Abstract Submission Form

The Women's Heart Center Program Committee is accepting abstract submission forms through **August 15, 2025**. Completed forms should be emailed to WHC@TheChristHospital.com.

Abstract submissions should be gender- and sex-specific research pertaining to one of the program topics outlined below.

The Program Committee wishes to encourage young scientific investigators and will reward up to 4 abstracts/posters submitted by presenters considered early career (definition provided below). First place will receive $1000, second place will receive $500, and two honorable mentions will each receive $250.

The presenting author will be sent an email with the status of the submission by **August 22, 2025**. If your abstract is accepted, your notification will contain complete presentation information. However, please note the following:

- All human subject research must conform to the principles of the Declaration of Helsinki of the World Medical Association.
- The presenting author should be able to provide documentation of IRB approval if requested.
- The Program Committee is unable to reimburse presenters for travel, hotel, or per diem expenses.
- Submission of an abstract constitutes a commitment by the presenting author (or designee) to present in-person at the symposium on October 3, 2025, during the following times:
    - Registration & Networking: 7:00 – 8:00 am
    - Networking Lunch: 12:00 – 1:30 pm
    - Poster Session Award Announcement: 4:50 – 5:10 pm
- All accepted abstract presenters must register for the symposium via Eventbrite and pay the applicable registration fees (trainees and invited speakers will have the registration fee waived).
- If an author wishes to withdraw an abstract, please email WHC@TheChristHospital.com.

Presenting Author Information

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Early Career (Defined as physicians, scientists, medical students, and other healthcare providers currently in residency or fellowship programs or within three years of training)? Yes ☒ No ☐

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Disclosures: Please list any relevant financial disclosures.

Dr. Thurston is on the medical advisory board for Amissa, Astellas, Bayer, and Novo Nordisk.

Abstract Topic (must be gender- or sex-specific)

☒ Preventative cardiology	☐ General cardiology	☐ Interventional cardiology
☐ Heart failure	☐ Cardio-oncology	☐ Cardio-obstetrics
☐ Electrophysiology	☐ Cardiovascular Imaging	☐ Coronary Microvasculature
☐ Social Determinants of Health	☐ Mental Health	☐ Precision Medicine

Title: Include the full title as it will appear on the poster.

Understanding the Association between Ideal Cardiovascular Health Metrics (American Heart Association's Life's Essential 8) and Subclinical Carotid Atherosclerosis in Midlife Women

Background: In an initial paragraph, provide relevant information regarding the background and purpose of the study, preferably in no more than two to three sentences.

There is limited research on how modifiable risk factors impact the development of carotid plaque in women during midlife, a time of accelerating cardiovascular disease (CVD) risk. The American Heart Association (AHA) created the Life's Essential 8 (LE8) scoring criteria to measure modifiable risk factors that impact cardiovascular health. We hypothesize that women who meet more LE8 criteria, a healthier cardiovascular health profile, will have less carotid plaque burden, a measure of subclinical CVD.

Methods: Briefly state the methods used.

This cross-sectional analysis included 304 non-smoking women from the menopausal hot flashes and cardiovascular health (MsHeart) study. Carotid ultrasound scans were completed to assess plaque burden (area, height, number) and echogenicity (grey scale median), a marker of potential plaque vulnerability. Each woman underwent assessments for diet, physical activity, sleep duration, blood pressure, body mass index, glucose and lipids. The total LE8 score (range:0-100) was calculated based on these assessments. Multiple regression models were used to examine the relationship between the total LE8 score and measures of plaque burden and grey scale median adjusting for race/ethnicity, age, education, and financial strain.

Results: Summarize the results in sufficient detail to support the conclusions.

Participants (mean age 54 years; 72% white and 22% Black) had a median (inter quartile range) LE8 score of 74 (66.3, 82.5) with 33% of women scoring greater than 80 points (ideal total LE8 score). Plaque prevalence was 46%, plaque height 2.1 mm, plaque area 22.3 mm^2, and grey scale median 61.7. Higher LE8 scores were associated with less total plaque area adjusting for age, race, financial hardship and education; each unit increase in the LE8 score was associated with a statistically significant 1.3% decrease in total plaque area (SE=0.0053 p=0.016). Additionally, higher LE8 scores were associated with maximum plaque height in the unadjusted and partially adjusted model; each unit increase in the LE8 score was associated with a statistically significant 0.0091mm (SE=0.0043 p=0.038 unadjusted model) and 0.010mm (SE=0.0045 p=0.025 adjusting for age and race/ethnicity) decrease in maximum plaque height, respectively. Lastly, statistically significant associations were observed between the LE8 score and tertiles of grey scale median.

Conclusions: Concisely state the conclusions reached.

Our findings indicate that a higher AHA LE8 score is associated with less carotid plaque burden in midlife women. This study is significant as midlife is a time of increasing CVD risk for women. Understanding how modifiable risk factors lessen carotid plaque burden could ultimately inform prevention efforts for adverse CVD outcomes in women.

Tables/Figures/Graphics: Include images that are part of your submission here. Images should be high resolution and have a file type of "gif", "jpg", or "jpeg".