

# Annual Report

Department of Health Management and Policy  
College of Public Health | The University of Iowa

## Center for Health Policy and Research

# 2008

## Research and Educational Activities

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Dear Colleagues,

We are pleased to provide you with this annual report of the research and educational activities of the Center for Health Policy and Research (CHPR). This year we have added highlights to this report on sample projects and publications in the Center.

This report provides descriptions of the 23 funded research projects housed in the Center. Affiliated with CHPR are 13 Center Associates, including faculty in the Department of Health Management and Policy and other Principal Investigators who use CHPR as their base for research activities. CHPR-based projects provided salary support to an additional 22 Center Affiliates and 15 Graduate Research Assistants. Also listed are other research projects, housed outside CHPR, that support Center Associates. We have listed the 33 publications and 28 presentations during 2007 involving our Center Associates.

The Center supports the Department of Health Management and Policy doctoral program and offers weekly educational activities. This annual report lists the Seminar Series, Research Updates, and Methods Workshop presentations during 2008. We also list the 3 publications during 2008 that were co-authored by HMP doctoral students and several that are forthcoming.

As you will see from this report, the CHPR Associates, Affiliates, and Graduate Research Assistants are actively engaged in important work focused on health policy and research issues. We enjoy sharing news of our research and educational activities and hope you find this report interesting.

Sincerely yours,

A handwritten signature in black ink that reads "Marcia M. Ward".

Marcia M. Ward, Ph.D.  
Director



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**CENTER ASSOCIATES\***

Rachel Anderson, Ph.D.  
 Christopher Atchison, M.P.A.  
 James Bahensky, M.S.  
 Barry Greene, Ph.D.  
 Jason Hockenberry, Ph.D.  
 Brian Kaskie, Ph.D.  
 Donna Katen-Bahensky, M.S.



Samuel Levey, Ph.D.  
 Lawrence Prybil, Ph.D.  
 Tanya Uden-Holman, Ph.D.  
 Thomas Vaughn, Ph.D.  
 Marcia Ward, Ph.D.  
 George Wehby, Ph.D.  
 Fredric Wolinsky, Ph.D.

\*Center Associates include faculty in the Department of Health Management and Policy and others who are principal investigators on research projects based in the Center for Health Policy and Research.

**CENTER AFFILIATES \*\***

Alison Amendola	Department of Health Management and Policy
Hyonggin An, Ph.D.	Department of Biostatistics
Elizabeth Chrischilles, Ph.D.	Department of Epidemiology
John Geweke, Ph.D.	Department of Economics
Tim Gutshall, M.D.	Iowa Foundation for Medical Care
Loreen Herwaldt, M.D.	Department of Internal Medicine
Michael Jones, Ph.D.	Department of Biostatistics
Mark Koepke	Iowa Foundation for Medical Care
Jeff Murray, M.D.	Department of Pediatrics
Robert Ohsfeldt, Ph.D.	Texas A&M University
Claire Pavlik, Ph.D.	Department of Geography
James Price, Ph.D.	Department of Health Management and Policy
Gary Rosenthal, M.D.	Department of Internal Medicine
Diane Schaeffer	Department of Health Management and Policy
Linda Snetselaar, Ph.D.	Department of Epidemiology
Marita Titler, Ph.D., R.N.	College of Nursing
Kelli Vellinga, R.N.	Iowa Foundation for Medical Care
Rujuta Vidal	Department of Health Management and Policy
Douglas Wakefield, Ph.D.	University of Missouri
Robert Wallace, M.D., M.Sc.	Department of Epidemiology
Laurie Walkner	Institute for Public Health Practice
Kara Wright	Department of Epidemiology

\*\*Center Affiliates include faculty and staff who receive a portion of salary support from research projects based in the Center for Health Policy and Research.

**GRADUATE RESEARCH ASSISTANTS \*\*\***

Suzanne Bentler	Department of Health Management and Policy
Janet Benton	Department of Health Management and Policy
Beth Cook	Department of Health Management and Policy
Nicole Dehning	Department of Health Management and Policy
Ammon Fillmore	Department of Health Management and Policy
Li Liu	Department of Biostatistics
Troy Mills	Department of Health Management and Policy
John Nganga	Department of Health Management and Policy
Kwame Nyarko	Department of Health Management and Policy
Maksym Obrizan	Department of Economics
Rebecca O'Rourke	Department of Health Management and Policy
Qian Qiu	Department of Health Management and Policy
Lance Roberts	Department of Health Management and Policy
Smruti Vartak	Department of Health Management and Policy
Matthew Wyatt	Department of Health Management and Policy

\*\*\*Graduate Research Assistants are students in masters and Ph.D. programs who receive a portion of salary support from research projects based in the Center for Health Policy and Research.



**RESEARCH PROJECTS WITH CHPR ASSOCIATES AS PRINCIPAL INVESTIGATORS****Rachel Anderson, PhD (PI)**

*Evaluation of Multi-Dimensional Treatment Foster Care*

Tanager Place

Direct Funds: \$3,704, Funding Period: 2007 - 2008

This project evaluates Multi-Dimensional Treatment (MDT) Foster Care. Evaluation components include clinical, social and environmental outcomes of children and their families, the quantity and quality of out-of-home placements, MDT family foster care retention and satisfaction, and mental health service utilization.

*Division of Mental Health and Disability Services--Technical Assistance: Policy Briefs & Data Analysis*

Iowa Department of Human Services

Direct Funds: \$131,545 | Funding Period: 2007 - 2008

This project involves participation in the re-design of the children's mental health system in Iowa by steering committee membership, conducting data analyses relative to current trends in service delivery, and the development of a white paper on the history of Iowa's mental health system since the implementation of managed behavioral health care.

**Barry Greene, PhD (PI)**

*Hospital Leadership Quality Assessment: Building a Technical Assistance Program for Hospital Quality Improvement*

Commonwealth Fund

Co-Investigators: Samuel Levey, Thomas Vaughn

Direct Funds: \$457,519 | Funding Period: 2008 – 2010

The project aims to establish and support Technical Assistance Protocols (TAP) derived from the Hospital Leadership Collaborative's "Hospital Leadership Quality Assessment Tool"

**Brian Kaskie, PhD (PI)**

*The Development of an EBP Model of Service Delivery for Older Adults with Mental Illnesses*

Iowa Department of Human Services

Direct Funds: \$72,081 | Funding Period: 2006 - 2008

The goal of this work contract is to initiate a planning process that leads to the development and evaluation of an evidence-based practice for older adults with mental illnesses who present in primary health care settings.

*Iowa Coalition on Mental Health and Aging (4th Phase)*

Iowa Department of Human Services

Direct Funds: \$111,941 | Funding Period: 2006 - 2008

This project is a continuation of the Iowa Coalition on Mental Health and Aging (ICMHA) efforts. The goal of the contract is to build on the existing efforts of the coalition. This phase continues to include staff support of ICMHA efforts.

## HMP Faculty Develop Hospital Leadership Quality Assessment Tool

Ask any health care executive whether he or she cares about quality improvement within their organization, and you will likely hear an unequivocal, emphatic affirmative response. Yet does executive commitment to quality translate into measurable outcomes? For Professor Sam Levey, PhD, this question provided the impetus for a stream of research that has captured the interest of researchers and practitioners across the country.

In order to gather some preliminary data about the relationship between hospital leadership and performance, Dr. Levey and his colleagues, including HMP alum Mark Koepke (JD, MHA), conducted interviews with 96 hospital executives (i.e., CEOs, CMOs, and governing board members) in 18 community hospitals. This research indicated a gap between executive rhetoric on the importance of quality initiatives and actual execution of activities designed to support quality performance activities. This research, conducted in 2004-2005, was published in *Journal of Patient Safety*.

This research was very timely as a variety of initiatives at the national level focused attention on the importance of leadership engagement on quality. In concert with this work, researchers from the Department of Health Management and Policy (HMP), including Dr. Levey and Dr. Thomas Vaughn, Ph.D., developed a web-based survey that was completed by 413 health care executives working in eight states. This research indicated that when a board: 1) spends more than 25% of its time on quality issues; 2) receives a formal quality performance measurement report; 3) bases senior executives' compensation partially on performance; and 4) interacts with hospital staff on quality issues that the hospital will experience better outcomes.

In 2006, realizing the potential importance of this research for health care organizations of all sizes, the Hospital Leadership Collaborative (of which researchers in HMP were an integral part) created a public-private partnership to develop a self-assessment tool that could be used to help hospitals improve quality through enhanced leader engagement. This tool, known as "The Hospital Leadership and Quality Assessment Tool" (HLQAT), has the potential to make a significant contribution to the field.

The HLQAT, noted Dr. Levey, helps hospitals obtain "a thorough self-assessment of its strengths and weaknesses. It's basically an instrument that gives hospitals the opportunity to conduct a SWOT analysis on quality."

These researchers quickly realized that simply identifying the organization's strengths and weaknesses is only the first step in the process. If they were truly committed to helping hospitals achieve their quality improvement goals they must help them develop strategies to bridge the gap between the current and desired situation. A 2-year, \$458,939 grant from the Commonwealth Fund has provided these researchers, joined by Professor Barry Greene, Ph.D. the opportunity to do just that.

This grant funding has allowed Drs. Levey, Vaughn, and Greene to focus on developing Technical Assistance Protocols (TAPs), essentially an on-line toolkit to bridge gaps in performance identified by the HLQAT. The final phase of this project will evaluate the entire process.

Barry Greene, PhD, Department Head and Professor  
Samuel Levey, PhD, Gerhard Hartman Professor  
Thomas Vaughn, PhD, Associate Professor and Director of Masters Programs

**Brian Kaskie, PhD (PI) (cont.)***The Development of an EBP Model of Service Delivery for Older Adults with Mental Illnesses*

Iowa Department of Human Services

Direct Funds: \$29,975 | Funding Period: 2007 - 2008

This project is a continuation of a previous award. The goal of this work contract is to initiate a planning process that leads to the development and evaluation of an evidence-based practice for older adults with mental illnesses who present in primary health care settings.

**Lawrence Prybil, PhD (PI)***Studying Governance in Community Healthcare Systems*

W. K. Kellogg Foundation

Co-Investigator: Samuel Levey

Direct Funds: \$237,000 | Funding Period: 2006 - 2008

This study examines governance structures, practices, and culture in a group of non-profit community health systems. It compares the existing structures, practices, and culture to emerging standards (“best practices”) in the nonprofit field.

*Baseline Survey of Governing Boards in Community Healthcare Systems*

Grant Thornton LLP

Co-Investigator: Samuel Levey

Direct Funds: \$36,000 | Funding Period: 2006 - 2008

This grant supports a mail survey of the CEOs of 201 nonprofit community health systems. The purpose is to obtain the CEO’s perspectives on the structure, practices, and cultures. This survey supplements and compliments a related project funded by the W.K. Kellogg Foundation.

*Promoting Wellness and Reducing Obesity Among Children*

Principal Financial Group Foundation

Co-Investigator: Linda Snetselaar

Direct Funds: \$250,000 | Funding Period: 2008 – 2013

Funds are to provide resources to support the collaborative efforts of the College of Public Health and the communities of Muscatine and Fort Dodge in the evaluation of community-based initiatives directed at attacking obesity and promoting health of children in those communities. The goal is to create national models of evidence-based, community-wide programs that can be replicated in other communities.

**Tanya Uden-Holman, PhD (PI)***Activate Iowa: Connecting Resources to Enhance the Health and Wellness of Iowans*

Wellmark Foundation

Direct Funds: \$10,000 | Funding Period: 2007 - 2010

The project goals include: 1) improve the health of Iowa’s communities through citizen-focused educational programs; 2) identify grass-roots resources to enhance and benefit community-based initiatives; and 3) promote a collaborative, linked and sustained approach based on a three-year commitment.

**Tanya Uden-Holman, PhD (PI) (cont.)***Strengthening WIC Nutrition Assessment Skills: Establishing a Competency-to-Training Framework in a Learning Management System*

Iowa Department of Public Health

Direct Funds: \$78,985 | Funding Period: 2007 - 2010

This project incorporates Women, Infants, and Children (WIC) nutrition assessment competencies and related training activities into an existing online learning management system. Nutrition assessment competency areas will also undergo extensive validity testing. This online system compliments the traditional training methods currently used by the Iowa WIC Program. The training system with a blended training approach will maximize limited training resources at the state and local levels.

**Thomas Vaughn, PhD (PI)***Quality Care on Acute Inpatient Units*

University of California, San Francisco

Direct Funds: \$31,971 | Funding Period: 2006 - 2008

The purpose of this project is to determine the impact of direct care nurse staffing hours measured as recommended by the National Quality Forum (hours per patient day) on patient outcome indicators also recommended by the NQF (failure to rescue, decubitus ulcers, injury from falls, urinary tract infections, central line associated blood stream infections, ventilator associated pneumonias) and to determine the accuracy, availability, variation, and usefulness of those and other indicators of the quality of care.

**Marcia Ward, PhD (PI)***Health Information Technology Value in Rural Hospitals*

US Department of Health & Human Services, Agency for Healthcare Research & Quality

Co-Investigators: James Bahensky, Tanya Uden-Holman, Thomas Vaughn, Douglas Wakefield

Direct Funds: \$901,793 | Funding Period: 2004 - 2008

Goals of this project are to assess the current use of Health Information Technology (HIT) in rural hospitals, evaluate the potential value of HIT system enhancements, and develop a tool to assist rural hospitals when making decisions about investments in HIT system enhancements.

*Collaborative EHR Implementation to Bridge the Continuum of Care in Rural Iowa*

Hancock County Memorial Hospital

Co-Investigators: Rujuta Vidal, Douglas Wakefield

Direct Funds: \$482,178 | Funding Period: 2005 - 2009

This study provides a unique opportunity to evaluate how implementation of an integrated electronic health record and computerized provider order entry (EHR/CPOE) system using common tools, including decision supports, affects patient care in seven small rural hospitals throughout Mercy Health Network-North Iowa, and on a regional basis with regard to changes in access to medical specialty, pharmacy, and laboratory consultation services.

# Health Information Technology Value in Rural Hospitals



Marcia Ward, PhD

“Our research has studied health information technologies in small rural hospitals and identified factors related to their progress in adopting these systems.”

Health information technology (HIT) solutions, such as electronic medical records, are often touted as having the ability to streamline patient care and improve patient safety. Most of the research on the efficacy of these technological advances has focused on large hospitals operating in urban settings and academic medical centers. Yet little is known about whether HIT solutions have a similarly positive impact in rural hospitals. And, even if the impact is positive, do the benefits outweigh the financial costs associated with implementation? Further, what impact do these technologies have on quality and patient safety?

A desire to answer these questions led Professor Marcia Ward, PhD, and her colleagues to apply for a grant from the Agency for Healthcare Research and Quality (AHRQ).

The three-year \$1.3 million grant was awarded in 2004 and has resulted in a steady stream of publications. Using data collected from Iowa's 89 rural hospitals (80 of which were classified as critical access hospitals), Dr. Ward and colleagues have focused on identifying and evaluating those HIT capacities and practices most strongly related to patient safety and healthcare quality.

This grant allowed Dr. Ward and her colleagues to conduct in-depth research on these hospitals utilizing a broad range of approaches including: 1) literature reviews; 2) primary data collection, such as surveys, key-informant interviews, and workgroup discussions; 3) secondary data analysis of hospital discharge datasets and HIT databases; and 4) economic analysis. The research supported by the AHRQ grant has made a significant contribution to our understanding of how rural hospitals are implementing HIT solutions and has resulted in 17 publications, in journals such as *Health Services Research*, *Journal of Rural Health*, *Health Care Management Review*, and *American Journal of Medical Quality*.

**Marcia Ward, PhD (PI) (cont.)**

*University of Iowa College of Public Health, Department of Health Management & Policy Doctoral Student Data Analysis Projects for AHRQ Inpatient, Safety and Prevention Quality Reports*

Iowa Healthcare Collaborative

Direct Funds: \$36,723 | Funding Period: 2006 - 2008

This agreement involves analysis of hospital discharge data to support the Iowa Healthcare Collaborative annual report of hospital performance and website. The project also involves designing, conducting, and analyzing a survey of Iowa hospitals on priority and progress on national patient safety goals and hospital leadership.

**TeamSTEPPS™ Adoption in Action**

US Department of Health & Human Services, Agency for Healthcare Research & Quality

Co-Investigators: Tim Gutshall, Thomas Vaughn, Kelli Vellinga

Direct Funds: \$210,728 | Funding Period: 2006 - 2009

This task order is funded through the AHRQ ACTION network. It's purpose is to examine the implementation of TeamSTEPPS, a team building approach developed by the Department of Defense, in two community hospitals in Iowa.

**Reducing Hospital Associated Infection (HAI)**

US Department of Health & Human Services, Agency for Healthcare Research & Quality

Co-Investigators: Loreen Herwaldt, Marita Titler

Direct Funds: \$268,737 | Funding Period: 2007 - 2009

This task order is funded through the AHRQ ACTION network. It involves disseminating a set of tools to reduce hospital associated infections (HAI) to hospitals throughout Iowa. The project team is working with the Iowa Healthcare Collaborative's HAI Initiative to disseminate the tools to infection control professionals throughout the state. Surveys and interviews are being conducted in 16 Iowa hospitals to form case studies of HAI prevention and control efforts.

**Fredric Wolinsky, PhD (PI)**

*Physical Frailty in Urban African Americans*

Indiana University

Direct Funds: \$191,905 | Funding Period: 2004 - 2009

The objective of this study is to continue annual follow-ups of the 865 surviving members of the original random sample of 998 middle aged African Americans living in two geographic areas of St. Louis, MO. The project focuses on three specific aims: 1) investigate further the timing, antecedents, sequence, and consequences of the disablement process; 2) study recovery from disablement; and 3) examine longitudinally the antecedents and consequences of sarcopenia.

Accomplished methodologist and researcher, Professor Fred Wolinsky, PhD, John W. Colloton Chair in Health Management and Policy, has spent his career studying the health and health behavior of older adults.

Given that individuals over the age of 65 account for nearly half of days of care in short stay health care facilities, comprise the majority of nursing home residents, and make up more than 75% of home-based care, interventions that are designed to improve the mental and physical health of this population are extremely important. Research by Dr. Wolinsky and his colleagues, funded by the National Institutes of Health, describes an intervention that appears to have a substantial impact on the well-being of older adults.

This intervention, known as the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE), is the largest, community-based, multisite randomized controlled trial ever conducted that focuses on improving or maintaining cognitive performance in older adults. Participants were randomly assigned to four groups: one group engaged in computerized brain exercises, one group received instruction in memory strategies, one group received instruction in reasoning, and the final group was a control group.

Earlier study results focused primarily on whether and how ACTIVE affected cognition and quality of life, while recent results, published in *The Journals of Gerontology*, explore the impact of cognitive training on mood. Analysis of data collected from 2,036 participants over a five-year period revealed that those individuals who completed the computerized brain exercises experienced fewer depressive symptoms than those in the other three groups. Specifically, these individuals were 30% less likely to see an increase in depressive symptoms during the course of this study.



Fred Wolinsky, PhD

“There are several reasons why this area is so important, not the least of which are the growing imbalance of the population pyramid on which US health and welfare policy is based, the disproportionately higher expenditures of health care for older adults, and health care’s increasingly burdensome share of GNP.”

## Wolinsky Continues ACTIVE Work

**Fredric Wolinsky, PhD (PI) (cont.)***Health and Health Services Use in the HRS/AHEAD*

US Department of Health & Human Services, National Institutes of Health

Co-Investigators: Hyonggin An, Elizabeth Chrischilles, John Geweke, Robert Ohsfeldt, Claire Pavlik, Gary Rosenthal, Robert Wallace

Direct Funds: \$1,213,254 | Funding Period: 2004 - 2009

This is an in-depth examination of the health and health services use of the 7,447 HRS/AHEAD respondents aged 70 years old or older at baseline, and involves the baseline (1993) and 1995, 1998, 2000, 2002, and 2004 follow-up interviews merged with Medicare claims (since 1988), the National Death Index, and household geocodes.

*Adverse Outcomes of Dual Use of Health Systems Among Older Male Veterans*

US Department of Health & Human Services, National Institutes of Health

Direct Funds: \$45,000 | Funding Period: 2006 - 2008

This study examines the potentially adverse outcomes of dual use of both the VHA and Medicare among older male veterans. The overall hypothesis is that dual use increases the risk of being hospitalized for ambulatory care sensitive conditions, and increases the risk of mortality. The presumed etiologic mechanism is the lack of continuously coordinated health care.

*Continuity of Care and Health Outcomes: Does It Really Matter?*

US Department of Health & Human Services, National Institutes of Health

Co-Investigators: Michael Jones, Gary Rosenthal, Robert Wallace

Direct Funds: \$225,500 | Funding Period: 2007 - 2009

This is a secondary analysis of the Survey of Assets and Health Dynamics Among the Oldest Old (AHEAD) to determine whether continuity of care with a physician has beneficial effects on health status trajectories, the risk of being hospitalized for ambulatory care sensitive conditions, and mortality.

*ED Use Patterns, Antecedents, and Consequences in Older Adults*

US Department of Health & Human Services, National Institutes of Health

Co-Investigators: Michael Jones, Brian Kaskie, Gary Rosenthal, Robert Wallace

Direct Funds: \$225,500 | Funding Period: 2008 – 2010

This project proposes to develop one or more typologies that reflect an older adult's pattern of ED use over time (as opposed to focusing on single ED visits) among a nationally representative sample of Medicare beneficiaries, and to examine the antecedents and consequences of these ED use patterns.

*Health Service Use at the End of Life: A Biracial Population Study of AD*

US Department of Health & Human Services, National Institutes of Health

Direct Funds: \$32,379 | Funding Period: 2008 – 2011

This project examines the relationship between Alzheimer's disease (AD) and cognitive decline with the use of health care services at the end of life, focusing on comparisons among people with AD, mild cognitive impairment, and normal cognition.



**OTHER RESEARCH PROJECTS SUPPORTING CHPR ASSOCIATES***Upper Midwest Public Health Training Center*

Health Resources &amp; Services Administration

Tanya Uden-Holman (PI) | Center Investigators: Christopher Atchison, Barry Greene

Direct Funds: \$3,166,261 | Funding Period: 2001 – 2011

*Center for Research in the Implementation of Innovative Strategies in Practice (CRIISP)*

US Department of Veterans Affairs, Iowa City Veterans Affairs Medical Center

Gary Rosenthal (PI) | Center Investigators: Jason Hockenberry, Thomas Vaughn, Fredric Wolinsky

Direct Funds: \$3,600,000 | Funding Period: 2004 - 2009

*Gerontological Nursing Interventions Research Center*

National Institutes of Health

Toni Tripp-Reimer (PI) | Center Investigator: Fredric Wolinsky

Direct Funds: \$1,592,741 | Funding Period: 2004 – 2009

*Upper Midwest Center for Public Health Preparedness*

Centers for Disease Control and Prevention

Christopher Atchison (PI) | Center Investigators: Barry Greene, Tanya Uden-Holman

Direct Funds: \$4,452,281 | Funding Period: 2004 – 2009

*Promoting Health and Reducing Obesity in Children: A Community-Based Pilot Project in Iowa*

W.K. Kellogg Foundation

Linda Snetselaar (PI) | Center Investigator: Lawrence Prybil

Direct Funds: \$199,997 | Funding Period: 2006 – 2008

*Oral Cleft Prevention Program*

US Department of Health &amp; Human Services, National Institutes of Health

Jeff Murray (PI) | Center Investigator: George Wehby

Direct Funds: \$6,598,341 | Funding Period: 2006 – 2011

*University of Iowa Older Adults CERT*

Agency for Healthcare Research &amp; Quality

Elizabeth Chrischilles (PI) | Center Investigator: Fredric Wolinsky

Direct Funds: \$2,787,230 | Funding Period: 2006 – 2011

*Promoting Health and Reducing Obesity in Children: Building a National Model for Community-Based Programs*

W.K. Kellogg Foundation

Linda Snetselaar (PI) | Center Investigator: Lawrence Prybil

Direct Funds: \$35,000 | Funding Period: 2007 – 2009

*Effects of Oral Clefts on Birth Outcomes and Cleft Risks Due to Maternal Smoking*

US Department of Health &amp; Human Services, National Institutes of Health

George Wehby (PI)

Direct Funds: \$198,900 | Funding Period: 2007 – 2009

*Impact of System-Centered Factors, and Processes of Nursing Care on Fall Prevalence and Injuries from Falls*

Robert Wood Johnson Foundation

Marita Titler (PI) | Center Investigator: Marcia Ward

Direct Funds: \$267,858 | Funding Period: 2007 – 2009

*Promoting Health and Reducing Obesity in Children: Building a National Model for Community-Based Programs*

Roy J. Carver Charitable Trust

Linda Snetselaar (PI) | Center Investigator: Lawrence Prybil

Direct Funds: \$150,000 | Funding Period: 2007 – 2010

*Health Outcomes and Improved Phenotypic Characterization of Cleft Lip and Palate*

US Department of Health &amp; Human Services, Centers for Disease Control &amp; Prevention

George Wehby (PI)

Direct Funds: \$1,119,921 | Funding Period: 2007 – 2010

*Iowa Research Network (IRENE): A Rural Primary Care Practice Based Research Network*

Agency for Healthcare Research &amp; Quality

Barcey Levy (PI) | Center Investigator: Marcia Ward

Direct Funds: \$325,595 | Funding Period: 2007 – 2010

*Older Adult Mental Health Services Project*

Iowa Department of Human Services

Brian Kaskie (PI)

Direct Funds: \$88,650 | Funding Period: 2008 – 2009

*GEIS – University of Iowa Certificate in Emerging Infectious Diseases*

Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

Gregory Gray (PI) | Center Investigator: Tanya Uden-Holman

Direct Funds: \$880,927 | Funding Period: 2008 – 2011

**PUBLICATIONS BY CHPR ASSOCIATES**

**Anderson RL.** Finding the balance in an evolving service sector: The role of measurement in matching treatment need to service delivery. In *Behavioral Health Care*. (JS Lyons and DA Weiner, Eds.) Chapter 14. 2008.

**Anderson RL.** The silos of Iowa and the need for a common language: Creating a path toward an efficacious mental health care system for children and families. In *Behavioral Health Care*. (JS Lyons and DA Weiner, Eds.) 2008.

Andresen EM, Malmstrom TK, **Wolinsky FD**, Miller JP, Miller DK. Rating neighborhoods for public health: results from the African American Health Study. *BMC Public Health*. Vol. 8(35): 1-11, 2008.

Armstrong M, **Greene BR**, Rushton G. Using geocodes to estimate distances and geographic accessibility for cancer prevention and control. In *Geocoding Health Data: The Use of Geographic Codes in Cancer Prevention and Control, Research, and Practice*. (G. Rushton, et al., Editors) CRC Press (Taylor & Francis Group), Chapter 11, 2008.

**Bahensky J**, Frieden R, Moreau B, **Ward MM**. Critical access hospital informatics. How two rural Iowa hospitals overcame challenges to achieve IT excellence. *Journal of Healthcare Information Management*. 22(2): 16-22, 2008.

**Bahensky JA**, Jaana M, **Ward MM**. Healthcare IT in rural America: EMR adoption status in meeting the national agenda. *Journal of Rural Health*. 24(2):101-105, 2008.

Blegen MA, **Vaughn TE**, Vojir CP. Nurse staffing levels: Impact of organizational characteristics and RN supply. *Health Services Research*. 43 (1 Part 1):154-173, 2008.

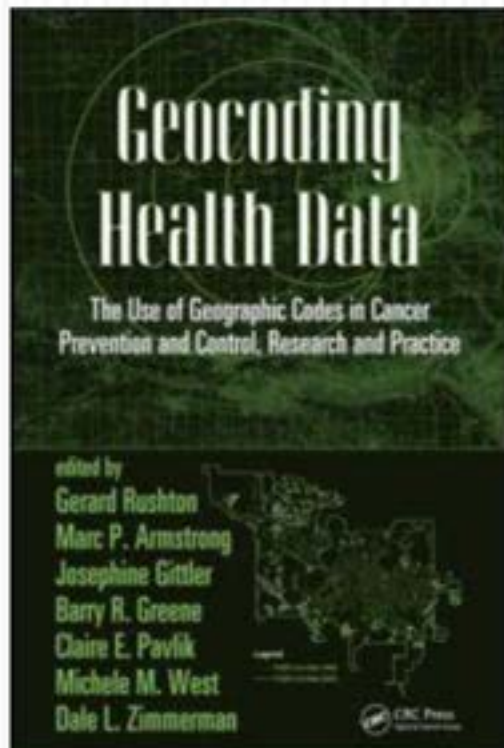
Chi C, Street N, **Ward MM**. Building a hospital-referral expert system with a prediction and optimization-based decision support system algorithm. *Journal of Biomedical Informatics*. 41:371-386, 2008.

Clabaugh G, **Ward MM**. Cost-of-illness studies in the USA: A systematic review of methodologies for direct cost. *Value in Health*. 11(1):13-21, 2008.

Forman-Hoffman VL, Richardson KK, Hillis SL, Wallace RB, **Wolinsky FD**. Retirement and weight change among men and women in the Health and Retirement Study. *Journal of Gerontology: Social Sciences*. Vol. 63B: S146-S153, 2008.

Forman-Hoffman VL, Richardson KK, Yankey JW, Hillis SL, Wallace RB, **Wolinsky FD**. Impact of functional limitations and medical comorbidity on the relationship between weight change and increased depressive symptoms in older adults. *Journal of Aging and Health*. Vol. 20: 367-384, 2008.

## Center Project Results in New Book



*Funding for work in this book came from the following source:*

***Prostate Cancer Geocoding: Ensuring Fitness for Use***

Association of Schools of Public Health  
Barry Greene (PI)  
Direct Funds: \$509,441  
Period of Funding: 2003-2006

In the past, disease pattern mapping depended on census tracts based on political units, such as states and counties. However, with the advent of geographic information systems (GIS), researchers can now achieve a new level of precision and flexibility in geographic locating. This emerging technology allows the mapping of many different kinds of geographies, including disease rates in relation to pollution sources.

Geocoding Health Data presents a state-of-the-art discussion on the current technical and administrative developments in geographic information science. In particular, it discusses how geocoded residential addresses can be used to examine the spatial patterns of cancer incidence, staging, survival, and mortality. The book, published by Taylor and Francis and released in 2008, had its origin in a project supported by the Centers for Disease Control and Prevention (CDC) to assess issues that arise in the Geocoding of cancer incidences and in their subsequent use.

The book begins with an introduction of various codes and their uses, including census geographic, health area, and street level codes. It goes on to describe the specific application of geocodes to cancer, detailing methods, materials, and technical issues. The text illustrates how to compile data maps for analysis and addresses issues, such as mismatch correction and data quality. It describes the current state of geocoding practices and discusses the use of individually geocoded cancer incidences in spatial epidemiology, distance estimation and spatial accessibilities, and tips for handling non-geocoded cases. Special consideration is given to privacy and confidentiality issues by focusing on disclosure limitation methods.

With recent disease outbreaks and escalating concerns about bioterrorism, interest in the application of GIS to individual data is growing. The fundamental concepts presented by this book are of great value to anyone trying to understand the causes, prevention, and control of cancer as well as a variety of other diseases.

# Featured Publications

**Hockenberry J**, Lien H-M, Chou S-Y. The impact of task repetition and temporal breaks in production on human capital and productivity. *Journal of Human Capital*. 2(3):303-335, 2008.

Imhof S, **Kaskie B**. How can we make the pain go away? Public policies to manage pain at the end of life. *The Gerontologist*. 48(4): 423-431, 2008.

Imhof S, **Kaskie B**. Promoting a good death: Determinants of pain policy across the United States. *Journal of Health Politics, Policy and Law*. 33(5): 907-941, 2008.

**Kaskie B**, Gregory D, Cavanaugh J. The use of public mental health services by older Californians and complementary service system effects. *Journal of Behavioral Health Services Research*. 35(2): 142-157, 2008.

**Kaskie B**, Imhof S, Cavanaugh J, Culp K. Civic engagement as a retirement role for aging Americans. *The Gerontologist*. 48(3): 368-377, 2008.

**Kaskie B**, Imhof S, Wyatt M. Local Medicare policies: Pathways to providing mental health services to older adults. *Psychological Services*. 5(1): 60-72, 2008.

**Kaskie B**, Van Gilder R, Gregory D. Community mental health service use by older adults in California. *Aging and Mental Health*. 12(1): 134-144, 2008.

Li P, **Bahensky J**, Jaana M, **Ward MM**. Role of multihospital system membership in electronic medical record adoption. *Health Care Management Review*. 33(2):1-9, 2008.

Miller DK, **Wolinsky FD**, Andresen EM, Malmstrom TK, Miller JP. Adverse outcomes and correlates of change in the Short Physical Performance Battery (SPPB) over 36 months in the African American Health project. *Journal of Gerontology: Medical Sciences*. 63A: 487-494, 2008.

**Prybil L**. What's your board's culture? A survey shows there is room for improvement. *Trustee*. 61:16-24, 2008.

**Prybil L, Levey S**, Peterson R, Heinrich D, Brezinski P, Zamba G, Roach W. *Governance in Nonprofit Community Health Systems*. Chicago: Grant Thornton, 2008.

Rushton G, **Greene BR**, Armstrong MP, Gittler J, Pavlik CE, West MM, Zimmerman DL. Conclusions, in *Geocoding Health Data: The Use of Geographic Codes in Cancer Prevention and Control, Research, and Practice*. (G. Rushton, et al., Editors). CRC Press (Taylor & Francis Group), Chapter 13, 2008.

Segawa E, Emery S, **Curry SJ**. Extended generalized linear latent and mixed model. *Journal of Educational and Behavioral Statistics*. 33:464-484, 2008.

Shi M, **Wehby GL**, Murray JC. Review on genetic variants and maternal smoking in the etiology of oral clefts and other birth defects. *Birth Defects Research (Part C)*. 84(1):16-29, 2008.



**Hockenberry J.** Lien H-M, Chou S-Y. The impact of task repetition and temporal breaks in production on human capital and productivity. *Journal of Human Capital*, 2(3):303-335, 2008.

How do breaks in production impact healthcare worker productivity? Assistant professor **Jason Hockenberry** and his colleagues addressed this very question by examining outcomes for a sample of cardiac surgeons in Taiwan. They examined the extent to which the time since surgeons last performed a given procedure affected patient health outcomes. Their results indicated the length of time between surgeries does, in fact, have a negative impact on surgeon productivity as measured by patient health outcomes. There is little evidence to suggest that this relationship is mitigated by the level of surgical volume (i.e. task repetition) prior to the break.

**Kaskie B.** Imhof S & Wyatt M. Local Medicare policies: Pathways to providing mental health services to older adults. *Psychological Services*, 5(1): 60-72, 2008.

Researchers have long theorized about the reasons why older Americans do not utilize available mental health services. Scant attention has been paid to the impact of Medicare's local service policies on this relationship and, since these policies affect service outcomes, it is important to establish clear and concise policies. By examining the local coverage determination policies (LCDs) of 21 insurance carriers across the country in 2003 and again in 2006, **Brian Kaskie** and his colleagues were able to document how these policies evolved over time. Although there is room for improvement, results indicate that LCDs have become more specific and detailed.



**Wehby GL** and Murray JC. The effects of prenatal use of folic acid and other dietary supplements on early child development. *Maternal and Child Health Journal*. 12(2): 180-7, 2008.

Expectant mothers are routinely exhorted to take prenatal vitamins containing folic acid during their pregnancies. Precisely what impact does folic acid have on child development and is the effect appreciable? A study by two UI researchers, **George Wehby** and Jeffrey Murray, confirms the importance of this vitamin during pregnancy. Specifically, they found use of folic acid was associated with improved gross-motor development in children but note that further research is needed to determine the impact of these supplements on personal-social development.

# Featured Publications

Skarupski KA, McCann JJ, Bienias JL, **Wolinsky FD**, Gilley DW, Aggarwal NT, Evans DA. The effect of adult day care attendance on the use of home-based formal services in persons with Alzheimer's disease. *Home Health Care Services Quarterly*. 27: 217-239, 2008.

Vartak S, **Ward MM**, **Vaughn TE**. Do post-operative complications vary by hospital teaching status? *Medical Care*. 46(1):25-32, 2008.

Wakefield BJ, **Ward MM**, Holman JE, Ray A, Scherubel M, Burns TL, Kienzle MG, Rosenthal GE. Evaluation of home telehealth following hospitalization for heart failure: A randomized trial. *Telemedicine and e-Health*. 14(8):753-761, 2008.

Wakefield DS, **Ward MM**, Groath D, Schwichtenberg T, Magdits L, Brokel J, Crandall D. Complexity of medication-related verbal orders. *American Journal of Medical Quality*. 23:7-17, 2008.

**Wehby GL**, Murray JC. The effects of prenatal use of folic acid and other dietary supplements on early child development. *Maternal and Child Health Journal*. 12(2): 180-187, 2008.

**Wehby GL**, Ohsfeldt RL, Murray JC. 'Mendelian randomization' equals instrumental variable analysis with genetic instruments. *Statistics in Medicine*. 27(15):2745-2749, 2008.

**Wolinsky F**, Liu L, Miller T, An H, Geweke J, Kaskie B, Wright K, Chrischilles E, Pavlik C, Cook E, Ohsfeldt R, Richardson K, Rosenthal G, Wallace R. Emergency department utilization patterns among older adults. *Journal of Gerontology: Medical Sciences*. 63A(2): 204-209, 2008.

**Wolinsky FD**, Miller TR, Malmstrom TK, Miller JP, Schootman M, Andresen EM, Miller DK. Self-rated health: changes, trajectories, and their antecedents among African Americans. *Journal of Aging and Health*. 20: 143-158, 2008.

#### HMP PhD STUDENT PUBLICATIONS

**Clabaugh G**, Ward MM. Cost-of-Illness studies in the United States: A systematic review of methodologies used for direct cost. *Value in Health*. 11(1), 13-21, 2008.

**Vartak S**, Ward MM, Vaughn TE. Do post-operative complications vary by hospital teaching status? *Medical Care*. 46(1):25-32, 2008.

Wolinsky, FD, Liu L, Miller TR, An H, Geweke JF, Kaskie B, Wright KB, Chrischilles EA., Pavlik CE, **Cook, EA**, Ohsfeldt, RL, Richardson KK, Rosenthal GE, Wallace RB. Emergency department utilization patterns among older adults. *J Gerontol A Biol Sci Med Sci*. 63: 204-209, 2008.

**FORTHCOMING PUBLICATIONS BY CHPR ASSOCIATES**

**Kaskie B**, Gregory D, Van Gilder R. Community mental health service used by persons with dementia. *Psychological Services*. In press.

Li P, Schneider JE, **Ward MM**. Effects of critical access hospital conversion on the financial performance of rural hospitals. *Inquiry*. In press.

**Prybil L**, Peterson R, Brezinski P, Roach W, Fillmore A, Board oversight of patient care quality in community health systems. *American Journal of Medical Quality*. In press.

**Prybil L**, Murray W, Cotter T, Bryant E. Transforming CEO evaluation in a multiunit healthcare organization. *Practice of Evidence-Based Management* (Chicago: Health Administration Press). In press.

Wang J, **Hockenberry J**, Chou S-Y. Do bad report cards have consequences? How publicly reported provider quality information impacts the CABG market in Pennsylvania. *Journal of Health Economics*. In press.

**Wehby GL**, Castilla EE, López-Camelo JS, Murray JC. Predictors of multivitamin use during pregnancy in Brazil. *The International Journal of Public Health*. In press.

**Wehby GL**, Murray JC, Castilla EE, Lopez-Camelo JS, Ohsfeldt RL. Quantile effects of prenatal care on birth weight in Argentina. *Health Economics*. In press.

**Wehby GL**, Murray JC, Castilla EE, Lopez-Camelo JS, Ohsfeldt RL. Prenatal care demand and its effects on birth outcomes by birth defect status in Argentina. *Economics and Human Biology*. In press.

**Wolinsky FD**, Bentler SE, Liu L, Obrizan M, Cook EA, Wright KB, Geweke JF, Chrischilles EA, Pavlik CE, An H, Ohsfeldt RL, Richardson KK, Rosenthal GE, Wallace RB. Recent hospitalization and the risk of hip fracture among older Americans. *J Gerontol A Biol Sci Med Sci*. In press.

**FORTHCOMING HMP PhD STUDENT PUBLICATIONS**

**Roberts LL**, Ward MM, Brokel JM, Wakefield DS, Crandall DK, Conlon P. Methodological approaches to measuring the effects of implementation of health information technology (HIT). *HICCS 42 Proceedings*. Awarded “Best Paper in Health Care Track”. In press.

Wolinsky FD, **Bentler SE**, Liu L, Obrizan M, **Cook EA**, Wright KB, Geweke JF, Chrischilles EA, Pavlik CE, An H, Ohsfeldt RL, Richardson KK, Rosenthal GE, Wallace RB. Recent Hospitalization and the Risk of Hip Fracture among Older Americans. *J Gerontol A Biol Sci Med Sci*. In press.



### PRESENTATIONS BY CHPR ASSOCIATES

Anderson RL. Policy intervention research via public health problems. Department of Community and Behavioral Health, University of Iowa, Seminar Series, Iowa City, IA, February 7, 2008.

Anderson, RL. Mental health services for youth: Where do we go from here? National Alliance on Mental Illness, Iowa City, IA, 2008.

Anderson, RL. Mental health services in Iowa: A view from the data. Iowa Division of Mental Health and Disability Services, Iowa Department of Human Services, Des Moines, IA 2008.

Atchison CG. Lessons learned in developing an emergency plan in academic institutions. Iowa Public Health Conference, Ames, IA, April, 2008.

Atchison CG. Breakout session panel discussion: What is a research agenda? American Public Health Laboratory Association Annual Meeting, St. Louis, MO, May 2008.

Atchison CG. Rural health delivery systems issues. 2008 Rural Health Scholars Program, University of Iowa, Iowa City, IA, May 2008.

Atchison CG. Moderator: Defining a medical home in a state health care program and it's not a house; it's a medical home. National Academy for State Health Policy's 21<sup>st</sup> Annual State Health Policy Conference, Tampa, FL, October 2008.

Atchison CG. Success through alliance: The product and process of the ASPH/CDC pandemic influenza collaboration group. APHA Annual Meeting, San Diego, CA, October, 2008.

Atchison CG. Remarks: Rebalancing health care in the heartland forum. Des Moines, IA, December 2008.

Curry SJ. Meeting public health challenges in prevention research, practice, and policy. St. Louis University, St. Louis, MO, 2008.

Hockenberry JM. Do bad report cards have consequences? How publicly reported provider quality information impacts the CABG market in Pennsylvania. American Public Health Association Annual Meeting, San Diego, CA, October 2008.

Kaskie B. Providing collaborative care to older Iowans with mental illnesses. Iowa Coalition on Mental Health and Aging, Wartburg College, Waverly, IA, April 2008.

Li P and Ward MM. Hospital quality indicators and Iowa rural hospitals. AHRQ Annual Meeting, Bethesda, MD, September, 2008.

Prybil LD. Some keys to effective governance in nonprofit healthcare organization. Allen Health System Joint Board Conference, Waterloo, IA, 2008.

Prybil LD. Community benefit and the role of nonprofit community health system boards. Association for Community Health Improvement Annual Conference, Atlanta, GA, 2008.

Prybil LD. Perspectives on career planning & development: tips for making a successful transition. CPH Department of Epidemiology Seminar Series, University of Iowa, Iowa City, IA, 2008.

Prybil LD. Keys to effective governance. Iowa Health System Rural Network Trustee Forum, Des Moines, IA, 2008.

Prybil LD. Community health system board involvement in community benefit planning & evaluation. National Audio Conference: Hospital and Health System Governance Strategies for Meeting Community Nonprofit Responsibilities, sponsored by Health Affairs and Harvard Health Policy Review, Chicago, IL, 2008.

Prybil LD. Governance in nonprofit community health systems. Thomson Reuters 100 Top Hospitals Summit Conference, Colorado Springs, CO, 2008.

Prybil LD. Do board members understand their role? Iowa Critical Access Hospitals Peer Group Meeting, Johnston, IA, 2008.

Prybil LD. Results of the “governance in nonprofit community health systems study” regarding community benefit policies, plans, and reports. Second National Congress on the Under-Insured, Washington, DC, 2008.

Prybil LD. Governance in nonprofit community health systems. Iowa Conference on Volunteer Service and Nonprofit Management, Ames, IA, 2008.

Roberts LL and Ward, MM. Hospital leaderships’ perceptions of National Quality Forum safe practices in Iowa. AHRQ Annual Meeting, Bethesda, MD, September, 2008.

Vaughn TE. Hospital leadership and quality: a collaborative attempt to support hospital quality improvement. Tulane University, New Orleans, LA, May 2008.

Ward MM, Vartak S, Vaughn TE. Patient safety indicators in U.S. urban and rural hospitals. AHRQ Annual Meeting, Bethesda, MD, September, 2008.

Wehby GL. Health outcomes and improved sub phenotypic characterization of cleft lip and palate. CDC, Division of Birth Defects and Developmental Disabilities, Atlanta, GA, October 2008.

Wehby GL. The impact of systematic pediatric care on neonatal mortality of infants born with cleft lip and palate. 65<sup>th</sup> annual meeting of the American Cleft Palate-Craniofacial Association, Philadelphia, PA, 2008.

Wehby GL. A genetic instrumental variables analysis of the effects of maternal smoking on birth outcomes. Biennial conference of the American Society of Health Economists, Durham, NC, 2008.

## INVITED SEMINAR PRESENTATIONS

Date	Invited Speaker	Title of Presentation
February 13, 2008	Xin Xu PhD Candidate Department of Economics and Institute of Government and Public Affairs University of Illinois at Chicago	Does a Rising Tide Lift Health of the Low-Educated?
February 15, 2008	Stephen Barnes PhD Candidate Department of Economics Louisiana State University	Once You Pop, You Can't Stop! Food Addiction, Obesity, and Tax Policy
May 2, 2008	Yang Xie, PhD Assistant Professor College of Pharmacy University of Iowa	Is More Information Always Better? Effect of Information, Education, and Health Insurance Coverage on Patient-Physician Relationship and Consumer Satisfaction
October 24, 2008	Peter Kaboli, MD, MS Associate Professor of Internal Medicine Center for Research in the Implementation of Innovative Strategies in Practice (CRIISP) VA Medical Center of Iowa City	Activating Patients to Promote Evidence-Based Hypertension Care: The Veterans Administration Project to Implement Diuretics (VAPID)
October 31, 2008	Suzanne Cooner, Kevin Kincaid, Thomas E. Vaughn, and Kelli Vellinga TeamSTEPPS Researchers	Implementing a Teamwork Initiative to Improve Patient Safety
November 21, 2008	Beth Virnig, PhD Associate Professor and Director Program in Healthcare Administration and Policy University of Minnesota	Hospice Care Prior to Death: Geographic Barriers and Policy Opportunities
December 12, 2008	Kyle Grazier, PhD Professor Department of Health Management and Policy School of Public Health University of Michigan	Paying for Mental Health Services: Challenges and Strategies

**RESEARCH UPDATES and METHODS WORKSHOPS**

<b>Date</b>	<b>Presenter</b>	<b>Title of Presentation</b>
February 1, 2008	Fredric D. Wolinsky, PhD Professor and John W. Colloton Chair Department of Health Management and Policy University of Iowa	The ACTIVE Cognitive Training Trial and Predicted Health Care Expenditures
February 8, 2008	Jason Hockenberry, PhD Assistant Professor Department of Health Management and Policy University of Iowa	The Effect of Surgeon Task Repetition and Temporal Distance Between Surgeries on Cardiac Patient Health: Evidence from Taiwan
February 22, 2008	Lance Roberts PhD Candidate Department of Health Management and Policy University of Iowa	National Quality Forum Safe Practices – Practices and Progress in Iowa
February 29, 2008	Qian Qiu PhD Student Department of Health Management and Policy University of Iowa	Is the Patient Safety Composite Score a Good Indicator to Compare Hospital Performance
March 7, 2008	Lawrence Prybil, PhD Professor Department of Health Management and Policy University of Iowa	Governance in Nonprofit Community Health Systems: An Initial Report on CEO Perspectives
April 28, 2008	Ingrid Philibert PhD Candidate Department of Health Management and Policy University of Iowa	Adapting Strategies from High-Reliability Organizations to Improve Patient Hand-Offs in Teaching Hospitals
April 25, 2008	Barry Greene, PhD Professor and Head Department of Health Management and Policy University of Iowa	Weaving Information into the Research Craft
September 5, 2008	Fredric D. Wolinsky, PhD Professor and John W. Colloton Chair Department of Health Management and Policy University of Iowa	The ACTIVE Cognitive Training Interventions and the Onset of Clinically Relevant Levels of Depressive Symptoms
September 19, 2008	Jason Hockenberry, PhD Assistant Professor Department of Health Management and Policy University of Iowa	The Impacts of Diffusion of Less Invasive Surgical Technology on the Use of Existing Technology and Implications for the Cost of Treating Disease: The Case of PTCA in the Stent Era in Pennsylvania
October 3, 2008	Marcia Ward, PhD Professor Department of Health Management and Policy University of Iowa	Research Approaches to Understanding Rural Hospital Clinical Information System Strategies