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Million Hearts 2022:

Small Steps Are Needed for Cardiovascular Disease Prevention

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Despite decades-long improvement, recent evidence suggests that rates of myocardial infarction, stroke, and other cardiovascular disease (CVD) events have plateaued and are increasing among certain groups, including adults aged 35 to 64 years.[1,2] These events are common, costly, and largely preventable. Million Hearts, a national initiative co-led by the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare & Medicaid Services (CMS), was launched in 2012 with a 5-year aim to prevent 1 million acute cardiovascular events by improving key CVD risk factors. Projections using 2012–2014 data suggest that an estimated 500 000 events may have been prevented by 2016,[3] although improvement in risk factors was slow. To accelerate progress, Million Hearts 2022 began in 2017 with new and refreshed partnerships and a strengthened framework. This Viewpoint reflects 2 recent CDC reports that together highlight the challenges and opportunities to improve the nation's cardiovascular health.

The first report[4] describes the national and state-level burden of CVD events most likely to be prevented by reducing sodium consumption, increasing physicalactivity, and improving ABCS: aspirin when appropriate, blood pressure control, cholesterol management, and smoking cessation. The events that Million Hearts seeks to prevent include emergency department visits, hospitalizations, and deaths due to myocardial infarction, stroke, heart failure, and related conditions.[5] In 2016 alone, these events accounted for an estimated 2.2 million hospitalizations (850.9 per 100 000 population) and 415 480 deaths (157.4 per 100 000); the burden was greatest in the Southeast and Midwest.[4] Without intervention and if the 2016 event rates remain constant through 2021, an estimated 16.3 million potentially

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preventable events (3.3 million/year) are projected to occur, including2.2 million emergency department visits, 2.2 million deaths, and 11.8 million hospitalizations resulting in projected estimated costs of $170 billion. Approximately one-third of these events are projected to occur among adults aged 35 to 64 years.[4]

The second report[6] conveys the frustratingly slow rate of improving population-level measures of cardiovascular health. Appropriate aspirin use decreased between 2011–2012 and 2013–2014.[6] From 2011–2012 to 2015–2016, small but statistically significant reductions were observed in combustible tobacco use and physical inactivity. No significant improvements were observed for hypertension control or statin use among eligible persons; sodium consumption remained high. Disparities in these indicators were apparent by sex, race/ ethnicity, and age. For example, compared with adults aged 65 years and older, adults aged 35 to 64 were less likely to take aspirin (43.7% vs 78.9%) or a statin (48.1% vs 63.5%) when indicated. They were more likely to use combustible tobacco (24.6% vs 10.4%) and consumed more sodium (3591mg/d vs 2947mg/d). Only about half (52.9%) of adults aged 35 to 64 with hypertension had a systolic blood pressure less than 140 mm Hg and diastolic blood pressure less than 90 mm Hg, and almost a third (28.4%) performed less than 10 minutes of activity a week.[6] These findings and the cumulative influence of high rates of diabetes and obesity for decades contributed to the many preventable CVD events occurring in this age group.[4]

While progress has been too slow and disparities remain, opportunities to improve cardiovascular health occur daily. Among adults, currently, it is estimated that 9 million are not taking aspirin as recommended, 40.2 million have uncontrolled hypertension, 39.1 million are eligible for but not taking a statin, 54.1 million use combustible tobacco, and 70.7 million are physically inactive. Together, these represent an estimated more than 213.1 million potential opportunities to prevent CVD events; more than half (116.4 million) of these missed opportunities occur in people aged 35 to 64.[6]

These national numbers are concerning. The good news is that clinical teams, practices, and health systems across the country are adopting small, selective changes that when sustained over time could lead to excellence in achieving the ABCS as well as potential significant improvements in cardiovascular health and care.

For example, 83 practices and systems in 31 states and the District of Columbia have been recognized as Million Hearts Hypertension Control Champions for achieving control rates of almost 80% among 5 million patients with high blood pressure.[7] Since 2015, more than 200 community health centers have earned recognition from the Health Resources & Services Administration for exceeding 70% performance on aspirin use, blood pressure control, and smoking cessation.[8]

Often, these clinical teams selected a practicewide priority based on the frequency of the clinical problem among their patients, available practice resources, and current performance; an internal champion led the effort. Metrics were established, proven interventions were chosen, data were reviewed frequently, and results were shared among team members and patients.[7]

The foundation for nationwide progress is now in place to help clinical teams excel in the ABCS. First, the ABCS are embedded in more than a dozen quality reporting initiatives including the cardiology, general and family medicine, and obstetrics and gynecology specialty measure sets of the CMS Merit-based Incentive Payment System (MIPS).[9] Controlling High Blood Pressure (NQF 0018) is a high priority measure in MIPS, and the ABCS measures are mandatory for large group reporting via the MIPS web interface. Accountable care organizations and many commercial payers are using these measures in value-based arrangements. The Million Hearts CVD Risk Reduction model is the first pay-for-prevention approach, testing the impact of individualized risk assessment on event rates in Medicare beneficiaries. If successful, it could be scaled nationally.

Second, population health management tools are widely available, permitting real-time insights into performance on the ABCS. Million Hearts partners and others have developed tools to identify patients with undiagnosed hypertension who are “hiding in plain sight”; this approach can be adapted for other risk factors.[10]

Third, strategies that work are available for adoption and adaptation. A common strategy is a clinician-led, team-executed treatment protocol that incorporates the practice’s preferred counseling language and medications, facilitates identification of patients who need customized attention, and enables more patients to be optimally treated.[10] Electronic health record algorithms that identify and e-refer patients to cardiac rehabilitation and community-based resources, such as tobacco quitlines, can reduce burden while getting patients the services they need.

The burden of improvement does not lie solely on clinicians. Public health professionals and communities must ensure access to safe, affordable, and smoke-free places to be active. Individuals can best contribute to their cardiovascular health by gradually building healthy habits. Examples include adding just 10 more minutes of daily activity, substituting fresh for processed food, or cooking 1 more meal a week at home. Discussing concerns about adverse effects or costs of medications with the clinical team is a good first step toward improved adherence.

Progress in cardiovascular health and care has slowed and without concerted effort, including small but well-chosen steps sustained overtime, the nation faces a future of millions of largely preventable events. Many of these events will occur among adults aged 35 to 64years, who represent the majority of the US workforce and play vital roles as parents, spouses, caregivers, and community leaders. It is time for individuals and families, health care and public health professionals, and communities to begin doing what works, one small step at a time.

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