

TOP TAKEAWAYS

Comprehensive Centers of Excellence for Women's Cardiovascular Care

A Deep Dive on the 2026 AHA/AAP/ACOG/SMFM Science Advisory

SCIENCE ADVISORY | WOMEN'S CARDIOVASCULAR HEALTH

SECTION A: OVERALL INTENT AND CRITICAL GAP

➤ Improving CV health in women is an urgent public health priority.

Persistent gaps remain in awareness, prevention, and management of CVD in women. Only 41% of women identify heart disease as the leading cause of death. CVD accounts for >400,000 deaths among US women in 2024, which is - more than breast cancer, lung cancer, and chronic lung disease combined.

➤ Fragmented care delivery drives missed opportunities.

Care for women is uniquely fragmented, episodic, and poorly aligned across pediatrics, adolescent medicine, primary care, OB/GYN, maternal-fetal medicine, endocrinology, cardiology, hematology and neurology, limiting early CVD risk identification and effective intervention. Women with polyendocrine metabolic ovarian syndrome (PMOS, previously referred to as polycystic ovarian syndrome or PCOS) or ischemia with no obstructive coronary arteries (INOCA) often report delays in diagnosis, with over one-third reporting a time to diagnosis longer than 3–4 years.

➤ The Female Life Stage construct requires operationalization.

The AHA, in collaboration with AAP, ACOG, and SMFM, established the Female Life Stage construct integrating hormonal, psychosocial, and cardiovascular health across life stages. Gaps remain in operationalizing this construct and delivering patient-centered, interdisciplinary care to women.

➤ Women's Cardiovascular Centers have led the way.

Over the last several decades, Women's Cardiovascular Centers have emerged as leaders, expanded rapidly, and elevated recognition of CVD that exclusively, predominantly, or differently affects women (e.g., myocardial infarction with non-obstructive coronary arteries or MINOCA, spontaneous coronary artery dissection or SCAD, Takotsubo syndrome).

➤ This Advisory conducts a landscape assessment and proposes a novel infrastructure.

The Advisory describes the current landscape and proposes a novel infrastructure to support expansion of dedicated Comprehensive Centers of Excellence (CCoE) for Women's Cardiovascular Care: interdisciplinary care models built on four interdisciplinary pillars: clinical care, education and training, research, and community partnerships. Integrated pathways spanning disciplines can reduce fragmentation, enable earlier risk identification, and expand women's representation in clinical research.

SECTION B: METHODS

➤ Cross-sectional national survey with multidisciplinary expertise.

A cross-sectional survey was developed by the Work Group with multidisciplinary expertise in cardiovascular care in women including pediatrics, primary care, OB/GYN, cardiology, nursing, implementation science, health services research, clinical trials, community engagement, and medical education.

➤ Broad national reach.

The survey with approximately 60 questions covering clinical care, education and training, research, and community engagement was distributed via REDCap to clinician leaders at Women's Cardiovascular Centers/Programs, and to 226 cardiology division chiefs/department chairs at AAMC-registered training institutions across the US.

SECTION C: KEY FINDINGS FROM THE SURVEY

➤ Routine integration of the four pillars, with substantive variation in implementation.

Nearly all surveyed centers/programs offered specialized care across the adult life course spanning pregnancy, perimenopause, and postmenopause, and addressed female-specific and female-predominant CV conditions. They routinely integrated the four guiding pillars of interdisciplinary clinical care, education and training, research, and community engagement, although implementation varied substantially across the centers.

➤ Structural constraints threaten sustainability.

Many centers reported space and personnel constraints limiting capacity, and lacked sustainable funding models for clinical services, research activities, and community engagement.

SECTION D: PRIORITIES BY THE FOUR PILLARS OF CCoE

PILLAR 1- Interdisciplinary Clinical Care

- Coordinated, interdisciplinary, team-based care is the first fundamental pillar. The Female Life Stage construct emphasizes the interconnectedness of hormonal, psychosocial, and cardiovascular health, informing a unified approach to CV care across the female life course.
- Guidelines endorse team-based care models. Recent national guidelines and statements — including the 2025 ACC/AHA High Blood Pressure Guideline and the 2026 AHA/ACC CKM Syndrome Guideline — recommend interdisciplinary, team-based models to prevent and treat CVD.
- Apply learning health system frameworks. A key priority is to study and implement interdisciplinary care models using implementation science and quality improvement principles to iteratively refine operational structures, identify measurable targets, and monitor patient outcomes.
- Measure, Modify, and Monitor. Assess pathways and communication strategies with quality metrics, patient-reported outcomes, and equity-focused performance measures. Conduct subgroup analyses by social drivers of health (insurance, race/ethnicity, zip code). Consider AI to reduce administrative burden, assist clinical documentation, improve care transitions, and schedule appointments.
- Scale to reach underserved and rural areas.

CCoE should scale across broader health networks. In a hub-and-spoke framework, the CCoE serves as central hub of expertise, extending care through community-based clinics, mobile diagnostics, telehealth, community health workers, and remote monitoring.

PILLAR 2 - Professional Education and Training

- Education and training form the second foundational pillar. Develop and deliver professional education for learners at all stages; medical school through residency, fellowship, and continuing medical education. Training both future and current generations is essential to sustainability, interdisciplinary culture change, and future workforce expansion.
- Combine didactic and experiential learning. Existing curricula combine lectures, multidisciplinary case discussions, journal clubs, and inpatient/outpatient clinical rotations covering cardio-obstetrics, INOCA, MINOCA, SCAD, and fibromuscular dysplasia.
- Prepare all clinicians for the 174 million adult US women. All clinicians involved in CV care must be prepared to deliver care across Female Life Stages and recognize the interconnected domains of hormonal, psychosocial, and cardiovascular health.
- Ground curricula in Female Life Stages and ACGME core competencies. Curricular elements are grounded in the Female Life Stages model and span ACGME Core Competencies (medical knowledge, patient care, communication, professionalism, practice-based learning and improvement, systems-based practice).

Examples include sex-specific epidemiology and presentation of CVD, history-taking on menstruation/pregnancy/menopause, and evaluation of female-predominant conditions. Integrate into case-based training, maintenance-of-certification, and workforce competency assessments.

PILLAR 3: Research

- Research is the third fundamental pillar. Funding, designing, and conducting research in women's cardiovascular health is core to the CCoE mandate, especially as women remain underrepresented in CV clinical trials.
- Build formal research infrastructure. CCoE can build formal infrastructure for recruitment, data collection, and outcomes assessment, with rigorous standards and quality assurance processes that serve as benchmarks and inform best practices. A collaborative research environment fosters a mentorship pipeline.
- Establish a national women's CV research network. An early research target is a national research network to promote longitudinal observational, interventional, and implementation research. Standardize and harmonize outcome reporting building on infrastructure such as AHA's "**Research Goes Red**" registry. Enrich with data from remote monitoring and wearables; leverage federal infrastructure and international collaborations (e.g., Global Cardiovascular Research Funders' Forum).
- Address structural barriers to enrollment. Low enrollment/retention of women in CV trials reflects diagnostic and referral biases, mistrust, caregiving burden, near-universal exclusion of pregnant and lactating women, and additional barriers for historically disenfranchised groups (language, cultural insensitivity, financial hardship, transportation, prior mistreatment). Use women-centered, culturally sensitive recruitment strategies and study designs.

PILLAR 4: Community Engagement

- Community engagement is the fourth pillar. Integrate outreach and partnerships. Bidirectional partnerships address multilevel drivers of CV health, disease awareness, and care delivery (e.g., community advisory boards).
- Foster strategic, principled partnerships. Sustain partnerships with community leaders, community health workers, and community-based organizations (e.g., faith-based, community centers). Ground partnerships in trust, inclusiveness, shared power, and mutual value. Engage community advisory boards for program design and evaluation; use bidirectional feedback and accountability structures.
- Extend research through community-based participatory approaches.

Use community-based participatory research so community input informs priorities, design, and dissemination across the research lifecycle.

SECTION E: CALL TO ACTION

- Create an alliance or network of CCoE. Essential purposes: (1) evaluate best practices in care delivery using implementation frameworks to achieve person-centered care; (2) develop, measure, and monitor quality/performance metrics with female-specific considerations; (3) support collaborative QI initiatives; (4) build federated data and registry infrastructure to accelerate female-specific research; (5) create a visible platform to attract federal, industry, institutional, philanthropy, and venture capital funding.
- A national infrastructure sets standards. A national infrastructure can help set standards for the establishment, growth, and accreditation of new centers – promoting high-quality care, facilitating workforce expansion, and serving as a platform for advocacy, funding, and improved awareness of CVD in women.
 - *The Association will be developing an Implementation Toolkit, Universal Checklist, and Center Standards, in response to the Call to Action.*

CCoE can serve as exemplars for surrounding health systems to improve awareness, prevention, and treatment of CVD across the Female Life Stages. Together with the accompanying Presidential Advisory and Scientific Statement, this Advisory represents a coordinated multi-society commitment to transform how cardiovascular healthcare is delivered, taught, researched, and understood.