Medical Device Industry Points to Consider for Use by Those Engaged in Designing Clinical Trials To Address Recruitment, Enrollment and Retention of Women In Cardiovascular Medical Device Clinical Trials

While there has been some progress, gender bias and under representation of women in cardiovascular medical device trials continues to be a challenging issue. The reasons for under representation are multi-factorial. For example, independent research conducted in Canada showed that physicians rated men as more likely than women to benefit from cardiac catheterization.\(^1\) Physicians also refer women to trials less often than men.\(^2\) Gender gaps in diagnosis of women with heart disease are also a factor. Only 8% of primary care doctors, 13% of gynecologists and 17% of cardiologists were aware of heart disease as a greater cause of mortality in women than men.\(^3\) In addition, cardiovascular classification schemes may fail to appropriately capture women. One in eight young women are unclassified by the universal definition of myocardial infarction.\(^4\)

These Points to Consider are intended to provide cardiovascular medical device companies and others with a menu of options and ideas they can consider on a voluntary basis to improve the recruitment, enrollment and retention of women in the clinical trials that they conduct. This document is not intended to be a list of requirements to be applied to every cardiovascular medical device trial.

To improve the recruitment, enrollment and retention of women, companies may consider the following voluntary options:

- Conducting market research with patients and physicians to understand more about the barriers to women human subject participation.

---


\(^{4}\) Spatz, E, et al. The VIRGO Classification System: A Taxonomy for Young Women with Acute Myocardial Infarction; Circulation. 2015; 132:1710-1718.
• Improving patient-facing educational materials and physician training in clinical trials from available information including information based on data learned in market research.

• Expanding screening logs for clinical trials to capture data around why human subjects choose not to participate as well as their perceptions around research.

• Adding to the protocol background a section emphasizing the importance of including women human subjects in cardiovascular trials and the need to achieve appropriate representation of this population.

• Identifying cultural barriers and issues involving women then address them in the clinical trial materials and training materials for sites and investigators.

• Adding emphasis in the training on the device clinical trial on issues involving women and the need to achieve appropriate representation of this population.

• Encouraging clinical trial sites to develop specific recruitment programs for women (e.g., transportation, child care, etc.).

• Prioritizing -- during the clinical trial site screening and selection process -- sites with recruitment programs for women or sites willing to implement them (e.g., transportation, child care).

• Actively seeking diverse principal investigators and co-investigators.

• Including wording and/or budgetary considerations in the research agreement and wording in the protocol that sets expectations for enrollment of women.
  o Periodically review progress towards meeting those expectations (e.g., actively monitor the gender mix on monthly clinical trial dashboards).
  o Review prior performance of centers for enrollment of women and/or ask them to project how many and the percentage of women they can enroll when selecting centers for new trials.

• Performing a critical review of inclusion and exclusion criteria (e.g., pregnancy, age etc.) and the follow-up schedule to identify and eliminate barriers to enrollment of women.

• Where challenges with diagnosis are a contributing factor (e.g., failure to evaluate, inadequate evaluation, methodologies for diagnosis), working to address the ability for patients to be appropriately evaluated for potential enrollment. This could include strategies such as working with referral clinicians and sites, educational programs or developing alternative inclusion criteria.

• Identifying alternative follow-up requirements that may encourage participation of women such as:
  o Fewer required follow up visits
  o Phone follow up by the nurse coordinator
  o Home visits by nurse coordinator
- On-line follow up options
  - Permitting the human subject’s primary care provider to perform some of the follow up requirements and be reimbursed for such
  - Transportation reimbursement
  - Establishing weekend hours for required follow up visits

- Using proven tactics to recruit and retain women such as:
  - Posting trial on ClinicalTrials.gov
  - Partnering with patient advocacy groups (e.g., to publicize trial or to target geographic areas for study sites)
  - Use of live speakers/presentations
  - Use of advertisements
  - Use of social media to recruit and/or provide updates on clinical trial
  - Use of Email
  - Clinic flyers
  - Reimbursement for participation, transportation and/or child care
  - Newsletters or similar written updates of clinical trial
  - Providing investigator tools (e.g., call scripts for patient follow-up, letter or email templates)
  - Extra or ongoing patient education on consent or risks and benefits of the trial
  - Extra or ongoing patient education on insurance versus study coverage