

**DEPARTMENT OF FAMILY MEDICINE
RESEARCH DIVISION MONTHLY REPORT
APRIL 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 Debra Lancaster who joins the Division as a research analyst (facilitator). She is currently working with Jay Crosson's E-prescribing project and NCI funded SCOPE project. Debra has a Masters in Labor Studies and Industrial Relations (MLIR) from the School of Management and Labor Relations at Rutgers University. She is a doctoral student in the Graduate School of Education at Rutgers and a Fellow at the Center for Women and Work at Rutgers. She has strong interest in work organization, organizational behavior, adult learning, and organizational change and care work.

It is also with great pleasure that we congratulate Apexya Patel on the birth of her son Om Pinal Patel, who was born on May 1 weighing 7 lbs.

As part of the Division's participation in the AAFP-funded Center for Research in Family Medicine and Primary Care, Ben Crabtree has been negotiating a contract to evaluate the AAFP's new National Demonstration Project (NDP) that seeks to fully implement all elements of the "New Model of Family Practice." The AAFP has created a new non-profit entity, TranforMED, Inc. to oversee the implementation and is contracting for an independent evaluation of the NDP. Ben Crabtree, Eric Shaw, and Dena O'Malley traveled to Cleveland to train the NDP facilitators in practice-based observation and interviewing techniques in March, with Ben making a follow-up training trip in April to Kansas City.

During April the Division hosted several outside speakers who presented at our weekly Research Division meetings. **Beth Hoffman, PhD**, is a former Postdoctoral Fellow with the Tobacco Surveillance & Evaluation Research Program at UMDNJ School of Public Health and a new Postdoctoral Fellow with the Friends Institute, UCLA. Dr. Hoffman has been working with social network analysis for over five years under the mentorship of Dr. Thomas Valente at USC and used social network analysis techniques for her dissertation looking at peer influence and peer selection processes among adolescent cigarette smoking. **Diane R. Brown, Ph.D.**, Executive Director of the Institute for the Elimination of Health Disparities at the UMDNJ-RWJMS, is a medical sociologist with a strong interest in developing culturally appropriate, community-based approaches to addressing health disparities. In her presentation she discussed, "Cancer Treatment Decision Making: Examining Racial Differences." **Allison Wagreich, MD**, an Instructor in Obstetrics, Gynecology, and Reproductive Sciences at CINJ, presented "Survey of reproductive factors in women with and without Endometrial Cancer." Dr. Wagreich is interested in the prevention of ovarian, endometrial, and cervical cancer, with a special interest in cancer genetics and gynecologic concerns of the cancer patient.

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Ben Crabtree gave an invited lecture at the Korean Academy of Family Physicians Annual Meeting in Daegu, Korea that reviewed the use of complexity science for understanding organizational change in practices. He also lectured to members of the Department of Family Medicine at Sungkyunkwan University School of Medicine on mixed methods research designs.

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

Publication

DiCicco-Bloom B, Crabtree BF. Qualitative Interviews. Medical Education, 2006 Apr; 40(9): 314-21.

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 2006 May;30(5):413-22.

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 2006 Jan-Mar; 31(1):2-10.

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 2006 Mar-Apr; 4(2):109-16.

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).

Hroszkosk MC, Solberg LI, Sperl-Hillen, JM, Harper P, **Crabtree BF.** The challenges of change: implementing the chronic care model. Annals of Family Medicine (in press).

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

Hung DY, Rundall TG, **Tallia AF, Cohen DJ, Crabtree BF.** Productivity and turnover in primary care practice: the role of staff participation in decision making. Medical Care (in press).

Katerndahl D, **Crabtree BF.** Creating Innovative Research methods: The 10-Year Methodological Think Tank Experience. Annals of Family Medicine (in press).

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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).

Sussman A, Williams RL, Leverence R, Gloyd PW, **Crabtree BF**. The Art and Complexity of Primary Care Clinicians' Preventive Counseling Decisions. *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*)

Ferrante J, **Hahn K, Hudson S, Ohman-Strickland P, Scott J, Crabtree B**. "Colorectal Cancer Screening Among Obese patients in Primary Care Practices" (under review - *Cancer Detection and Prevention*)

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." (revisions requested - *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*)

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

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*).

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.

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."

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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, 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."

Looney JA, Shaw E, Chase S, Stello 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."

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

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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, Leverage 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 2006 Annual NAPCRG conference)

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. (submitted for presentation at the 2006 Annual NAPCRG conference)

Stange KC, **Crabtree BF**, Miller WL. Developing Integrated Approaches to Reporting Mixed Methods Research. Workshop abstract. (submitted for presentation at the 2006 Annual NAPCRG conference)

Ferrante JM, Chen P, Wartenberg D. "The effect of physician recommendation and patient adherence on cancer screening in Obese Women." (submitted for presentation at 2006 Annual NAPCRG conference)

Ferrante JM, Hahn KA, Hudson SV, Ohman-Strickland P, Scott JG, Crabtree BF. "Colorectal cancer screening among obese patients in primary care practices" (submitted for presentation at 2006 Annual NAPCRG conference)

Hudson SV, Ohman Strickland P, Ferrante JM, Hahn K, Cunningham R, Crabtree BF. "The effects of teamwork and reminders on colorectal cancer screening in primary care practices" (submitted for presentation at 2006 Annual NAPCRG conference)

Ohman Strickland P, Orzano J, Tallia A, Hudson SV, Balasubramanian B, Crabtree BF.

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“Diabetes care in family medicine practices with nurse practitioners and physician assistants”
(submitted for presentation at the 2006 Annual NAPCRG conference)

Orzano AJ, Tallia A, McInerney C, Scharf D, Crabtree BF. “Knowledge Management and Enhanced Practice Performance: An Exploratory Qualitative Data Analysis”(submitted for presentation at 2006 Annual NAPCRG conference)

Presentation:

Deborah Cohen, PhD Nicole Isaacson, PhD Benjamin Crabtree, PhD Alfred Tallia, M.D., MPH Laura Leviton, PhD gave a presentation on "Online Diaries for Qualitative Evaluation: Gaining Real-time Insights"; at the Eastern Evaluation Research Society meeting, Absecon, NJ. April 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”, 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

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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

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.

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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, “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.

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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.

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: "Electronic Medical Record Usage and Health Care Quality in Primary Care" (R 03 proposal), Funding Agency: AHRQ; September 2006 – August 2007, Project total cost: \$100,000.

To determine what organizational attributes and capacities of EMR-using primary care practices are associated with higher quality care for patients with hypertension and diabetes in order to identify potential intervention targets for a clinical trial of effective methods for using EMRs to improve the quality of care received by patients with chronic illnesses in primary care practices.