

**DEPARTMENT OF FAMILY MEDICINE
RESEARCH DIVISION MONTHLY REPORT
MARCH 2006**

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:

We welcome two new members to the Research Division. Enid Cruz joined the NJFMRN as a staff assistant in March. We are excited to have her working with us. She is an important addition to the development of our growing practice-based research network. The Division also welcomes Oliver Lontok, MD. Oliver started in the Postdoctoral Research Fellowship this month. Welcome to Enid and Oliver. We look forward to working together.

The Research Division has an ongoing grant from the Robert Wood Johnson Foundation to conduct an independent evaluation of its Prescription for Health program. Prescription for Health funds practice-based research networks to develop and test pilot interventions that target four behaviors – risky drinking, smoking, unhealthy diet and lack of physical activity. This month, Deborah Cohen (PI) and her colleagues working on this evaluation – Ben Crabtree, Al Tallia and Nicole Isaacson – hosted a meeting of their consultants at our Somerset office. National leaders in a diversity of fields participated in this meeting, including Larry Green, Russell Glasgow, Kurt Stange, Martey Doodoo, John Hickner and Reuben McDaniel. This was an extremely productive meeting. The work this group accomplished will lay the foundation for upcoming data analysis, publication and dissemination of the important lessons being learned from this national program. This meeting could not have been possible without the help of two vital members of our Research Division – Anda Cytroen and Cynthia Duncan-Robinson. Thank you to Anda and Cynthia for all of your hard work preparing and coordinating this event.

This month we were sad to see the departure of Tara Nazareth. Tara has been a dedicated, hardworking student-employee in the Research Division. She has helped greatly with managing the large amount of data gathered through our ULTRA study. Tara will be missed and we wish her all the best in her future endeavors.

Respectfully submitted by
Deborah Cohen
Assistant Professor
on behalf of Benjamin F. Crabtree, Ph.D.
Professor and Director

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New Jersey Family Medicine Research Network (NJFMRN)

Enid Cruz joined the Network as Staff Assistant in March. Ms. Cruz strong interpersonal and administrative skills lend to the continued development of the Network. She will also be assisting in the recruitment of patients for SCOPE (Supporting Colorectal Outcomes Through Participatory Enhancements).

Terry Falco, Program Administrator attended the Mobilizing for Action Through Planning and Partnerships. MAPP focuses on strengthening the whole system rather than separate pieces to collaboratively determine the most effective way to conduct public health activities.

Dr. Spierer and Terry Falco are working with the American Cancer Society to obtain newly developed easy reading low-literacy patient brochures in multiple languages to assist with screening for Colon, Breast, Tobacco and Prostate Cancer. These brochures have been developed by a grant to the ACS and will be distributed to NJFMRN practices across the State of New Jersey.

Publication

M Heisler, B Tabaei, R Ackerman, KV Narayan, B Waitzfelder, M Safford, C Tseng, K Duru, **JC Crosson**, B Herman, C Kim. (2006). "Physicians' participatory decision-making and quality of diabetes care processes and outcomes: results from TRIAD." *Journal of General Internal Medicine*, 21, s4:103.

In Press

Backer EL, Gregory P, Jaen CR, **Crabtree BF**. "A Close Look at Adult Female Health Care Maintenance Visits." *Family Medicine* (in press).

Cohen DJ, Leviton L, **Tallia A**, **Crabtree BF**, **Isaacson, N**. "Using online diaries as an evaluation tool: insights from prescription for health." *American Journal of Evaluation*. (in press. June 2007).

DiCicco-Bloom, B, **Crabtree BF**. "Qualitative Interviews." *Medical Education* (in press)

Hudson SV, Harris-Haywood S, Stange KC, **Orzano AJ**, **Crabtree BF**. "Recruiting Minority Primary Care Practices into Practice-Based Research" accepted for publication by *Medical Care* (in press)

Hung DY, Rundall TG, **Crabtree BF**, **Tallia AF**, **Cohen D**, Halpin, HA. "Influence of Practice and Provider Attributes on Preventive Service Delivery" *American Journal of Preventive Medicine* (in press)

Katerndahl D, **Crabtree BF**. "Creating Innovative Research methods: The 10-Year

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Methodological Think Tank Experience.” *Annals of Family Medicine* (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)

Under Review

Cohen D, DiCicco-Bloom B, Flocke S. “The nature of weight loss counseling in the primary care visit.” (under review - *Annals of Family Medicine*)

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

JC Crosson, PA Ohman-Strickland, KA Hahn, B. DiCicco-Bloom, E Shaw E, AJ Orzano, BF Crabtree. “Use of electronic medical records is associated with lower quality diabetes care in primary care practices.” (under review – *JAMA* :submitted February 7).

JC Crosson, PA Ohman-Strickland, KA Hahn, B. DiCicco-Bloom, E Shaw E, AJ Orzano, BF Crabtree. Use of electronic medical records is associated with lower quality diabetes care in primary care practices. (revisions requested – *JAMA*)

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

Hahn K, Ohman-Strickland P, Hamilton J, Scott J, Nazareth T, Crabtree B. “Hyperlipidemia guideline adherence and the effects of patient gender.” (under review - *Journal of Women's Health*)

DiCicco-Bloom, B, Frederickson K, O'Malley D, Shaw E, Crosson J: “Concept Development: Social Capital Within a Complex Adaptive System Framework” (submitted for review: *Journal of Nursing Scholarship*)

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

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Decision Making on Productivity and Turnover in Primary Care Practice.” (revisions requested – Health Care Mgt Review)

Hroschikosc MC, Solberg LI, Sperl-Hillen, JM, Harper P, **Crabtree BF**. “The challenges of change: implementing the chronic care model” (revisions requested – Annals of Family Medicine)

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

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).

Sussman A, Williams RL, Leverence R, Gloyd PW, **Crabtree BF**. “The Art and Complexity of Primary Care Clinicians’ Preventive Counseling Decisions (revisions requested – Annals of Family Medicine)

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.” (under review - Medical Care)

In Process

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, 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

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development of the concept social capital within the complexity science framework.”

Ferrante J, **Hahn K, Hudson S, Ohman-Strickland P, Crabtree B.** “Colorectal Cancer Screening Among Obese patients in Primary Care Practices”

Hahn K, Ferrante J, Crosson J, Hudson S. "Associations of chronic disease flow sheet use with guideline adherence."

Hahn K, Ferrante J, Crosson J, Hudson S, Crabtree B. "Associations of chronic disease flow sheet use with guideline adherence."

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, 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."

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Shaw E, Looney JA, Chase S, Stello B, Crabtree BF. "Passing the Torch in Quality Improvement Trials."

Shaw E, Looney JA, Chase S, Stello B, Crabtree BF. "In the Moment: An Analysis of Facilitator Impact during a Quality Improvement Process."

Sussman A, Williams RL, Leverence R, Gloyd PW, **Crabtree BF.** "Using Self Determination , Theory to Explain Clinical Decision Making in Primary Care"

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."

Abstract Submission

JC Crosson, B Balasubramanian, M Roland, RL Phillips, A Bazemore, M Dodoo, C Fullwood, T Doran, AF Tallia, JG Scott. A comparison of US and UK family medicine practices using two pay-for-performance standards. (submitted for presentation at NAPCRG, April 18, 2006)

Grants/Contract Related Activities

Active Grants

Cohen, D., PI: "Using illness visits to address health behavior advice" National Cancer Institute 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., PI. 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",

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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 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. 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.

Crabtree, BF, PI: “New Jersey Family Physicians Research Network – Cancer Center Support Grant”, 2005 – 2010; total project costs: \$806,348.

This work supports the NJFPRN to offer investigators an opportunity to have direct access to community-based patients and physicians in order to translate research evidence into community-based primary care practices with a long-term vision of enhancing the quality of care patients receive in New Jersey.

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. January 1, 2006 – December 31, 2006. Project total cost: \$173,093

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This subcontract is to examine the effect of e-prescribing on workflow and organizational function in 12 primary care practices in New Jersey. The goal of the larger project is to provide evidence for the Department of Health and Human Services to use when setting policy regarding electronic prescribing standards.

DiCicco-Bloom, B. 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.

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

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.

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.

Scott, JG, PI. Robert Wood Johnson Generalist Physician Faculty Scholars Program,

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“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.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)

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 in sustainable 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.

Crabtree, B.F., PI: "Practice Redesign to Improve Depression Care – PRIDE Care" (subcontract), Funding agency: NIMH; 2006-2010; Project total costs: \$167,732.

This subcontract will assist the main study in a group randomized trial To evaluate a Chronic Care Improvement intervention for implementing and sustaining chronic care office systems to improve depression care in 36 small, semi-autonomous, mixed-payer community-based primary care practices.

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

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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.