

Grant Final Report

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**Primary Care Research Methods & Statistics
Conference**

Inclusive project dates: 09/30/08 - 04/30/12

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Performing Organization:

University of Texas Health Science Center at San Antonio

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None provided.

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The Agency for Healthcare Research and Quality (AHRQ)

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Abstract

Purpose: The purpose of the Primary Care Research Methods & Statistics Conference is to increase research capacity in primary care by 1) helping novice researchers develop basic research skills; and 2) helping experienced researchers expand their repertoire of research methodologies.

Scope: National audience of primary care researchers.

Methods: The needs of novice researchers were addressed through the Methods Workshop for the Novice Researcher, the basic Methodology track, the Research Career Planning panel discussion (“New Paradigms in Primary Care Research”), and opportunities for networking with intermediate and experienced researchers. The needs of experienced researchers were addressed through the pre-conference Experienced Researcher Workshop, the Statistics track, the Thematic track (“Research with Vulnerable Populations”), the Qualitative Methods track, the Plenary Sessions, and the Thematic panel discussion.

Results: The 24th annual Primary Care Research Methods & Statistics Conference included 19 concurrent sessions (peer sessions [45 minutes], seminars [90 minutes] and workshops [2 hours 15 minutes – 3 hours], and attracted attendees from around the country. The two Plenary Speakers were: 1) Lillian Gelberg MD MSPH, UCLA, Center for Health Policy Research, who discussed “Conducting Research with Homeless Populations”; and 2) Steven Blanchard PhD, Our Lady of the Lake University, who discussed “The Social Ecology of Health: Effects of Context and Place”. The conference also included two preconference workshops aimed at novice and experienced researchers: 1) Novice Researcher Workshop, “Methods Workshop for the Novice Researcher” John G. Ryan DrPH, University of Miami; and 2) Experienced Researchers, “Stata Workshop for Experienced Researchers”, William Rising PhD, Director of Educational Services, StataCorp. Future Plans: We hope to present the 25th annual conference in Jan or Feb 2013 (we wil not be able to pursue our usswl firs weekend in December because the NAPCRG annual conference will be held Dec 1-5, 2012, in New Orleans). Preconference workshops: Experienced Researchers: “Social Network Analysis”, Stephen Borgatti PhD, Univ. of Kentucky; Novice Researchers: “Grant Writing Tips”, Lawrence Gabel PhD, Ohio State Univ. Practice Transformation. This conference has always been focused on new and emerging techniques, and one important development in primary care research has been measuring the implementation of “practice transformation”. To this end, we would like to invite AHRQ awardees to attend the meeting and share their ideas and experiences on this important topic. Practice Facilitation. We will solicit sessions on how to recruit, train, and deploy “practice facilitators” for practice-based research. We hope to attract Lyndee Knox PhD to present her AHRQ-sponsored white paper on this subject. Other potential presenters include LJ Fagnan MD MPH (OHSU), Chet Fox MD (SUNY Buffalo), and James Mold MD (Univ. of Oklahoma).

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Final Report

Purpose

The purpose of the Primary Care Research Methods & Statistics Conference is to increase capacity in primary care research by:

- 1) helping novice researchers develop basic research skills; and
- 2) helping experienced researchers expand their repertoire of research methodologies.

Scope

Background

The Primary Care Research Methods & Statistics Conference is a multidisciplinary conference that addresses the particular needs of primary care researchers. While other meetings allow presentation of original research, this unique conference focuses on research methodology.

The Primary Care Research Methods & Statistics Conference has been presented annually for 24 years, involving more than 2,400 participants from over 30 disciplines. The conference is endorsed by the Society of General Internal Medicine, the Ambulatory Pediatric Association, the Society of Teachers of Family Medicine, and the North American Primary Care Research Group. The conference includes two nationally-recognized plenary speakers, two panel discussions, and two pre-conference workshops.

The Primary Care Research Methods & Statistics Conference has a proven track record of success in fostering the research careers of conference participants and serving as a venue for new and innovative methodologies (Katerndahl 2000, Katerndahl 2006).

The Primary Care Research Methods & Statistics Conference has been supported by an AHRQ grant for the past twelve years. The conference is endorsed by the Society of General Internal Medicine (SGIM), the Academic Pediatric Association (APA), the North American Primary Care Research Group (NAPCRG), and the Society of Teachers of Family Medicine (STFM). The conference includes two nationally recognized plenary speakers, two panel discussions, and two pre-conference workshops. The majority of the conference consists of skill development for primary care researchers but emphasizes research themes highlighted by AHRQ. The conference also seeks to highlight new or emerging research methods for conducting primary care research.

AHRQ Conference Objectives

The Primary Care Research Methods & Statistics Conference addresses AHRQ conference objectives:

- 1) **Research Development:** the conference specifically invites researchers to submit "real world" problems in research methodology and develops strategies for addressing these problems;
- 2) **Design and Methodology:** the conference solicits and presents sessions on methodological and technical issues important to the field of health services research. The conference specifically solicits sessions on new and/or emerging methodologies in the area of primary care research; and
- 3) **Dissemination Conferences:** the conference is a unique venue for disseminating methodologies specific to primary care research to a wide audience of novice-, intermediate- and experienced-researchers in internal medicine, pediatrics, family medicine, nursing, and health services research.

The Primary Care Research Methods & Statistics Conference addresses all three of these priorities: we actively seek new research on priority health issues, highlight new tools and help develop new talented researchers, and host sessions on translating research into practice. Taken together, these elements help build the infrastructure, tools, and knowledge needed to improve health care in the US.

The need to build research capacity in primary care and for faculty development is well-recognized (AHCPR 1993). Specific recommendations for the primary care disciplines have included fostering interdisciplinary collaboration, promoting innovative methods, presenting forums for interdisciplinary networking, and promoting research as a career (Stange 1996). Previous work suggests that productive researchers are socialized to academic medicine and skilled in professional communication, and they work in environments that emphasize research, foster communication, and provide a collegial climate (Bland 1992). These recommendations for building capacity and characteristics of productive environments suggest that conferences may be useful in the effort to build research capacity in primary care.

Addressing these Needs

The Primary Care Research Methods and Statistics Conference addresses these documented needs in several ways:

Capacity-building. First and foremost, the conference builds capacity in primary care research by training novice researchers and enhancing the skills of experienced researchers. The conference provides a venue for exploring and developing the particular methodological needs of research in the primary care setting.

Conference Theme. The yearly conference theme coincides with many of the needs outlined above. Over the previous nine years, the conference highlighted such themes as Practice-based Research Networks (1995), Quality of Care Research (1998), Medical Informatics and Technology (1999), Research in the Managed Care Setting (2000), Translating Research into Practice (2001), Health Disparities Research (2002), Multidisciplinary Research (2003), Knowledge Management and Organizational Learning (2004), and "Patient Safety and Medical Errors: Methodological Challenges" (2005). "Social Epidemiology and Multilevel Effects

Research” (2007). The theme for the 22nd annual conference was “Complexity Science and Applications in Primary Care Research”, and the theme for the 23rd annual conference was “Patient-Centered Care, Patient-Centered Research”. The theme for the 24th annual conference was “Research with Vulnerable Populations”.

Multidisciplinary. The conference is designed to be multidisciplinary in nature, attracting not only internists, pediatricians, health services researchers, nurse researchers, and researchers in family medicine, but also a wide variety of other researchers as well.

Multi-methods. The conference has been successful in attracting nationally recognized experts in multi-methods research, a synthesis of both quantitative and qualitative methods particularly appropriate to primary care research.

Preconference Workshops. This conference has hosted several topic-specific pre-conferences in the previous years: 1) “Advancing the Methods in PBRN Research” (2001); and 2) “Culturally-Bound Mental Disorders” (2002). These 2 day workshops were designed to bring together invited experienced researchers actively conducting research in a new area relevant to primary care with the purpose of identifying a series of needed research studies in that area and of fostering collaboration among the participants to achieve that program of study. For the 2004 conference, we partnered with the Veteran’s Evidence-based Research Dissemination and Implementation CenTer (VERDICT) to host a one and a half-day session on “Studying Knowledge Management in Healthcare: Methodological Challenges”. For the 2007 conference we co-hosted 3 concurrent meetings: 1) Qualitative Retreat, AAFP Research Center; 2) AHRQ-sponsored Academic Center of Excellence (ACE) Evidence Based Practice group; and 3) Residency Research Network of South Texas (RRNeST)

Participants

Approximately 35-45% of conference attendees are MD's, and 30% are PhD's. Participants with a wide range of other degrees also attend. Although 60% of participants are full-time faculty, 10% are either practitioners or clinical faculty. Although 40% of participants come from Texas, 55% come from all over the US, and 5% come from Canada and Mexico.

This conference is truly multidisciplinary with 30 different disciplines represented. While family practitioners account for over 40% of participants, over 10% are from Internal Medicine and 5% are from Pediatrics. Since 1999, the number of nurse researchers attending the conference has risen steadily, peaking at 16% of attendees for the 2003 conference. Participants rate their level of research experience as being evenly distributed among novice, intermediate, and experienced levels. This mix provides one of the great strengths of this meeting, the opportunity for novice researchers to meet with and network with more experienced researchers. It also provides more experienced researchers with the opportunity to discuss and review their work with like-minded experienced researchers from around the country.

Consequently, this conference provides a diverse experience with a variety of topics presented several formats. It is attended by participants from many disciplines, with all levels of research experience, from across the United States.

Distribution of Announcements

In addition to posting the Call-for-Papers and Program Announcements on our website, they are distributed to those potential attendees identified by the Program Committee or on mailing lists. All past participants, and faculty and residents of primary care disciplines—family medicine, general internal medicine, pediatrics, dentistry, nursing—at the University of Texas Health Science Center at San Antonio receive announcements. In addition, members of primary care research organizations also receive them. These organizations include:

- Academic Pediatric Association
- Society of General Internal Medicine
- Society of Teachers of Family Medicine
- North American Primary Care Research Group

Nursing researchers are contacted through a variety of means, including the Council for the Advancement of Nursing Science (CANS) and the Southern/Eastern/Midwestern Nursing Research Societies. Other targeted groups include: directors and research directors of practice-based research networks; directors of fellowship training programs; qualitative researchers; geographic information systems researchers; and leaders of managed care organizations. Announcements are also sent to all department chairs in the U.S. and Canada for departments of family medicine, internal medicine, and pediatrics. Finally, announcements are placed in the newsletters and distributed at the annual meetings for the organizations mentioned above.

Organization of the Project

Conference Coordinators. Dr. Calmbach (PI) and Dr. Katerndahl (co-investigator) are ultimately responsible for the planning and conduct of the conference. They ensure that the timeline is met, and plenary and pre-conference workshop speakers are arranged. They review the Call-for-Papers and program announcement prior to printing, arrange seminar/workshops into their final schedule, seek additional funding if necessary, summarize the summative evaluations, and implement recommendations of the Program Committee.

Program Committee. The Program Committee consists of the conference coordinators, Rose Tierney-Gumaer MSN MPH (Continuing Education), and representatives of the four endorsing organizations:

Table 1. Program Committee

| Organization | Participant(s) |
|--|--|
| Society of General Internal Medicine | Andrew Diehl, MD, Dept. of Medicine, UTHSCSA |
| Academic Pediatric Association | Pamela Wood, MD, Dept. of Pediatrics, UTHSCSA Paul Darden MD, Dept of Pediatrics, University of Oklahoma School of Medicine |
| Society of Teachers of Family Medicine | Charles P. Mouton, M.D., M.S., Dean, Medical School, Meharry Medical College |
| North American Primary Care Research Group | Anton Kuzel, MD, MPHE, Dept. of Family & Community Medicine, Virginia Commonwealth University |
| Council of Nurse Researchers | Kathleen Stevens, EdD, RN, School of Nursing, Univ. of Texas Health, Science Center at San Antonio (UTHSCSA) |
| Academy for Health Services Research and Health Policy | John G. Ryan, DrPH, Dept. of Family Medicine and Community Health, University of Miami |
| Continuing Medical Education | Susan Duncan, Univ. of Cincinnati |

The Program Committee meets semi-annually. In month 7, the committee meets to review submissions and select those for presentation. The committee meets within six weeks of the conference to review the previous conference evaluations, and select the plenary and pre-conference workshop speakers for the next year's conference (months 1-2). In addition, members of the Program Committee may assist in inviting selected speakers. The organizational representatives are responsible for keeping their organizations informed about the conference and placing announcements in their organization's newsletter.

Moderators. The moderators for the conference are volunteers from the faculty of the Dept. of Family & Community Medicine, Program Committee members, or volunteer seminar/workshop presenters. For participants to be able to move between concurrent tracks, seminar/workshops must begin and end on time. Moderators are responsible for keeping presentations on schedule. In addition, moderators introduce the presenter(s), ensure that the necessary audiovisual equipment is present, evaluate the presenter's presentation skills using the checklist provided, and encourage participants to complete the seminar/workshop evaluations.

Timetable. During months 1-3, the previously identified plenary and pre-conference workshop speakers are contacted to elicit their participation. With this information, the Call-for-Papers is developed and disseminated by month 4. The Call for Papers requests that submissions include an abstract, the educational goals and objectives, a description of content, prerequisite knowledge, a description of audience participation, and a bibliography.

The Program Committee meets in month 7 to review submissions. Based on descriptions of the proposed presentations and the theme of the conference, a decision is made to accept or reject each submission. Gaps in the content of each track are identified, and potential topics and presenters selected. The level of each presentation is identified—novice, intermediate, or experienced—based on the topic, prerequisite knowledge, and description provided. The conference coordinators inform those making submissions about the decision of the Program Committee and group presentations into tracks. This conference schedule is given to the CME director who then develops the program announcement.

The program announcement is disseminated by month 8 and manuscripts for the proceedings are to be received by month 9. The conference proceedings are prepared during month 10 and final hotel arrangements are made.

Within six weeks of the conference, the Program Committee meets to review the summative and seminar/workshop evaluations (months 1-2). The committee then reviews the following year's theme, ranks a list of potential plenary speakers, and identifies the topic and speaker for the pre-conference workshops.

Marketing of the Conference

Mailing lists are purchased from the major primary care organizations Society of General Internal Medicine (SGIM), the Ambulatory Pediatric Association (APA), the Society of Teachers of Family Medicine (STFM), the North American Primary Care Research Group (NAPCRG), as well as the (former) National Council of Nurse Researchers and the (current) Council for the Advancement of Nursing Science (CANS). Announcements about the conference were circulated through email listserves and online announcements made by SGIM, APA, STFM, and NAPCRG. This resulted in relatively few proposals being submitted. The PI then solicited specific topics from recognized leaders in the field to complete the conference schedule.

Methods & Results

Conference Format

The basic format of the conference is a 2-1/2 day conference, beginning on Friday morning with two workshops: 1) a methods workshop for the novice researcher; and 2) an experienced-researcher workshop (topic chosen to match the conference theme, or based on the previous year's Summative evaluations). Friday afternoon, the first plenary address is given followed by 3-4 seminar/workshop tracks (e.g., methodology, qualitative methods, statistics, thematic track). Saturday begins with a plenary address and a related panel discussion; these are followed by 3-4 seminar/workshop tracks. Saturday afternoon, a plenary address by the principal investigator of the innovative study selected is given, followed by 3-4 seminar/workshop tracks. Sunday begins with the academic career panel discussion followed by 2-3 concurrent workshops.

Themes

The Primary Care Research Methods & Statistics Conference provides sessions on a broad array of research methodologies. However, each conference has a central theme. The theme is reflected in the plenary sessions, the thematic panel discussion, and a track of seminars and workshops. These themes were selected on the basis of AHRQ priorities as well as suggestions from conference participants as part of the Summative Evaluation process. The theme for the 24th annual conference was: "Research with Vulnerable Populations".

Plenary Speakers

The two 55-minute plenary sessions address different aspects of the yearly conference theme, and are intended to be inspirational/motivational in nature. The Plenary Speakers for the 24th annual conference included:

Lillian Gelberg, MD, MSPH; UCLA School of Medicine, Center for Health Policy Research. Dr. Gelberg is well-recognized in the field of conducting research with homeless individuals and was the lead author on a seminal work creating a model for health care among the homeless. She presented a plenary session on “Conducting Research with the Homeless”.

Stephen Blanchard, PhD. Dr. Blanchard is Chair of the Department of Applied Social and Cultural Sciences at Our Lady of the Lake University, and director of the Sociology program. He was a long history of experience working with vulnerable populations in South Texas and has done pioneering work using GIS systems in local research. He presented a plenary session on “The Social Ecology of Health: Effects of Context and Place”.

Panel Discussions

Two one-hour panel discussions are held at each conference. The panels are designed to promote discussion of key or controversial topics among a group of experienced and influential researchers while encouraging questions from participants. The first panel discussion addresses issues related to the yearly conference theme. The second panel discussion deals with a topic concerning academic career development. These panel discussions not only facilitate the exchange of ideas, but also encourage audience participation. For the 24 th annual conference, the panel discussions included:

Thematic Panel Discussion: “Challenges of Conducting Research with Vulnerable Populations”. Panelists included the two plenary speakers, Dr. Gelberg and Dr. Blanchard, as well as Robert Jacobson, MD, chair of Pediatrics and Adolescent Medicine, Mayo Clinic, Rochester, MN.

Academic Panel Discussion: “New Paradigms in Primary Care Research”. Panelists included Paul Darden, MD, chief of the section for Community and General Pediatrics at the University of Oklahoma School of Medicine; and Ronald Chenail, PhD, Professor of Family Therapy, and Vice President for Institutional Effectiveness at Nova Southeastern University [the nurse researcher scheduled to be on the panel had to cancel at the last minute].

Seminars/Workshops

The backbone of the conference consists of 20-25 seminars and workshops submitted to the Program Committee by presenters in response to a call-for-papers. Seminar/workshops can be submitted on any research-related topic—methods, statistics, computers, funding, communicating results—and for any intended audience—novice, intermediate, or experienced researchers. Three classes of seminar/workshops exist. Peer Sessions consist of a 45-minute

didactic presentation, permitting questions from the audience at the end. Seminars are 90 minutes in duration and are designed to promote participant involvement in some basic activities. Workshops are 2-3 hours long and involve extensive hands-on experiences for participants.

After review by the Program Committee, decisions about the acceptance or rejection of submitted seminar/workshops are made based upon the quality of the presentation, the appropriateness of the topic and instructional strategy, and the need to address that topic within the schedule. Those seminar/workshops that are accepted are grouped around a common construct into a “track.” Three to four concurrent tracks are presented.

At each conference, a “novice researcher” track is created: peer sessions, seminars, and workshops, which deal with each stage in the research process. When the submitted peer session/seminar/workshops are grouped into a novice researcher track, gaps in the sequence of seminars may occur, some important subjects may not be adequately addressed. In this instance, the Program Committee identifies the topics and presenters needed to complete the track. In addition, each conference presents a track related to the conference theme.

For the 24th annual conference, peer sessions, seminars, and workshops are organized into several tracks: [Basic] Methodology, [Advanced] Statistics, Thematic Track (“Research with Vulnerable Populations”), Qualitative Methods Track, and Software Applications.

Table 2. Seminars/workshops

| Track | Content |
|--|--|
| Thematic Track: “Research with Vulnerable Populations” | <ul style="list-style-type: none"> • Conducting Research with Homeless Populations (Plenary) – Lillian Gelberg, MD MSPH • The Social Ecology of Health: Effects of Context and Place (Plenary) – Stephen Blanchard, PhD • Challenges of Conducting Research with Vulnerable Populations (Panel) – Lillian Gelberg, MD, MSPH; Stephen Blanchard, PhD; Robert Jacobson, MD • IRB Restrictions on the Inclusion of Children & Adolescents in Clinical Research (seminar) – Robert Jacobson, MD; Paul Darden, MD • Pragmatic Action Research with Vulnerable Populations: Mexican-American Elders, Formerly Incarcerated Women, and Additional Examples (seminar) – Mickey Parsons, PhD, RN |
| Qualitative Methods Track | <ul style="list-style-type: none"> • Learning to Listen: Methods for Discovering Meaning in Texts – April A. Biasioli, MA • Writing Primary Care Qualitative Research Well (workshop) – Ronald J. Chenail, PhD; Robin Cooper, PhD • New Paradigms for Conducting Qualitative Research (workshop) – Ronald J. Chenail, PhD; Robin Cooper, PhD |
| Statistics Track | <ul style="list-style-type: none"> • Meta-analytic Methods for Combining Direct and Indirect Evidence in Systematic Reviews of Clinical Trials (Workshop) – John E. Cornell, PhD • Causal Modeling for Comparative Effectiveness Studies (seminar) – Chen-Pin Wang, PhD • Principles for the Ethical Analysis of Clinical and Translational Research – Jonathon A L Gelfond, MD, PhD • A Practical Approach to Missing Data in Scale Construction and Analysis (Workshop) – Raymond Palmer, PhD |
| Methodology Track | <ul style="list-style-type: none"> • Methods Workshop for the Novice Researcher (workshop) – John G Ryan DrPH • Managing Research Projects From Conceptualization to Reporting (Project Management: a Recipe for Success) [workshop] – Henry C. Barry, MD, MS • How to Conduct a Systematic Review (Workshop) – Robert Jacobson, MD; Paul Darden, MD • Survey Design – Cindy Passmore, MA • New Paradigms in Primary Care Research (Panel) – Paul Darden, MD, Ronald J. Chenail, PhD |
| Software Applications | <ul style="list-style-type: none"> • Stata Workshop for Novice Researchers (Workshop) – William Rising, PhD • Stata Workshop for the Experienced Researcher (Workshop) – William Rising, PhD |

Preconference Workshops

Novice Researcher Workshop, “Methods Workshop for the Novice Researcher” John G. Ryan, DrPH; University of Miami. Dr. Ryan presented a workshop designed to help novice researchers identify and develop a research question. The workshop helped participants generate a research hypothesis, evaluate potential study designs, select appropriate study variables, develop a plan of analysis, and plan for communication of research results. Dr. Ryan also facilitated a series of small-group work sessions, each with a specific goal, to help participants implement the process outlined in the didactic portion of the workshop. Enrollment for this novice workshop was strictly limited to <30 novice participants.

Experienced Researcher Workshop: “Stata Workshop for experienced Researchers” William (Bill) Rising, PhD; Director of Educational Services, Stata Corp. Dr. Rising presented a 3-hour workshop designed specifically for experienced researchers who are already familiar with using Stata software for data analysis. Enrollment for this advanced workshop was strictly limited to <20 experienced Stata users.

Dissemination of Conference Results (APA Website Email and Newsletter)

Conference Website. The department’s webmaster posts all conference handout materials on the conference website. He is also working on a searchable database of presentations from previous conferences, to help make the site a powerful learning tool for attendees as well as researchers who visit the site.

Conference Proceedings. The conference proceedings are distributed at registration. The conference proceedings consist of referenced manuscripts for each presentation to be made at the conference, prepared by the presenters. This provides participants with reference material after the conference is over and allows participants to learn about other topics presented concurrently that participants could not attend. These manuscripts are required of each mini-lecture/seminar/workshop presenter.

Networking of Participants

Not only does the conference encourage active audience participation through the presentation of workshops and panel discussions, but it also provides information on academic advancement through the academic panel discussion. The conference also encourages collaboration among participants. Due to its limited enrollment (100-120 participants), frequent breaks, and well-structured meeting facilities, the conference offers an intimate environment in which participants have frequent opportunities to interact and discuss research. The conference also includes a “Networking Reception” to further encourage the exchange of ideas. To further encourage collaboration, participants receive a listing of all participants including their addresses, telephone numbers, and areas of research interest.

Evaluation Process

Evaluation of Submitted Proposals. All submitted proposals are reviewed by the program committee and evaluated using written criteria (see appendix). Proposals are graded on the bases of expertise, innovation, and appropriateness to the conference (e.g., conference yearly theme, specified tracks [statistics, basic methods, qualitative methods, professional writing skills, etc.]).

Seminar/Workshop Evaluations. The conference uses two evaluation procedures during the conference. At the conclusion of each seminar/workshop, participants are asked to complete a brief written evaluation of the seminar/workshop, focusing on learning objectives, facilitation of research and critical appraisal, and presentation skills. In addition, each moderator completes a presentation skills checklist. A summary of those evaluations with the presentation skills checklist is then given to the presenter, providing useful feedback concerning their presentations.

Summative Evaluation. At the conclusion of the conference, participants are requested to complete a summative evaluation in which they are asked to rate each of the conference's components (i.e. plenary speakers, panel discussions, etc.). Participants also rate the degree to which the conference helped them develop or expand their research skills. Finally, participants are asked to suggest future plenary speakers, panel discussions, etc. The Program Committee uses the results in planning future conferences. In fact, the future themes and topics for panel discussions mentioned in this proposal have all been suggested by previous conference participants.

List of Publications and Products

1. Katerndahl DA, Crabtree BF. Creating Innovative Research Designs: The 10-Year Methodological Think Tank Case Study. *Ann Fam Med* 2006; 4: 443-449.
2. AAFP Task Force, Plan to Enhance Family Practice Research. Methods for Practice-Based Research Networks: Challenges and Opportunities. Proceedings from the PBRN Methods Conference Nov 29-30, 2001. American Academy of Family Physicians, 2003.
3. Katerndahl DA. Effect of attendance at an annual primary care research methods conference on research productivity and development. *Fam Med* 2000; 32(10): 701-708. http://www.stfm.org/fmhub/fm2000/novdec00/F_D1.pdf (accessed Jul 15, 2010)

Appendixes

Appendix A: Tables

Table A1. Keynote speakers

| | 22nd annual conf. | 23rd annual conf. | 24th annual conf. |
|-------------------------------|--|--|--|
| Plenary Speakers | A Medical Tale of Tails: Applications & Implications of Inverse Power Laws in Primary Care Research , Bruce J. West PhD, Duke Univ. Understanding Research Results through Complexity Science , Reuben McDaniel Jr. EdD, Univ. of Texas at Austin | What Does Research Tell Us about Patient Centered Care? The Why, What and How Moira A. Stewart PhD Engaging Patients and Communities Through Research Partnerships Ann C. Macaulay CM MD FCFP | Conducting Research with Homeless Populations Lillian Gelberg MD MSPH, UCLA, Center for Health Policy Research The Social Ecology of Health: Effects of Context and Place Steven Blanchard PhD |
| Experienced Research Workshop | Catastrophe Modeling Stephen Guastello PhD, Marquette University | Survival Analysis for the Experienced Researcher Roger B. Davis ScD, Harvard School of Public Health | Stata Workshop for Experienced Researchers William Rising PhD, Director of Educational Services, StataCorp. |
| Novice Researcher Workshop | Methods Workshop for the Novice Researcher John G. Ryan DrPH | Methods Workshop for the Novice Researcher John G. Ryan DrPH | Methods Workshop for the Novice Researcher John G. Ryan DrPH |
| Thematic Panel | Complexity Science: Applications in Primary Care Research Bruce J. West PhD, Stephen Guastello PhD, Reuben McDaniel Jr. EdD | Patient-Centered Care, Patient-Centered Research Moira Stewart PhD, Ann C. Macaulay CM MD FCFP | Challenges in Conducting Research with Vulnerable Populations Lillian Gelberg MD MSPH, Stephen Blanchard PhD, Robert Jacobson MD |
| Academic Panel | Rewarding Research Helen Hazuda PhD, Charles P. Mouton MD MS, Robert M. Jacobson MD | Fostering Innovation Elizabeth M. Yano PhD MSPH, John Boltri MD, Paul Darden MD, Helen P. Hazuda PhD | New Paradigms in Primary Care Research Paul Darden MD, Ronald Chenail PhD |

Special Sessions

Editorial Board Report,

Journal Complexity in Health Care

Joachim Sturmberg, MD, PhD;

Carmel Martin MSc PhD

Table A2. Content of presentations (%)

| | 22 nd annual conf. | 23 rd annual conf. | 24 th annual conf. |
|---------------------------|-------------------------------|-------------------------------|--------------------------------------|
| Level: Beginner | 5% | 11% | 13% |
| Level: Beginner (B/I) | 50% | 28% | 33% |
| Level: Intermediate (I/E) | 40% | 50% | 33% |
| Level: Experienced | 5% | 5% | 20% |
| Type: Mini-Lecture | 25% | 28% | 20% |
| Type: Seminar | 45% | 39% | 20% |
| Type: Workshop | 30% | 33% | 60% |
| Type: Total # | 20 | 18 | 15 |
| Topic: Methods | 40% | 56% | 60% |
| Topic: Statistics | 30% | 33% | 20% |
| Topic: Computers | 20% | --- | 13% |
| Topic: Funding | 5% | 5% | --- |
| Topic: Communication | --- | --- | 7% |
| Topic: Other | 5% | 5% | --- |
| Plenary Speakers | Bruce West Reuben McDaniel | Moira Stewart Ann Macaulay | Lillian Gelberg Stephen Blanchard |

Table A3. Background of participants (%)

| | 22nd Annual Conference | 23rd Annual Conference | 24th Annual Conference |
|--|------------------------|------------------------|------------------------|
| Degree(s): MD/DO | 18% | 35% | 20% |
| Degree(s): PhD | 48% | 38% | 39% |
| Degree(s): MD/PhD | 6% | 6% | 8% |
| Degree(s): MD/MS | 24% | 6% | 10% |
| Degree(s): MS | 4% | 8% | 14% |
| Degree(s): Other | 0% | 8% | 8% |
| Status: Faculty | 70% | 73% | 57% |
| Status: Clinical Faculty | 6% | 3% | 4% |
| Status: Practitioner | 4% | 3% | 4% |
| Status: Fellow | 6% | 0% | 4% |
| Status: Resident | 0% | 0% | --- |
| Status: Student | 0% | 0% | 6% |
| Status: Other | 12% | 20% | 24% |
| Geography: San Antonio | 30% | 44% | 44% |
| Geography: Other Texas | 14% | 16% | 19% |
| Geography: South Central Region | 6% | 5% | 8% |
| Geography: Other U.S. | 36% | 25% | 17% |
| Geography: Foreign | 14% | 11% | 13% |
| Specialty: Family Medicine | 32% | 27% | 33% |
| Specialty: Internal Medicine | 2% | 4% | --- |
| Specialty: Pediatric | 6% | 13% | 6% |
| Specialty: Nursing | 4% | 4% | 8% |
| Specialty: Other | 56% | 52% | 53% |
| Specialty: #Specialties | 16 | 18 | 14 |
| Level of Research Experience: Beginner | 18% | 16% | 25% |
| Level of Research Experience: Intermediate | 20% | 23% | 28% |
| Level of Research Experience: Experienced | 62% | 61% | 47% |

Table A4. Seminar/workshop evaluations (mean)

| | 22nd annual conf. PRESENTATIONS | 23rd annual conf. PRESENTATIONS | 24th annual conf. PRESENTATIONS |
|--|--|--|--|
| Benefit Reading the Literature | 4.2 | 4.4 | 4.1 |
| Conducting Research | 4.2 | 4.3 | 4.3 |
| Overall Quality Audience: Beginner | 4.3 | 4.3 | 4.3 |
| Overall Quality Audience: Intermediate | 4.4 | 4.6 | 4.2 |
| Overall Quality Audience: Experience | 4.3 | 4.4 | 4.5 |
| Overall Quality Audience: Total | 4.4 | 4.5 | 4.3 |
| Seminars with Overall Rating > 3.5 | 100% | 100% | 93% |

Table A5. Summative evaluation (mean)

| | 22nd Annual Conference | 23rd Annual Conference | 24th Annual Conference |
|--------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Components: Plenary Speakers | 4.8/4.9 | 4.6/4.6 | 4.8/4.6 |
| Components: Mini-Lecture/Seminars | 4.4 | 4.9 | 4.5 |
| Components: Workshops | 4.5 | 4.6 | 4.6 |
| Components: Panel Discussions | 4.4/3.7 | 4.6/4.7 | 4.4/4.3 |
| Components: Moderators | 4.2 | 4.6 | 4.8 |
| Components: Proceedings/Syllabus | 4.3 | 4.8 | 4.4 |
| Components: Concept Paper Reviews | 5.0 | --- | --- |
| Develop/Expand Skills?: Beginner | 3.0 | 4.0 | 4.0 |
| Develop/Expand Skills?: Intermediate | 4.7 | 4.7 | 4.6 |
| Develop/Expand Skills?: Experienced | 4.8 | 3.0 | 4.4 |
| Develop/Expand Skills?: Overall | 4.4 | 4.4 | 4.4 |

Appendix B: 22nd Annual Primary Care Research Methods & Statistics Conference, San Antonio, Texas, The Menger Hotel

Table B1. Friday

Table B1a. 8:30-12:00

| | Novice Researcher Workshop – <i>Ballroom B</i> | Experienced Researcher Workshop – <i>Ballroom C</i> |
|------------|---|--|
| 8:30-12:00 | 1. Methods Workshop for the Novice Researcher – John G. Ryan DrPH, Univ. of Miami – <i>Enrollment is strictly limited to 30 novice participants</i> | 2. Catastrophe Modeling – Stephen Guastello PhD, Marquette University E |

Table B1b. 12:00-2:45

| | |
|------------|---|
| 12:00-1:30 | Lunch (on your own) |
| 1:30-2:30 | 3. Plenary Session: “A Medical Tale of Tails: Applications & Implications of Inverse Power Laws in Primary Care Research” – Bruce J. West PhD – <i>Ballroom A</i> |
| 2:30-2:45 | Break |

Table B1c. 2:45-5:00

| | Qualitative Methods – <i>Ballroom A</i> | Statistics – <i>Ballroom B</i> | Geographic Information Systems – <i>Ballroom C</i> |
|-----------|---|--|---|
| 2:45-4:15 | 4. Integrating Interview & Observation Data to Create a Conceptual Model – Shannon Bolon MD MPH B, I | 6. Hands-on Application of Large Data Set Analyses – Robert M. Jacobson MD, Paul Darden MD I, E | 7. The Raw and the Cooked: Smoothing Spatial Data – M. Norman Oliver MD MA, Ethan Berke MD MPH I, E |
| 4:15-5:00 | 5. Three Methodologic Perspectives Used in the Qualitative Analysis of Patient Interviews – Lorrie Powel PhD RN B, I | | 8. Basic Mapping Principles for Visualizing Cancer Data Using Geographic Information Systems (GIS) – Cynthia Brewer PhD I, E |

Table B2. Saturday

Table B2a. 7:30-10:15

| | |
|------------|--|
| 7:30-10:00 | Registration, Continental Breakfast |
| 8:00-9:00 | 9. Plenary Session: “Understanding Research Results through Complexity Science” – Reuben McDaniel Jr. EdD – <i>Ballroom A</i> |
| 9:00-10:00 | 10. Thematic Panel Discussion: “Complexity Science: Applications in Primary Care Research” – Bruce J. West PhD, Stephen Guastello PhD, Reuben McDaniel Jr. EdD, – Moderator: David A. Katerndahl MD MA |
| 10-10:15 | Break |

Legend: B, Beginner; I, Intermediate; E, Experienced

Table B2b. 10:15-1:45

| | Qualitative Methods – Ballroom A | Statistics – Ballroom B | Geographic Information Systems – Ballroom C |
|-------------|---|---|---|
| 10:15-11:45 | 11. Finding Culture in Texts – Bryan Bayles PhD B, I | 13. The Normal Curve as a Way to Understand p-values, and the Central Limit Theorem – Cindy Passmore PhD B, I | 15. Using Geographical Information Systems in Public Health Research: Possibilities and Pitfalls – Michael Dulin MD PhD, Joseph LeMaster MD MPH, Hazel Tapp PhD I, E |
| 11:45-12:30 | 12. Qualitative Research: Capturing What Can't Be Counted – Charles P. Mouton MD MS B, I | 14. Using Numbers Needed to Treat with Confidence: Dealing with Sample Size, Power, and Infinity-Robert Jacobson MD B, I | 16. Use of GIS to Identify Optimal Settings for Cancer Prevention and Control in African-American Communities-Rebecca Bryan MPH I, E |
| 12:30-1:45 | Lunch (on your own) | Lunch (on your own) | Lunch (on your own) |

Table B2c. 1:45-5:00

| | Methodology – Ballroom A | AHRQ Review of Concept Papers – Ballroom B | Complexity Science in Primary Care – Ballroom C |
|-----------|---|---|---|
| 1:45-3:15 | 17. Guidelines for Constructing a Survey – Cindy Passmore PhD B, I | 19. AHRQ Review of Concept Papers - Janice L. Genevro PhD B, I | 20. (Making Sense of) Knowledge Synthesis for Complex Primary Care Systems – Carmel M. Martin MSc PhD, Joachim Sturmborg MD PhD I, E |
| 3:15-3:30 | Break | Break | Break |
| 3:30-5:00 | 18. Research Career Development – Sandra K. Burge PhD B, I | <i>Review of Concept papers cont'd</i> | 21. Quantitative Approaches to Studying Complex Systems – David Katerndahl MD MA I, E |

Table B2d. 5:30-7:30

| | |
|-----------|--|
| 5:30-7:30 | Networking Reception: "Contact, Connect, Collaborate" – Renaissance Room |
|-----------|--|

Table B3. Sunday**Table B3a. 7:30-9:45**

| | |
|-----------|--|
| 7:30-9:30 | Continental Breakfast |
| 8:00-9:00 | 22. Academic Panel Discussion: "Rewarding Research" – Helen Hazuda PhD, Charles P. Mouton MD MS, Robert M. Jacobson MD; Moderator, David Espino MD – <i>Ballroom A</i> |
| 9:00-9:30 | 23. Editorial Board Report, Journal Complexity in Health Care – Joachim Sturmborg MD PhD, Carmel Martin MSc PhD, David A. Katerndahl MD MA |
| 9:30-9:45 | Break |

Table B3b. 9:45-12:00

| | Qualitative Methods – Ballroom A | Statistics – Ballroom B |
|------------|---|---|
| 9:45-12:00 | 24. Introduction to Qualitative Research Design – Ronald J. Chenail PhD B, I | 25. Assessing Heterogeneity in the Rate of Change Over Time: A Structural Equation Modeling Approach – Ray Palmer PhD I, E |

Legend: B, Beginner; I, Intermediate; E, Experienced

Appendix C: 23rd Annual Primary Care Research Methods & Statistics Conference, San Antonio, Texas, The Menger Hotel

Table C1. Friday

Table C1a. 8:30-12:00

| | Novice Researcher Workshop – Ballroom B | Experienced Researcher Workshop – Ballroom C |
|------------|--|--|
| 8:30-12:00 | 1. Methods Workshop for the Novice Researcher – John G. Ryan DrPH, Univ. of Miami – <i>Enrollment is strictly limited to 30 novice participants</i> B | 2. Survival Analysis for the Experienced Researcher – Roger B. Davis ScD, Harvard School of Public Health E |

Table C1b. 12:00-3:45

| | |
|------------|---|
| 12:00-1:30 | Lunch (on your own) |
| 1:30-2:30 | 3. Plenary Session: “What Does Research Tell Us about Patient Centered Care? The Why, What and How” – Moira A. Stewart PhD – <i>Ballroom A</i> |
| 2:30-3:30 | 4. Thematic Panel Discussion: “Patient-Centered Care, Patient-Centered Research” – Moira Stewart PhD, Ann C. Macaulay CM MD FCFP – Moderator: David A. Katerndahl MD MA |
| 3:30-3:45 | Break |

Table C1c. 3:45-5:15

| | Methodology – Ballroom A | Statistics – Ballroom B | Patient-Centered Medical Home – Ballroom C |
|-----------|--|---|--|
| 3:45-5:15 | 5. Understanding the Selection of Commonly Used Statistics in Primary Care Research – William D. Grant EdD B, I | 6. Statistics of Studies of Equivalence (or What To Do When You Are Looking for a Sameness Rather than a Difference) – Robert Jacobson MD B, I | 7. Approaches to Evaluating Patient-Centered Medical Home (PCMH) Implementation – Elizabeth M. Yano PhD MSPH I, E |

Table C2. Saturday

Table C2a. 7:30-9:15

| | |
|------------|--|
| 7:30-10:00 | Registration, Continental Breakfast |
| 8:00-9:00 | 8. Plenary Session: "Engaging Patients and Communities Through Research Partnerships" – Ann C. Macaulay CM MD FCFP – <i>Ballroom A</i> |
| 9:00-9:15 | Break |

Legend: B, Beginner; I, Intermediate; E, Experienced

Table C2b. 9:15-1:30

| | Methodology – Ballroom A | Statistics – Ballroom B | Patient-Centered Research – Ballroom C |
|-------------|---|--|---|
| 9:15-10:45 | 9. Preparing an NIH Grant: Crucial Resources and Common Challenges-John Boltri MD B, I | 11. Mixed Effects Models for Longitudinal Data – John E. Cornell PhD I, E | 13. The Quest for the Holy Grail of Patient-Centered Research-- Finding the Appropriate Denominator - Siew Ching Ang PhD, Robert Jacobson MD, Paul Darden MD I, E |
| 10:45-11:00 | Break | Break | Break |
| 11:00-11:45 | 10. Survey & Questionnaire Design – Cindy Passmore MA B, I | 12. Latent Variable Modeling for Longitudinal Data – Chen-Pin Wang PhD I, E | 14. The South Texas Veterans Health Care System Experience in Implementing Patient-Aligned Care Teams (AKA Patient Centered Medical Home) – Vicki L. Hannigan MD, Roger Roehl I, E |
| 11:45-1:30 | Lunch (on your own) | Lunch (on your own) | Lunch (on your own) |

Table C2c. 1:30-5:00

| | Research Career Planning – Ballroom A | Systematic Review – Ballroom B | Qualitative Methods – Ballroom C |
|-----------|--|--|---|
| 1:30-3:00 | 15 Research Career Planning – David A. Katerndahl MD MA B | 16. How to Conduct a Systematic Review: A Workshop – Robert Jacobson MD, Paul Darden MD I | 17. Utilizing Qualitative Approaches to Explore Patients' Experiences – Ronald J. Chenail PhD I, E |
| 3:00-3:15 | Break | Break | Break |
| 3:15-5:00 | <i>Research Career Planning cont'd</i> | <i>Systematic Reviews cont'd</i> | 18. Learning to Listen: Methods for Discovering Meaning in Texts – Bryan P. Bayles PhD I, E 19. Three Methodologic Perspectives Used in the Qualitative Analysis of Patient Interviews – Lorrie Powel PhD RN I, E |

Table C2d. 5:30-7:30

| | |
|-----------|--|
| 5:30-7:30 | Networking Reception: "Contact, Connect, Collaborate" – Renaissance Room |
|-----------|--|

Table C3. Sunday**Table C3a. 7:30-9:15**

| | |
|-----------|--|
| 7:30-9:30 | Continental Breakfast |
| 8:00-9:00 | 20. Academic Panel Discussion: Fostering Innovation – Elizabeth M. Yano PhD MSPH, John Boltri MD, Paul Darden MD; moderator, Helen P. Hazuda PhD – <i>Ballroom A</i> |
| 9:00-9:15 | Break |

Figure C3b. 9:15-11:45

| | Qualitative Methods – Ballroom C | Statistics – Ballroom B |
|------------|---|---|
| 9:15-11:45 | 21. Introduction to Qualitative Research Design – Ronald J. Chenail PhD B, I | 22. Structural Equation Modeling (SEM), Beyond the Basics: Novel Applications, Tips and Tricks – Ray Palmer PhD I, E |

Legend: B, Beginner; I, Intermediate; E, Experienced

Appendix D: 24th Annual Primary Care Research Methods & Statistics Conference, San Antonio, Texas, The Menger Hotel

Table D1. Friday

Table D1a. 8:30-12:00

| | Novice Researcher Workshop – Ballroom B | Experienced Researcher Workshop – Ballroom C |
|------------|--|--|
| 8:30-12:00 | 1. Methods Workshop for the Novice Researcher – John G. Ryan DrPH, Univ. of Miami – <i>Enrollment is strictly limited to 30 novice participants</i> B | 2. Stata Workshop for Experienced Researchers – William Rising PhD, Stata Corp. E |

Table D1b. 12:00-2:45

| | |
|------------|---|
| 12:00-1:30 | Lunch (on your own) |
| 1:30-2:30 | 3. Plenary Session: "Conducting Research with Homeless Populations" – Lillian Gelberg MD MSPH – <i>Ballroom A</i> |
| 2:30-2:45 | Break |

Table D1c. 2:45-5:00

| | Methodology – Ballroom A | Statistics – Ballroom B | Software Applications – Ballroom C |
|-----------|---|---|--|
| 2:45-5:00 | 4. Managing Research Projects From Conceptualization To Reporting (Project Management: A Recipe for Success) – Henry C. Barry MD MS B, I | 5. Meta-analytic Methods for Combining Direct and Indirect Evidence in Systematic Reviews of Clinical Trials – John E. Cornell PhD E | 6. Stata Workshop for Novice Researchers – William Rising PhD B |

Table D2. Saturday

Table D2a. 7:30-10:15

| | |
|------------|--|
| 7:30-10:00 | Registration, Continental Breakfast |
| 8:00-9:00 | 7. Plenary Session: "The Social Ecology of Health: Effects of Context and Place" – Stephen Blanchard PhD – <i>Ballroom A</i> |
| 9:00-10:00 | 8. Thematic Panel Discussion: "Challenges in Conducting Research with Vulnerable Populations" – Lillian Gelberg MD MSPH, Stephen Blanchard PhD, Robert Jacobson MD, Moderator: David A. Katerndahl MD MA – <i>Ballroom A</i> |
| 10-10:15 | Break |

Legend: B, Beginner; I, Intermediate; E, Experienced

Table D2b. 10:15-1:45

| | Methodology – Ballroom A | Statistics – Ballroom B | Qualitative Methods – Ballroom C |
|-------------|---|---|--|
| 10:15-11:45 | 9. IRB Restrictions on the Conduct of Studies Involving Children and Adolescents – Robert Jacobson MD, Paul Darden MD B, I | 11. Causal Modeling for Comparative Effectiveness Studies – Chen-Pin Wang PhD I, E | 13. Pragmatic Action Research with Vulnerable Populations: Mexican-American Elders, Formerly Incarcerated Women, and Additional Examples – Mickey Parsons PhD RN I, E |
| 11:45-12:30 | 10. Survey Design – Cindy Passmore MA B, I | 12. Principles for the Ethical Analysis of Clinical and Translational Research – Jonathon A L Gelfond PhD I, E | 14. Learning to Listen: Methods for Discovering Meaning in Texts – April A. Biasioli MA I |
| 12:30-1:45 | Lunch (on your own) | Lunch (on your own) | Lunch (on your own) |

Table D2c. 1:45-5:00

| | Methodology – Ballroom A | Qualitative Methods – Ballroom B |
|-----------|---|---|
| 1:45-3:15 | 15. How to Conduct a Systematic Review: A Workshop – Robert Jacobson MD, Paul Darden MD B, I | 16. Writing Primary Care Qualitative Research Well – Ronald J. Chenail PhD, Robin Cooper PhD, Maureen Duffy PhD I, E |
| 3:15-3:30 | Break | Break |
| 3:30-5:00 | 15. Systematic Review cont'd | 16. Writing Primary Care Qualitative Research |

Table D2d. 5:30-7:30

| | |
|-----------|--|
| 5:30-7:30 | Networking Reception: “Contact, Connect, Collaborate” – Renaissance Room |
|-----------|--|

Table D3. Sunday**Table D3a. 7:30-9:15**

| | |
|-----------|---|
| 7:30-9:30 | Continental Breakfast |
| 8:00-9:00 | 17. Academic Panel Discussion: “New Paradigms in Primary Care Research”– Paul Darden MD, Ronal Chenail PhD– <i>Ballroom A</i> |
| 9:00-9:15 | Break |

Table D3b. 9:15-11:45

| | Qualitative Methods – Ballroom A | Statistics – Ballroom B |
|------------|--|---|
| 9:15-11:45 | 18. New Paradigms for Conducting Qualitative Research – Ronald J. Chenail PhD, Robin Cooper PhD, Maureen Duffy PhD B, I | 19. A Practical Approach to Missing Data in Scale Construction and Analysis – Ray Palmer PhD E |

Legend: B – Beginner; I – Intermediate; E – Experienced