



3.b.i. EVIDENCE-BASED STRATEGIES FOR CARDIOVASCULAR DISEASE MANAGEMENT IN HIGH RISK/AFFECTED POPULATIONS (ADULTS ONLY)



PROJECT GOAL

Support implementation of evidence-based best practices for disease management in medical practice for adults with cardiovascular conditions.

OVERVIEW

The goal of SOMOS' Cardiovascular project parallels that of the Million Hearts Campaign,¹ namely, to reduce heart attacks and strokes in the population it serves and to decrease the percent of preventable admissions and emergency department encounters. The importance of the Million Hearts Campaign is seen in the infographic below:



About one of three U.S. adults – or ~70 million people – have high blood pressure. Only about half (52%) of these people have their high blood pressure under control.² Hypertension is the most common chronic condition seen in primary care and leads to myocardial infarction, stroke, renal failure, and death if not detected early and treated appropriately.³ Hypertension is quantitatively the most important risk factor for premature cardiovascular disease, being more common than cigarette smoking, dyslipidemia, and diabetes, which are the other major risk factors. Hypertension accounts for an estimated 54 percent of all strokes and 47 percent of all ischemic heart disease events globally. Hypertension increases the risk for a variety of cardiovascular diseases, including stroke, coronary artery disease, heart failure, atrial fibrillation, and peripheral vascular disease.⁴

With few variations, most major guidelines⁵ recommend

that hypertension be diagnosed when a systolic blood pressure is ≥ 140 mm Hg OR a diastolic blood pressure is ≥ 90 mmHg on repeated examination. Control of hypertension below these thresholds has been adopted as a quality indicator within the Healthcare Effectiveness and Data Information Set (HEDIS), except for non-diabetics age 60 and older, for whom a systolic BP < 150 is acceptable.⁶ SOMOS will adopt a treatment goal of 140/90 for hypertension for all population and risk groups to simplify population health monitoring.⁷ This goal is consistent with the ~~Vostok~~ evidence on age-stratified studies and the recommendations of JNC 8⁸ and more recent opinions and responses to the SPRINT study for seniors.⁹ It is also the threshold for all ages adopted by the Million Hearts Clinical Quality Measure set.¹⁰

SOMOS will adopt the ACC/AHA recommendations on lipid management based on the 10-year cardiovascular disease risk estimation.¹¹

Project Population Target: Patients (18 and older) with hypertension or hyperlipidemia.

PATIENT ENGAGEMENT GOALS

Every patient will have lifestyle modification counseling involving physicians, nurses, care managers/care coordinators, and other team members to document:

- ▶ Blood pressure and cholesterol management;
- ▶ Smoking cessation efforts, if a current smoker or tobacco product user, and referral to the NYS QuitLine. EHR will prompt providers to complete the 5 As of tobacco control (Ask, Assess, Advise, Assist, and Arrange) because referral alone will not be sufficient to optimize compliance with smoking cessation. Asking about tobacco use each visit will provide insight into the success of smoking cessation interventions.

- ▶ Encourage physical activity target of at least 30 minutes of moderate exercise (e.g., walking 3 miles/hour, dancing, gardening), 5 times per week;¹² identify safe walking trails in the area and provide these to all offices to encourage more activity;
- ▶ Culturally and linguistically appropriate educational material and counseling on the English, Spanish,¹³ and Chinese¹⁴ versions of the DASH Nutrition Plan and the ABCs of Your Health brochures,¹⁵ how to read food labels for salt content and trans-fats, how to find affordable sources of food for the DASH diet, and how to prepare foods in a healthier way.¹⁶ SOMOS's nutritional consultant is developing material to educate patients about healthy dietary substitutions for their usual diet and consistent with the DASH diet for Hispanic and Chinese American populations, with a culturally appropriate education campaign.
- ▶ Referral to an appropriate care manager;
- ▶ Use of aspirin to prevent further complications in individuals with cardiovascular, cerebrovascular, and peripheral vascular disease;
- ▶ Limit alcohol intake to an average of one drink/day for women and two drinks/day for men,¹⁷ and weight reduction for individuals with a BMI ≥ 25 kg/m².

In addition, SOMOS will pay to train and license Community Health Workers on the Stanford Chronic Disease Self-Management Program (<http://patienteducation.stanford.edu/programs/cdsmp.html>), an educational program to empower patients with cardiovascular and other chronic conditions to achieve self-management practices such as medication, dietary, and exercise adherence. PPS partners will be offered this program, especially in practices in hot-spot areas with the highest prevalence of hypertension and cardiovascular disease.

ACTION PLAN

- ▶ Establish a PPS registry for hypertension and measure the prevalence of hypertension control level (<140 systolic AND <90 diastolic) twice a year using EHR or onsite audits in all practices with at least 20 SOMOS patients;
- ▶ For individuals who do not achieve adequate BP control, provide member-facing and provider-facing materials to address common adherence barriers.¹⁸ These brochures and EHR prompts with itemized strategies to address.
 - » Forgetting to take medication;
 - » Screening for depression, anxiety, and alcohol use;
- » The value of once-daily regimens or fixed-dose combinations;
- » Cost issues due to non-coverage of medication by the patient's insurance coverage formulary;
- » Medication side effects (including sexual function) at each visit;
- » Avoiding the chronic use of non-steroidal anti-inflammatories, and
- » Cultural factors that may be interfering with adherence, such as the concomitant use of botanicals or myths about various medications (e.g., hot-cold theory).
- ▶ Implement a refill protocol for individuals who have a pattern of not obtaining at least 80% of the recommended medications prescribed;
- ▶ Encourage all practices to designate blood pressure stations, where clinical staff members are trained on BP measurement and will take blood pressure when patients walk in without an appointment. No copay will be required;
- ▶ Encourage providers to prescribe home blood pressure monitoring machines, especially for those with inconsistent control, teach log-book recording, and review with patients how and when to perform home blood pressure checks;
- ▶ Review each patient's blood pressure logbook at each visit;
- ▶ Monitor and increase the use of CPTII codes¹⁹ on claims to record systolic and diastolic pressure each visit. Incorporate into EHRs.
- ▶ Provide standard hypertension treatment protocols to all practices.²⁰ Incorporate into EHRs;
- ▶ Provide brief tobacco intervention pocket cards²¹ that reinforce the 5As to all practices and encourage documentation of tobacco use screening at each visit and counseling using CPTII codes.²² Incorporate into EHRs; Outreach to patients without regular visits by office staff to check progress in tobacco cessation efforts; Provide smoking cessation program contact information to all PCPs.²³
- ▶ Encourage all local and national community pharmacies to provide free blood pressure testing. Identify cooperating pharmacies and inform local practices of this service;
- ▶ Provide all patients and PCPs with information on Shape Up NYC Classes (<https://www.nycgov-parks.org/programs/recreation/shape-up-nyc>) in patient and provider newsletters. Print and mail details for patients who do not have access to the internet or a printer.

- ▶ Ensure safety-net providers are (1) connected to a Regional Qualified Entity (QE) and then to SHIN-NY, (2) share information among PPS clinical partners, including direct exchange, alerts and patient record look-up, and (3) meet Meaningful Use and PCMH Level 3 or ACPM by the end of DY3.

To optimize compliance with clinical guidelines, SOMOS intends to integrate the cardiovascular guidelines into our practices' EHRs. This integration will encourage documentation and more consistent use of screening and management protocols. It will also facilitate tracking progress in BP control and documenting referral to the NYS Quitline, when needed. Self-management of either home BP use or accessing free BP office and pharmacy visits and tobacco cessation medication should also be documented in the EHR.

PERFORMANCE METRICS

The following are nationally accepted evidence-based quality indicators developed by the National Committee for Quality Assurance (NCQA) and adopted by the NYSDOH and SOMOS:

- ▶ Annually reduce admission and readmission rates for hypertension (PQI 7) and the rate of admissions with a principal diagnosis of heart failure (PQI 8);
- ▶ Annually increase the rate of adequately controlled BP (systolic BP <140 mmHg and diastolic BP <90 mmHg);
- ▶ Annually increase the percent of those with a history of heart attacks who had a discussion about the risks and benefits of aspirin. Annually increase the use of aspirin in this high-risk group;
- ▶ Annually increase the percent of those with hypertension who have LDL-C testing, and annually increase the percent of those with hypertension and hyperlipidemia who are prescribed statins;
- ▶ For those who smoke, annually increase the percent with documentation of advice to quit smoking and those receiving recommendation for smoking cessation medications;
- ▶ Annually increase the percent of those with hypertension who receive influenza and pneumonia vaccines;
- ▶ Annually improve health literacy scores (CAHPS –QHL 13,14,16), that is, the percent of respondents who answered that they saw their provider for an illness or condition and were given instructions that were “usually” or “always” easy to understand, described how the instruction

would be followed and were told what to do if the illness/condition got worse or came back.

- ▶ Annually increase the adoption of no-copay visits for BP checks without a prior appointment;
- ▶ Annually increase the percent of those engaged in BP management but who do not have a diagnosis of hypertension on claims analysis but who have several PCP visits and at least two BP readings >140/90 noted on random BP audits from Hot spotting area practices.

REFERENCES

- ¹<http://millionhearts.hhs.gov/about-million-hearts/index.html>
- ²<https://www.cdc.gov/bloodpressure/>
- ³JNC 8: <http://jama.jamanetwork.com/article.aspx?articleid=1791497#Abstract>
- ⁴<http://www.uptodate.com/contents/cardiovascular-risks-of-hypertension>
- ⁵<http://www.healthquality.va.gov/guidelines/CD/htn/HTNSUM3-FIA20151209.pdf>, http://kpcmi.org/files/hypertension_clinician_guide.pdf, 2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults: Report from the Panel Members Appointed to the Eighth Joint National Committee (JNC 8) JAMA. 2014;311(5):507-520 (<http://jama.jamanetwork.com/article.aspx?articleid=1791497>)
- ⁶<http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2015-table-of-contents/controlling-high-blood-pressure>
- ⁷James PA, Oparil S, Carter BL, Cushman WC, Dennison-Himmelfarb C, Handler J, et al. 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). JAMA. 2014;311:507-20.
- ⁸Note the following statement from JNC 8: There is strong evidence to support treating hypertensive persons aged 60 years or older to a BP goal of less than 150/90 mm Hg and hypertensive persons 30 through 59 years of age to a diastolic goal of less than 90 mm Hg; however, there is insufficient evidence in hypertensive persons younger than 60 years for a systolic goal, or in those younger than 30 years for a diastolic goal, so the panel recommends a BP of less than 140/90 mm Hg for those groups based on expert opinion. The same thresholds and goals are recommended for hypertensive adults with diabetes or nondiabetic chronic kidney disease (CKD) as for the general hypertensive population younger than 60 years. <http://jama.jamanetwork.com/article.aspx?articleid=1791497#Abstract>;
- ⁹<http://jama.jamanetwork.com/article.aspx?articleid=2524265>
- ¹⁰https://millionhearts.hhs.gov/files/MH_CQM.pdf
- ¹¹<https://www.guideline.gov/summaries/summary/48337> and ACC/AHA guidelines - <http://circ.ahajournals.org/content/circulationaha/early/2013/11/11/1101.cir.0000437738.63853.7a.full.pdf>
- ¹²American Heart Association recommendation http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/FitnessBasics/American-Heart-Association-Recommendations-for-Physical-Activity-in-Adults_UCM_307976_Article.jsp#.V7TFelUrLU
- ¹³<https://www.cardiosmart.org/~media/Documents/Fact%20Sheets/es-US/zx1344.ashx>
- ¹⁴<http://www.cchrhealth.org/health/health-education-material/food-and-nutrition>
- ¹⁵4 PASOS ADELANTE, http://millionhearts.hhs.gov/files/4_Steps_Forward.PDF; Chinese equivalent was developed by SOMOS staff.
- ¹⁶<http://www.eatright.org/resource/health/lifestyle/culture-and-traditions/ethnic-foods-for-a-healthy-plate>
- ¹⁷<http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/expert-answers/blood-pressure/faq-20058254>
- ¹⁸Review other adherence strategies with offices as found in Tables 2 and 3 in Million Hearts Clinician Guide (http://millionhearts.hhs.gov/files/MH_HTN_Clinician_Guide.pdf)
- ¹⁹3074F Most recent systolic blood pressure <130 mm Hg; 3075F Most recent systolic blood pressure 130-139 mm Hg; 3077F Most recent systolic blood pressure >=140 mm Hg; 3078F Most recent diastolic blood pressure <80 mm Hg; 3079F Most recent diastolic blood pressure 80-89 mm Hg; 3080F Most recent diastolic blood pressure >=90 mm Hg
- ²⁰Examples: http://kpcmi.org/files/hypertension_clinician_guide.pdf; <http://www.healthquality.va.gov/guidelines/CD/htn/HTNpocketGuide3F20150803.pdf>
- ²¹<http://www.cdc.gov/tobacco/campaign/tips/partners/health/materials/twyd-5a-2a-tobacco-intervention-pocket-card.pdf>
- ²²1000F Tobacco use assessed; 1031F Smoking status and exposure to second hand smoke in the home assessed; 1034F Current tobacco smoker; 1035F Current smokeless tobacco user (e.g., chew, snuff); 1036F Current tobacco non-user; 4000F Tobacco use cessation intervention, counseling; 4001F Tobacco use cessation intervention, pharmacologic therapy
- ²³<https://www.nysmokefree.com/SpecialPages/Showprog.aspx?p=50&p1=5040&r=Region1>