

**DEPARTMENT OF FAMILY MEDICINE
RESEARCH DIVISION MONTHLY REPORT
SEPTEMBER 2005**

Research – Benjamin Crabtree, PhD

The vision of the **UMDNJ-RWJMS Family Medicine Research Division** is to develop and sustain a nurturing and productive research environment that fosters collaborative transdisciplinary approaches to promote the health of families and communities by improving quality of care and eliminating health-related disparities.

Message from the Director:

The Division is grateful for the selfless volunteerism of NRSA Fellow Beatrix Roemheld-Hamm, MD, PhD, who served as medical director of a UMDNJ Katrina emergency medical response team that was selected to support 400 New Jersey Police and firefighters who traveled to New Orleans to assist the local police and conduct search and recovery missions in downtown New Orleans. Other members of the team included an infectious disease specialist from RWJMS, Amisha Malhotra MD, two nurse practitioners from UBHC, Betty Vreeland and Ann Hirschman, and a physician assistant from NJ medical School, Claude Krause. The UMDNJ team was integrated into a larger NJ Department of Health's contingent. The medical team was charged to set up a medical facility for the entire planned length of the police deployment (6 months) and provide primary care services including infection control and emergency care around the clock.

As a continuation of our self-reflection process and priority setting, members of the Research Division met for a day long retreat on September 19. We were very fortunate to have Chris Stroebel as an outside facilitator – she did an outstanding job of stimulating both large and small group discussions. The retreat was organized as a discussion of Recommendations 1 and 3 from the deGruy and Campbell report; one focusing on developing internal leadership and the other on building the RD infrastructure. Themes that emerged from the discussion included the complexity of the leadership role, noting that there are 2 sides, that is, there is a continuum of shared leadership interaction between personal and organizational development. The discussion also identified the need for trust, accountability, a reward system, and boundaries and structure. Three main areas to test for a 3-month period were identified: creating a writing group; managing resources/creating a middle management group; and doing an ongoing needs assessment. After discussion, the full group decided to conduct an initial needs assessment using the ideas generated by one of the small groups. Sabrina, Barbara, and Bijal agreed to lead the effort and will present a plan at an upcoming Division meeting.

The NIH and AHRQ are beginning serious discussions about the role of quality improvement research as an important part of the NIH portfolio. We are fortunate to have active participating by Ben Crabtree in an NIH/AHRQ hosted symposium on the future of translational research agenda in Washington, DC and in an AHRQ/Health Partners panel in Minneapolis that is designing a 2006 conference on quality improvement research. Dr. Crabtree also visited Albuquerque, New Mexico as a consultant on an AHRQ funded CAM project. The New Mexico team expressed an interest in collaborations with our fellowship CAM team.

The New Jersey Family Medicine Research Network (NJFMRN) held a very successful Annual Practice Convocation on Saturday September 24. The conference room at World's Fair Drive was transformed from an everyday work space to a facility that would rival hotel meeting areas. Cynthia Duncan-Robinson, Karissa Hahn, Dena O'Malley and Eric Shaw gave of their time and creativity to aid in the overall presentation of the program. John Orzano, MD, Medical Director of the Network and Terry Falco, Program Administrator were committed presenting an exciting, informative and engaging program. This was an extremely productive meeting and aids in continuing our mission statement to integrate clinical practice, research, and education to community family medicine practices.

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Terry Falco, Eric Shaw, Shawna Hudson, and Ben Crabtree attended an ACS sponsored conference in Woodbridge, NJ focusing on colorectal cancer screening. Michelle Tropper, MPH, Vice President for Strategic Health Initiatives at ACS was a major coordinator for the conference and is working with the NCI-funded SCOPE team to incorporate some of the ideas expressed at the conference as part of the SCOPE intervention.

Two peer-reviewed publications describing our approaches for describing family practices were published in the September/October issue of the *Annals of Family Medicine*. These include a manuscript authored by John Scott and other Division members describing the use of social network analysis and another manuscript authored by Ben Crabtree and a host of collaborators that looks at the ways practices evolved to meet the needs of their unique practice landscapes. Two major grant submissions went out in September, one a NCI career award (K08) by Deb Cohen and the other a NIDDK diabetes grant by Jay Crosson. We also received word that a Notice of Grant Award has been issued for an NIDDK grant submitted by Paul Nutting on which Alfred Tallia has a major subcontract, and that the Title VII grant submitted by Dr. Tallia has been funded effective September, 2005. Congratulations to all!!!!

Benjamin F. Crabtree, Ph.D.
Professor and Director

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The NJFMRN is taking strides in becoming the Premier PBRN in New Jersey. The Board has representation from family practices, UMDNJ –Robert Wood Johnson Medical School - New Brunswick and Newark, UMDNJ-School of Osteopathic Medicine - Stratford Campus, CINJ and the NJAFP.

Recently the Network participated at the American Cancer Society Meeting, Woodbridge Hilton that focused on NJ Colorectal Cancer Screening. The Annual Practice Meeting was held on September 24th at the Network office in Somerset. Speakers included Paul Nutting, MD, a nationally known family practice researcher; Andy Kuziemski, RN, Practice Manager for JFK Family Medicine Center; and Jonathan Foulds, PhD, Director, Tobacco Dependence Program, UMDNJ. Attendees were family practice clinicians, nurses and practice managers.

Upcoming projects include Practice Manager Meetings, Card Studies, database development, quarterly newsletters and multiple practice site visits. For information on joining the Network contact Terry Falco, Program Administrator 732-743-3387.

Published

Aita V, McIlvain H, Backer E, McVea K, **Crabtree B**. “Patient-Centered care and communication in primary care practice: what is involved?” Patient Education and Counseling, 2005;58(3):296-304

Crabtree BF, Miller WL, **Tallia AF**, **Cohen DJ**, **DiCicco-Bloom B**, McIlvain HE, Aita VA, **Scott JG**, **Gregory PB**, Stange KC, McDaniel RR. “Delivery of Clinical Preventive Services in Family Medicine Offices.” Annals of Family Medicine; 2005:3(5):430-435

Roemheld-Hamm B: “Chasteberry”, American Family Physician, 2005:Sep 1:72(5):821-4

Scott, JG, **Tallia, A**, **Crosson, JC**, **Orzano, AJ**, **Stroebel, C**, **DiCicco-Bloom, B**, **O'Malley, D**, **Shaw, E**, **Crabtree, BF**. "Social Network Analysis as an analytic tool for interaction patterns in primary care practices." Annals of Family Medicine; 2005:3(5):443-448

Orzano AJ, **Cohen D**, **Scott J**, **Crabtree B**. “Closing the vaccine gap among toddlers in NJ family physicians' practices.” J Okla State Med Assoc 2005;98(9):436-440.

In Press

Hudson SV, Momperousse D, Leventhal H. “Physician Perspectives on Cancer Clinical Trials and Barriers to Minority Recruitment.” Cancer Control (in press).

Miller WL, **Crabtree BF**: “Healing landscapes: patients, relationships and optimal healing places.” J. Complementary and Alternative Med. 2005 (in press)

Orzano AJ, **Tallia A**, Nutting P, Scott-Cawiezell J, **Crabtree B**. “Are Attributes of Organizational Performance Salient in Primary Care Practices?” Health Care Management Review (in press)

Solberg LI, Hroszkoski MC, Sperl-Hillen JM, Harper P, **Crabtree BF**. “Transforming Medical Care: Case Study of an Exemplar Small Medical Group” Annals of Family Medicine (in press)

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Tallia AF, Lanham H, McDaniel R, **Crabtree BF**. “What Physicians Need to Know about Work Relationships in Primary Care Practices.” Family Practice Management (in press)

Under Review

Backer EL, Gregory P, Jaen CR, **Crabtree BF**. “A Close Look at Adult Female Health Care Maintenance Visits.” (revisions under review - Family Medicine)

J Reteguiz, **JC Crosson**, L Robbins, C. Brazeau. “Developing a graduation OSCE: one medical school's experience.” (under review - Journal of General Internal Medicine)

JC Crosson, C Brazeau, L Boyd, J Reteguiz, J Ferrante. “A comparison of methods for eliminating the timing and order effect on final grades in a third year clerkship.” (revisions requested - Journal of General Internal Medicine)

DiCicco-Bloom, B, Crabtree BF. “Qualitative Interviews.” (revisions under review - Medical Education)

Flocke S, **Crabtree BF**, Stange KC. “Clinician Reflecting on Promotion of Healthy Behaviors in Primary Care Practice.” (under review - Preventive Medicine).

Hudson SV, Harris-Haywood S, Orzano AJ, Crabtree BF. “Recruitment of Minority Primary Care Community Practices into Practice-based Perspective.” (revisions requested – Medical Care)

Hung DY, Rundall TG, **Crabtree BF, Tallia AF, Cohen D**, Halpin, HA. “Promoting Healthy Behaviors in Primary Care: The Role of Practice Staff Participation and Clinician Attributes in Preventive Service Delivery.”
(revisions requested – American Journal of Prev., Med)

Hung, DY, Rundall, TG, **Crabtree, BF, Tallia, AF, Cohen, DJ**. “Effects of Staff Participation in Decision Making on Productivity and Turnover in Primary Care Practice.” (under review – Health Care Mgt Review)

Hroschikoski, MC, Solberg LI, Sperl-Hillen, JM, Harper P, **Crabtree BF**. “The challenges of change: implementing the chronic care model” (under review – Annals of Family medicine)

Isaacson N: “The Promise and Potential Problems of Online Sexuality Education for Adolescents” (revisions requested – Sexuality Research and Social Policy)

Katerndahl D, **Crabtree BF**. “Creating Innovative Research methods: The 10-Year Methodological Think Tank Experience.” (revisions requested – Annals of Family Medicine)

Nutting PA, Dickinson WP, Dickinson LM, Nelson CC, King DK, **Crabtree BF**, Glasgow RE. “Chronic Care Model Elements Associated with High Quality Care for Diabetes” (revisions requested – Health Services Research)

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Ohman-Strickland P, Orzano AJ, Nutting PA, Dickinson WP, Scott-Cawiezell J, Hahn K, Gibel M, Crabtree BF. “Measuring Organizational Attributes of Primary Care Practices: Development of a New Instrument, A New Study in the New Jersey Family Physicians Research Network.” (revisions under review – Health Services Research).

Ohman-Strickland PA, Crabtree BF. “Modeling systems with varying numbers of inputs: An application to the Ultra study (under review – Statistics in Medicine)

In Process

Cohen D, DiCicco-Bloom B, Flocke S. “The complexities of weight loss counseling in the primary care visit.”

Cohen DJ, Leviton L, Tallia A, Crabtree BF, Isaacson, N. “Using online diaries as an evaluation tool: insights from prescription for health.”

Crosson JC, Ohman-Strickland P, Hahn K, Bass C, Shaw E, O’Connell ME, Crabtree BF. “Divergent views of physicians and staff regarding decision-making in family medicine practices.”

Crosson JC, Ohman-Strickland P, Hahn K, DiCicco-Bloom B, Orzano J, Shaw E, Crabtree BF. “The relationship between electronic medical record usage and diabetes guideline adherence in primary care practices.”

Crosson JC, DiCicco-Bloom B, Shaw E, O’Malley D, Crabtree BF. “Electronic medical records and adherence to diabetes guidelines in primary care: a multimethod comparative case study.”

DiCicco-Bloom B, O’Malley D, Shaw E, Crosson JC, Bass C, Miller WF, McDaniel R. “The extension of the jazz metaphor to understand relationships among members of family medicine practices.”

DiCicco-Bloom B, O’Malley D, Shaw E, Crosson JC, Bass C. Frederickson, K. “The development of the concept social capital within the complexity science framework.”

Hahn K, Ohman-Strickland P, Hamilton J, Nazareth T, Crabtree B. “Hyperlipidemia guideline adherence and the effects of and interaction between patient and physician gender.”

Hudson SV, Ferrante J, Ohman-Strickland P, Crabtree BF. "Primary care team versus individual provider impact on colorectal screening."

Hudson, SV, Bates, D. “Coder Reliability and Qualitative Software” in When Methods Meet Technology: Qualitative Data Analysis using Computer-Assisted Software, edited by R. Maietta and S. Hesse-Biber. Thousand Oaks, CA: Sage Publications.

Hudson SV, Ohman-Strickland P, Ferrante J, Young D, Hahn K, Harris-Haywood S, Crabtree BF. “Organizational Factors Associated with Cancer Screening Disparities in Primary Care Settings.”

Hudson SV, Ohman-Strickland P, Lu-Yao G, Ferrante J, Cunningham R. Orzano AJ, Crabtree BF. “Prostate-specific antigen screening in primary care practices.”

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Hung, DY, Rundall, TG, **Crabtree, BF, Tallia, AF, Cohen, DJ**. "Preventive Care Processes for Health Behaviors: Application of the Chronic Care Model in Primary Care Practice."

Leverence RR, Williams RL, Sussman A, **Crabtree BF**. "Obesity prevention and treatment: National guidelines through the viewfinder of clinicians in a US Southwest PBRN."

Parchman ML, McDaniel RR, **Crabtree BF**. "Methodological implications of complexity theory for studying clinical microsystem redesign."

Phillips RL, Dryer M, Weyer SM, Guirguis-Blake J, **Crabtree BF**, McNellis R, Johnson-Pawlson J. The direct observation of nurse practitioners and physician assistants in primary care practice: are there differences and do they matter?

Scott JG, DiCicco-Bloom B, Stroebel C, Stello B, Crosson JC, O'Malley D, Shaw E, Bass C, O'Connell ME, Solberg L, Gilchrist V, Jaen C, Crabtree BF. "Food for thought: How pharmaceutical representatives influence primary care physicians."

Scott JG, DiCicco-Bloom B, Stello B, Crosson JC, O'Malley D, Shaw E, Bass C, O'Connell ME, Solberg L, Gilchrist V, Jaen C, Crabtree BF. "The Influence of pharmaceutical representatives on adherence to guidelines for treatment of hypertension."

Tallia A, Scott JG, DiCicco-Bloom B, Orzano AJ, O'Malley D, Shaw E, Crosson JC, Crabtree B "Comparison of Genograms and Social Network Diagrams in the Analysis of Primary Care Practices."

Grants/Contract Related Activities

Active Grants

Cohen, D., PI: "Using illness visits to address health behavior advice" NCI with CWRU (subcontract); 2004-2008; total project subcontract costs: \$150,419.

This subcontract provides support for conversation analysis in a study which seeks to characterize the way a teachable moment arises and is constructed within physician-patient interaction and to evaluate the effectiveness of this strategy on patient recall of advice, motivation to modify behavior and change in health behavior.

Cohen D., P. Prescription for Health Independence Evaluation Unit. Robert Wood Johnson Foundation; 2004-2008; total project costs: \$963,576.

This multiyear project is performing an ongoing content and process analysis of Robert Wood Johnson Foundation funded projects submitted by Practice Based Research Networks to the Prescription for Life: Promoting Health Behaviors Initiative. Methodologies include a comparative case analysis of projects, built on qualitative and quantitative data collected at the initiative, project, and practice levels.

Cohen, DJ: "Study of Determinants of High Quality Care in Family Practice Offices", agreement,

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University of Chicago (PI Hickner); 2005; total project direct costs: \$12,352.

This supports a collaboration to provide on-site and off-site research data collection and analysis to document and assess the quality of care, organizational structure and function of the project as they relate to increasing and sustaining a high quality of care; and to understand the interpersonal relationships and processes within the practice.

Cohen, D, PI: “Using Qualitative Methods in Healthcare Research: A Comprehensive Guide for Designing, Writing, Reviewing and Reporting Qualitative Research,” Robert Wood Johnson Foundation (RWJF); 2005-2006; total project costs: \$33,894.

A one year project to collect and synthesize multiple sources in order to develop a web-based resource that will be an important resource to those with varying degrees of familiarity and experience with qualitative research methods.

Crabtree BF. Institutional National Research Services Award (T32). Health Resources and Service Administration, 2003–2008; total project costs: \$1,319,174.

The NRSA fellowship seeks to produce researchers who: 1) are knowledgeable about national, state, and local health promotion and disease prevention; 2) are capable of investigating the appropriateness, effectiveness, and quality of health care in primary care settings; and 3) contribute to ongoing clinical and health policy research.

Crabtree BF. Trial to Enhance Adherence to Multiple Guidelines. National Heart, Lung, and Blood Institute; 2002–2007; total project costs: \$3,722,849.

The major goal of this grant is to test a tailored practice level intervention strategy to simultaneously improve the delivery of care for diabetes, hypertension, and asthma and for tobacco and cholesterol screening. A group randomized clinical trial of practices is being used to test the intervention.

Crabtree, BF, PI: “Enhancing colorectal CA screening through learning teams,” National Cancer Institute; 2005 – 2010; total project costs: \$2,997,356.

This study evaluates a tailored practice-level MAP/RAP intervention that seeks to enhance relationships among practice members in order to improve rates of colorectal cancer screening in primary care practice.

Crosson JC. Co-Investigator. Introducing the new model of care to medical students. DHHS, HRSA. total project costs: \$516,713

Crosson JC (Co-Investigator). Translating Research into Action for Diabetes (TRIAD), CDC/NIDDK U58/CCU223529. total project costs: \$4,275,000.

This is a national multi-center study designed to determine how managed care systems influence the processes and outcomes of diabetes care.

DiCicco-Bloom, B, PI: “Patterns of nurse-physician relationships”. Funding Agency: National Institute of Nursing Research (NINR); 2005–2007; total project costs: \$151,199.

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This study aims to 1) describe the presence of social capital and 2) describe the presence of movement in conceptual space among nurses and physicians in primary care practices and determine their association with standards of chronic illness care.

Hudson, SV (Pilot Project PI), DHHS, Project EXPORT, Addressing Cancer Disparities in NJ Communities, 9/30/04-9/29/07; total project costs: \$1.2 million.

This three year grant focuses on development of resources and infrastructure needed for cancer research, training, community education and outreach. It focuses on conducting health disparities research designed to reduce cancer rates among minorities in New Jersey and to increase the participation of African-Americans, Latinos and other health disparity groups in biomedical and behavioral research as well as prevention and intervention activities.

Orzano AJ, PI. Capacity in Organizational Research, AHRQ (K08 HS014018) Career Development Award; 2004 – 2008; total project costs: \$435,219.

This grant supports a variety of educational strategies designed to make Dr. Orzano an expert in relevant organizational performance measure and to enhance his skills in survey and multimethod research approaches.

Scott, JG, PI. Robert Wood Johnson Generalist Physician Faculty Scholars Program, “Balancing Priorities: Healing in the context of evidence-based medicine”; Robert Wood Johnson Foundation; 2004 – 2008; total project costs: \$300,000.

This grant supports Dr. Scott to explore how the doctor-patient relationship promotes patient healing.

Tallia, A. Academic Administrative Units in Primary Care. Health Resources and Services Administration, 2002 –2005; total project costs: \$682,987.

This grant supports a three-year project to strengthen the department’s research capacity using a multifaceted strategy including creating a supportive research environment, supporting a critical mass of family medicine faculty focused on the elimination of health disparities, and building the research infrastructure.

Tallia, A.F., PI: “Academic Administrative Units in Primary Care”, Health Resources and Services Administration; September 2005 – August 2008; total project costs: \$741,915.

The major goals of the grant are to: 1) develop a state-wide quality of care research network; 2) support a critical mass of family medicine researchers, and 3) build the infrastructure necessary to support and sustain network-based quality of care research and primary care practice improvement research productivity.

Tallia, A., (subcontract PI): “Using learning teams for reflective adaptation for diabetes”; NIDDK; September 2005 – August 2010) subcontract project amount: \$315,363

A subcontract that will compare the magnitude and timing of the intervention effects with a state of the art quality improvement effort that focuses on diabetes.

Pending grant applications (submitted)

Roemheld-Hamm, B., PI: “National Needs Assessment: Problem Physician Early Warning System”,

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subcontract with National Board of Medical Examiners, Funding agency: Robert Wood Johnson Foundation; 2005–2006; Subcontract total costs: \$150,453.

A subcontract that seeks to develop an evidence-based early warning system to identify and remediate at-risk practitioners who are at a high probability of causing harm to the public.

Cohen, D., PI: "An Integrated Approach to Enhancing Diet and Physical Activity (K07 Career Development Award)", Funding agency: National Cancer Institute; 2006-2011; Project total costs: \$717,863.

This career development award application combines research and study to develop candidate's expertise in the areas of cancer control, clinical trial research, and obesity to foster emergence as an independent investigator insustainable and effective cancer-preventive weight control interventions By conducting a series of foundational analyses on existing, rich multimethod datasets, pragmatic communication strategies will be identified to develop integrative links of practice-and community-based strategies for engaging patients in effective diet and physical activity counseling.

Crosson, JC, PI: "Organizational Self-Assessment to Improve Diabetes Care in Primary Care Practices" (R 34 proposal), Funding agency: NIDDK; July 2006 - June 2008, Project total cost: \$466,500

To pilot test a cost-effective organizational change intervention designed to improve adherence to evidence-based diabetes treatment guidelines in primary care by improving practice level self understanding.

Crosson, JC, PI: "A UMLS Clinical Vignette Tool for Cognitive Skill Training and Assessment", Subcontract to R01 (D. Bell PI) Funding Agency: NLM; July 2006 - June 2011; Project total cost: \$187,336

Analyze cognitive interviews as part of the ongoing development of a software system for training physicians in diabetes management skills.