

Organization, Execution and Evaluation of the 2014 Academic Emergency Medicine Consensus Conference on Gender-Specific Research in Emergency Care - an Executive Summary.

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Conference on Gender-specific Research in Emergency Care: An Executive Summary

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Abstract

With the goal of reducing inequalities in patient care, the 2014 *Academic Emergency Medicine (AEM)* consensus conference, “Gender-Specific Research in Emergency Care: Investigate, Understand, and Translate How Gender Affects Patient Outcomes,” convened a diverse group of researchers, clinicians, health care providers, patients, and representatives of federal agencies and policy-makers in Dallas, Texas, in May 2014. The executive and steering committees identified seven clinical domains as key to gender-specific emergency care: cardiovascular, neurological, trauma/injury, substance abuse, pain, mental health, and diagnostic imaging. The main aims of the conference were to: 1) summarize and consolidate current data related to sex- and gender-specific research for acute care and identify critical gender-related gaps in knowledge to inform an EM research agenda; 2) create a consensus-driven research agenda that advances sex- and gender-specific research in the prevention, diagnosis, and management of acute diseases and identify strategies to investigate them; and 3) build a multinational interdisciplinary consortium to disseminate and study the sex and gender medicine of acute conditions. Over a 2-year period, this collaborative network of stakeholders identified key areas where sex- and gender-specific research is most likely to improve clinical care and ultimately patient outcomes. The iterative consensus process culminated in a daylong conference on May 13, 2014, with a total of 133 registrants, with the majority being between ages 31 and 50 years (57%), females (71%), and whites (79%). Content experts led the consensus-building workshops at the conference and used the nominal group technique to consolidate consensus recommendations for priority research. In addition, panel sessions addressed funding mechanisms for gender-specific research as well as gender-specific regulatory challenges to product development and approval. This special issue of *AEM* reports the results of the 2014 consensus conference as well as related original research with the goal of bringing high-quality equitable care to male and female emergency patients.

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Gender Equity in Medicine

Aristotle once said, “The worst form of inequality is to try to make unequal things equal.” Twenty-seven hundred years later, his pearl of wisdom still holds true. Modern medicine has confirmed that disease biology, progression, and management are not equal in men and women. Yet concerted efforts have been required to overcome the dogma that overlooks these differences in research and patient care. This was first recognized in 1993, when Congress introduced the National Institutes of Health (NIH) Revitalization Act that required federally funded researchers to include appropriate numbers of women and minorities in clinical research and, when scientifically appropriate, to perform valid analyses of the role of biological sex in clinical trials.¹ It was followed by a landmark report, “Exploring the Biological Contributions to Human Health: Does Sex Matter?” in which the Institute of Medicine brought sex- and gender-specific medicine to the forefront by summarizing sex-specific scientific data to date.^{2,3} The report demonstrated how normal human biology differs between men and women and how the manifestation, mechanisms, and treatment of disease vary as a function of sex and gender. Over the past decade, the NIH, the Centers for Disease Control and Prevention, the Agency for Healthcare Research and Quality, and the U.S. Food and Drug Administration have collectively established a mandate to further the science of gender medicine through policy, science, and outreach and by encouraging participation of women in clinical trials and subpopulation analyses in an attempt to reduce these inequalities in care.⁴⁻⁷

The science of gender medicine has evolved thanks to the dedication of pioneers, advocates, and forward-thinking politicians who pushed this agenda forward and in 1993 made the NIH Revitalization Act a reality. They recognized that focusing on gender equity in medical research benefits *both* men and women. And ignoring these differences halts the progression of medicine and compromises the safety of our patients.

The historical perspective, gaps, and importance to emergency medicine (EM) are described elsewhere in this issue.^{8,9} In this executive summary, we will describe the planning for the 2014 *Academic Emergency Medicine (AEM)* consensus conference, the organizational structure, goals, and agenda and an overview of the consensus building process. We also present the feedback from our participants in reaching our goals. As with the prior special issues dedicated to these annual consensus conferences, the entire issue is available free of charge, through the generosity of our publisher, at the Journal's website, <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291553-2712>.

Definition of Sex Versus Gender

In this issue of *AEM*, we have used the *AMA Style Guide* for the definitions of “sex,” “gender,” and “sex/gender,” as defined below. This is the standard for most medical journals (including ours):

Sex is defined as the classification of living things as male or female according to their reproductive organs and functions assigned by chromosomal complement.

Gender refers to a person's self-representation as man or woman, or how that person is responded to by social institutions on the basis of the person's gender

presentation. In most instances, authors of articles in biomedical publications intend the word sex.¹⁰

According to The World Health Organization, sex “refers to the biological and physiological characteristics that define men and women” and gender “refers to the socially constructed roles, behaviors, activities and attributes that a given society considers appropriate for men and women.”¹¹ For most of the conference topics and subtopics we are discussing biology (sex) when discussing the implications of scientific research and clinical trials and not sociology (gender). There are exceptions, of course: behaviors in calling 9-1-1 at the onset of chest pain; in driving habits leading to motor vehicle crashes; or issues related to access to care, affordability, or utilization may be considered more gender than sex in certain research contexts. There are also circumstances (and even individual sentences) where the use of the word “sex” just plain does not work, and “gender” needs to be used. However, rewriting can also resolve these problems to avoid what the editor of another EM journal called the “snicker factor.”

Conference Planning

In 2008, members of the executive committee (Table 1) conceived the idea of a gender conference after a Society for Academic Emergency Medicine (SAEM) workshop devoted to gender topics in EM (Figure 1). In 2011, with support from the Academy of Women in Academic Emergency Medicine (AWAEM), this committee submitted a proposal for a national consensus conference devoted to gender-specific research to the editorial board of *AEM*. Through a competitive review process, the board selected it as a timely, important, and clinically relevant topic aimed to improve the quality and safety of health care for all patients, both male and female. The executive committee planned the conference via monthly conference calls and biannual face-to-face meetings in assembling workgroups and enforcing the mission of this conference.

The executive committee, in consultation with the steering committee (Table 1), identified seven clinical domains as key to sex- and gender-specific emergency care (Figure 2). They invited national experts in the field to lead individual work groups. The groups were then populated with interested parties from a diverse group of stakeholders including researchers, clinicians, nurses, prehospital providers, patients, and representatives of federal agencies and policy-makers. Joining members of the academic EM community were a number of notable non-EM national experts such as Drs. Legato, Napolitano, Stein, and Fillingim. In addition, a number of federal partners representing various agencies including the U.S. Food and Drug Administration (FDA); National Heart, Lung and Blood Institute; Office of Emergency Care Research; Office of Research on Women's Health; and Patient Centered Outcomes Research Institute participated in the conference.

The executive committee divided conference planning into two main segments

Year 1

Year 1 was dedicated to fund-raising and marketing of the conference. A multiprong approach was used to promote the conference including internet news sources, monthly ads

in leading national journals of emergency care, an aggressive marketing campaign by SAEM and other emergency care stakeholders, widespread dissemination of educational concept papers, educational videos created by the planning committee, and preconference networking (see full efforts in Data Supplement S1, available as supporting information in the online version of this paper).

Year 2

Year 2 was dedicated to development of guidelines and a timeline for deliverables (see Data Supplements S2–S4, available as supporting information in the online version of this paper). These materials were disseminated to the workgroup leaders at face-to-face meetings in May and October 2013 to help reduce variation in the consensus process. The committee continued marketing to non-EM audiences to be a part of the consensus-building process through partner groups such as the American Heart Association, SGWHG, and others (detailed in Table 1).

The team leaders had their first face-to-face meeting with the workgroups of interested stakeholders at the SAEM meeting in Atlanta in May 2013, where they set the initial workgroup agenda. They further developed priority questions through a face-to-face meeting in October 2013, as well as regular follow-up conference calls and electronic discussions in the ensuing year (Figure 1).

Conference Aims

For each of the seven workgroups:

1. Summarize and consolidate current data related to sex- and gender-specific research for acute care and identify critical gender-related gaps in knowledge to inform an EM research agenda.
2. Create a consensus-driven research agenda that advances sex- and gender-specific research in the prevention, diagnosis, and management of acute diseases and identify strategies to investigate them.
3. Build a multinational interdisciplinary consortium to disseminate and study sex and gender medicine of acute conditions.

Added objectives included using the workgroups to discuss the development of interdisciplinary information systems needed for collecting, sharing, and comparing clinical data for acute conditions by sex/gender and to foster collaborative networks.

Conference Agenda

On May 13, 2014, after a welcome by Dr. David Cone, editor-in-Chief of *AEM*, conference co-chairs Drs. Basmah Safdar and Marna Greenberg provided the historical background for this year's consensus conference and the rationale for its place in emergency care, followed by an overview of the day and a description of the consensus methodology. This was followed by a keynote address by Dr. Marianne Legato, Director of the Foundation for Gender-Specific Medicine and Professor Emerita at Columbia University, addressing the

history and development of sex- and gender-specific medicine and the clinical relevance to emergency care.

Figure 2 details the full agenda along with the group leaders. There were three content-specific breakout sessions in the morning and four more thematic consensus sessions in the afternoon to allow cross-fertilization of ideas between groups. In these workshops, each team leader guided participants through: 1) an overview of current sex- and gender-specific research in the topic, 2) a discussion of critical gaps in sex- and gender-specific research, 3) a consensus process for the identification of the priority areas for sex- and gender-specific research in the topic, and 4) a discussion of steps to building national collaborative and interdisciplinary networks to facilitate gender-specific research in the topic.

A lunchtime panel discussed the funding mechanisms for sex- and gender-specific research. An afternoon panel including the FDA discussed the sex- and gender-specific regulatory challenges to product approval. A closing session, led by Drs. Greenberg and Safdar on behalf of the executive committee and assisted by the workshop leaders, provided feedback on the consensus process and defining an EM sex- and gender-specific research agenda.

Although the primary goal of the conference was to develop a research agenda, an additional and important aim of our conference was to create an infrastructure for continued meaningful national collaborations. We considered this networking crucial to the success of the meeting, as we hope to catalyze the formation of teams and networks to propel future funding opportunity announcements, grant applications, and studies in this area. We created numerous opportunities during breaks and meals, before and after the conference. This included for the first time an allotted and well-advertised postconference networking session that allowed junior members to network with presenters and attendees, funders, and potential grantees. Some work groups also identified existing national health databases to answer key study questions identified through this collaboration.

Common Themes Linking the Consensus Recommendations

The workgroups and panel discussions highlighted a few themes that linked the consensus recommendations:

1. Sex- and gender-specific differences permeate almost all domains of prehospital, hospital, and postresuscitative emergency care. These differences were documented in presentations on physiology, diagnosis, management, and prognosis of diseases and public health issues that affect emergency department (ED) patients.
2. Critical gaps exist in current emergency care research that could influence the care and outcomes of ED patients.
3. Emergency care researchers need to bridge the gap across disciplines and between basic sciences and clinical science to investigate, understand, and translate the effect of sex/gender on patient outcomes.
4. Emergency medicine researchers need to align their research questions and training with the funding opportunities to move this field forward.

5. Collaborative networks are needed to advance education, research, and advocacy for sex- and gender-specific research in emergency care.

Conference Products

A summary of consensus conference products is shown in Table

Consensus Methodology

By definition, consensus is the general agreement or the judgment arrived at by most of those concerned.¹² Consensus methodology is the study of techniques or processes used to achieve a nonbiased valid agreement among a group of individuals with diverse opinions and expertise. A nonbiased methodology typically displays the following features:^{13–15}

- Anonymity: avoids dominance; achieved by use of a private ranking.
- Iteration processes: occurs in “rounds,” allowing individuals to change their opinions.
- Controlled feedback: showing the distribution of the group's responses allows participants to reassess their positions.
- Statistical group: expressing judgment using response summary measures of the full group response (example: mean and medians).

A validated and commonly used consensus method is the nominal group technique (NGT).¹⁶ This technique uses a structured process to gather information from relevant experts (usually nine to 12 in number) about a given issue. It consists of iterative rounds of input in which participants review and identify important themes, generate items or questions, prioritize, discuss, and then rerate a series of items. The NGT method provides a process in which thoughts and opinions can be heard and consolidated and prioritized in a nonoppressive manner. Good consensus methodology requires careful planning to include all relevant stakeholders. Poorly constructed groups can pose the danger of deriving incomplete or biased conclusions. The nominal group is not a replacement for rigorous scientific reviews of published reports or for original research, but rather a means of identifying areas of current expert opinion and areas of disagreement.¹⁶

AEM Consensus Methodology

The 2014 *AEM* consensus conference methodology used a similar reiterative process of collecting and consolidating ideas from a group of relevant stakeholders from EM and related fields. The goal of the *AEM* consensus conferences is to develop a consensus-based research agenda on the theme topic for EM researchers. Specifically, the 2014 consensus conference was focused on creating a research agenda for sex- and gender-specific research in seven key areas: cardiovascular, neurological, trauma/injury, substance abuse, pain, mental health, and diagnostic imaging.

Individual workgroups decided whether the research questions related to their subject matter were best discussed and presented in the form of domains, themes, or specific questions.

Domains—A domain was defined as a very general area of knowledge or collection of themes with some common element. Each domain was typically circumscribed by the logical relatedness of its main concept and allowed for a structured conversation of a broad topic. For example, the cardiovascular workgroup discussed three main domains: acute coronary syndrome, heart failure/arrhythmias, and resuscitation. All topics were related to the heart and yet were distinct entities. Some workgroups such as diagnostic imaging had only one domain for discussion.

Themes—Within each domain, themes were defined as the overarching conceptual categories that described a group of closely connected items. These were the general propositions that emerged from diverse and detail-rich discussions of the group stakeholders. Themes represented the recurrent and unifying ideas regarding the subjects of inquiry. For example, acute coronary syndrome was discussed around several themes (presentation, diagnosis, pathophysiology, outcomes, and prognosis) and the group voted to prioritize the top themes for consensus recommendations. Each theme had specific questions all unified by the subject of that theme. Themes were used for consensus recommendation(s) when topics were too broad or detailed to be restricted to distinct questions.

Questions—When possible, specific research questions were encouraged and posed by groups. For example, within the diagnosis of acute coronary syndrome, investigating the sex-specific cutoff levels of biomarkers was a specific question.

Four-step Consensus Building Process (Figure 3)

The conference executive committee proposed and executed a modified NGT composed of four steps to create a uniform consensus methodology across the seven work groups. This iterative process was designed to reach a consensus on the key areas of future research for a given topic and to filter out minor or redundant concepts.

1. The *first step* began in the years/months preceding the conference and included a background literature search by content experts who consolidated their expertise to identify current gaps in sex- and gender-specific research in their specific areas. Each team was expected to develop and discuss important items and topics for future research through electronic discussion, face-to-face meetings, and conference calls. Teams framed gaps in research as individual research questions, as broader domain recommendations, or as topic areas as appropriate. Some groups queried non-EM audiences to widen the scopes of their searches.
2. The *second step* occurred in the weeks preceding the conference and involved further discussion and reprioritization of the proposed questions. Ideally, the aim was to prioritize the most clinically relevant research to EM clinicians. While there was no requirement or limitation to the actual number of items generated, the *AEM* leadership recommended a list of five to eight themes or questions for each domain going into the consensus conference. The draft manuscript and priority recommendations from each group were posted on the SAEM website several weeks before the conference. E-mails were distributed to those registered for the conference with links for each group's research agenda. This iteration provided

ranking feedback on questions put forth by each group. Additional potential research questions were also requested from expected participants, as well as others with vested topic interest, including non-EM experts.

3. The *third step* occurred on the conference day. The consensus participants and relevant stakeholders selected their areas of interest and gathered in “breakout groups” to develop summary consensus recommendations through a robust discussion and vetting process. Group leaders briefly reviewed a background of the rationale of the questions listed and described the prioritization process within their work groups. Each work group then discussed, considered alternatives proposed by the group, and voted to prioritize the top five to eight research themes or questions or recommendations relevant to their topic areas. The different voting methods that were offered to the group leaders are described below. The group leaders wrapped up the session in the final 10 to 15 minutes with summary comments and final voting if there were remaining areas of disagreement.

Each room had facilitators (group leaders) who were integrally involved during the first two steps. During the session, the facilitator(s) with content expertise helped lead the dialogue, review the proposed research priorities, and obtain feedback from the larger group. To reduce intergroup variation, the conference co-chairs reviewed clear goals and objectives of the sessions, ground rules for the discussion, and voting methodologies with the facilitators at the planning dinner the evening before the conference. This was done to ensure that all participants, including participants who joined later in the process, were able to express their views and keep those with strong personal or professional biases from dominating the discussion. Groups and participants were allowed opportunities to defend or better clarify their questions. Special attention was paid to patient representatives as well as non-EM participants to make sure their voices were heard. Additional information sessions were held for these members to help orient them with the group discussions prior to the conference. Facilitators prepared to adjust the discussions to accommodate the unpredictability of the actual audience size in each breakout room on the day of the conference. After all research questions were created, discussed, defended, vetted, and clarified, a final list was generated. Research priority themes and questions were created on the basis of majority vote.

4. The *fourth step* occurred after the conference. Groups summarized and revised their final research agenda items from their discussions and created the final consensus research agendas to be submitted for publication.

Voting Methods

Various ranking strategies were offered to the groups (described below). Each room was equipped with a laptop and projection screen for presentations. After presenting a synopsis of the topic, facilitators put forth research questions prepared during step 2. Facilitators then asked participants to score agreement or disagreement with the clinical importance of each of the proposed five to eight research domains or theme questions using a Likert scale. The voting results were then counted and summarized (example: median scores), and the

questions were ranked accordingly. If for some reason consensus could not be obtained during the breakout session, the facilitators had the option of offering a late feedback electronic survey for a final reiteration following the day of the conference. This was felt to be appropriate for participants who wished to continue to consider the questions, but posed risk to publication deadlines. Group leaders were advised to use postconference surveys only as a last resort.

All workgroups posted draft manuscripts summarizing the data pertinent to their discussion as well as preformed priority domains and theme questions well ahead of the conference. This allowed new participants an opportunity to review the background information and save valuable time in the meeting. Facilitators helped groups review, revise, and discuss new concepts within the allotted time frame. Specifics of the groups, including their size, attendee list, and any ranking strategies that have not been described, can be reviewed in the individual workgroup manuscripts.

1. Hand Voting—This is the low-technology method that was proposed for all workgroups as standard backup. A simple hand vote was counted after presenting each domain or theme question. Designated room scribes noted these results on flip charts made available to each group or on a computer tally projected on the screen. The final rankings were based on the tally of these votes. This process worked best for smaller groups or subgroups. Considering the time involved also reinforced the need for the groups using this method to limit the number of questions or recommendations put forth to the groups to achieve consensus in the allotted time frame.

2. Poll Everywhere—Groups that chose Poll Everywhere (<http://www.polleverywhere.com>) had preapproval from the co-chairs. They drafted polls containing their questions in survey link and PowerPoint (Microsoft) presentations before the conference. Designated technology scribes helped facilitate the transcription of newly generated questions to the poll during the session when necessary. Live audience feedback was submitted through text messages sent from cell phones (or through an online survey) and was transmitted to the polls and was visible to participants in the corresponding question format (ranking, open ended, multiple choice, etc.). Leaders and teams who opted to use this technology were advised to practice using the tool in group settings prior to the conference. This preparation helped make the process at the conference more efficient in an already tight schedule. For groups using Web-based technology, a back-up method was also selected (e.g., flip chart/markers or show of hands) in anticipation of technology failure.

3. Turning Point (Turning Technologies)—Individual breakout room facilitators were allowed to bring their own audience feedback systems to use at the conference. However, they had to bring their own laptops with the software loaded onto it. It was not guaranteed that this would always perform optimally, so teams using this option had to have a back-up (nontechnology) plan prepared. If a breakout room chose this option, the room's leaders also had to plan for door monitors to collect the keypads at the end of the session.

4. Others—Group leaders were permitted to come before the session to set up flip charts or posters around the room with a research question on each page. Participants were then given

a fixed number of response items (adhesive note, colored sticker, etc.) to rank each question (for instance, a red sticker indicated a low importance, a green sticker indicated a question of higher importance, etc.). A word of caution was given to the facilitators: in this method a participant could place all of his or her votes on one question if he or she felt it had the highest priority. Using color-coded adhesive notes or stickers with a different color for each question helped avoid introducing this potential bias. In advance, teams were permitted to create posters to be used in a similar fashion; however, they were prepared to display them on tables because it was not guaranteed that they could be hung on the room dividers.

Troubleshooting

The co-chairs reviewed and helped troubleshoot the various voting strategies with the group facilitators the day prior to the conference. Group leaders were advised to consider unpredictable factors such as variable group size, failure of technology, group attrition throughout the day, and the possible need for moderation when people defended or clarified their questions. Group leaders were also asked to formulate a strategy to lead the group if they have unexpectedly high (>60 per group) or low (<15 per group) attendance. For larger groups, group facilitators could divide the room into subgroups of 20 to 25 people to allow robust discussion; however, this required identifying and preparing additional individuals to facilitate these groups. The distribution and timing of discussion versus voting varied based on these dynamics. Group leaders created several countermeasures and flexible alternative plans if they met with any of these obstacles. The groups kept a fluid agenda/discussion to incorporate new ideas and concepts generated through the consensus process. Some groups with large numbers of questions chose to limit their recommendations to main domains and themes, as opposed to detailed questions. Finally, the group leaders formatted the final manuscripts to provide a consensus-based research agenda, as opposed to a detailed literature review of the subject.

Conference Demographics, Voting, and Evaluation Results

A total of 133 people attended the 14th annual *AEM* consensus conference. Fifty-seven percent were between ages 31 and 50 years, 71% were females, and 79% were white. Twenty-five percent of them were trainees (students, residents, or fellows), 32% were junior faculty, 19% were ranked as associate professors, 13% as full professors, and 11% as "other." The last category included PhD researchers, nurses, patients, paramedics, and representatives of federal and funding agencies and regulatory bodies.

Primary and secondary voting methods used by each workgroup are summarized in Table 3. The conference aims were evaluated through multiple mechanisms: 1) a formal CME assessment form was distributed to participants and group leaders, and a Web-based polling facilitated feedback for a 360-degree evaluation from both participants and leaders at the conference was done. Participants rated each session for content, organization, and relevance by answering yes/no, open-ended, and Likert-scale questions (Data Supplements S5 and S6, available as supporting information in the online version of this paper); 2) successful compilation and dissemination of consensus statements; 3) publication of this special topic issue of *AEM* in December 2014; and 4) use of the consensus research agenda in guiding and catalyzing future research in the field across disciplines.

The participant evaluation of the conference (paper and Web-based) is summarized in Table 4. The speakers were 45% females and 15% junior and 85% senior faculty members. With an aim to obtain 360-degree evaluation, speaker evaluations of the conference (paper and Web-based) are summarized in Table 5.

Participants and speakers noted the quality of sessions, the opportunity for networking with funders as well as senior members, use of digital voting in consensus-building process, and the postconference networking session among the highlights of the conference. Specific recommendations for future improvements revolved around clarification of the editorial process with the help of a summary document, videoconferencing option for nonattendees, and increasing the discussion time. Suggestions for increased networking opportunities included a “speed dating” event for smaller groups of people during the meeting, having a handout of senior members listing their areas of interests, and increased publicity.

Going forward, planning groups may consider pay extra attention to several issues. Almost all of the breakout groups had trouble restricting content to five to eight themes or domains, and most went into the consensus conference with over twice that number. Future consensus committees should consider adapting this guideline to balance the depth of material covered on the day of the conference against allowing enough time to generate new ideas and have discussions. Additionally, enough time should be allowed between mailing out preconference surveys and the day of the conference to allow incorporation of the feedback from the survey into the final iteration of the themes and questions. This should ideally be done a month before the conference. Finally, some of the group leaders and participants were concerned about seeing the summary responses during the voting process as a potential bias. This is in fact an integral part of the nominal technique process intended to build consensus. Clarification of the consensus methodology and early education of the group leaders and participants may help resolve these misconceptions.

Summary

The 2014 *AEM* consensus conference was a well-received conference that has put forth a consensus-driven multistakeholder research agenda in seven domains key to emergency care. We hope that through this multidisciplinary discussion, the recommendations of this conference will advance the field of sex and gender medicine in emergency care. In this executive summary, we have also outlined the marketing efforts, fund-raising campaign, team-building efforts, and a clear sets of guidelines and deliverables that were required to facilitate the success of this conference. The summary is expected to serve as a guide for the organizers and leaders of future research conferences.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.
Timeline for the 2014 *AEM* consensus conference: planning, execution and dissemination.

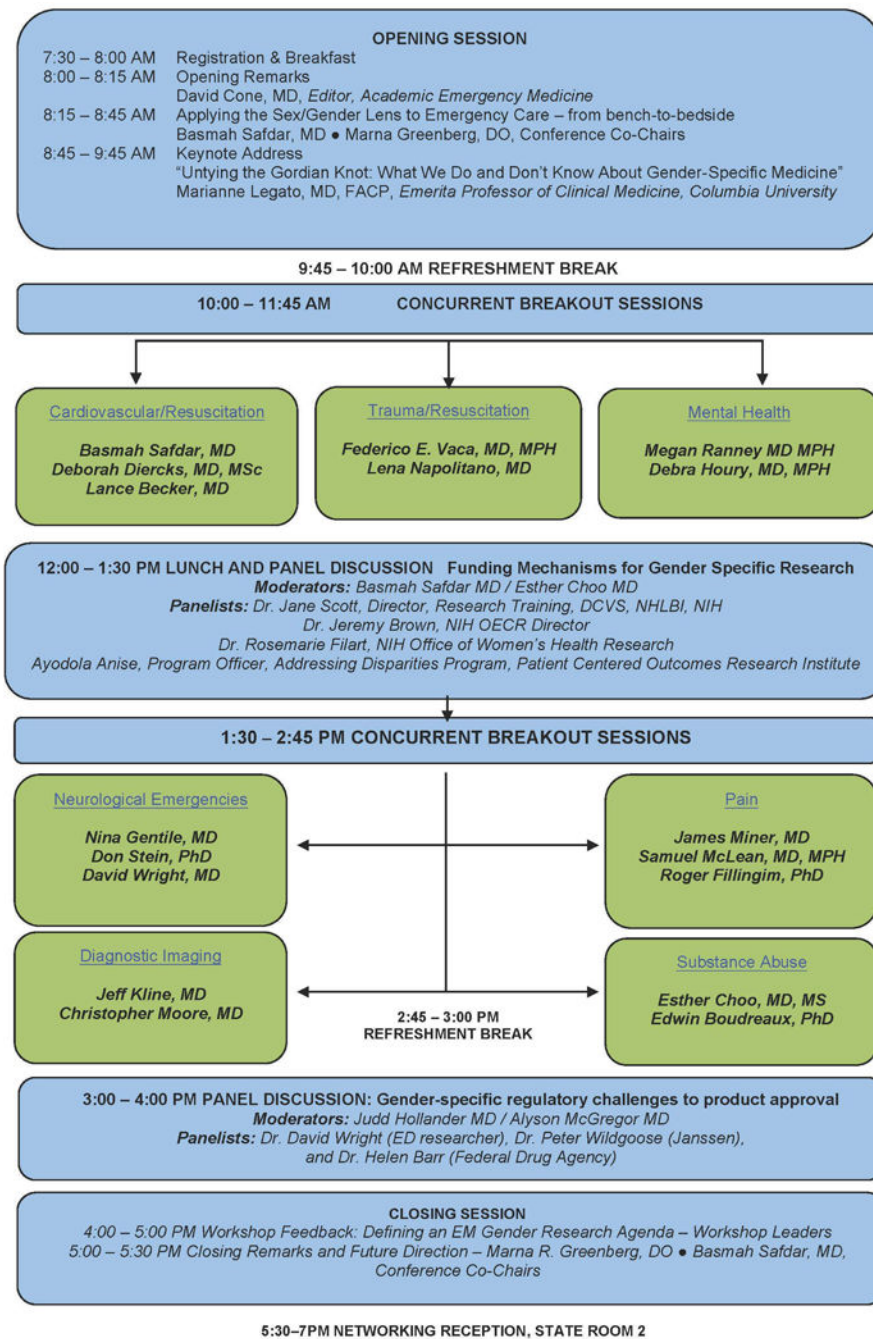


Figure 2.
 Agenda.

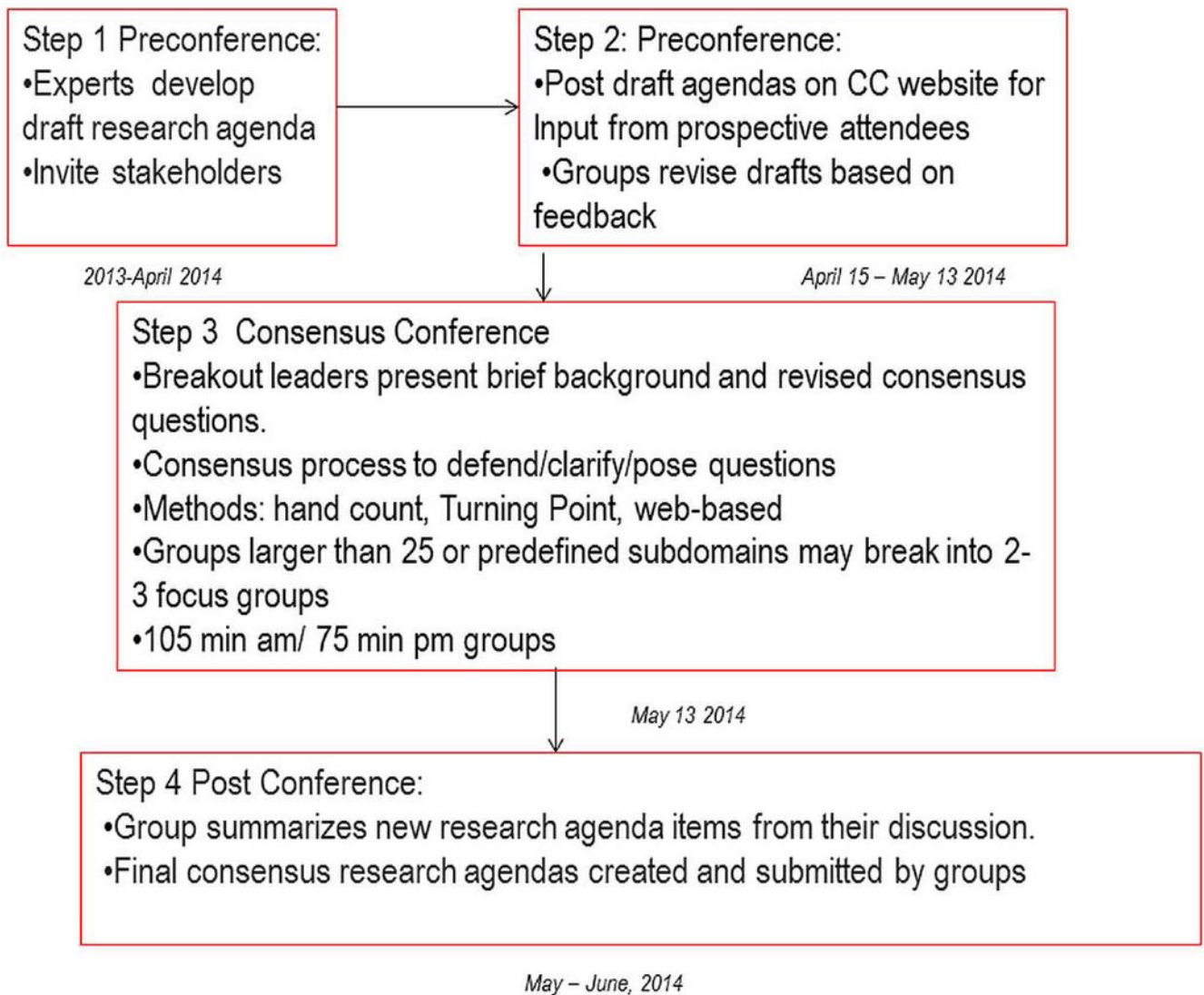


Figure 3.
Steps of consensus process.

Table 1

Consensus Conference Executive and Planning Committees		
Member	Institution	Role
Basmah Safdar, MD, MSc	Yale University	Co-Chair and Proceedings Guest Editor
Marna R. Greenberg, DO, MPH	Lehigh Valley Health Network	Co-Chair
David C. Cone, MD	Yale University	Editor-in-chief
Esther Choo, MD, MPH	Brown University	Original Contributions Guest Editor
Alyson McGregor, MD, MS	Brown University	Executive Planner
Lance Becker, MD	University of Pennsylvania	Executive Planner
James Miner, MD	Hennepin County Medical Center	Proceedings Guest Editor
Kathleen Seal	<i>AEM</i>	Technical Editor
Sandra Arjona	<i>AEM</i>	Journal Manager
Melissa McMillian	SAEM	Grants and Foundation Manager
Holly Byrd-Duncan	SAEM	Marketing and Membership Manager
Consensus Conference Steering Committee		
Members	Institution	
Stephanie Abbuhl, MD	University of Pennsylvania	
Gail D'Onofrio, MD, MS	Yale University	
Knox Todd, MD, MPH	University of Texas	
Bob Hockberger, MD	Harbor-UCLA Medical Center	
Gloria Kuhn, DO, PhD	Wayne State University	
Federico E. Vaca, MD, MPH	Yale University	

Table 2
Summary of Consensus Conference Products

Product	Description
1. Gender review	A focused review that consolidates existing evidence on sex/gender medicine for key issues relevant to EM.
2. <i>AEM</i> special issue published in December 2014	<p><i>First half:</i> conference proceedings developed along a conceptual framework addressing the most relevant facets of the conference theme.</p> <p><i>Second half:</i> original papers related to the conference theme. The breadth of the topics demonstrates interest that already exists in our specialty. Also included are expert commentaries and summaries of plenary presentations. We expect these papers will guide and empower clinicians, educators, and researchers for the next decade.</p>
3. Research agenda	A stepwise roadmap for the translation of current sex- and gender-specific scientific evidence in EM clinical practice as well as an agenda for future research and health policy.
4. Interdisciplinary network	Formation of a collaborative network to synergize the developments in basic science and translational research with clinical research and train future emergency care scientists in sex/gender medicine.

Table 3
Voting Methods Used by the 2014 *AEM* Consensus Workgroups

Workgroup	Primary Method	Secondary Method
1. Cardiovascular/resuscitation	Poll Everywhere	Paper survey
2. Trauma/resuscitation	Poll Everywhere	Paper survey
3. Mental health	Poll Everywhere	Paper survey
4. Substance abuse	Flip charts with dots/stickers	—
5. Pain	Paper survey	Hand vote
6. Neurological emergencies	Poll Everywhere	Paper survey
7. Diagnostic imaging	Poll Everywhere	Paper survey

Table 4
Evaluation Response from Participants of 2014 AEM Consensus Conference

Participant Exit Survey Question	Type of Question	
	Yes/ No (% Yes)	Likert Scale (% Very Good or Excellent)
1. What is your overall rating for this conference?		100%
2. Has the conference contributed to your understanding of the role of sex/gender in your research or clinical practice?	100%	
3. Did the workgroups summarize current data to gender-specific research for acute care and identify critical gender-related gaps?	95%	
4. Did the conference advance a consensus-driven research agenda for gender-specific emergency care?	100%	
5. Did the conference provide you with opportunity to network and form new collaborations?		95%
6. Has the conference allowed you networking that had a personal or professional advantage?	95%	

Table 5
Evaluation Response from Speakers of 2014 AEM Consensus Conference

Speaker Exit Survey Question	Type of Question	
	Yes/ No (% Yes)	Likert Scale (% Very Good or Excellent)
1. What is your overall rating for this conference?		100%
2. How well did the organizing committee keep you informed of the meeting expectations and deliverables?		100%
3. Has the conference contributed to your understanding of the role of sex/gender in your research or clinical practice?	100%	
4. Did the workgroups summarize current data to gender-specific research for acute care and identify critical gender-related gaps?	100%	
5. Did the conference advance a consensus-driven research agenda for gender-specific emergency care?	100%	
6. Did the conference provide you with opportunity to network and form new collaborations?		97%
7. Has the conference provided you any personal or professional advantage from the process or the conference?	100%	
8. How much did participating in the conference help your own research?		77%