

# The Cancer Research Network Connection

## News from Ed, Larry, and Mark

### *Update from the CRN Executive Committee*

Through our first three funding cycles, the CRN core cooperative agreement has provided infrastructure support to enhance cancer research activities at participating sites, and has also supported a series of research projects, some of which were substantial research efforts. These efforts have resulted in important research findings; some of these have been highlighted in past issues of the CRN Connection, and no doubt will continue to generate peer-reviewed publications. The CRN has also had an important incubation or catalytic effect on cancer research in participating CRN sites. Without CRN1-3, it is likely that some careers would not have taken

the direction toward cancer research, and collaborations that have resulted in additional grants would have been less likely to occur. We have all gained better appreciation for the complexity of working with clinical and administrative data, and have made great strides in harmonizing our data resources to facilitate collaborative projects. The activities enabled by the CRN have also enhanced the scientific reputation of our respective research units, within our organizations, with local and national academic research partners, and with funding agencies. We can be proud of our accomplishments to date, a result of the

*See Executive Committee, page 5*

## News from NCI

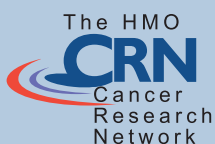
### *Update from the CRN Program Director*

NCI Director Harold Varmus has initiated the NCI Provocative Questions project. The Provocative Questions project is intended to create a community of scientific inquiry that is open to all interested parties. By encouraging a broad range of talents and the development of a cohesive community of interest, NCI hopes to encourage questions that are novel, provocative, and ultimately productive. Information on how to submit Provocative Questions is at: <http://provocativequestions.nci.nih.gov/>.

Provocative questions should

- Build on specific advances in our understanding of cancer and cancer control;
- Address broad issues in the biology of cancer that have proven difficult to resolve;
- Take into consideration the likelihood of progress in the foreseeable future (e.g. 5 to 10 years); and
- Address ways to overcome obstacles to achieving long-term goals.

*- Martin Brown (NCI)*



*The Cancer Research Network (CRN) is a collaboration of 14 non-profit HMOs committed to the conduct of high-quality, public domain research in cancer control. The CRN is a project of NCI and AHRQ.*

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# Innovations in the Acquisition of HMORN Data

Report from CRN Scholars session at HMORN

Since its inception, the CRN Scholars Program has sponsored a session at the HMORN Annual Meeting. This year, the concurrent session, “Innovations in the Acquisition of CRN/HMORN Data,” addressed some of the advantages and difficulties in utilizing CRN/HMORN data, often described as accessible and inexpensive population-based patient-level data, and the means of communicating these possibilities to other investigators. CRN scholars posed a series of questions to invited panel members and audience members. The following broad topics generated the most discussion.

## Multi-Center Data Collection and Collaboration

Large clinical studies conducted cooperatively at multiple sites have important advantages, including increased generalizability of results and more efficient accrual of larger participant samples. The Virtual Data Warehouse (VDW) is a central

component of the HMORN’s cooperative research network. Additional innovations, such as assisted chart abstraction and natural language programming may enhance current medical record abstraction capabilities. Multicenter collaboration requires comprehensive planning, vigilance to detail, and awareness of limitations. A recurring theme during the discussion was the programmers’ important role and valuable guidance in understanding data attributes and availability.

## New Data Collection

Panelists discussed the need to think

“beyond claims data” to supplement the VDW and to address important research and clinical questions. Data collection of patient-reported information and outcomes, such as quality of life, sleep, and smoking, needs to be standardized to improve usefulness and efficiency. One of the purposes of the Grid-Enabled Measures (GEM) database is to facilitate standardized collection and use of social and behavioral measures that can be shared across studies. The CRN’s ability to address questions about health disparities would be enhanced by the addition of “contextual” variables to the VDW,

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## Executive Committee

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ongoing work of all the researchers, programmers, administrators, and others across the CRN. Building on these well-established and recognized accomplishments, and with the likelihood of a funding opportunity for CRN4, we have the opportunity to take the CRN to the next level. In order to strengthen the CRN and enhance our ability to build sustainable and innovative research programs across the CRN, we are identifying key scientific areas in which the CRN and the HMO research setting provides unique advantages and scientific strengths in the cancer research enterprise. These scientific program areas would build on the interests and expertise of our cancer researchers; on the research opportunities presented by our defined populations covering 10 million members; on the privileged access of our researchers to health plan clinical and administrative data; and on the dissemination and

translation of findings to clinical and public health practice and policy. As we look forward to CRN4 and beyond, it is our vision that the CRN will become known as the setting for thought and research leaders in these key scientific areas. The CRN will have become the setting for the development of leading cancer researchers through an enhanced scholars program, and the catalyst for numerous research projects through its pilot projects program. We envision a CRN in which the best and brightest scientists want to join our research groups, or failing that, are clamoring to collaborate with us – and not just with our data. Our accomplishments to date have put us in a position to identify a clear scientific and strategic vision for the CRN that positions us as one of the leading organizations for conducting population sciences cancer research.

*- Ed Wagner (GHC), Mark Hornbrook (KPNW), Larry Kushi (KPNC)*

## CRN Scholars Session

### Invited Panel

Diana Buist (GHC)  
Sharon Fuller (GHC)  
Russell Glasgow (NCI)  
Douglas Roblin (KPG)  
Diem-Thy Tran (GHC)

### Planning Committee

Kenneth Adams (HPRF)  
Nangel Lindberg (KPNW)  
Pamela Mink (KPG & Emory University Rollins School of Public Health)  
Borsika Rabin (KPCO)  
Diane Smelser (GHS)  
Kathleen Walsh (MPCI)  
Robert Fletcher (HPHCI)

# CRN Scholars

*Continued from page 2*

such as neighborhood socioeconomic context and walkability index, which may be derived from US Census data.

## Dissemination

The nature of multi-center collaborative research and the ongoing innovations to improve the quality and quantity of available health-related information, makes peer-to-peer communication and dissemination critical. The CRN portal is a central repository for information, computer programs, newsletters and meeting minutes. Audience members commented on the difficulties in

navigating the portal, and the need to improve user interface to increase efficiency.

The annual HMORN Conference allows investigators to meet in person and share their research experience at their respective sites.

A copy of slides, references, glossary, and a summary of key points from the concurrent session can be found on the CRN portal.

- Pamela Mink (Emory/KPG),  
Diane Smelser (GHS),  
Nangel Lindberg (KPNW)

# Economic Burden of Cancer

## *Study Team Shares Progress and Lessons Learned*

**A**t the HMO Research Network conference in Boston, the Burden team presented on the results of a CRN R01 and pilot study that are using data from four sites to estimate the cancer-related pharmacy costs among aged Medicare HMO beneficiaries who were omitted from SEER-Medicare data due to the exclusion of outpatient medication use/cost. We are evaluating the hypothesis that SEER-Medicare data undercount the full economic burden of cancer care in the U.S., because of incomplete coverage of outpatient prescribed medications for aged Medicare beneficiaries. We are building a CRN data documentation surrounding chemotherapy and costs.

We presented data on incremental utilization associated with the diagnosis of cancer and used a phase of care framework—prodromal/diagnosis; treatment; end-of-life; and, survivorship. We examined monthly hospitalization rates, inpatient days, ambulatory care visits, same-day surgeries, and dispensings. Data on all cancer patients from 2000 through 2008 were extracted from the VDW. We also created a frequency-matched comparison sample of patients who had no record of a cancer diagnosis prior to 2009. Our overall model contains 45,276,158 records! Including site processing time, it took over 60 CPU clock hours to process data for all models for our HMORN presentation.

- Mark Hornbrook (KPNW)



CRN Scholars and Program Directors at the 2011 HMORN Conference  
1st row: Corinna Koebnick, Melody Eide, Jessica Chubak, Bob Fletcher, Nangel Lindberg  
2nd row: Suzanne Fletcher, Jane Colagiovanni  
3rd row: Adedayo Onitilo, Heather Feigelson, Diane Smelser, Pamela Mink  
4th row: Kathleen Walsh, Chris Neslund-Dudas, Kenneth Adams

The CRN Connection is a publication of the CRN intended to inform and occasionally entertain CRN collaborators. It is produced with oversight from the Communications & Collaborations Committee.  
Please send comments and suggestions on this newsletter to Sarah McDonald, [mcdonald.sj@ghc.org](mailto:mcdonald.sj@ghc.org)



# Henry Ford Health System

## CRN Site Profile

Founded in 1915, HFHS is a non-profit corporation, Michigan's sixth largest employer and the fourth largest employer in the city of Detroit. With more than 21,500 employees, HFHS is taking a leadership position in revitalizing the city. The system includes seven hospitals, 36 Medical Centers, the Henry Ford Medical Group and the Health Alliance Plan (HAP). HAP, a non-profit health maintenance organization serves more than 2,800 area employers and more than 580,000 members. Nearly 35% of the patient population is African American. Annually, care provided by HFHS includes over 3.1 million patient visits, 78,000 ambulatory surgeries and 93,000 hospital admissions.

## Research at HFHS

HFHS has more than 150 PhD and MD research scientists across basic, clinical, and population sciences. Transdisciplinary research can be readily accomplished at HFHS. Currently, more than 1,500 individual research projects are underway at HFHS. Diseases under study include cancer, stroke, hypertension, heart disease, osteoporosis, arthritis, sleep disorders, diabetes, lung disease,



Henry Ford Hospital, Detroit MI

asthma and allergy. HFHS receives more than \$60 million in annual funding from internal and external sources including the NIH, CDC, other government sources, industry and private foundations.

## The Department of Public Health Sciences (PHS)

The PHS, chaired by Christine Cole Johnson, PhD, was created in 1983 and became the first non-clinical department at HFHS. This department serves as the population research and statistical component of HFHS and supports and directs many NIH and industry-based grants

and contracts including the CRN. The Department specializes in applied and theoretical statistics and epidemiology, with special emphasis on cancer, genetics, respiratory and neurological diseases, pharmaco-epidemiology, health disparities

research, birth cohort studies, behavioral intervention research, and women's health. The Department also has a long history of serving as a statistical coordinating center for many studies. Dr. Mei Lu, a senior biostatistician, currently heads the Data Coordinating Center for the Chronic Hepatitis B and C Cohort Study (CHeCS.) PHS works closely with the Department of Pathology at HFHS and has access to biospecimens dating back as much as four decades. PHS is also home to the Molecular Epidemiology Research Laboratory which supports several on-going population studies. PHS personnel include eight Ph.D. and seven masters-level biostatisticians; eleven Ph.D. and eight masters-level epidemiologists; population scientists and molecular biologists; as well as experienced programmers, data managers, medical abstractors and interviewers totaling just over 100 staff members. In addition to the HFHS-led CRN Statins & Lymphoma study, major research contracts within PHS include the Prostate, Lung, Colorectal and Ovarian Screening Trial, the National Lung Screening Trial, the National Children's Health Study, and the Study of Environment,



1st row: Heather Dakki, Lois Lamerato, Christine Cole Johnson  
3rd row: George Divine, Rick Krajeta, Chris Neslund-Dudas  
2nd row: Andrea Cassidy-Bushrow, Rita Montague, Dana Larkin

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# HFHS

an electronic medical record system known as CarePlus that was designed with input from nearly 300 clinicians and contains more than 21 years of patient data. A new version, CarePlus Next Generation, is currently being rolled out at HFHS and is the first in a series of technological enhancements occurring HFHS.

## The Center for Health Policy and Health Services Research (CHPHSR)

Some HFHS CRN staff work in CHPHSR. Under the direction of David Nerenz, PhD, CHPHSR conducts



From left: Melody Eide, Michelle Holz, David Nerenz, Gwen Alexander

research on the relationships that impact the efficacy and efficiency of health care delivery. CHPHSR staff have training and expertise in: health services research; clinical medicine; economics; computer science; finance; health education; epidemiology; sociology; and psychology.

## Josephine Ford Cancer Center and the Karmanos Cancer Institute

The Josephine Ford Cancer Center (JFCC) at HFHS is one of the largest cancer centers in Michigan and is consistently ranked by U.S. News and World Report as one of the top cancer centers in the nation. JFCC treats over 14,000 cancer patients each year, and over 15 percent of all people in southeast Michigan diagnosed with cancer are treated at HFHS. Each year, more than 3,000 newly diagnosed cancer patients visit the center for treatment. JFCC has a close working relationship with the Karmanos Cancer Institute (KCI), an NCI-

designated cancer center which is also located in Detroit. KCI houses the Detroit SEER and is affiliated with Wayne State University. Several HFHS CRN researchers, including Sharon Hensley Alford, Christine Cole Johnson, Lois Lamerato, Christine Neslund-Dudas, and Benjamin Rybicki are members of JFCC and KCI and have active collaborations across institutions. These same investigators collaborate with Wayne State's Institute for Environmental Health Sciences.

As you have likely heard from the national news, Detroit has many challenges ahead. HFHS leaders are committed to the city and PHS is working more and more with other institutions, such as KCI and Wayne State University, in and around the city to address these challenges. Our urban location and long-standing commitment to the city help us realize the ongoing importance of our research each day.

- Christine Cole Johnson (HFHS)

## Snapshots from the 2011 HMORN Conference in Boston MA



Jane Colagiovanni, Bob and Suzanne Fletcher (HPHCI)



Tyler Ross (GHC), Amy Butani (HPRF), Dustin Key (GHC)



Kenneth Adams (HPRF), Sherry Yan (GHS)



Don Bachman (KPNW)



Erin Bowles (GHC), Katrina Goddard (KPNW)

# CRN Pilot Fund Program

CRN3 (5/1/2007 - 4/30/2012) has supported 20 cancer-related pilot projects. The average pilot award is \$100k total; pilots generally involves 1 – 2 sites. Funding considerations were:

- Aims to develop and test sophisticated methods for using CRN site data and focus on the CRN’s research themes
- Potential to generate a fundable grant and manuscript(s)
- Involve a junior investigator
- Leverages unique features of the CRN and HMO setting
- Involves new investigators, investigators with a new strategic focus, and new collaborations

The CRN Developmental Pilot Fund Program awarded three proposals in 2010. These one-year projects will start on May 1, 2011.

### Integrating Cost Communication into a Cancer Care Research Strategy

PI: Nora Henrikson (GHC)

### Friend to Friend: Colorectal Cancer Screening Discussions Among Members of Social Networks

PI: Sarah Cutrona (MPCI)

### Diffusion of Community-based Radiation Oncology

PI: Elizabeth Trice Loggers (GHC)

In 2010, the also CRN received special funding from the NCI for pilot studies led by current and past CRN Scholars. Three proposals were awarded. These one-year projects started on November 1, 2010.

### Comparing Characteristics of CRN Melanoma Cases to the National SEER Database

PIs: Maryam Asgari (KPNC), Melody Eide (HFHS)

### Colonoscopy Adenoma Outcomes as Predicted by Lifestyle Risk Factors

PI: Kenneth Adams (HPRF)

### The Colonoscopy Lookout Utilization and Effectiveness (CLUE)

### Study

PI: Porat Erlich (GHS) (replaced Nirav Shah (GHS))

### Achievements of 9 pilot projects conducted between 2009 – 2010

|   |  |
|---|--|
| Manuscripts under development           | 11   |
| Grants awarded... so far                | 1 Admin supplement<br>1 R01<br>1 GO grant<br>1 Dissertation<br>2 K award or fellowship |
| Non-CRN site collaborators              | 7  |
| Junior investigators/ Scholars involved | 12   |

## Graham Prize for CRN PI

Ed Wagner, MD, MPH, CRN’s Principal Investigator, has been chosen to receive the 2011 William B. Graham Prize for Health Services Research.

Please congratulate Ed on earning the very highest recognition that health services researchers can receive. He’s in distinguished company: Among previous winners are Princeton’s Uwe Reinhardt, U.S. Medicare chief Don Berwick, Dartmouth’s John Wennberg, and Stanford University’s Alain Enthoven.

Read more at <http://www.grouphealthresearch.org/newsroom/newsroom.aspx>.

## KPCO joins cancer center consortium

The Institute for Health Research (IHR) at Kaiser Permanente Colorado became the ninth member of the University of Colorado Cancer Center. The UC Cancer Center, Colorado’s only federally designated comprehensive cancer center, is the hub of cancer research in Colorado. Researchers from University of Colorado Denver, University of Colorado Boulder and Colorado State University are members, as are cancer care physicians at University of Colorado Hospital, The Children’s Hospital, Denver Health, Denver VA and National Jewish Health. Adding the IHR to the cancer center consortium brings a large group of cancer health outcomes researchers and cancer health services providers into the mix.

“The IHR is a leader in the field of cancer research and we believe many of their (CRN related) projects complement our longstanding cancer research programs,” said Tim Byers, MD, MPH, UCCC’s associate director

for cancer prevention and control and associate dean of the Colorado School of Public Health.

“We want to have as consortium members all the institutions and people doing cancer research in Colorado, and with Kaiser Permanente’s dedication to these areas, it’s a logical step to include them,” said Byers.

Kaiser Permanente officials also applauded the new collaboration. “This consortium agreement formalizes the many collaborations that already exist between Kaiser Permanente’s IHR researchers and faculty from the University of Colorado. We bring to this collaboration a long history of commitment to research in cancer prevention, treatment, and dissemination of new knowledge into improvements in cancer care,” said IHR’s Senior Director, John F. Steiner, MD, MPH.

-Deb Ritzwoller (KPCO)