendations are for women of AVERAGE risk of breast cancer: defined as women aged 40-74 without personal or family history of breast cancer, known BRCA1 or 2 mutation, or prior chest wall radiation
- Mammography: either digital or film mammography is acceptable
  - Age 50-74: routine screening recommended every 2-3 years — this frequency appears to preserve nearly all of the benefit of annual screening but reduces adverse effects, inconvenience to women and cost; (Weak recommendation, moderate-quality evidence)
  - Age 40-49: routine screening NOT recommended, but should DISCUSS benefits/risks with patient:
    - Lower likelihood of breast cancer & greater likelihood of false positive results on mammography in younger women
    - Women who place a higher value on a small reduction in breast cancer mortality and are less concerned about the potential harms may choose screening
  - Limited data on the benefits of screening in women <40 or >74 but benefit is likely lower than in women aged 50-74
  - Certain ethnic groups may have higher (e.g. Ashkenazi Jews) or lower (East Asians) risk of breast cancer, which may increase or reduce the absolute benefit of screening, respectively
- Clinical Breast Exam: not recommended alone/combined with mammogram for breast cancer screening (Weak recommendation, low-quality evidence)
- Breast self-exam: not recommended (Weak recommendations, moderate quality evidence)
- MRI screening: not recommended

COPD screening: Spirometry

- When to do spirometry:
  - Age >40 who are current or ex-smokers should undertake SPIROMETRY if they answer YES to any one of:
    - Do you cough regularly?
    - Do you cough up phlegm regularly?
    - Do even simple chores make you short of breath?
    - Do you wheeze when you exert yourself or at night?
    - Do you get frequent colds that persist longer than those of people you know?
  - After an episode of acute bronchitis in a smoker has resolved: acute bronchitis in a smoker may represent the 1st clinical presentation of COPD

Unchanged:
- Cardiovascular disease: Fasting Lipid Profile (total cholesterol, HDL-C, triglyceride and LDL-C)
- Colorectal Cancer Screening
- Cervical Cancer Screening: Pap
- Screening for Sexually Transmitted Infections in High Risk Populations
- Osteoporosis Screening: BMD
- Immunizations

Debate surrounding period health examination (PHE): should it be abandoned?

- The history: the annual physical dates back to 1861. In the 1970s and 1980s, both the Canadian Task Force on Preventive Health Care (CTFPHC) and the United States Preventive Services Task Force recommended abandoning the comprehensive systemic examination in favour of case-finding maneuvers during regular visits.¹
- Terminology: there is no difference between an annual physical and a PHE, except in the terminology. Patients and physicians still refer to it as an annual physical, and two-thirds of both physicians and patients still believe that it involves a head-to-toe examination and multiphasic testing.¹

Arguments favoring abandoning the PHE:¹
- Costly and non-sustainable by the Canadian Medicare system
- 21.4 million appointments a year cost $2 billion in consultation costs alone, added to this testing, investigations, and recalls
- Time-consuming and if abandoned, can take access
  - If every patient in a practice of 2000 had a 20-minute annual health examination, it would occupy the physician full-time for 22 weeks of every year
- Non-evidence based and outdated
  - no convincing evidence exists that a dedicated appointment for a PHE, in place of case-finding maneuvers during regular visits, leads to better health outcomes, or that those who undergo this annual ritual are healthier or have decreased morbidity and mortality compared with those who do not
- Building relationships and rapport is possible through the cumulative visits²
- Preventive care is possible at regular intervals and within the framework of acute visits, esp with the help of EMR²
- Mehrotra et al³ found only 19.9% of 8 different preventive services occurred at PHEs or preventive gynecologic examinations, and that preventive care, in particular counseling services, frequently occurred at visits for immediate care or chronic illness

Arguments against abandoning the PHE:¹²³⁴
- Builds relationships, allows a more holistic view of patients and give context to medical issues
- Allows for delivery of preventative care (4): a large systematic review of studies on the value of periodic health evaluation found that the PHE was consistently associated with an improved delivery of Papnicolaou tests cholesterol screening, and fecal occult blood testing
- Are not worthless visits that are simply burdened with tests: physicians are often attending to chronic disease and multiple health issues during these appointments as well
- Are becoming more evidence-based: many physicians use the preventative care checklist of the CFPC, which is evidence-based
- Physician and patient preference should be taken into account
  - Prochazka et al⁴: 94% of primary care physicians felt that annual physical examinations provided an opportunity to counsel patients on preventive health services and improve the doctor-patient relationship.
  - Obler et al⁵: 2/3 of patients responded that the annual physical examination was necessary in addition to regular primary care

References can be found online at http://www.dfcm.utoronto.ca/programs/postgraduateprograme/One_Pager_Project_References.htm