

Appendix 1 (as supplied by the authors): Candidate CANHEART Primary Prevention Performance Indicators (N=109)

Smoking (N=3)

- Prevalence of smoking
- Percentage of patients who received tobacco use assessment by their primary health care provider
- Percentage of smokers who received smoking cessation counselling

Weight/Obesity (N=5)

- Prevalence of overweight/obesity
- Prevalence of self-perceived overweight/obesity
- Percentage of patients who had waist circumference/ height and weight measurement (BMI) / obesity screening
- Percentage of overweight/obese patients who have had the risks of their weight discussed by their primary health care provider
- Percentage of overweight/obese patients who made lifestyle modifications to lose weight

Physical Activity (N=3)

- Prevalence of physical inactivity
- Percentage of patients who were asked about their physical activity by their primary health care provider
- Percentage of patients who report being given physical activity advice by their primary health care provider

Diet (N=3)

- Prevalence of inadequate fruit and vegetable consumption (<5 servings of fruits and vegetables per day)
- Percentage of patients who were asked about their diet by their primary health care provider
- Percentage of patients who report being given dietary advice by their primary health care provider

Alcohol Consumption (N=3)

- Prevalence of heavy drinking (≥ 5 drinks on one occasion ≥ 12 times per year)
- Percentage of patients who were asked about their alcohol consumption by their primary health care provider
- Percentage of patients who were given alcohol consumption advice

Depression (N=1)

- Percentage of patients who were asked about their mental health or emotional status by their primary health care provider

Hypertension (N=12)

- Prevalence of treated or untreated hypertension (BP \geq 140/90)
- Percentage of patients who had their blood pressure measured by their primary health care provider
- Percentage of patients with hypertension (BP \geq 140/90) who report taking their own blood pressure
- Percentage of patients with hypertension (BP \geq 140/90) who had kidney function screening (serum creatinine, urine protein)
- Percentage of patients with hypertension (BP \geq 140/90) who have been screened for modifiable risk factors (kidney function, fasting blood sugar, fasting lipid profile, blood pressure measurement, obesity/overweight)
- Percentage of patients with hypertension (BP \geq 140/90) who received lifestyle recommendations to reduce blood pressure from their primary health care provider (reduce salt intake, healthy diet, exercise, lose weight, quit smoking, limit alcohol consumption, reduce stress)
- Percentage of patients with hypertension (BP \geq 140/90) who made lifestyle changes following advice of their primary health care provider (topics as above)
- Percentage of patients with hypertension (BP \geq 140/90) prescribed anti-hypertension medication
- Percentage of patients with chronic kidney disease, hypertension (BP \geq 140/90), and proteinuria on ACE inhibitor or ARB therapy
- Self-reported blood pressure control (normal, borderline, high, or low) among patients with hypertension
- Measured blood pressure control among patients with hypertension (BP <140/90 for non-diabetics, <130/80 for diabetics)
- ED Visit rate for hypertensive emergencies among patients with hypertension

Diabetes (N=20)

- Prevalence of diabetes (Type I or Type II)
- Percentage of patients with fasting blood glucose/HbA1c screening within past 36 months
- Percentage of diabetics who report self-monitoring their blood glucose levels
- Percentage of diabetics who had HbA1c testing at least twice in past 12 months
- Percentage of diabetics who had a full fasting lipid profile screening within the previous 36 months
- Percentage of diabetics who had nephropathy screening (e.g.. albumin/creatinine ratio, microalbuminuria) within the past 12 months
- Percentage of diabetics who report blood pressure measurement by primary health care provider within the past 12 months
- Percentage of diabetics who had a foot examination within the past 12 months
- Percentage of diabetics who had obesity/overweight screening within the past 12 months
- Percentage of diabetics who had an eye examination within past 24 months

- Percentage of diabetics who report having lifestyle modifications (diet, physical activity, weight control, stress management, smoking, alcohol consumption) discussed with them by their primary health care provider
- Percentage of diabetics on anti-diabetic medications (oral agents and/or insulin)
- Percentage of diabetics who report making lifestyle modifications after diagnosis of diabetes (diet, physical activity, weight control, quit smoking, reduce alcohol consumption)
- Percentage of diabetics with proteinuria or micro-albuminuria prescribed ACE-inhibitors
- Percentage of diabetics referred for multidisciplinary care (nutritionist/dietician, podiatrist, alternative medicine, nephrologist, diabetes specialist)
- Percentage of diabetics who self-report glycemic control (well-controlled, borderline, high, or low)
- Percentage of diabetics who have achieved glycemic control ($HbA1c \leq 7\%$)
- Percentage of diabetics who have their lipid levels controlled ($LDL-C \leq 2.0\text{mmol/L}$)
- Rate of ED visits for diabetes among diabetics
- Rate of diabetic complications among diabetics (AMI, amputation above or below knee, began chronic dialysis)

Dyslipidemia (N=8)

- Prevalence of high lipid levels (total cholesterol $\geq 5.2\text{mmol/L}$)
- Percentage of men ≥ 40 and women ≥ 50 with a record of a full fasting lipid profile in the past 5 years
- Percentage of patients who had an MI, stroke who have been prescribed lipid lowering therapy
- Percentage of patients who have diabetes who have been prescribed lipid lowering therapy
- Percentage of patients who are hypertensive ($\geq 140/90$ for non-diabetics, $\geq 130/80$ for diabetics) who have been prescribed lipid lowering therapy
- Percentage of patients with established CVD who have been given lifestyle recommendations to reduce cholesterol by their primary health care provider
- Percentage of patients with CVD who self-report lipid control status (normal, borderline, high, or low)
- Percentage of patients with established CVD who have their lipid levels controlled ($LDL-C \leq 2\text{mmol/L}$)

Atrial Fibrillation (N=7)

- Prevalence of atrial fibrillation
- Percentage of patients with atrial fibrillation on anticoagulant therapy (Warfarin or direct oral anticoagulants)
- Percentage of patients with atrial fibrillation on Coumadin who receive monthly International normalized ratio (INR) monitoring
- Percentage of time in therapeutic range among patients with atrial fibrillation on Coumadin (INR 2-3)

- Percentage of patients with atrial fibrillation who have a stroke over 36 months (adjusted for CHADS score)
- Percentage of patients with atrial fibrillation who bleed over 36 months (adjusted for HASBLED score)
- Rate of ED visits for atrial fibrillation among patients with atrial fibrillation over 36 months

Ischemic Heart Disease (N=12)

- Prevalence of ischemic heart disease
- Percentage of patients ≥ 40 years of age who received an ECG (screening)
- Percentage of patients who received a global risk assessment for heart disease
- Percentage of patients who had an MI/IHD who have been prescribed antiplatelet therapy
- Percentage of patients who had an MI/ IHD who have been prescribed beta-blocker therapy
- Percentage of patients who had an MI/ IHD who have been prescribed statin therapy
- Percentage of patients who had an MI/IHD who have been prescribed ACE inhibitor or ARB or Angiotensin II Antagonist therapy
- Percentage of patients who had an MI who have been referred to cardiac rehab within 3 months of event
- Percentage of patients who had an MI/ IHD who have their blood pressure controlled ($<140/90$ for non-diabetics, $<130/80$ for diabetics)
- Percentage of patients who had an MI/IHD whose cholesterol is controlled (LDL-C <2 mmol/L)
- Percentage of patients who had an MI/IHD whose angina is controlled (CCS Class I)
- Rate of recurrent MI hospital admission among patients who had an MI

Heart Failure (N=8)

- Prevalence of heart failure
- Percentage of heart failure patients with left ventricular ejection fraction assessment by Echocardiogram, Angiogram, Nuclear Medicine, or MRI
- Percentage of heart failure patients prescribed beta-blocker therapy
- Percentage of heart failure patients prescribed ACE-inhibitor or ARB therapy
- Percentage of heart failure patients followed in a heart failure clinic
- Percentage of heart failure patients with a dietary assessment by their primary health care provider
- Rate of emergency department visits for heart failure among heart failure patients over 36 months
- Rate of hospital admission for heart failure among heart failure patients over 36 months

Stroke (N=7)

- Prevalence of a history of stroke
- Percentage of stroke patients who have received cognitive screening (using a standardized screening tool, e.g.. MOCA)
- Percentage of stroke patients taking or prescribed aspirin/antiplatelet therapy

- Percentage of stroke patients prescribed statins
- Percentage of stroke patients referred to outpatient stroke rehab within 3 months of event
- Percentage of stroke patients followed in a secondary prevention stroke clinic
- Rate of recurrent stroke among stroke patients over 36 months

Primary Care Access (N=5)

- Percentage of population with a primary health care provider
- Percentage of population with continuous care from a primary health care provider
- Percentage of patients who self-report satisfaction with their primary health care provider
- Percentage of patients who report difficulties accessing routine/ongoing primary health care
- Percentage of patients who report difficulties obtaining immediate after-hours care for a minor health problem

Outcomes/Other (N=12)

- Percentage of patients taking aspirin
- Percentage of patients taking lipid-lowering agent
- Percentage of patients taking other medications (diuretics, ARBs, calcium channel blockers, nitrates)
- Percentage of patients who received an influenza immunization
- Percentage of patients who self-manage their chronic conditions (Diabetes, Hypertension, CHF, Afib, Stroke, CAD)
- Primary health care support for self-management of chronic conditions (Diabetes, Hypertension, CHF, Afib, Stroke, CAD)
- Percentage of patients with chronic conditions who reported having had enough time and opportunity to ask questions in most visits with their primary health care provider
- Percentage of patients who report having drug insurance
- Percentage of patients who report having dental insurance
- 3-5 year cardiovascular event rate (acute myocardial infarction, stroke, congestive heart failure, revascularization)
- Hospitalization rate for cardiac ambulatory care sensitive conditions (diabetes, hypertension, angina, stroke, CHF)
- Cardiovascular and/or all-cause mortality rate (age and sex adjusted)