BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
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NAME: Kim F. Rhoads

eRA COMMONS USER NAME (credential, e.g., agency login): KIM.RHOADS

POSITION TITLE: ASSOCIATE PROFESSOR

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
University of California, Berkeley	BA	12/1991	Linguistics
University of California, Berkeley (Joint Medical Program with UC San Francisco)	MS	06/1996	Health & Medical Sciences
University of California, San Francisco	MD	06/1998	Medicine
University of California, San Francisco	Residency	06/2005	General Surgery
Harvard University School of Public Health, Boston, Massachusetts	MPH	06/2006	Healthcare Policy & Management
University of California, San Francisco	Fellowship	06/2007	Colon & Rectal Surgery
Institute for Health Policy Studies, University of California, San Francisco	Fellowship	06/2008	Health Policy

A. Personal Statement

I am well prepared to undertake this project based on my unique combination of clinical expertise in treating colorectal cancers (CRC); my prior research experience investigating how variation in the quality of cancer care received by minority populations explains disparities; and most recent experiences working with faith-based and community clinic based populations to increase CRC screening using FIT testing. In ongoing qualitative research, my team is exploring system level barriers to creating sustainable academic community partnerships to increase CRC screening in community free clinics at Stanford. Obtaining care across the cancer continuum from screening to survivorship is complex and requires multiple clinical hand-offs between providers who may work in geographically disparate locations. Thus system level fragmentation poses a significant barrier to eliminating disparities at both the individual, as well as community level. As the Academic PI on the project, I will bring clinical expertise and leadership to the research team specifically leveraging institutional resources to address health system barriers and facilitate an increase in completion of CRC screening. I will also act as scientific lead for the development of health curricula and identification of appropriate speakers/presenters and trainers. I will oversee the part of the research team that manages the daily operations related to data management: processing, analysis and manuscript production; while also providing material support for Community Advisory Board (CAB) meetings, Fecal Immunohistochemical testing and the development of durable materials (tool kit).

B. Positions and Honors

1998 Nusz-Galante Award for outstanding medical students in surgery, UCSF
1998 Alpha Omega Alpha National Medical Honor society, UCSF
2002 House staff research award, Department of Surgery, UCSF
2002 House staff award for compassion in care Department of Surgery, UCSF

2005 Research Fellow, Department of Social Medicine, Harvard Medical School, Boston, Massachusetts
2006 Clinical Fellow in Colorectal Surgery, UC San Francisco Department of Surgery, San Francisco, California
2007 Philip R. Lee Fellow in Health Policy, Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco, California
2008-2015 Assistant Professor of Surgery, Department of Surgery, Division of General Surgery Stanford University, School of Medicine
2008- Associate, Stanford University Center for Health Policy and Primary Care Outcomes Research
2010-2015 Founding Director, Stanford Cancer Institute-Community Partnership Program
2015 Associate Professor of Surgery, Department of Surgery, Division of General Surgery Stanford University, School of Medicine

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C. Contribution to Science

Understanding of the impact of hospital and healthcare system quality on longstanding disparities in colorectal cancer.

MY CONTRIBUTION: I have tested the overarching hypothesis that the kinds of hospitals where minorities cluster for cancer care may explain longstanding disparities in cancer survival. My work is based on the conceptual model of health care quality (Donabedian's quality triad) where hospital and health care system structural quality influence processes of care and both are linked to outcome of care. Previous studies have attributed cancer disparities to low screening rates, late stage of disease at diagnosis, lack of access/insurance leading to poorly controlled comorbidities. In some cases, genetic factors have been implicated. In Unequal Treatment, the Institute of Medicine (IOM) suggested that hospitals with high percentages of Medicaid patients (i.e. low resource settings) provided largely minority beneficiaries in segregated hospitals, clinics and systems of care where the quality of care may vary from standard practice. At the time the monograph was published, the IOM did not have evidence to support this assertion. **MY WORK**: Using a novel data from the California Cancer Registry (CCR) linked statewide patient discharge abstracts, I have been testing the association between disparities, cancer mortality and location where care is delivered in California. Our work was among the first to link these two data sources with California hospital characteristics. We found higher colorectal cancer mortality rates in association with high Medicaid hospital settings for all patients; regardless of race or insurance status (1). In subsequent work, we showed that these settings were associated with lower rates of adherence with evidence based care for colorectal (2). Finally, using quasi-experimental methods (propensity score matching), we showed that disparities in colorectal cancer in California are explained by failure to receive evidence based care (3). We found similar correlations in acute myelogenous leukemia (4), even after accounting for genetic factors. Finally, in colorectal cancer, we found that the lapse in high quality processes of care appeared to be explained by the location where care was delivered. **IMPLICATION**: The work has influenced other investigators (after 2008) to begin to account for the impact of location of care (particularly in so-called high Medicaid hospitals) in models predicting cancer mortality and other hospital performance metrics.

1. **Rhoads KF,** Ackerson LK, Jha AK, Dudley RA: Quality of colon cancer outcomes in hospitals with a high percentage of Medicaid patients. *J Am Coll Surg*. 2008 Aug; 207(2):197-204. Epub 2008 May 19. PMID: 18656047
2. **Rhoads KF,** Ngo JV, Dudley RA. Do hospitals serving a high percentage of Medicaid patients perform well on evidence based guidelines for colon cancer care? *J health Care Poor Underserved* 2013 August; 24 (3): 1180-1193. PMID: 23974390
3. **Rhoads KF,** Patel MI, Ma Y, Schmidt L. How do integrated health care systems address racial/ethnic disparities in colon cancer? *J Clin Onc.* 2015 March 10;33(8): 854-60 with invited commentary. PMID: 25624437
4. Patel MI, Ma Y, Mitchell BS, **Rhoads KF.** How do differences in treatment impact racial and ethnic disparities in Acute Myeloid Leukemia? A population based study. *Cancer Epi biomarkers Prev.* 2015 Feb; 24(2):344. PMID: 25662426

Validation of the National Comprehensive Cancer Network (NCCN) guidelines for cancer care in population based studies.

MY CONTRIBUTION: I have used the California Cancer Registry data linked to patient discharge data in order to validate evidence based (NCCN) guidelines for treatment. The NCCN is a consortium of more than 20 member hospitals who evaluate evidence for cancer treatment recommendations. All data, including clinical trials data are incorporated into cancer care guidelines. These guidelines are updated on an annual basis. Before 2010, the guidelines had not been validated in population based studies. Moreover, previous studies used a variety of evidence based recommendations to evaluate quality of cancer care. **MY WORK:** Under my direction, my colleagues and I have demonstrated a strong correlation between use of NCCN guidelines and survival in hepatobiliary (5); pancreatic (6); gastric (7); and colorectal cancer (3). **IMPLICATION:** The impact of our work has supported the adoption of the guidelines by the Center for Medicare and Medicaid Services (CMS) as the definition of high quality cancer care. Thus, NCCN guidelines will guide the maintenance of CMS Oncology Care Model accreditation for hospitals and health care systems.

5. Zak Y, **Rhoads KF,** Visser BC. Predictors of surgical intervention for hepatocellular carcinoma: race, socioeconomic status, and hospital type. *Arch Surg.* 2011 Jul; 146 (7):778-84. Epub 2011 Mar 21. PMID: 21422327
6. Visser BC, Ma Y, Zak Y, Poultsides GA, Norton JA, **Rhoads KF**. "Failure to comply with NCCN guidelines for management of pancreatic cancer compromises outcomes" *HPB,* 2012 August 14(8): 539-47 PMID: 22762402; PMCID: PMC3406351
7. Worhunsky DJ, Ma Y, Poultsides GA, Visser BC, **Rhoads KF**. Compliance with gastric cancer guidelines is associated with improved outcomes. *J Natl Compr Canc Netw.* 2015 Mar; 13 (3):319-25 PMID: 25736009

Rhoads complete bibliography available at URL: http://www.ncbi.nlm.nih.gov/pubmed/?term=rhoads+kim

D. Research Support

Ongoing research support

Principal Investigator: Joy Chen
Source: American Society of Colorectal Surgery Period: 7/1/2014-6/30/2016
Title: Increasing Colorectal Cancer Screening in Community Based Clinics
Description: The project consists of a qualitative assessment of the sustainability of delivering a free, FIT based colorectal cancer screening project in surrounding community clinics. The project aims to assess attitudes of hospital administrators, clinic managers and cancer center leaders toward provision of CRC screening; and developing CRC education for free clinic users and reducing structural barriers in order to increase screening in the free clinic population. As project mentor, Dr. Rhoads played a critical role in developing the project with PI Chen; and providing material support through the SCI-Community Partnership Program for the completion of the project.

Completed research support (selection)

Project Director: Kim Rhoads Period: 3/1/2010-8/1/2015
Source: Stanford Cancer Institute
Title: **Community Partnership Program Support**
Description: Project funds used to support community engagement in order to facilitate community based participatory research projects; and to increase minority participation in cancer clinical trials. Funds have supported the Faith Based Initiative to increase colorectal cancer screening in San Mateo and Santa Clara Counties (2014). Additional annual activities include the Beast Cancer and African Americans conference. The conference promotes breast cancer awareness; breast cancer screening and risk reduction in African American communities across the Greater Bay Area. As Project Director, Rhoads founded the program and develops programs and activities to promote cancer prevention and control in the SCI catchment as part of the institutional P30 Cancer Center Support Grant.

Principal Investigator: Kim Rhoads Period: 7/1/2013-6/15/2014
Source: California Breast Cancer Research Program
Title: **Sustainable Education to Eliminate Disparities (SEED) in Breast Cancer**

Description: Participants in the annual Breast Cancer and African Americans conference (sponsored by SCI-CPP) were engaged over the course of a year for training and capacity building. The first class of "Ambassadors for Change" was comprised of conference participants who trained in breast cancer disparities; advocacy, media relations and networking. Participants developed a breast cancer risk reduction tool kit and disseminated the tool kit and other cancer information at local events around the Bay Area.

Principal Investigator: Kim Rhoads Period: 1/1/2012-2/1/2014
Source: National Institutes of Health/NCI; 1R21CA161786-01A1
Title: The quality of care in minority serving hospitals explains cancer disparities
Description: The project assessed differences in resources in hospitals providing service to high percentages of minority patients with cancer. The study also assessed differences in the quality of care in minority serving hospitals as well as the impact of care in low resource settings on cancer survival disparities.

Principal Investigator: Kim Rhoads Period: 2/1/2009-7/15/2014
Source: Robert Wood Johnson Foundation, Medical Faculty Development Award
Title: How do institutional inequities explain health inequalities?
Description: The project tested the conceptual idea that the location and quality of care delivered to minorities with different types of cancer explain some proportion of disparities in survival. A novel data set created by linking data from the California Cancer Registry with California state patient discharge abstracts. Validated guidelines for cancer care (National Comprehensive Cancer Network) were used to evaluate quality of cancer care in each of California's hospitals.