

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

During December, the Division hosted **Elizabeth Clark, MD, MPH**, who delivered an informal discussion of her work on "Interpersonal Counseling, Motivational Interviewing, and Communication in Healthcare". Dr. Clark is an Assistant Professor of Family Medicine and an Assistant Professor of Epidemiology at the University of Iowa. She is board certified in Family Medicine and Preventive Medicine and she is a member of the American Board of Family Practice and the American Board of Preventive Medicine. Her research interests include chronic disease, clinical preventive services, behavioral change, and communication.

Dena O'Malley and **Ben Crabtree** attended the annual NHLBI Investigator's Meeting in Bethesda, MD of Investigators funded under NHLBI's RFA on "Trials Assessing Innovative Strategies to Improve Clinical Practice Through Guidelines." Dena and Ben presented updates from our ULTRA project and worked with other investigators to finalize presentations that have been accepted for presentation at this year's American Heart Association's Annual Forum on Quality of Care and Outcomes (Washington DC, May 2007) and Academy Health Annual Conference (Orlando, June 2007). NHLBI is anxiously awaiting the main effects results from these projects and has scheduled a dissemination conference for September 2007 – we will present the main effects of ULTRA at that meeting!

The NCI funded Project SCOPE continues with the collection of both quantitative and qualitative data in the practices. Patients are recruited in the practice waiting rooms followed by a chart audit performed by one of the project team members. Also, the project facilitators have conducted the initial practice assessments that will help inform their work as facilitators during the weekly quality improvement meetings. The baseline database from SCOPE is rapidly becoming a phenomenal resource with matching patient surveys and chart audits for more than 700 patients age 50 and above, as well as staff/clinician surveys and practice level measures on the 26 participating practices.

The calendar year 2006 went by all too fast, but the Division has set in motion a series of strategic planning initiatives for 2007, beginning with a faculty retreat in January, which will be followed by a staff retreat in February, a Department retreat in March, and a final whole Division retreat in April or May. We are looking forward to another great year!!!

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

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New Jersey Family Medicine Research Network (NJFMRN)

December brought the close to an exciting year for the Research Network. Over the past 12 months the Network has grown to over 100 practices that include solo, multiple location private practices and academic sites. Rules of Governance were carefully crafted; a Research Application and process was developed and implemented. Quarterly meetings took place for the Board and the Practice Managers from across the State; with an Annual Practice Convocation. For additional information on the New Jersey Family Medicine Research Network, obtain a brochure or application to submit a research project contact Terry Falco falcote@umdnj.edu or Enid Cruz at cruze2@umdnj.edu.

Events in January 2007 will include: multiple practice site visits; NJFMRN Board Meeting on the 11th and Practice Managers on Wednesday, January 24th at the office in Somerset. Key Speaker at the Managers Meeting will be Regina Cunningham, RN, and Chief Nursing Officer at CINJ.

Published

Isaacson N. An Overview of the Role of Sexual Health Organizations, Corporations, and Government in Determining Content and Access to Online Sexuality Education for Adolescents. Sexuality Research and Social Policy, Journal of MSRC, June 2006:3(2): 24-36

In Press

Balasubramanian BA, Gandhi SK, Demissie K, August DA, Kohler B, Osinubi O, Rhoads GG. Use of Adjuvant Systemic Therapy for Early Breast Cancer among Women 65 Years and Older. Cancer Control (in press)

Crosson JC, Ohman-Strickland,PA, Hahn KA, DiCicco-Bloom B, Shaw E, Orzano AJ, Crabtree BF. Use of electronic medical records and diabetes quality of care: results from a sample of family medicine practices (Annals of Family Medicine)

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." Milbank Quarterly, in press.

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. Health Services Research (in press).

Leverence RR, Williams RL, Sussman A, **Crabtree BF.** Obesity guidelines through the viewfinder of clinicians practicing in health disparity communities: A qualitative assessment. Am J Prev Med (in press)

Nutting PA, Dickinson WP, Dickinson LM, Nelson CC, King DK, **Crabtree BF,** Glasgow RE. Use of Chronic Care Model Elements Is Associated with Higher Quality Care for Diabetes. Annals of Family Medicine (in press).

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Under Review

Balasubramanian BA, Demissie K, Patel RC, Vyas VH, Rhoads GG. Cancer Incidence among Asian Indian Migrants in the United States, 1988-2001 (under review – Cancer, Causes, and Control)

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

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)

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

Cappiello, M., **Cunningham, R. S.**, Knopf, M. T., & Erdos, D. (2006). Breast Cancer Survivors: Information and Support Needs After Treatment. (submitted for review: Clinical Nursing Research)

Salas-Lopez D, Mouzon DM, Cespedes LM, McLaughlin C, **Hudson SV**, Natale-Pereira A. “Evaluation of a Medical Interpreter Training Program for Bilingual Dual-Role Hospital Employees” (under review: Journal of General Internal Medicine).

Hudson SV, Ohman-Strickland P, Cunningham R, Ferrante J, Hahn K, Crabtree BF. "The effects of teamwork and system support on colorectal cancer screening in primary care practices" (under review - Cancer Detection and Prevention)

Orzano AJ, Tallia AF, McInerney CR, McDaniel RR, Crabtree BF. Strategies for Developing a Knowledge-Driven Culture. (under review: J Family Practice Management).

Orzano AJ, Ohman Strickland P, Tallia AF, Hudson S, Balasubramanian, Nutting PA, Crabtree BF. Improving Outcomes for High Risk Diabetics: Practices’ Use of Information Systems.. (under review: J. American Board of Family Medicine)

Orzano AJ, McInerney CR, Tallia AF, Scharf D, Crabtree BF. Primary Care Practice and Knowledge Management: Development of the Concept and Implications for Enhancing Quality Care (under review: Journal of the American Society of Information Science and Technology, JASIST)

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? (revisions requested: Annals of Family Medicine).

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Abstract Submissions:

Cunningham, R. S., Chaudhry, S., Centofanti, D., Vamos, D., Fessele, K. (2007). Establishing a centralized education service for clinical research personnel. Submitted to the Oncology Nursing Society annual meeting.

Kane, M., Fessele, K., Gordils-Perez, J., Schwatz, S., Lisi, N., Nishioka, J., Vamos, D., Tan, A., **Cunningham, R.**, & Goodin, S. (2007). Medication safety in cancer clinical trials: an analysis of medication error reports at a comprehensive cancer center. Submitted to the American Society of Clinical Oncology (ASCO) Annual Meeting

Hudson SV, Gordon M, Evans K, Todd M, Gabel M. "Cancer Clinical Trials: Is the Community Ready? Lessons Learned from the Novartis Education and Outreach Project at the Cancer Institute of New Jersey" submitted as an abstract for the Bridging the Health Care Divide: Research and Programs to Eliminate Cancer Disparities Conference sponsored by the American Cancer Society.

In Process

Balasubramanian BA, Orzano AJ, Ohman Strickland P, Hudson SV, Tallia AF, Crabtree BF. The impact of a quality improvement intervention in primary care practices on staff turnover.

Balasubramanian BA, Tallia AF, Scott JG, Ohman Strickland P, Miller WF, Crabtree BF. Multimorbidity in Diabetic Patients and Adherence to Screening Guidelines in Primary Care

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."

JC Crosson, B Balasubramanian, P Ohman-Strickland, 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 UK pay-for-performance standards.

JC Crosson, P Ohman-Strickland, B Balasubramanian, M Roland, RL Phillips, A Bazemore, M Dodoo, C Fullwood, T Doran, AF Tallia, JG Scott. How do different P4P schemes sort ULTRA practices?

C Brazeau, **JC Crosson.** Observation of teaching in a third year clerkship: the hidden curriculum of patient care.

MS Johnson, S Rovi, **JC Crosson, L Boyd.** Offsite mentors program: an approach to increasing

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research capacity.

JC Crosson, S Johnson, C-W Tseng, B Swain, other TRIAD study group members. Clinician perceptions of why some patients with diabetes do better than others.

Cunningham, R., Anselmo-Murphy, A., & Vamos, D. (2007) The role of erythropoietic agents in elderly cancer patients receiving chemotherapy. (for submission to *Drugs and Aging* in June).

Cunningham, R. Shaw, E., Hudson, S., O'Mally, D., & Crabtree, B. Using Learning Collaboratives to enhance c

C-W Tseng, TRIAD study group, **JC Crosson**. Impact of cost on medication use and communications with physicians about cost among patients with diabetes.

JC Crosson, D Bell, N Isaacson, **B DiCicco-Bloom**, **D Lancaster**, EA MacDonald, T Schueth. Effect of electronic prescribing on workflow and work relationships in ambulatory practices.

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."

Echeverria SE and Diez-Roux A. "Emergent Chronic Conditions" In upcoming book, "Social and Structural Factors Affecting the Health of Latino Males". Aguirre-Molina M, Borrell L, and Vega W (Eds).

Echeverria SE, Diez-Roux A, Shea S, Borrell L, Jackson S. "Associations of neighborhood problems and neighborhood social cohesion with mental health and health behaviors". (To be submitted to the journal *Health and Place*).

Echeverria SE and Rhodes G. "The influence of area of residence on advanced-stage breast cancer among Black, Latina and White women living in New Jersey". Research proposal submitted to the New Jersey State Cancer Registry. Pending IRB approval.

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

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**,

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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.”

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

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

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."

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.”

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.”

Presentation:

John Scott, MD, PhD gave a presentation at the Family Medicine Grand Rounds. "Relationships Matter: Understanding Healing Relationships in Primary Care", New Brunswick, NJ , December 12, 2006.

John Scott, MD, PhD gave a presentation at the Family Medicine Residents. "Evidence-based Medicine: Can We Find Truth?" New Brunswick, NJ , December 29, 2006.

Grants/Contract Related Activities

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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, 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.

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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.

Crabtree BF. (subcontract); "The TransforMED National Demonstration Project", American Academy of Family Physicians; 2006-2009; total project costs: \$138,977.

This subcontract is part of a national project which will demonstrate new knowledge about practice change; payor, patient and practice outcomes using a detailed multi-method assessment of the process of practice change in selected practices across the United States.

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

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.

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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, “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”, 1 R18 DK067083-01A2, 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)

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

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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.

DiCicco-Bloom, B, PI: "Expanding Nurse/Physician Relationships to Improve Diabetes Care". Funding Agency: National Institute of Nursing Research (NINR)/National Institute for Diabetes and Digestive and Kidney Diseases; 2007-2012; total project costs: \$3,887,324.

This project is designed to build and sustain attributes of social capital among nurses and physicians to then improve overall practice relationships to enhance care of patients with diabetes. The integrated care processes that are the foundation of diabetes care make it an ideal condition for evaluating interventions seeking to enhance work relationships in primary care settings.

Crosson, JC, PI: "Organizational Self-Assessment to Improve Diabetes Care in Primary Care Practices" (R 34 proposal - resubmission), Funding agency: NIDDK; July 2007 - June 2009, Project total cost: \$466,500 (submitted 11/1/06)

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.