Reducing Atherosclerotic Cardiovascular Disease (ASCVD) through Key Stakeholders

Key Opinion Leader (KOL) Phase Three Summit: Preventive Cardiovascular Nurses Association (PCNA)

August 10, 2023

Background

The American Heart Association (AHA) estimates that 126.9 million Americans are living with one or more forms of cardiovascular disease (CVD), and an estimated 28.9% of American adults have high low-density lipoprotein cholesterol (LDL-C) levels.[1] Elevated LDL-C is well understood to be directly associated with the development of atherosclerotic cardiovascular disease (ASCVD), leading to increased risk for heart attack, stroke and peripheral artery disease. Lowering LDL-C is the main target to reduce ischemic cardiac events which is attributed to greater than 20% mortality of all cardiovascular disease deaths in the US.[2] Despite advances in pharmacologic treatment of dyslipidemia, hypercholesterolemia remains a significant public health problem in the U.S, with more than 25% of adults aged 40–74 having high LDL-C levels.[2]

Guidelines impacting cardiovascular health (CVH) have been released with significant changes in 2017, 2018 and 2019. Specifically, the 2018 Guideline on the Management of Blood Cholesterol and 2019 Guideline on the Primary Prevention of Cardiovascular Disease impact the work of cardiovascular healthcare providers every day. It is well known that translation of guidelines into clinical practice can have lag time and clinicians and stakeholders must work together to shorten this process. The health and wellbeing of those not receiving goal directed care to decrease the risk of cardiac event occurrence is evident. The National Forum for Heart Disease and Stroke Prevention reports that the initiation of use of easy to use shared-decision making guides at a Minnesota health system to increase LDL-C testing boasted an outcome improvement of 50%. Statins remain the first-line therapy for lowering LDL-C according to guideline directed therapy, however, a significant portion of the population, including those considered high-risk, are receiving sub-optimal or no treatment to lower their cholesterol. Furthermore, findings indicate that up to 70% of people with elevated LDL-C never reach their goal level. Regarding Lipoprotein(a) testing and awareness, the Family Heart Foundation reports that less than 1% of their database of greater than 300 million people have been tested.

Optimizing LDL-C for people with coronary heart disease or stroke is one of the goals for the Healthy People 2020 initiative to reduce health disparities and improve the overall health of the U.S. population. Recently, Life's Simple Seven from AHA was updated to Life's Essential Eight, with the addition of sleep as a key factor in overall health. The updated model places a higher emphasis on psychological health and social determinants of health. This update further challenges health care professionals (HCPs) to focus on the whole patient,[3] and to work collaboratively with others in a team-based focus on improved patient outcomes. Utilizing a population health approach to this whole patient care includes a wide range of stakeholders working together to implement primary and secondary prevention measures, improving the health of the population as a whole. Underrepresented populations are disproportionately affected by health disparities including risk for, and treatment of, ASCVD. For example, a 2017 study found that black women and people without health insurance were at high risk

for underutilization of medications for lowering cholesterol, despite being prescribed.[4] Additionally, Million Hearts reports launching a cholesterol change management package with increasing access and uptake to cardiac rehab as a key initiative. Million Hearts reports that only 29% of Medical eligible patients that have the opportunity to utilize cardiac rehab do so, while the goal is at a 70% utilization rate. It is also important to be aware that certain populations are disproportionately affected by health disparities including risk for, and treatment of, ASCVD. For example, healthcare professional participants report that there continues to be a lack of awareness of the independent risk factors in Black populations for ASCVD related health problems among patients and healthcare providers alike.

GOALS

Goals of the roundtable summit included:

- Build on the 2021 and 2022 KOL discussion and outcomes
- Build on the 2022 and 2023 Cholesterol Summit discussion and outcomes
- Identify and share best practices to address potential gaps or system shortfalls using patient testimonials and successful and/or proposed team-based care models
- Provide a strong foundation for the year-long efforts towards addressing the identified barriers

- Continue to identify specific information and messaging related to ASCVD that aligns with, or should be integrated into, existing or newly developed stakeholder efforts
    - Develop recommendations for professional societies and healthcare providers that prioritize action-oriented initiatives
    - Outline methods for individual organization strategies and options for increasing collaboration to enhance efforts keeping a focus on the voice of the patient and utilization of patient-centered approaches

Objectives

The objective of the summit was to reduce ASCVD risk through key stakeholders by:

- Facilitating constructive discussion among key stakeholders
- Evaluating the landscape of established and emerging barriers
- Developing a consensus-based, multi-pronged strategy to improve patient management
- Encouraging robust collaboration across stakeholder groups following the summit

Participants (KOLs)/Organizations Represented

- **American Heart Association/Council on Cardiovascular and Stroke Nursing**
    - Wan-chin Kuo, PhD, RN
      Assistant Professor University of Wisconsin-Madison School of Nursing

- **American Society for Preventive Cardiology**
    - Stacy Manthos
      Executive Director

- **Association of Black Cardiologists**
  - Keith C. Ferdinand, MD, FACC, FAHA, FNLA, FASH
    Professor of Medicine and Gerald S. Berenson Endowed Chair in Preventive Cardiology at the Tulane University School of Medicine

- **Family Heart Foundation**
  - Cat Davis Ahmed, MBA
    Vice President, Policy and Outreach

- **Million Hearts**
  - Laurence Sperling, MD, FACC, FACP, FAHA, FASPC
    Katz Professor in Preventive Cardiology and Founder, Emory Center for Heart Disease Prevention
    Professor of Global Health, Hubert Department of Global Health, Rollins School of Public Health at Emory University
    Executive Director, Million Hearts

- **National Forum for Heart Disease & Stroke Prevention**
  - Jen Childress, MS, MCHES
    Director of Programs

- **National Lipid Association**
  - Joseph Saseen
    Associate Dean for Clinical Affairs and Professor of Clinical Pharmacy and a Professor of Family Medicine at the University of Colorado Anschutz Medical Campus

- **Preventive Cardiovascular Nurses Association**
  - Susan Halli Demeter, DNP, FNP-BC, CLS, FNLA, FPCNA
    Summit Moderator
    Assistant Professor of Medicine, Heart Health & Performance Program Lipid Clinic, Mayo Clinic Arizona
    PCNA Current President and Board Member

  - Yvonne Commodore-Mensah, PhD, MHS, RN, FAAN, FAHA, FPCNA
    Associate Professor, Johns Hopkins Schools of Nursing and Public Health
    Board Member, Preventive Cardiovascular Nurses Association

  - Joanna Dagenais MSN, RN, CCRN-K
    Summit Planner
    Director of Clinical Education

Moderated Discussion Among Organizational Representatives

Key Opinion Leaders were requested to present best practices to move the dial in ASCVD prevention and management that they demonstrate or observe in their practice or healthcare setting.

Three additional questions were posed to the Key Opinion Leaders for further discussion, recommendations, and explorations:

1. What challenges/barriers do you encounter to improving ASCVD related health outcomes?
2. Who are key stakeholders in your setting to promote ASCVD health?
3. What strategies or best practices do you encounter to improve ASCVD heath outcomes?

Key Theme	Discussion
Access to care	• Only 29% of Medicare eligible patients that have the opportunity to utilize cardiac rehab take advantage of it, despite the goal of a 70% utilization rate (Million Hearts) • Reduced amount of elderly adults that smoke follow up with preventive care services, including cholesterol screening, despite risk factors (AHA/CVSN) • Greatest return on investment in ASCVD prevention is focusing on blood pressure control, cholesterol management and tobacco cessation (Million Hearts) • The key stakeholder 6 P's include patients, providers, public health, purchasers, payors and pharma (National Forum) • Colorado University utilizes value-based care with a focus on cardiometabolic risk reduction targeting dyslipidemia and diabetes (NLA) • Many patients don't have a primary care provider and this leads to disjointed care (PCNA) • Team-based care includes providers, pharmacists, nurses, nutrition, social work, psychologists and more (PCNA) • It is important to collaborate between different organizations and disciplines. All organizations within the prevention space should contribute and share to enhance care and break down silos. (PCNA)
Awareness	• Less than 1% of database of greater than 300 million people have been tested for Lp(a) elevation (Family Heart) • Working on reaching out to stakeholder populations including patients and the public with a landing page to share information and direct to care providers (Family Heart) • Messaging campaign to primary care providers to prioritize LDL management and Lp(a) testing (Family Heart) • Many cities could optimize the public health organizations in their community and the Move with the Mayor initiative across the country works to improve by leveraging leadership of mayors to increase activity and reduce CVD risk (National Forum) • ASPC's mission is to provide education for clinicians to better understand prevention and cardiology (ASPC) • Pharmacists can enhance patient understanding of medication regimen but billing and payment model needs to be initiated (NLA) • Past cholesterol management guidelines allowed for misinterpretation of treatment goals and took focus of LDL-C testing (NLA) • Opportunity to enhance public health approach, whether in faith-based setting or community settings, many opportunities to translate evidence into practice (PCNA)
Urgency to Treat	• Importance of guidelines clear but there is a delay in responding to new data quickly (ABC) • We are waiting for people to come to us with a disease instead of focusing on prevention (ABC) • 70% of people never get to goal cholesterol level, and even those that do get to controlled level only stay for ~6 months at a time, consequences include higher

	CV events, even 44% higher, for those above their LDL recommended levels (Family Heart) • We must act now, without delay, and comprehensive care navigation centers can help (Family Heart) • State of Colorado has approved statewide protocols for statin therapies that allow any pharmacist in any setting to initiate therapy (NLA)
Holistic and Inclusive Treatment	• Disparities in the US are troubling and getting worse and proper steps to address are not being taken (ABC) • Initiation of use of easy to use shared-decision making guides at a Minnesota health system to increase LDL-C testing boasted an outcome improvement of 50% (National Forum) • Many people not aware of independent risk factor for CVD in Black population (PCNA) • Stakeholders must collectively think of opportunities to prevent CV events together (Million Hearts) • NLA is a member focused group and focus on lipids and cardiometabolic health (NLA) • Convenience is a challenge of the current healthcare system, goal to reimagine how to rethink CVD care to be person-centered (PCNA) • Shared-decision making in practice improves outcomes and patient satisfaction scores (PCNA)

Summary and Future Directions

Four key themes emerged from the discussion.

1. Access to care for atherosclerotic cardiovascular disease with a focus on decreasing health disparities
    a. Access to care is dependent on team-based care models with teams and key stakeholders all contributing and sharing strategies to improve care.
2. Awareness of atherosclerotic cardiovascular disease among the public and testing and treatment recommendation among healthcare professionals
3. Amplify the urgency to treat mission to improve health outcomes and slow disease progression
4. Need for holistic and inclusive treatment of dyslipidemia and cardiometabolic diseases

From these key themes, PCNA proposes implementation of:

- Focused educational programming to address ASCVD awareness, evidence-based management including the urgency to treat, and methods to improve access to care across populations and despite presence of social determinants of health
- Best practices and findings shared in this report with all participants with request to share among professional networks and teams
- Increased promotion of key messaging among educational projects and communication pathways and networking including professional and social platforms among key partnerships and stakeholders in treatment and prevention of ASCVD

- Educational programming centered on holistic treatment of ASCVD risk factors and cardiometabolic disease prevention and progression of disease
- Incorporating health equity within ASCVD prevention and management learning objectives throughout educational programming

[1] Virani SS, Alonso A, Aparicio HJ, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Cheng S, Delling FN, Elkind MSV, Evenson KR, Ferguson JF, Gupta DK, Khan SS, Kissela BM, Knutson KL, Lee CD, Lewis TT, Liu J, Loop MS, Lutsey PL, Ma J, Mackey J, Martin SS, Matchar DB, Mussolino ME, Navaneethan SD, Perak AM, Roth GA, Samad Z, Satou GM, Schroeder EB, Shah SH, Shay CM, Stokes A, VanWagner LB, Wang N-Y, Tsao CW; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2021 update: a report from the American Heart Association [published online ahead of print January 27, 2021]. *Circulation*. doi: 10.1161/CIR.0000000000000950

[2] Kuklina EV, Carroll MD, Shaw KM, Hirsch R. Trends in high LDL cholesterol, cholesterol-lowering medication use, and dietary saturated-fat intake: United States, 1976-2010. NCHS Data Brief. 2013 Mar;(117):1-8. Available at: http://www.ncbi.nlm.nih.gov/pubmed/23759124. Accessed July 20, 2014.

[4] Donald M. Lloyd-Jones. Circulation. Life's Essential 8: Updating and Enhancing the American Heart Association's Construct of Cardiovascular Health: A Presidential Advisory From the American Heart Association, Volume: 146, Issue: 5, Pages: e18-e43, DOI: (10.1161/CIR.0000000000001078)

[4] Schroff, P., Gamboa, C., Durant R., et al. Vulnerabilities to Health Disparities and Statin Use in the REGARDS Study. Journal of the American Heart Association. 2017;6(9) https://doi.org/10.1161/JAHA.116.005449

Appendix A: Event Photo