

**DEPARTMENT OF FAMILY MEDICINE
RESEARCH DIVISION MONTHLY REPORT
OCTOBER 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:

It is probably fair to say that the UMDNJ-RWJMS Family Medicine Research Division came of age on the national stage at this year's NAPCRG conference in Quebec City (October 15-18, 2005). Members of the Division contributed 14 podium or poster presentations and were indeed seen as a major positive presence at the conference. What is especially impressive is the diversity and scope of research presented, ranging from sophisticated biostatistical methods to complex theoretical perspectives. Equally impressive was the diversity represented among the presenters, with a full range of staff and faculty presenters. The feedback has been overwhelmingly positive and is a real testament to the dedication and hard work of our research team. Many thanks and congratulations!

As a follow-up of the visit to our Division by Flemming Bro in 2003, I was privileged to spend a week with Dr. Bro and colleagues from the University of Southern Denmark exploring cross-national applications of complexity science to organizational change. During the visit, I presented two workshops in Odense, Denmark, one titled "Using case studies to understand practices as complex adaptive systems," and the other "Strategies for Understanding & Enhancing Family Practice." Both these workshops were conducted on October 25, 2005. On October, 27, I presented a seminar at a 3 day workshop for PhD students from Nordic countries, titled "Complexity & General Practice." This session was held in Kerteminde, Denmark, which is a small port town on the Baltic coast. The audience was extremely engaged and sees the work we are doing in ULTRA and SCOPE as the cutting edge of practice change research – and this is coming from an very sophisticated international audience.

Jesse Crosson submitted three grant applications to NIDDK, National Library of Medicine and AHRQ/CMS in October. These grants are a natural extension of the work that Jay has been doing with the ULTRA project. We will keep our fingers crossed.

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

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

Article Submitted for Publication

Hamilton JL, Levine JP, "Neo-Pagan Patients' Preferences Regarding Physician Discussion of Spirituality" accepted by Family Medicine for publication in March 2006:

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, Hroschikoski 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)

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)

Cohen DJ, Leviton L, **Tallia A, Crabtree BF, Isaacson, N**. "Using online diaries as an evaluation tool: insights from prescription for health." (under review – American Journal of Evaluation)

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

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

Primary Care Community Practices into Practice-based Perspective.” (revisions under review – 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)

Hroschikosc 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)

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 requested – 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.”

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.”

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

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, Scott 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.”

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,

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

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, Diccico-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, 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

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

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.

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

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

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

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", 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.

Crosson, JC, PI: "Tests of Medicare's initial electronic prescribing standards in the New Jersey e-prescribing action coalition" Subcontract (D Bell, PI) Funding Agency: Agency for Healthcare Research and Quality/Center for Medicare and Medicaid Studies. December 26, 2005 – December 31, 2006. Project total cost: \$149,756.

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

This subcontract is to examine the effect of e-prescribing on workflow and organizational function in 12 primary care practices in New Jersey.

Presentations:

Crabtree BF. Using case studies to understand practices as complex adaptive systems. Workshop at University of Southern Denmark, Odense, Denmark, Oct 25, 2005.

Crabtree BF. Strategies for Understanding & Enhancing Family Practice. Workshop at University of Southern Denmark, Odense, Denmark, Oct 25, 2005.

Crabtree BF. Complexity & General Practice. Seminar presented at 3 day workshop for PhD students from Nordic countries. Kerteminde, Denmark, Oct 27, 2005.

Presentations at the 33rd Annual NAPCRG Conference, Quebec City, Canada

Crabtree BF, Miller WL, Balasubramanian B, Ohman-Strickland P. Using Learning Teams for Reflective Adaptation: Preliminary Results from the NHLBI-funded ULTRA Study. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Cohen DJ, DiCicco-Bloom B, Flocke SA. The Complexities of Weight Counseling in the Primary Care Visit. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Crosson JC, DiCicco-Bloom B, O'Malley D, Shaw E, Bass C, Crabtree BF. "Electronic medical records and adherence to diabetes guidelines in primary care: a multimethod comparative case study." Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

DiCicco-Bloom B, O'Malley D, Shaw E, Crosson J. Social Capital among Nurses and Physicians in Primary Care Practices and Implications for Patient Care. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Hahn K, Ohman-Strickland P, Hamilton J, Nazareth T, Crabtree B. Hyperlipidemia Guideline Adherence and the Effect of Patient Gender. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Hamilton J, Roemheld-Hamm B, Young D, Jalba M, DiCicco-Bloom B, Crabtree B. Organizational Features of Family Medicine Practices which Include CAM. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

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

Hamm B. Why do family practices offer complementary and alternative medicine (CAM)? Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Hudson SV, Ohman-Strickland P, Lu-Yao G, Ferrante J, Cunningham R, Orzano AJ, Crabtree BF. Prostate Cancer Screening Patterns in Primary Care Settings. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Ohman-Strickland P, Crabtree B. Modeling systems with varying numbers of inputs: An application to the Ultra study. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

O'Malley D, DiCiccio-Bloom B, Crosson J, Shaw E, Crabtree B. Initial Conditions: Understanding the Qualities of Family Medicine Practices that Promote the Integration of a Reflective Adaptive Process. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Orzano AJ, Katerndhal D, Miller W, Griffiths F, Crabtree B. "Using Complexity Science as a Lens to Describe the Encounter: An Exploratory Qualitative Analysis." Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Scott J, DiCiccio-Bloom B, Cohen D, Crabtree B. Partners in healing: Doctors' and patients' experiences of healing relationships. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Shaw EK, O'Malley D, Crosson J, DiCiccio-Bloom B, Crabtree B. Exploring Family Dynamics in Family Medicine Practices. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

Young DM, Paul S, Ibrahim A, DeMissie K. Rapid HIV Testing in New Jersey: A State-wide Primary Care Initiative. Presentation at the 33rd Annual North American Primary Care Research Group Annual Meeting, Quebec City, Canada, Oct 16, 2005.

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