

CURRICULUM VITAE

Date Prepared: October 2020
Name: Nancy Lynn Keating
Office Address: Department of Health Care Policy
180 Longwood Avenue, Room 201
Boston, MA 02115
Work Phone: (617) 432-3093
Work E-Mail: keating@hcp.med.harvard.edu
Work FAX: (617) 432-0173

Education

1989	B.S.	Biochemistry, in Honors	Virginia Tech
1993	M.D.	Medicine	University of Chicago Pritzker School of Medicine
1998	M.P.H.	Public Health, Clinical Effectiveness	Harvard School of Public Health

Postdoctoral Training

Internship and Residencies

1993-1994	Intern in Medicine	Brigham and Women's Hospital	Boston, MA
1994-1996	Resident in Medicine	Brigham and Women's Hospital	Boston, MA

Clinical and Research Fellowships

1993-1996	Clinical Fellow in Medicine	Harvard Medical School	Boston, MA
1996-1998	Fellow, Harvard Faculty Development and Fellowship Program in General Internal Medicine	Brigham and Women's Hospital	Boston, MA
1996-1998	Fellow, Department of Health Care Policy	Harvard Medical School	Boston, MA

Faculty Academic Appointments

1998-2003	Instructor in Health Care Policy	Health Care Policy	Harvard Medical School
1998-2003	Instructor in Medicine	Medicine	Harvard Medical School
2003-2007	Assistant Professor of Health Care Policy	Health Care Policy	Harvard Medical School
2003-2007	Assistant Professor of Medicine	Medicine	Harvard Medical School
2007-2014	Associate Professor of Health Care Policy	Health Care Policy	Harvard Medical School
2007-2014	Associate Professor of Medicine	Medicine	Harvard Medical School
2014-	Professor of Health Care Policy	Health Care Policy	Harvard Medical School
2014-	Professor of Medicine	Medicine	Harvard Medical School

Appointments at Hospitals/Affiliated Institutions

1996-	Associate Physician	Department of Medicine	Brigham and Women's Hospital
1998-	Consulting Staff	Department of Medical Oncology	Dana-Farber Cancer Institute
2002-	Associate Physician	Department of Medicine	Faulkner Hospital

Major Administrative Leadership Positions

Local

2012-	Team Leader, Phyllis Jen Center for Primary Care	Harvard Medical School Primary Care Collaborative and Brigham and Women's Hospital
2013-	Program Co-Leader, Cancer Care Delivery Research Program	Dana-Farber/Harvard Cancer Center

Committee Service

Local

1989-1990	Liaison Committee for Medical Education Task Force	University of Chicago Pritzker School of Medicine
	1989-1990 Member	
1990-1993	Dean's Council	University of Chicago Pritzker School of Medicine
	1990-1993 Class Representative	
1990-1993	Pritzker School of Medicine Committee on Admissions	University of Chicago Pritzker School of Medicine
	1990-1993 Interviewer	
	1992-1993 Student Member	
1992	Orientation to the Clinical Biennium Committee	University of Chicago Pritzker School of Medicine
	1992 Chairman and cofounder	
1993-1996, 2001-	Intern Selection Committee, BWH Residency Program	Brigham and Women's Hospital
	1993-1996 Resident Member	
	2001- Member	
1995-1996	Evidence Based Medicine Journal Club	Brigham and Women's Hospital
	1995-1996 Coordinator	
	1997- Faculty Discussion Leader	
1996-1998	General Medicine Fellows' Seminar	Brigham and Women's Hospital
	1996-1998 Coordinator	
1999-	Division of General Internal Medicine Faculty Journal Club	Brigham and Women's Hospital
	1999- Coordinator	
1999-	Brigham Internal Medicine Associates Study Review Committee	Brigham and Women's Hospital
	1999- Member and Chair	
2000-2003, 2009-2010	Faculty Search Committee, Division of General Medicine	Brigham and Women's Hospital
	2000-2003 Member	
	2009-2010 Member	

2004-2005, 2014-	Harvard Medical School Faculty Council 2004-2005 Member 2014- Member	Harvard Medical School
2005	Faculty Development Program for Physicians and Scientists 2005 Participant	Harvard Medical School
2008-	Longitudinal Medical Record Expert Panel 2008- Member	Brigham and Women's Hospital
2008-	Dana-Farber/Harvard Cancer Center Outcomes Research Program 2008- Member 2013- Co-Program Leader	Dana-Farber/Harvard Cancer Center
2009-2010	BWH Faculty Mentoring Leadership Program 2009-2010 Participant	Brigham and Women's Hospital
2010-	Population Sciences Core Scientific Advisory Board 2010- Member	Dana-Farber Cancer Center
2010-	Crimson Care Collaborative Scientific Advisory Board 2010- Member	Harvard Medical School
2010-2011 2013-2014, 2016-2017	Faculty Search Committee, Department of Health Care Policy 2010-2011 Member 2013-2014 Member 2016-2017 Member	Harvard Medical School
2011, 2015	Harvard Medical School Honors Committee 2011, 2015 Expert reader/examiner	Harvard Medical School
2011-	Joint Committee on the Status of Women 2011- Member	Harvard Medical School
2011-	Advisory Committee on Health Policy and Health Services Research, Scholars in Medicine Program 2011- Member	Harvard Medical School
2012-2017	Program in Cancer Outcomes Research Training Fellowship Advisory Committee 2012-2017 Member	Dana-Farber/Harvard Cancer Center
2012-	Primary Care Collaborative 2012- Team Leader	Phyllis Jen Center, Brigham and Women's and Harvard Medical School
2013, 2015, 2016	Student Honors Thesis Committee 2013 Member 2015 Member 2016 Member	Harvard Medical School
2013	Quality of Care Task Force 2013 Member	Dana-Farber/Brigham and Women's Cancer Center
2015-	Committee to Review Interim Title IX Procedures with Respect to the Faculty of Medicine 2015- Member	Harvard Medical School
2015-	Harvard Medical School Council of Mentors	Harvard Medical School

2015-2018	2015- Member Standing Committee on Promotions, Reappointments, and Appointments	Harvard Medical School
2015-2016	2015-2018 Member Faculty Search Committee, Peter L. Goss Chair in General Internal Medicine	Massachusetts General Hospital
2016	2015-2016 Member Harvard Tenure Review Ad Hoc Committee	Harvard University
2016-2017	2016 Member Faculty Search Committee, Department of Health Care Policy	Harvard Medical School
2017-2018	2016-2017 Member Task Force on Promotion Criteria for Clinical Expertise and Innovation and Teaching and Educational Leadership	Harvard Medical School
2017-	2017-2018 Member 2017-2018 Subcommittee Chair External Advisory Committee for NCI T32 “Training Program in Cancer Biology”	Massachusetts General Hospital Cancer Center
2017-2018	2017 Member Faculty Search Committee, Director of the Mongan Institute	Massachusetts General Hospital
2018-	2017-2018 Member Selection Committee, Program Award for Culture of Excellence in Mentoring	Harvard Medical School
2018-	2018- Member Subcommittee of Professors Promotions Committee	Harvard Medical School
2018-	2018- Member Connors Center First-in-Women Precision Medicine Platform	Brigham and Women’s Hospital Connors Center for Women’s Health and Gender Biology
2019	2018- Expert Consultant Selection Committee, Program Award for Excellence in Culture of Mentoring Awards	Harvard Medical School
	2019 Member	
Regional		
2005-2007	Evaluation Project Expert Panel 2005-2007 Member	Massachusetts Women’s Health Network
2016-	Massachusetts Cancer Registry Advisory Committee	Massachusetts Cancer Registry
	2016- Member	
National		
2000-2003	Selection Committee 2000-2003 Member	Blue Cross Blue Shield National Awards for Best Practices
2004-2006	Breast Cancer Technical Panel 2004-2006 Member	National Quality Forum
2005	Evidence-Based Practice Center: The Periodic Health Exam	Johns Hopkins University
	2005 Technical Expert	

2008-	National Comprehensive Cancer Network Senior Oncology Guideline Panel 2008- Panel Member	National Comprehensive Cancer Network
2008	Writing Group for the American Heart Association Scientific Statement on Androgen Deprivation Therapy and Cardiovascular Risk 2008 Panel Member	American Heart Association
2010	NIH State-of-the-Science Conference: <i>Enhancing Use and Quality of Colorectal Cancer Screening</i> 2010 Panel Member	National Institutes of Health
2010-2013	Blue Cross and Blue Shield Association Blue Distinction Cancer Recognition Programs 2010-2013 Consultant Panel Member	Blue Cross and Blue Shield Association
2010-2017	Androgen Deprivation Therapy for Prostate Cancer 2010-2017 Medical Editor	Informed Medical Decisions Foundation
2011-2014	Clinical Practice Guidelines Committee 2011-2014 Panel Member	American Society of Clinical Oncology
2012	Provider Survey Initiative Expert Panel 2012 Panel Member	National Cancer Institute
2013-2017	Cancer Research Network External Advisory Panel 2013-2017 Panel Member	Cancer Research Network
2013-2014	External Scientific Peer Review Committee, Surveillance & Health Services Research Program 2013-2014 Panel Member	American Cancer Society
2013	Economics of Innovation Workgroup 2013 Panel Member	Leukemia and Lymphoma Society
2014-2015	Review of Clinical Guidance for the Care of Health Conditions Identified by the Camp Lejeune Legislation 2014-2015 Committee Member	Institute of Medicine
2014-	Early Detection & Screening Section for Susan G Komen's consumer education website <i>Understanding Breast Cancer</i> 2014- Faculty Reviewer	Susan G Komen for the Cure Foundation
2014-2015	Advisory Board on Prostate Cancer Survivorship 2014-2015 Member	Prostate Cancer Foundation
2015-2016	Search Committee, National Cancer Institute Associate Director for Healthcare Delivery Research Program 2015- 2016 Member	National Cancer Institute
2015-2017	External Advisory Panel for " <i>The National Survey of Precision Medicine in Cancer Treatment</i> " 2015- 2017 Member	National Cancer Institute

2018	Alumni Awards Committee 2018 Member	University of Chicago
2018-2019	Oncology Quality Measure Development National Advisory Board 2018-2019 Member	Tufts Medical Center
2019-	Technical Expert Panel on Patient Attribution 2019- Member	Alliance of Dedicated Cancer Centers (ADCC) Quality
2019-2021	Data Safety and Monitoring Board 2019-2021 Member	Leveraging the Electronic Health Record to Nudge Clinicians to Prescribe Evidence- Based Statin Medications to Reduce the Risk of Cardiovascular Disease
2019-	External Advisory Board 2019- Member	University of Michigan Rogel Cancer Center
2019-2020	Committee on Diagnosing and Treating Adult Cancers 2019-2020 Member	National Academies of Sciences, Engineering, and Medicine
2020-	Survivorship/Supportive Care Working Group 2019-2020 Member	National Cancer Institute

International

2010-2014	Global Task Force on Expanded Access to Cancer Care and Control in the Developing World 2010-2014 Technical Advisory Committee	Global Task Force on Expanded Access to Cancer Care and Control in the Developing World
2014-	Commission on Global Access to Pain Control and Palliative Care 2014- Scientific Advisory Committee	Harvard Global Equity Initiative and the Lancet
2015	Expert Panel, Breast Cancer Awareness Initiative in China 2015 Panel Member	Harvard Global Equity Initiative and the Susan G. Komen Foundation
2017-	Academic Reference Group Panel 2017- Panel Member	International Cancer Benchmarking Partnership

Professional Societies

1993-1999, American Medical Association

2007-	1993-1999 Member
	2007- Member

1993- Massachusetts Medical Society

1993-	Member
-------	--------

1996- Society of General Internal Medicine

1996-	Member
1999-	Annual Meeting Scientific Abstract Selection Committee (subcommittee chair or co-chair in 2002, 2004-2005, 2008, 2010-2012, 2014, 2016)
2000-	Annual Meeting Workshop Review Committee
2001-2012,	Judge, Associates Award and Junior Faculty Award

2014-2017
 2003-2004 Program Chair, 27th Annual Meeting
 2004-2009 Coordinator, ABIM Continuous Professional Development Self-Evaluation Process Session at Annual Meeting
 2006, 2014, 2015 SGIM Outstanding Junior Investigator Award Committee
 2007-2009 Member, Finance Committee
 2008 Member, Elnora Rhodes Award Selection Committee
 2008- Mentor, One-on-One Mentoring Program at Annual Meeting
 2009-2012 Elected representative, Council
 2009-2011 Member, Capital Campaign Committee
 2009-2012 Council Liaison, Evidence Based Medicine Task Force
 2009-2010 Council Liaison, Geriatrics Task Force
 2010-2012 Council Liaison, Research Committee
 2011, 2019 Member, Glaser Award Selection Committee
 2012- Member, Health Policy Committee
 2013- Member, Health Policy Executive Committee
 2013-2015, 2020- Co-chair, Research Subcommittee, Health Policy Committee
 2015-2019 Chair, Research Subcommittee, Health Policy Committee
 2016- Program Faculty, Leadership in Health Policy (LEAHP) Program

1996- American College of Physicians

1996-2006 Member
 2006- Fellow

1997- Academy Health (prior Association for Health Services Research)

1997- Member
 2006, 2008, 2009 Annual Meeting Scientific Abstract Selection Committee

2007- American Society of Clinical Oncology

2007- Member
 2011-2014 Clinical Practice Guidelines Committee Member

2010- American Cancer Society Cancer Action Network

2010- Member

2011- American Society for Clinical Investigation

2011- Member
 2012- Abstract reviewer

2017- Association of American Physicians

2017- Member

2019- International Society of Geriatric Oncology

2019- Member

Grant Review Activities

2002,2003, 2005	Scientific Review Committee 2002, 2005 Ad-hoc Grant Reviewer 2003 Grant Reviewer	California Breast Cancer Research Program
2002	Scientific Review Committee 2002 Ad-hoc Grant Reviewer	National Cancer Institute
2005	Special Emphasis Panel 2005 Grant Reviewer	CDC National Center for Chronic Disease Prevention & Health Promotion
2006-2007	Psychosocial and Behavioral Research Review Committee 2006-2007 Member	American Cancer Society
2007-2011	Health Services Research Scientific Review Committee 2007-2010 Member 2010-2011 Ad-hoc Grant Reviewer	American Cancer Society
2008	Challenge Award Scientific Review Committee 2008 Member	Prostate Cancer Foundation
2010	Special Emphasis Panel “Methodology and Measurement in the Behavioral and Social Sciences” 2010 Grant Reviewer	National Institutes of Health
2010	Scientific Review Committee 2010 Ad-hoc Grant Reviewer	Dutch Cancer Society
2011-2012	Cancer Risk and Disparities Program Review Panel 2011 Co-Chair 2012 Grant Reviewer	Dana-Farber/Harvard Cancer Center
2012	Harvard Catalyst Advanced Imaging Pilot Research Grants and Concept Development Awards Program 2012 Grant Reviewer	Harvard Catalyst
2012	Scientific Review Committee, “Applying Behavioral Economics to Perplexing Health and Health Care Problems” 2012 Grant reviewer	Robert Wood Johnson
2012-	Scientific Review Committee, Dana-Farber/Harvard Cancer Center U54 Partnership Pilot Program 2012 Grant reviewer 2013 Grant reviewer	Dana-Farber/Harvard Cancer Center
2013	Scientific Review Committee, Young Investigator	Prostate Cancer Foundation

	Award 2013	Grant reviewer	
2016	Special Emphasis Panel, NCI Provocative Questions #12 2016	Grant reviewer	National Cancer Institute
2019	Scientific Review Committee, RFA-CA-18-017 entitled "NCI Community Oncology Research Program (NCORP) Minority/Underserved Community Sites (UG1 Clinical Trial Required)" 2019	Grant reviewer	National Cancer Institute
2020	Scientific Review Committee, Pennsylvania Department of Health Final Performance Reviews (Cycle 19-20A) 2020	Grant reviewer	Pennsylvania Department of Public Health

Editorial Activities

Ad hoc Reviewer (reviews since late 2017 accessible on publons.com)

Health Affairs
Western Journal of Medicine
Journal of General Internal Medicine
Cancer
Health Services Research
Medical Care
Journal of Clinical Oncology
American Journal of Medicine
Milbank Quarterly
Journal of the American Medical Association
Annals of Internal Medicine
Annals of Family Medicine
International Journal for Quality in Health Care
JAMA Internal Medicine
Diabetes Care
American Journal of Managed Care
Journal of Palliative Medicine
New England Journal of Medicine
Journal of the National Cancer Institute
Medical Decision Making
Journal of Geriatric Oncology
Urology
Circulation
International Journal of Radiation Oncology, Biology, Physics
Cancer Epidemiology, Biomarkers, and Prevention
JAMA Psychiatry
Healthcare: The Journal of Delivery Science and Innovation
Journal of Pain and Symptom Management

JAMA Oncology
Lancet Oncology
Prostate Cancer and Prostatic Diseases
Annals of Surgical Oncology
Journal of Cancer Survivorship: Research and Practice
PLOS-ONE
JCO Clinical Cancer Informatics
Journal of Global Oncology
Journal of Women's Health
The BMJ
Journal of Oncology Practice
PNAS

Other Editorial Roles

2004-2012	Member, Editorial Board	<i>Harvard Health Letter</i>
2007-2010	Member, Editorial Board	<i>Journal of Clinical Oncology</i>
2011-	Member, Editorial Board	<i>Journal of Geriatric Oncology</i>
2012-	Member, Advisory Board	<i>Harvard Medical School Newsletters for the Public</i>
2015-	Associate Editor	<i>Journal of the National Cancer Institute</i>
2016-2017	Guest Editor: The Affordable Care Act and Cancer Care	<i>The Cancer Journal</i>

Honors and Prizes

1988	Phi Beta Kappa	Virginia Tech	
1989	Outstanding Senior in Department of Biochemistry	Virginia Tech	
1989	B.S. Summa Cum Laude	Virginia Tech	
1990	Ciba Geigy Research Award	University of Chicago	
1991	Research Award	International Society for Cardiovascular Surgery	
1992	Alpha Omega Alpha Honor Society	University of Chicago	
1993	Award for Scholastic Achievement	American Medical Women's Association	
1993	Joseph A. Capps Award for Outstanding Proficiency in Clinical Medicine	University of Chicago	Outstanding Clinical Achievement
1997	Mack Lipkin Sr. Associates Award	Society of General Internal Medicine	Outstanding Research Presentation at National Meeting
1999	Clinical Scientist Award	Doris Duke Charitable Foundation	National Research Award
2000	Milton Hamolsky Junior Faculty Award	Society of General Internal Medicine	Outstanding Research Presentation at National Meeting
2002	Author of "Best of JGIM" article	Journal of General Internal Medicine	Recognition of one of most accessed articles

2005	Outstanding Junior Investigator of the Year	Society of General Internal Medicine	
2006	Fellow, American College of Physicians	American College of Physicians	
2010	American Society for Clinical Investigation	American Society for Clinical Investigation	Honor society of young physician-scientists
2011, 2013, 2015, 2017	Excellence in Tutoring Award	Harvard Medical School	Recognition of outstanding tutorial facilitation, Health Policy 750
2015	A. Clifford Barger Excellence in Mentoring Award	Harvard Medical School	Recognition of outstanding mentoring
2015	Nominee, Excellence in Mentoring Award	Brigham and Women's Hospital	Recognition of outstanding mentoring
2016	Visiting Professor in Cancer Outcomes and Health Services Research	Johns Hopkins University	
2016	Author of one of "Top Cited Articles of 2013"	Journal of the National Cancer Institute	Recognition of one of journal's most cited articles
2016	Best Abstract in Aging, Disability, and End of Life	Academy Health	
2017	Top Performing Reviewer for Cancer	Cancer	Top 2% of reviewers in period 9/1/16-8/31/17
2017	Association of American Physicians	Association of American Physicians	Honor society of senior physician-scientists
2018	Nominee, Distinguished Service Award	University of Chicago Alumni Association	Recognition of alumni who has brought honor and distinction to University of Chicago
2019	Top Ten Article of 2018	Health Affairs	Recognition of article as one of 10 best published by Health Affairs in 2018

Report of Funded and Unfunded Projects

Funding Information

Past

1996-1998	PI	Brigham and Women's Hospital The Primary Care Education Fund	\$3782
		Physicians Experiences and Beliefs Regarding Informal Consultation Survey of a state-wide sample of physicians about use of informal consultation in clinical practice	
1998-1999	Research Fellow	Prudential Health Care Prudential Health Services Research Fellowship	\$50,000
		Patients' experiences with ambulatory care and trust Study of how patients' experiences with their physicians are associated with trust in their physician.	
1999-2001	Co-investigator	Agency for Health Care Policy and Research	

and American Association of Health Plans
U01 HS09936 and HS 98-005

Effect of Health Plans on Hypertension and Diabetes Care

Survey of patients with diabetes or hypertension and their physicians and medical record abstractions to identify physician and organizational factors associated with quality of care. I began as co-investigator and played a major role in instrument design, then took over as PI after illness of original PI.

1999-2002	PI	Doris Duke Charitable Foundation Doris Duke Charitable Foundation Clinical Scientist Award (19991079)	\$300,000
		Effect of Physician Specialty on Quality of Breast Cancer Care Examined the providers from whom women with breast cancer receive care and assessed the association of providers seen with stage at diagnosis, primary treatment, and surveillance care.	
2001-2005	Acting PI	National Cancer Institute 1 R01 CA92588-01	\$665,935
		Managed Care Penetration and Cancer Care Examined the association of increasing managed care penetration and spillover effects on quality of care for patients with cancer and on choice of treatments. I began as co-investigator and played a major role in instrument design, then took over as PI after illness of original PI.	
2001-2013	Co-investigator	National Cancer Institute U01 CA93324-01	
		Cancer Care Outcomes Research & Surveillance Consortium (Ayanian, PI) Multiregional study of patients with incident lung or colorectal cancer, including patient survey, physician survey, medical record abstraction, claims analyses. I led development and implementation of a physician survey of more than 7000 physicians across the consortium and participated actively in data collection for our study site. In a second phase of data collection, I led the development and implementation of a survey of more than 700 medical oncologists.	
2002-2004	PI	Brigham and Women's Hospital The Primary Care Education Fund	\$1,870
		Transfer of Information Via Social Networks Survey of primary care physicians at BWH to understand how physicians share information.	
2003-2005	PI	Doris Duke Charitable Foundation Doris Duke Charitable Foundation Clinical Scientist Award (T99040C)	\$200,000
		Effect of Physician Specialty on Hospice Use in Breast Cancer Examined the providers from whom women with advanced breast cancer receive care and assessed the association of providers seen with hospice use at the end of life.	
2004-2007	PI	SPORE, National Cancer Institute 5 P50 CA090381-03	\$109,544
		Cancer Survivorship in Men with Prostate Cancer Examined the association of androgen deprivation therapy for prostate cancer with development of diabetes and cardiovascular disease.	

2004-2007	PI	Novartis ZOL446G US94	\$174,164
Cancer-therapy Induced Bone Loss and Fracture Risk among Men with Prostate Cancer (NL Keating, PI) Examined the association of androgen deprivation therapy and radiation therapy for prostate cancer with development of fracture.			
2005-2009	PI	National Cancer Institute R01 CA104118	\$731,737
Long-term Outcomes of Breast Cancer Treatment in Community Populations Assessing long-term survival after primary breast cancer treatments among patients outside of clinical trials.			
2005-2010	Co-PI	Veterans Health Administration Federal Contract 15592/18866	\$554,615
Study of Cancer Care in the Veterans Health Administration (BJ McNeil, PI) Evaluation of quality of care delivered to veterans with cancer in the Veterans Health Administration.			
2008-2012	PI	National Cancer Institute R01 CA127652	\$687,690
Fractures, Heart Disease, and Stroke on Aromatase Inhibitors (NL Keating, PI) Assessing the association of aromatase inhibitor therapy and tamoxifen for breast cancer with myocardial infarction, stroke, and fractures among community populations of women.			
2008-2013	PI	Komen Foundation Foundation Research Grant	\$300,000
Disparities in Breast Cancer and Providers of Care Assessing the role of hospitals and physicians in explaining variations in quality of care for breast cancer.			
2008-2013	Co-investigator	National Institute of Aging P01 AG0309301	
Networks and Neighborhoods (N Christakis, PI) This work will empirically define networks of physicians based on shared patients and will assess whether sharing of information via physician networks is likely to explain local area variations in medical care.			
2010-2011	PI	Harvard Catalyst The Harvard Clinical and Translational Science Center NIH Award UL1 RR 025758	\$50,000
Improving Breast Cancer Diagnosis and Care in Mexico This work will improve awareness of breast health and breast cancer through training of health promoters in the states of Morelos, Jalisco, and Nuevo Leon. It also seeks to improve delivery of cancer care by providing cancer treatment in secondary hospitals with close supervision by physicians at tertiary hospitals.			
2010-2012	PI	American Cancer Society Foundation Grant RSGI-09-269-01-CPHPS	\$400,000

Effect of Massachusetts Health Insurance Reform on Breast Cancer Screening and Diagnosis
Assessing the influence of health insurance reform in Massachusetts on mammography screening and earlier stage at breast cancer diagnosis for women in Massachusetts.

2010-2013	Co-investigator	National Cancer Institute R01CA142744	
		Use of Geographic Variations to Estimate Effectiveness with Non-Randomized Data (Landrum, PI) Evaluation of effectiveness of many common cancer therapies using advanced statistical methods. The methods developed will be applicable to a broad range of interventions for cancer and other diseases, providing a framework for future analyses of comparative effectiveness needed for the design and implementation of health reforms	
2011-2014	PI	Dana-Farber Cancer Institute Disparity Award	\$100,000
		Understanding Racial Differences in Prostate Cancer Mortality This study will use SEER-Medicare data and data from the NHANES study to better understand disparities in prostate cancer mortality. We will first decompose the racial gap in prostate cancer mortality into differential incidence and stage-specific survival and to understand reasons for these differences. Then we will explore the consequences of differential intake of vitamin D on prostate cancer incidence and mortality.	
2008-2015	PI	Prostate Cancer Foundation Foundation Research Grant	\$450,000
		Prevention of Treatment and Disease-Related Morbidity during Androgen Deprivation Therapy: A Multicenter Proposal Examine the association of androgen deprivation therapy for prostate cancer with development of diabetes and cardiovascular disease in another cohort and identify characteristics of patients at highest risk of disease.	
2010-2015	PI, subcontract	National Cancer Institute R01CA106370	
		Black-White Differences in Advanced Cancer Communication, Acceptance and Care (Prigerson, PI) The study will assess how communication processes and communication goals influence racial disparities in EOL care, specifically assessing 1) communication processes; 2) communication goals; and 3) the effect of communication processes and communication goals on clinical outcomes at the EOL.	
2012-2016	PI	National Cancer Institute 1R01CA164021-01A1	\$895,067
		Explaining Variations in End-of-Life Care Intensity Understand the relative contribution of patient, physician, and area-level factors in explaining variations in intensity of end of life care.	
2014-2016	PI, subcontract	American Cancer Society Research Scholar Grant	
		Impact of Parity Legislation on Use and Costs of Oral Cancer Medications This proposal will use data from the Health Care Cost Institute and a difference-in-difference-	

in difference design to understand the effect of state cancer parity legislation on use and spending on oral cancer medications.

2013-2018	Co-investigator	National Institute of Mental Health U01MH103018 (Normand/Huskamp)	
		Technology Diffusion under New Payment and Delivery Models This study will conduct an in-depth investigation of the patterns of diffusion of new technologies, including drugs, biologics, and devices, across organizations of different types, and assess the effects of a new model for organizing and financing health care that is encouraged under the Affordable Care Act (ACA) of 2010 – risk-based payments made to accountable care organizations (ACOs) – on spending for new technologies.	
2013-2017	PI, subcontract	National Cancer Institute R21CA172892	
		Linking State Registry and All Payer Claims Data to Study Cancer Care The Massachusetts Executive Office of Health and Human Services and the Massachusetts Health Quality Partners represent key public and private stakeholders, respectively, who are committed to using the results of our analyses to further public health policy goals for improving the value of cancer care. The methods and results of this project can be employed to monitor the quality and costs of cancer care in Massachusetts and to guide efforts by consumers, payers and purchasers to evaluate provider networks or other comparable provider organizations. Our project will also provide a model to guide state policymakers and health-care systems in many other states that are developing comparable all-payer claims databases.	
2013-2019	Multiple PI	National Cancer Institute 1R01CA174468	\$1,834,536
		Social Networks and the Spread of Cancer Care Practices Develop a longitudinal database of physician networks over time and describe physician networks to understand diffusion of cancer care practices across these networks.	
Current			
2014-2020	PI	National Cancer Institute K24CA181510	\$816,771
		Behavioral Economics and Improving Chemotherapy Decisions for Advanced Cancer This is a mid-career mentorship award. I will mentor trainees and develop new skills in behavioral economics and intervention research. I will lead a project to improve decisions about chemotherapy for women with advanced breast and ovarian cancers.	
2015-2020	Clinical Lead PI, subcontract	Center for Medicare and Medicaid Services No grant number	\$2,215,046
		Evaluation of the Oncology Care Model CMS is launching the Oncology Care Model demonstration project, with a goal of improving the effectiveness and efficiency of specialty care. The model will pay oncology practices \$160 enhanced care management payment per 6-month episode of chemotherapy combined with performance-based shared savings if spending targets are reached. We will work with colleagues at Abt Associates and The Lewin Group to assess the impact of the program on utilization, spending, quality, and patient- and provider-reported experiences.	

2015-2020	Co-investigator	Agency for Health Care Research and Quality U19HS024072 (PI: Cutler, David)	
			Measuring the Clinical and Economic Outcomes Associated with Delivery Systems To determine whether differences in the delivery of evidence-based care processes and clinical and economic outcomes can be explained by characteristics of organizations that can be understood and modified, or whether such outcomes are ‘residual’ characteristics of organizations that are hard to transfer.
2015-2020	Co-investigator	National Institute on Aging 1R01CA189152-01A1 (PI:McWilliams/Graves)	
			Effects of Expanded Coverage on Access, Health Care and Health in the South This project will provide timely and rigorous analysis of the effect of health insurance coverage expansions on health care use and outcomes among a large cohort of low-income adults in 12 southeastern states (VA, WV, KY, TN, NC, SC, FL ,GA, AL, MS, LA, AR). Using a quasi-experimental research design, we aim to quantify the effects of coverage expansion through Medicaid and private health insurance exchanges on access to care, cancer screening and use of preventive clinical services (Aim 1); on self-reported health outcomes, mortality and use of emergent and inpatient care (Aim 2); and on cancer stage at diagnosis and quality of cancer care (Aim 3).
2017-2020	Project PI	Laura and John Arnold Foundation	
			Improving Feasibility and Efficiency of Quality Measurement in Oncology Practices This project will first estimate the extent to which claims-based measures of quality for practices (with and without clinical information about cancer stage and other tumor characteristics from registry data) correlate with practice-reported measures of oncology care quality. Next, for measures of quality for which supplemental clinical data are needed, assess the extent to which adaptive quality measurement strategies that focus primarily on identifying the providers who are delivering the highest- and lowest-quality care would be a more feasible and efficient strategy for assessing (and rewarding) quality of care delivered by oncology providers than measuring quality for all oncology practices.
2018-2020	PI	American Cancer Society PEP-17-052-01-PCSM	\$132,800
			More Good Days: Improving Goals of Care Discussions for Cancer Patients The goal of this study is to conduct a pilot test of an intervention that seeks to help patients identify and communicate their goals of care and preferences for care with their health care team. The intervention involves a 2.5 minute video, a brief questionnaire, and a wallet card that will be shared with patients who may be making decisions about cancer treatment after progressing on prior non-curative chemotherapy or whose physicians would not be surprised if the patient died within 6 months. By improving communication with care providers, these tools can help clinicians attend to aspects of care that are important to patients, thus improving the experiences of patients with advanced cancer at the end of life.
2018-2020	PI, subcontract	Leukemia and Lymphoma Society/ The Commonwealth Fund (PI: Dusetzina)	
			Identifying Cost and Coverage Barriers to Medicare Beneficiary Access to Specialty Drugs

This study will first describe trends in drug prices, Part D plan coverage, and cost sharing requirements for specialty drugs from 2010 through 2019. Next, it will leverage linked electronic health record networks and fee-for-service Medicare claims to observe both physician prescribing and patient medication filling at the population level, along with clinically relevant outcomes for patients. From this novel data source, we will estimate rates of nonadherence to specialty medications for Part D beneficiaries and whether nonadherence varies by drug price within and across conditions. Finally, we will examine the association between not starting or experiencing delays in starting therapy on key clinical outcomes and Medicare spending.

- 2019-2022 Co-Investigator AHRQ
R01HS026498
Comparing Targeted and Non-Targeted Approaches to Improving the Value of Cancer Care Services
This project aims to study the extent to which a general payment reform approach designed to improve overall the value of care delivered impacts the delivery of cancer care services and how this compares to a targeted approach. Our work will provide important evidence comparing these strategies, while also confirming that organizations participating in these payment reform models are not stinting on the provision of appropriate services.
- 2019-2021 PI, Subcontract NCI
R21CA227615-01 (PI: Freedman)
Individualizing Surveillance Mammography for Older Breast Cancer Survivors
This study will develop consensus on surveillance mammography and follow-up for breast cancer survivors who are age ≥ 75 years by further developing expert-panel recommendations and examining clinician and patient attitudes towards these recommendations. We will then apply a framework for decisional support to address decisional conflict on mammography decision-making and will test a strategy for communication of expert recommendations on mammography cessation through direct engagement of specialists, PCs, and patients.

Training Grants and Mentored Training Grants

- 2012-2017 Program in Cancer Outcomes Research Training
National Cancer Institute (R25)
Advisory Committee Member (PI: G. Scott Gazelle)
- 2014-2018 Chemotherapy Near Death: Modifiable Factors and Outcomes in Ovarian Cancer
National Cancer Institute (K07)
Primary Mentor (PI: Alexi Wright)
- 2015-2019 Disparities in Breast Cancer Knowledge and Treatment Adherence
American Cancer Society Mentored Research Scholar Grant
Primary Mentor (PI: Rachel Freedman)
- 2017- Training Program in Cancer Biology
National Cancer Institute (T32)
External Advisory Committee Member (PI: Kenneth Tanabe)
- 2017-2021 Improving Decisions about Dialysis Initiation in Older Adults with Kidney Disease

National Institute on Aging (K23)
Primary Mentor (PI: Melissa Wachterman)

2017-2021 An Assessment of Whether Aspirin and/or Vitamin D Improves Breast Cancer Outcomes in Black Women and the Modifying Effects of Genetic Variants
National Cancer Institute (K01)
Mentoring Committee (PI: Tracy Belthea)

2018-2022 Evaluating Breast Cancer Care in Rural Rwanda
National Cancer Institute (K07)
Primary Mentor (PI: Lydia Pace)

2018- Training in Oncology Population Sciences
National Cancer Institute (T32)
Principal Investigator (Multiple PI with Deborah Schrag)

2019-2023 Obstetrical and Oncological Outcomes Among Reproductive Age Women with Gynecological and Breast Cancer
National Cancer Institute (K08)
Mentoring (PI: Alejandro Rauh-Hain)

2019-2023 Expectations for Pediatric Cancer Treatment (EXPECT): A Family-Centered Intervention to Prepare Parents for Pediatric Leukemia
National Cancer Institute (K08)
Co-Mentor (PI: Katie Greenzang)

Current Unfunded Projects

2015- Mentor Effects of breast density legislation on breast imaging
Assessing changes in utilization of imaging tests following breast density legislation

Report of Local Teaching and Training

Teaching of Students in Courses

1996-1997 10 third year medical students	Primary Care Clerkship Faculty Tutor	HMS Preparation time: not applicable; Contact time: 5 hours per month
1996-1998 6 first year medical students	Patient/Doctor I Faculty Tutor	HMS 10 months per year Preparation time: 1 hour per week; Contact time: 2 hours/week
1998-2002 8 first year medical students	Critical Reading of the Medical Literature (AC701.0) Faculty Tutor	HMS 5 months per year Preparation time: 1 hour per week; Contact time: 2 hours per week

2001- 200 medical students	Introduction to Health Care Policy (HC750) HMS Lecturer	1-2 lectures per year Preparation time: 6 hours; Contact time: 2-4 hours
2004 8 graduate students	Medical Sociology Reading course Lecturer	Harvard University One lecture per year Preparation time: 2 hours; Contact time: 1.5 hours
2005- 10-15 masters students	Introduction to Epidemiology (EPI 208) HSPH Small Group Discussion Leader	2 months per year (2-4 sessions) Preparation time: 1-2 hours, Contact time 4-8 hours
2010-2015 8-10 medical students	Introduction to Health Care Policy (HC750) HMS Tutorial Leader	One month per year Preparation time: 12 hours, Contact time 12 hours
2010- 100 masters students	Introduction to Epidemiology (EPI 208) HSPH Core Faculty	6 weeks per year Preparation time: 2 hours, Contact time 12 hours
2016- 160 medical students	Essentials of Medicine: Part 1-Introduction to Health Care Policy (HC750) HMS Core Faculty	3 weeks per year Preparation time: 2 hours, Contact time 8 hours
2016- 10 medical students	Essentials of Medicine: Part 1-Introduction to Health Care Policy (HC750) HMS Tutorial Leader	One month per year Preparation time: 12 hours, Contact time 12 hours
2016- 100 medical students	Essentials of Medicine Health Care Policy (HC750) HMS Curriculum Development Board Member	3 weeks per year Preparation time: 10 hours
2018-2020 160 medical/dental students	Essentials of Medicine: Part 1-Introduction to Health Care Policy (HC750) HMS Course Director	One month per year Preparation time: 100 hours, Contact time 20 hours

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

1999-	“Counseling patients about breast cancer risk and breast cancer prevention” 15 residents BWH 1.5 hour lecture given twice per year
1999-2005	“Managed care: How do health plans influence the delivery of care?” 15 residents BWH 1.5 hour lecture given twice per year
1999-	“Reading the medical literature: How to read an article about therapy” 15 residents BWH 1.5 hour lecture given twice per year
2011-	“Writing an Abstract” 15 post-doctoral Harvard General Internal Medicine Fellowship Program fellows 1 hour lecture given once per year
2012-	“Breast and Colorectal Cancer Screening” 25 residents BWH 1.5 hour lecture given 4 times per year
2013-	“Benefits and Harms of Breast Cancer Screening” 25 residents BWH 1.5 hour lecture given 4 times per year

Clinical Supervisory and Training Responsibilities

1996	Harvard Medical School Medicine 1 Clerkship, BWH Teaching Resident	8 third year medical students 1 month per year (15 hours per week)
1996-	General Internal Medicine Clinic Attending Physician	4-5 residents 12 months per year (4 hours per week)
1997-	General Medical Service Attending Physician	2 medical students, 2 interns, 1 resident 2-4 weeks per year (20 hours per week)
1998-	General Internal Medicine Clinic Attending Physician	4-5 residents 2 weeks per year (20 hours per week)
2001-	Mentor, BWH Residency Program	Advisor for 1-2 BWH residents per year

Laboratory and Other Research Supervisory and Training Responsibilities

2004-	Supervision of medical student, resident, fellow, and/or junior faculty research trainees	Daily mentorship
-------	--	------------------

Formally Supervised Trainees

- 2004-2008 Marie Norredam, M.D. Associate Professor, University of Copenhagen, Denmark
Supervised work as a post-doctoral fellow studying abroad resulting in two publications.
- 2006-2008 Jim Hu, MD Professor of Surgery, Cornell Weill Medical College
Supervised work as a junior faculty member with several publications
- 2006-2008 Michael Hassett, MD Assistant Professor of Medicine, Dana-Farber Cancer Institute
Supervised research employment among cancer survivors resulting in a publication.
- 2007-2008 Irwin Lee, MD Staff Physician, Santa Rosa Medical Center, Santa Rosa, CA
Supervised research during a radiation oncology residency, resulting in a publication.
- 2007- Rachel Freedman, MD Assistant Professor of Medicine, Dana-Farber Cancer Institute
Supervised work during fellowship and junior faculty with numerous manuscripts, mentor for career development award.
- 2009 Signe Smith (Nielsen) Associate Professor, University of Copenhagen
Jervelund, PhD
Supervised work during doctoral program, 1 manuscript.
- 2009-2010 Vinod Nambudiri, MD Assistant Professor, Brigham and Women's Hospital
Supervised work during medical school thesis with 2 manuscripts.
- 2009-2010 Neal Chaterjee, MD Research Fellow, Massachusetts General Hospital
Supervised research during 4th year, 1 manuscript.
- 2008-2010 Christine Chung, MD Radiation Oncologist
Supervised research in a co-mentorship role during residency, 1 manuscript.
- 2009- Elyse Park, PhD Associate Professor of Psychology, Massachusetts General Hospital
Supervised research as a junior faculty member with several publications
- 2010-2012 Selwyn Rogers, Jr. MD Professor of Surgery, University of Chicago
Supervised research as a junior faculty member with 2 first-author publications
- 2010-2012 Jennifer Ligibel, MD Assistant Professor, Dana-Farber Cancer Institute
Supervised research as a junior faculty member with 2 first-author publications
- 2010-2013 Paola Friedrich-Medina Pediatric Oncology Fellow
Member of Fellowship Scholarship Oversight Committee
- 2010- Alexi Wright, MD Assistant Professor of Medicine, Dana-Farber Cancer Institute
Supervised research as junior faculty member, primary mentor on K application, several manuscripts published, others in progress
- 2010-2014 Gaby Soriano, MD Instructor in Medicine, Massachusetts General Hospital
Supervised research during residency, 1 manuscript published.

2010-2013 Glen Taksler, PhD Assistant Professor, Case Western Reserve Institute
Supervised research before and during fellowship resulting in 3 manuscripts

2011-2014 Michael Liu, MD, PhD Statistician, Harvard Medical School
Supervised research during postdoctoral fellowship. 5 manuscripts published.

2011-2012 Alicia Morgans, MD Assistant Professor, Vanderbilt Medical School
Supervised research during fellowship, 1 manuscript published

2011- Stacy Gray, MD Associate Professor, City of Hope
Supervised research as junior faculty, several manuscripts

2011- Stacie Dusetzina, PhD Associate Professor, Vanderbilt University Medical Center
Supervised research during residency, numerous manuscripts published.

2011-2014 Cleo Samuel, PhD Assistant Professor, University of North Carolina Medical School
Doctoral thesis committee member, 2 manuscripts published

2012- Lydia Pace, MD, MPH Assistant Professor of Medicine, Brigham and Women's Hospital
Supervised research during fellowship, numerous manuscripts; primary mentor for career development award

2012- Melissa Wachterman, Assistant Professor of Medicine, Brigham and Women's Hospital and
MD, MPH Boston Veterans Affairs Medical Center
Supervised research as junior faculty, several manuscripts, primary mentor for K award.

2013- Robert Griffiths, PhD Senior Health Economist, Health Economics Center of Excellence at
Boston Scientific
Member of dissertation committee, several papers published

2014-2015 Kenneth Kehl, MD Instructor in Medicine, Dana-Farber Cancer Institute
Supervised research in year before oncology fellowship, 5 papers published

2015-2017 Lisa Rotenstein Medical Resident, Brigham and Women's Hospital
Supervised research as medical student, Paper published

2015-2018 Aaron Winn Assistant Professor, Medical College Wisconsin
Member of dissertation committee, 2 manuscripts published, others in progress

2014-2019 Loren Saulsbery Assistant Professor, University of Chicago
Member of dissertation committee, Paper published

2015-2019 Jessica Roydhouse Researcher, Federal Drug Administration
Supervised research as a doctoral student at Brown, several papers published

2015- Alejandro Rauh-Hain Assistant Professor, MD Anderson Cancer Center
Supervised research during Program in Cancer Outcomes Research Training Fellowship, 2 papers published

2015- Katie Greenzang Instructor, Dana-Farber Cancer Institute
Member of Fellowship Scholarship Oversight Committee 2015-2018; Co-mentor of K award 2019-2023

2016- Gabriel Brooks Assistant Professor, Dartmouth Medical School
Supervised research as junior faculty, Papers published and in progress

2016-2019 Hyosin Dawn Kim Research Scientist, University of Oregon
Member of dissertation committee, Paper published, others in progress

2017- Alex Melamed Fellow, Massachusetts General Hospital
Supervised research, papers in progress

2017- Tracy Belthea Assistant Professor, Boston Medical Center
Member of K award Mentoring Committee

2018- Christine Gunn Assistant Professor, Boston Medical Center
Member of K award Advisory Panel

Formal Teaching of Peers

2006	Lecture: Breast Cancer Treatment of Older Women: Are there Disparities? Boston, MA	Single presentation Dana-Farber Cancer Institute
Breast Cancer: Current Challenges and New Horizons		
2012	Lecture: Recent Highlights in Palliative Care Research Cambridge, MA	Single presentation Harvard Medical School
Practical Aspects of Palliative Care		
2014	Lecture: Financial and Employment Issues for Cancer Survivors Boston, MA	Single presentation Brigham and Women’s Hospital
Cancer Survivorship: Optimizing Care and Outcomes		
2015	Lecture: Care of the Cancer Survivor Boston, MA	Single presentation Brigham and Women’s Hospital
36th Annual Office Practice of Primary Care Medicine CME		
2015	Lecture: Mammographic screening: trends and trade-offs from a public health perspective Boston, MA	Single presentation Dana-Farber Cancer Institute
Update on Breast and Ovarian Cancer		
2016	Lecture: Mammographic screening: trends and trade-offs from a public health perspective Boston, MA	Single presentation Dana-Farber Cancer Institute
Update on Women’s Cancers		
2018, 2019	Lecture: Innovation spotlight: Oncology care	Single presentation
Executive Education Program for the International Foundation of Employee Benefit Plans		

Local Invited Presentations

No presentations below were sponsored by outside entities.

1997	Physician Beliefs About Informal or ‘Curbside’ Consultation	Quality of Care Research Seminar Series Harvard School of Public Health, Boston, MA
1999	Surgical Treatment for Early Stage Breast Cancer—Effect of Provider Specialty on Treatment and Satisfaction	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2000	The State of Our Cancer Care System	National Council for Harvard Medicine Meeting Harvard Medical School, Boston, MA
2001	How is Outpatient Care in the Two Years Before Breast Cancer Diagnosis Associated with Stage at Diagnosis?	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2002	Consultation with a Medical Oncologist Before Surgery and Type of Surgery among Elderly Women with Early-Stage Breast Cancer	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2004	Health Status of Older Cancer Survivors	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2004	Taking Charge: Patient Advocacy for Yourself or a Loved One, “The Patient-Physician Relationship”	Longwood Seminar Harvard Medical School, Boston, MA
2005	Medicare Part D and the Medicare Modernization Act	Council for Harvard Medicine Meeting Harvard Medical School, Boston, MA
2006	Physicians Reports’ of Discussing End-of-Life Options for Terminally Ill Cancer Patients	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2006	Diabetes and Cardiovascular During Androgen Deprivation Therapy for Prostate Cancer	Massachusetts General Hospital Oncology Grand Rounds Massachusetts General Hospital, Boston, MA
2006	Financial, Insurance, and Employment among Older Long-Term Cancer Survivors	Boston Area Cancer Survivors Meeting Dana-Farber Cancer Institute, Boston, MA

2008	Cancer Patients' Roles in Treatment Decision Making: Are they Influenced by Characteristics of the Decision?	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2008	Physicians and Variations in End-of-Life Care for Patients with Cancer	Palliative Care Ground Rounds Massachusetts General Hospital, Boston, MA
2009	Cancer Care in High- versus Low-Spending Areas in the VA and the Private Sector	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2010	A National Study of the Quality of Cancer Care in the Veterans Health Administration and the Private Sector	Program in Cancer Outcomes Research Training Massachusetts General Hospital, Boston, MA
2010	The Role of Providers in Breast Cancer Treatment Disparities	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2011	Hospital Choice and Breast Cancer Treatment Disparities	Breast Rounds Massachusetts General Hospital, Boston, MA
2012	Diabetes Control During Androgen Deprivation Therapy Among Diabetic Men with Prostate Cancer	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2012	Effect of Massachusetts Health Insurance Reform on Mammography Use and Breast Cancer Stage at Diagnosis	Mongan Institute for Health Policy Research Seminar Massachusetts General Hospital, Boston, MA
2013	Understanding of Prognosis Among Patients with Lung and Colorectal Cancer	Clinical Outcomes and Policy Research Seminar Dana-Farber Cancer Institute, Boston, MA
2013	The CanCORS Study: What We Have Learned and What Can We Still Learn About End of Life and Palliative Care?	Radcliffe Seminar in Palliative Care Research The Radcliffe Institute, Cambridge, MA
2014	The Affordable Care Act: The Effects of Health Care Reform on Vulnerable Populations – Session Moderator	Serving the Underserved Retreat Harvard Medical School, Boston MA
2014	What's New in Cancer Outcomes Research, Discussant	Dana-Farber/Harvard Cancer Center Dana-Farber and Harvard Medical School, Boston MA
2014	Understanding Variations in Intensity of End of Life Care	Dana-Farber/Harvard Cancer

		Center Outcomes Seminar Dana-Farber Cancer Institute, Boston, MA
2014	Communicating with Patients about the Benefits and Harms of Breast Cancer Screening	Breast Oncology Seminar Series Dana-Farber Cancer Institute, Boston MA
2015	Individualizing Breast Cancer Screening Decisions	Department of Medicine Grand Rounds Brigham and Women's Hospital, Boston MA
2016	Discussant, Pitfalls and Challenges in Diagnosing Breast Cancer	Primary Care Morbidity & Mortality Brigham and Women's Hospital, Boston MA
2016	Diffusion of Bevacizumab Across Oncology Practices	Dana-Farber/Harvard Cancer Center Outcomes Seminar Dana-Farber Cancer Institute, Boston, MA
2016	Trends in Cancer Screening	Cancer 2025 Symposium Harvard Medical School, Boston, MA
2016	Diffusion of Bevacizumab Across Oncology Practices	Mongan Health Policy Institute Seminar Series Massachusetts General Hospital, Boston, MA
2017	Diffusion of Bevacizumab Across Oncology Practices	Oncology Interest Group Harvard Medical School, Boston, MA
2017	Clinical vs. Machine-Learning Algorithms to Predict Cancer Stage Using Claims Data for Patients Undergoing Chemotherapy	Dana-Farber/Harvard Cancer Center Outcomes Seminar Dana-Farber Cancer Institute, Boston, MA
2017	Research to Promote Health System-Level Change, Panel Moderator	Burke Global Health Fellowship Research Seminar Harvard Global Health Initiative, Cambridge, MA
2017	Clinical and Machine-Learning Algorithms to Predict Cancer Stage Using Claims Data for Cancer Patients	Department of Population Science Research Seminar Harvard Medical School, Boston, MA
2018	Understanding Factors Contributing to Geographic Variation in Intensity of End of Life Care Expenditures	Dana-Farber/Harvard Cancer Center Outcomes Seminar Dana-Farber Cancer Institute, Boston, MA
2018	Celebration of Promotions-A View from the Promotions and Reappointments Committee	Harvard Medical School Promotion Celebration Harvard Medical School, Boston, MA

2018	Keynote Lecture: From Mentor to Mentee: Shaping a Successful Transition	Centers for Faculty Development and Diversity 2018 Mentoring Course Harvard Medical School, Boston, MA
2019	The Oncology Care Model: Evaluation and Early Findings	Dana-Farber/Harvard Cancer Center Outcomes Seminar Dana-Farber Cancer Institute, Boston, MA
2019	SHARE: Sharing Goals of Care	Shared Decision Making Seminar Massachusetts General Hospital, Boston, MA
2020	Measuring Quality of Oncology Care Across Oncology Practices	Dana-Farber/Harvard Cancer Center Outcomes Seminar Dana-Farber Cancer Institute, Boston, MA

Report of Regional, National and International Invited Teaching and Presentations

Regional

No presentations below were sponsored by outside entities.

2000	Quality of Breast Cancer Care—Results from a Study in Massachusetts and Minnesota	Faulkner Hospital Multidisciplinary Breast Cancer Conference Faulkner Hospital, Boston, MA
2014	Racial/Ethnic Disparities in Cancer Care	Global Youth Summit on the Future of Medicine Brandeis University, Waltham, MA

National

No presentations below were sponsored by outside entities.

1997	Use of Hormone Replacement Therapy in a National Sample of Postmenopausal Women Plenary session Society of General Internal Medicine Annual Meeting Washington, D.C.
1997	Use of Hormone Replacement Therapy in a National Sample of Postmenopausal Women Invited Presentation National Research Service Award Trainees' Research Conference Chicago, IL
1998	Physician Beliefs About Informal or 'Curbside' Consultation Invited Presentation National Research Service Award Trainees' Research Conference

Washington, D.C

- 2000 How are Patients' Experiences during the Clinical Encounter Related to Trust and Considering Changing Physicians?
Invited Presentation
Society of General Internal Medicine Annual Meeting
Boston, MA
- 2000 Surgical Treatment for Early Stage Breast Cancer—Effect of Provider Specialty on Treatment and Satisfaction
Invited Presentation
Academy Health Annual Meeting
Nashville, TN
- 2004 Do Increases in Managed Care Market Share Influence Quality of Cancer Care in the Fee-for-Service Setting?
Invited Presentation
Academy Health Annual Meeting
San Diego, CA
- 2005 Medicare Part D and the Medicare Modernization Act
Invited Presentation
Harvard Club of New York Seminar Series
New York, NY
- 2005 Factors Related to Underuse of Surveillance Mammography
Invited Presentation
Society of General Internal Medicine Annual Meeting
New Orleans, LA
- 2005 Surveillance Testing after Breast Cancer Diagnosis
Invited Presentation
Society of General Internal Medicine Annual Meeting
New Orleans, LA
- 2006 Physician Factors Associated with Discussions about End-of-Life Care
Invited Presentation
Society of General Internal Medicine Annual Meeting
Los Angeles, CA
- 2006 Quality of Diabetes Care for Cancer Survivors with Diabetes
Invited Presentation
Society of General Internal Medicine Annual Meeting
Los Angeles, CA
- 2006 Physician Factors Associated with Discussions about End-of-Life Care
Invited Presentation
Academy Health Annual Meeting
Seattle, WA

- 2007 Physicians and Variations in Cancer Care
Invited Lecture
Dartmouth Institute for Health Policy and Clinical Practice Seminar
Hanover, NH
- 2008 Physicians and Variations in Cancer Care
Invited Lecture
Pennsylvania State University Seminar
University Park, PA
- 2008 Cancer Patients' Roles in Treatment Decision Making: Are They Influenced by
Characteristics of the Decision?
Invited Presentation
Society of General Internal Medicine Annual Meeting
Pittsburgh, PA
- 2008 Caring for Breast Cancer Survivors
Invited Lecture
Society of General Internal Medicine Annual Meeting
Pittsburgh, PA
- 2008 Cancer Patients' Roles in Treatment Decision Making: Are they Influenced by
Characteristics of the Decision?
Invited Presentation
Academy Health Annual Meeting
Washington, D.C.
- 2009 Aggressiveness of End-of-Life Care in the Veterans Health Administration versus the
Private Sector
Invited Presentation
Society of General Internal Medicine Annual Meeting
Miami, FL
- 2009 Prevention of Treatment and Disease-Related Morbidity During Androgen Deprivation
Therapy
Invited Presentation
Prostate Cancer Foundation Annual Meeting
Lake Tahoe, NV
- 2009 Using SEER-Medicare Data for Comparative Effectiveness Research
Invited Presentation
Meeting of the Board of Scientific Advisors, National Cancer Institute
Bethesda, MD
- 2009 Cancer Care in the Veterans Health Administration versus the Private Sector
Invited Lecture
Robert Wood Johnson Clinical Scholars Program Seminar, University of Michigan
Ann Arbor, MI

- 2010 A National Study of the Quality of Cancer Care in the Veterans Health Administration and the Private Sector
Invited Presentation
Society of General Internal Medicine Annual Meeting
Minneapolis, MN
- 2010 Quality of Care and Patient Safety
Discussant for Abstract Session
Society of General Internal Medicine Annual Meeting
Minneapolis, MN
- 2010 A National Study of the Quality of Cancer Care for Older Cancer Patients in the Veterans Health Administration Versus Fee-for-Service Medicare
Invited Presentation
Academy Health Annual Meeting
Boston, MA
- 2010 Aggressiveness of End-of-Life Care for Older Cancer Patients in the Veterans Health Administration Versus Fee-for-Service Medicare
Invited Presentation
Academy Health Annual Meeting
Boston, MA
- 2010 Variations in Primary Prostate Cancer Treatment in the Veterans Health Administration Versus the Private Sector
Invited Presentation
Academy Health Annual Meeting
Boston, MA
- 2010 Incentives Directed to Physicians
National Cancer Institute Provider Survey Methods Workshop
Invited Presentation
Bethesda, MD
- 2010 The Role of Providers in Breast Cancer Disparities
Invited Plenary Presentation
San Antonio Breast Cancer Conference
San Antonio, TX
- 2011 The Quality of Cancer Care in the Veterans Health Administration
Invited Lecture
UNC Lineberger Comprehensive Cancer Center Outcomes Research Seminar
Raleigh, NC
- 2011 Are Patient Preferences Incorporated into Treatment Decisions?
Invited Presentation
National Coalition for Cancer Survivorship and Institute of Medicine National Cancer Policy Forum Workshop: Patient-Centered Cancer Treatment Planning: Improving the

Quality of Oncology Care
Washington, DC

- 2011 Importance of Defining Stage for the Purposes of Health Services Research
Invited Presentation
American Joint Committee on Cancer and American Cancer Society summit: *Beyond Cancer Staging: Characterizing Cancer for Clinical Practice & Population Surveillance*
Chicago, IL
- 2011 Racial Disparities in Breast Cancer Stage at Diagnosis in the Mammography Era
Invited Presentation
Society of General Internal Medicine Annual Meeting
Phoenix, AZ
- 2011 Secondary Data Analysis R01s: A Route to Success
Invited Workshop
Society of General Internal Medicine Annual Meeting
Phoenix, AZ
- 2011 Understanding Delivery of Cancer Care in the Department of Veterans Affairs
Invited Lecture
Leonard Davis Institute of Health Economics Research Seminar, University of Pennsylvania
Philadelphia, PA
- 2011 Measuring Quality of Care: The Case of Cancer in the Veterans Health Administration
Invited Lecture
University of Iowa Department of Epidemiology Seminar
Iowa City, IA
- 2011 Use of Geographic Variation to Infer Treatment Effectiveness: Surgery for Early Stage Lung Cancer
Panel Discussant
University of Iowa "Challenges in Comparative Effectiveness Research" Panel
Iowa City, IA
- 2013 A National Evaluation of the Quality of Cancer Care in the Veterans Health Administration
Invited Lecture
The Dartmouth Institute
Hanover, NH
- 2013 Real World Treatment Patterns and Outcomes
Poster Discussant
American Society of Clinical Oncology 2013 Annual Meeting
Chicago, IL
- 2013 Studying Quality and Outcomes of Cancer Care
Hematology/Oncology Grand Rounds

Warren Alpert Medical School
Providence RI

- 2013 Screening for Breast Cancer and the US Preventive Services Task Force Recommendations
Grand Rounds
Beth Israel Medical Center
New York, NY
- 2014 What We Know About Tumor Boards: Research from the U.S
Invited Presentation
American Society of Clinical Oncology 2013 Annual Meeting
Chicago, IL
- 2016 Diffusion of Bevacizumab Across Oncology Practices
Invited Presentation
Cancer Outcomes Research Group, Johns Hopkins University School of Medicine
Baltimore, MD
- 2016 Individualizing Breast Cancer Screening Decisions
Medicine Grand Rounds
Johns Hopkins University School of Medicine
Baltimore, MD
- 2016 Assessing the Impact of Colonoscopy Complications on use of Colonoscopy among
Primary Care Physicians and Other Connected Physicians
Invited Presentation
Society of General Internal Medicine Annual Meeting
Hollywood, FL
- 2016 Cancer Research Poster Walk and Talk
Discussant and Invited Professor of Cancer Research
Society of General Internal Medicine Annual Meeting
Hollywood, FL
- 2017 Diffusion of Bevacizumab Across Oncology Practices
Invited Presentation
Health Services Research Speaker Seminar Series, Brown University School of Public
Health Seminar Series
Providence, RI
- 2017 Understanding Factors Contributing to Geographic Variations in End-of-Life Care
Intensity
Invited Presentation
Palliative Care Research Consortium Investigators Meeting
Denver, CO
- 2018 Understanding Variations in Intensity of Care at the End of Life
Invited Presentation and Visiting Professor
Comprehensive Cancer Center Population Sciences Seminar Series, University of

Michigan Comprehensive Cancer Center
Ann Arbor, MI

- 2018 An Evaluator's Perspective on the Oncology Care Model
Invited Presentation for Panel: Innovative Payment Models and Innovations in Cancer Care Delivery
ASCO Annual Meeting Economics of Cancer Care Precourse
Chicago, IL
- 2018 Understanding Factors Contributing to Geographic Variations in End-of-Life Care Expenditures
Invited Presentation
ASCO Annual Meeting
Chicago, IL
- 2018 More Good Days: A Pilot Study to Improve Discussions of Goals of Care for Patients with Advanced-Stage Cancer
Invited Presentation
National Palliative Care Research Center Annual Meeting
San Diego, CA
- 2019 Research Using Registries
Invited Presentation
Society of General Internal Medicine Annual Meeting
Washington, DC
- 2019 Using Administrative Data to Understand Care Delivery
Invited Presentation
ASCO Annual Meeting
Chicago, IL
- 2019 Understanding Area-Level Variations in Cancer Care Delivery
Invited Presentation
Alliance of Dedicated Cancer Centers (ADCC) Quality Committee National Meeting
Boston, MA
- 2019 Application and Measurement of Quality in Cancer Care Delivery Systems: Challenges & Lessons Learned
Invited Panelist
National Comprehensive Cancer Center Policy Summit: Defining, Measuring, and Applying Quality in an Evolving Health Policy Landscape and the Implications for Cancer Care
Washington, DC
- 2020 Key Considerations in Adopting a Value-Based Payment Model
Invited Speaker
National Comprehensive Cancer Center Annual Conference [scheduled; converted to video presentation by NCCN due to coronavirus related travel restrictions]
Orlando, FL

- 2020 Measuring Quality Across Oncology Practices
Invited Speaker, Virtual Presentation
ASCO Measures Steering Group
Arlington, VA
- 2020 Opportunities for System-level Redesign and Policy Change
Invited Speaker, Virtual Presentation
National Cancer Policy Forum Workshop on Addressing the Adverse Consequences of
Cancer Treatment
Washington, DC

International

One presentation below* was sponsored by an outside entity and the name of the sponsor is noted.

- 2007 Factors Affecting Influential Discussions Among Physicians: A Social Network Analysis
of a Primary Care Practice
Invited Presentation
Society of General Internal Medicine Annual Meeting
Toronto, Ontario, Canada
- 2007 Primary and Specialty Care before Death and Hospice Enrollment among Women with
Advanced Breast Cancer
Invited Presentation
Society of General Internal Medicine Annual Meeting
Toronto, Ontario, Canada
- 2009 Understanding Variations in End-of-Life Care for Cancer Patients
Invited Presentation
Oncology Grand Rounds
Sheba Medical Center Cancer Center
Tel Hashomer, Israel
- 2013 Cancer Survivors: Key Advocates for a Better Future
Invited Presentation
Breast Cancer and Survival: Challenges and Responses International Conference
Mexico National Rehabilitation Institute
Mexico City, Mexico
- 2013 Caring for Breast Cancer Survivors: What Can we Learn from the US and Canada?
Invited Presentation
Breast Cancer and Survival: Challenges and Responses International Conference
Mexico National Rehabilitation Institute
Mexico City, Mexico
- 2014 Cardiovascular Disease and Diabetes with Androgen Deprivation Therapy—the US
Perspective
Invited Presentation and Meeting Chair

Expert Meeting on Cardiovascular Risk and Androgen Deprivation Therapy
 Ferring Pharmaceuticals (honorarium and travel expenses declined)*
 Copenhagen, Denmark

2014 Racial/Ethnic Disparities in Cancer Care: Lessons from the U.S. CanCORS study
 Invited Presentation
 Department of Public Health, Section of Health Services Research
 University of Copenhagen
 Copenhagen, Denmark

2014 Understanding Variations in Intensity of End-of-Life Cancer Care
 Invited Presentation
 Institute for Clinical and Evaluative Sciences Research Rounds
 Sunnybrook Health Sciences Center
 Toronto, Canada

2017 Current Practices for Screening and Early Detection of Breast Cancer in the U.S.
 Invited Presentation
 Butaro Cancer Center of Excellence Early Detection Team Meeting
 Kigali, Rwanda

2018 Learning from Research on Cancer Disparities in the U.S.
 Invited Speaker for Plenary Panel: The Burden of Cancer Due to Inequalities and Its
 Likely Causes
 National Cancer Research Institute
 Glasgow, United Kingdom

Report of Clinical Activities and Innovations

Current Licensure and Certification

1995 State of Massachusetts
 1996 Diplomate, American Board of Internal Medicine, recertified 2006, 2016

Practice Activities

	Type of Activity	Setting of Practice	Description
1993-	Outpatient primary care practice	Brigham Internal Medicine Associates, Brigham and Women's Hospital	1 scheduled session per week and urgent visits throughout the week
1998-	Outpatient primary care preceptor	Brigham Internal Medicine Associates, Brigham and Women's Hospital	Weekly session supervising care for patients of 4-5 residents
1998-2014	Inpatient care attending	General Medical Service, Brigham and Women's Hospital	2-4 weeks per year

Report of Education of Patients and Service to the Community

Report of Scholarship

Peer reviewed publications in print or other media

Original Research Investigations

1. **Keating NL**, Zaslavsky AM, Ayanian JZ. Physicians' experiences and beliefs regarding informal consultation. *JAMA* 1998; 280:900-904.
2. **Keating NL**, Cleary PD, Rossi AS, Zaslavsky AM, Ayanian JZ. Use of hormone replacement therapy by postmenopausal women in the United States. *Ann Intern Med* 1999; 130:545-553.
3. **Keating NL**, Zaslavsky AM, Ayanian JZ. Physicians' reports of expertise in clinical practice. *J Gen Intern Med* 2000; 15:417-420.
4. Dudley RA, Landon BE, Rubin HR, **Keating NL**, Medlin CA, Luft HS. Assessing the relationship between quality of care and the characteristics of health care organizations. *Med Care Res Rev* 2000; 57 (Suppl 2):116-135.
5. **Keating NL**, Weeks JC, Landrum MB, Borbas C, Guadagnoli E. Discussion of treatment options for early-stage breast cancer: effect of provider specialty on type of surgery and satisfaction. *Med Care* 2001; 39:681-691.
6. **Keating NL**, Green D, Kao A, Gazmararian JA, Wu V, Cleary PD. How are patients' specific ambulatory care experiences related to trust, satisfaction, and considering changing physicians? *J Gen Intern Med* 2002;17:29-39.
7. **Keating NL**, Guadagnoli E, Landrum MB, Borbas C, Weeks JC. Treatment decision making in early-stage breast cancer: should surgeons match patients' desired level of involvement? *J Clin Oncol* 2002; 20:1473-1479.
8. Polsky D, **Keating NL**, Weeks JC, Schulman KA. The utility of choice: options for breast cancer treatment. *Med Care* 2002; 40:1068-1079.
9. Newhouse JP, Buchanan JL, Bailit HL, Blumenthal D, Buntin MB, Caudry D, Cleary PD, Epstein AM, Fitzgerald P, Frank RG, Gorski H, Huskamp HA, **Keating NL**, Landon BE, McNeil BJ, Palmer RH, Rosenthal MB, Zaslavsky AM. Managed care: an industry snapshot. *Inquiry* 2002; 39:207-220.
10. **Keating NL**, Weeks JC, Borbas C, Guadagnoli E. Treatment of early stage breast cancer: do surgeons and patients agree regarding whether treatment alternatives were discussed? *Breast Cancer Res Treat* 2003; 79:224-231.
11. **Keating NL**, Landrum MB, Ayanian JZ, Winer EP, Guadagnoli E. Consultation with a medical oncologist before surgery and type of surgery among elderly women with early-stage breast cancer. *J Clin Oncol*. 2003; 21:4532-4539.
12. **Keating NL**, Landrum MB, Landon BE, Ayanian JZ, Borbas C, Guadagnoli E. Measuring the quality of diabetes care—comparison of administrative data and medical record data. *Health Services Res* 2003; 38:1529-1545.

13. **Keating NL**, Landon BE, Ayanian JZ, Borbas C, Guadagnoli E. Practice, clinical management, and financial arrangements of practicing generalists: are they associated with satisfaction? *J Gen Intern Med* 2004; 19:410-418.
14. **Keating NL**, Gandhi TK, Orav EJ, Bates DW, Ayanian JZ. Patient characteristics and experiences associated with trust in specialist physicians. *Arch Intern Med* 2004; 164:1015-1020.
15. **Keating NL**, Landrum MB, Landon BE, Ayanian JZ, Borbas C, Wolf R, Guadagnoli E. The influence of physicians' practice management strategies and financial arrangements on quality of care among patients with diabetes. *Med Care* 2004; 42:829-839.
16. Persell SD, **Keating NL**, Landrum MB, Landon BE, Ayanian JZ, Borbas C, Guadagnoli E. Relationship of diabetes-specific knowledge to self-management activities, ambulatory quality of care, and metabolic outcomes. *Prev Med* 2004; 39:746-752.
17. **Keating NL**, Landrum MB, Ayanian JZ, Winer EP, Guadagnoli E. The association of ambulatory care with breast cancer stage at diagnosis among Medicare beneficiaries. *J Gen Intern Med.* 2005; 20:38-44.
18. **Keating NL**, Landrum MB, Meara E, Ganz PA, Guadagnoli E. Do increases in managed care market share influence quality of care in the fee-for-service sector? *J Natl Cancer Inst.*2005; 97:257-264.
19. Huskamp HA, **Keating NL**. The new Medicare drug benefit: formularies and their potential effects on access to medications. *J Gen Intern Med* 2005; 20:662-665.
20. **Keating NL**, Nørredam M, Landrum MB, Huskamp HA, Meara E. Physical and mental health status of older long-term cancer survivors. *J Am Geriatr Soc* 2005; 53:2145-2152.
21. **Keating NL**, Landrum MB, Guadagnoli E, Winer EP, Ayanian JZ. Factors related to underuse of surveillance mammography among breast cancer survivors. *J Clin Oncol* 2006; 24:85-94.
22. **Keating NL**, Landrum MB, Meara E, Ganz PA, Guadagnoli E. Managed care market share and primary treatment for cancer. *Health Serv Res*, 2006; 41:9-22.
23. **Keating NL**, Herrinton LJ, Zaslavsky AM, Liu L, Ayanian JZ. Variations in hospice use among cancer patients. *J Natl Cancer Inst.* 2006; 98:1053-1059.
24. Grabowski DC, Stevenson DG, Huskamp HA, **Keating NL**. The influence of Medicare home health payment incentives: does payer source matter? *Inquiry* 2006; 43:135-149.
25. **Keating NL**, O'Malley AJ, Smith MR. Diabetes and cardiovascular disease during androgen deprivation therapy for prostate cancer. *J Clin Oncol.* 2006; 24:4448-4456.
26. Huskamp HA, Stevenson DG, Donahue JM, Newhouse JP, **Keating NL**. Coverage and prior authorization of psychotropic drugs under Medicare Part D. *Psych Services* 2007; 58:308-310.
27. **Keating NL**, Landrum MB, Guadagnoli E, Winer EP, Ayanian JZ. Surveillance testing among survivors of early-stage breast cancer. *J Clin Oncol* 2007; 25:1074-1081.
28. **Keating NL**, Landrum MB, Landon BE, Ayanian JZ, Borbas C, Guadagnoli E. The influence of cost containment strategies and physicians' financial arrangements on patients' trust and satisfaction. *J Ambul Care Manage* 2007; 30:92-104.

29. Stevenson DG, Huskamp HA, **Keating NL**, Newhouse JP. Medicare Part D and nursing home residents. *J Am Geriatr Soc* 2007; 55:1115-1125.
30. **Keating NL**, Ayanian JZ, Cleary PD, Marsden PV. Factors affecting influential discussions among physicians: a social network analysis of a primary care practice. *J Gen Intern Med* 2007; 22:794-798.
31. Rosenthal MB, Landrum MB, Huskamp HA, Meara E, Conti RM, **Keating NL**. Using performance data to identify preferred hospitals. *Health Serv Res* 2007. 42:2109-2119.
32. **Keating NL**, Zaslavsky AM, Herrinton LJ, Selby JV, Wolf RE, Ayanian JZ. Quality of diabetes care among cancer survivors with diabetes. *Med Care* 2007; 45:869-875.
33. Stevenson DG, Huskamp HA, Grabowski, DG, **Keating NL**. Differences in hospice care between home and institutional settings. *J Palliat Med* 2007;10:1040-1047.
34. Landrum MB, Meara E, Chandra A, Guadagnoli E, **Keating NL**. Is spending more always wasteful? The appropriateness of care and outcomes among colorectal cancer patients. *Health Aff* 2008; 27: 159-168.
35. **Keating NL**, Landrum MB, Guadagnoli E, Winer EP, Ayanian JZ. Care in the months before death and hospice enrollment among older women with advanced breast cancer. *J Gen Intern Med* 2008; 23:11-18.
36. **Keating NL**, O'Malley AJ, McNaughton Collins M, Oh WK, Smith MR. Use of androgen deprivation therapy for metastatic prostate cancer in older men. *BJU Int* 2008; 101:1077-1083.
37. Huskamp HA, Newhouse JP, Norcini JC, **Keating NL**. Per diem payment and variation in patient-level hospice costs. *Inquiry* 2008; 45:232-244.
38. Huskamp HA, Stevenson DG, **Keating NL**, Newhouse JP. Prescription drug claim rejections for nursing home residents under Medicare Part D. *Health Aff* 2008; 2:560-567.
39. Hu JC, Wang Q, Pashos CL, Lipsitz S, **Keating NL**. Utilization and outcomes of laparoscopic radical prostatectomy. *J Clin Oncol* 2008; 26:2278-2284.
40. Gandhi TK, **Keating NL**, Ditmore M, Kiernan D, Johnson R, Burdick E, Hamann C. Improving referral communication using a referral tool within an electronic medical record. *AHRQ Advances in Patient Safety* 2008; 3:63-74.
41. **Keating NL**, Zaslavsky AM, Goldstein J, West DW, Ayanian JZ. Randomized trial of \$20 vs. \$50 incentives to increase physician survey response rates. *Med Care* 2008;46:878-81.
42. **Keating NL**, Landrum MB, Klabunde CN, Fletcher RH, Rogers SO, Doucette WR, Tisnado D, Clauser S, Kahn KL. Adjuvant chemotherapy for stage III colon cancer: do physicians agree about the importance of patient age and comorbidity? *J Clin Oncol* 2008; 26:2532-2537.
43. Prasad SM, **Keating NL**, Wang Q, Pashos CL, Lipsitz S, Hu JC. Variations in surgeon volume and use of pelvic lymph node dissection with open and minimally invasive radical prostatectomy. *Urology* 2008; 72:647-52.
44. **Keating NL**, Stoeckert KA, Regan MM, DiGianni L, Garber JE. Physicians' reports about BRCA1/2 testing in community settings. *J Clin Oncol* 2008; 26:5789-5796.

45. Freedman RA, He Y, Winer EP, **Keating NL**. Trends in racial and age disparities in definitive locoregional therapy of early-stage breast cancer. *J Clin Oncol* 2009; 27:713–719.
46. Grabowski DC, Stevenson DG, Huskamp HA, **Keating NL**. Ownership status and length of home health care enrollment. *J Aging Soc Policy* 2009; 21:130-143.
47. Huskamp HA, **Keating NL**, Malin JL, Zaslavsky AM, Weeks JC, Earle CC, Teno JN, Virnig BA, Kahn KL, He Y, Ayanian JZ. Discussions with physicians about hospice among patients with metastatic lung cancer. *Arch Intern Med* 2009; 169:954-962.
48. Hassett M, O'Malley AJ, **Keating NL**. Factors influencing changes in employment among women with newly diagnosed breast cancer. *Cancer* 2009; 115:2775-82.
49. **Keating NL**, Kouri E, He Y, Weeks JC, Winer EP. Racial differences in definitive breast cancer surgery: are they explained by the hospitals where patients undergo surgery? *Med Care* 2009; 47:765-73.
50. Lee IH, Hayman JA, Landrum MB, Tepper J, Tao ML, Goodman KA, **Keating NL**. Treatment recommendations for locally advanced, non-small-cell lung cancer: the influence of physician and patient factors. *Int J Radiat Oncol Biol Phys* 2009; 74(5):1376-84.
51. Klabunde C, Ambs A, **Keating NL**, He Y, Doucette W., Tisnado D, Clauser S, Kahn KL. The role of primary care physicians in the management of lung and colorectal cancer patients. *J Gen Intern Med* 2009; 24:1029-1036.
52. Norredam M, Meara E, Landrum MB, Huskamp HA, **Keating NL**. Financial status, employment, and insurance among older cancer survivors. *J Gen Intern Med* 2009; 24 (Suppl 2):S438-S445.
53. Rogers SO, Ayanian JZ, Ko CY, Kahn KL, Zaslavsky AM, Sandler RS, **Keating NL**. Surgeons' volume of colorectal cancer procedures and collaborative decision-making about adjuvant therapies. *Ann Surgery* 2009; 250:895-900.
54. Hu JC, Gu X, Lipsitz SR, Barry MJ, D'Amico A, Fowler FJ, Weinberg AC, **Keating NL**. Comparative effectiveness of minimally invasive versus open radical prostatectomy. *JAMA* 2009; 302:1557-1564.
55. **Keating NL**, O'Malley AJ, Freedland SJ, Smith MR. Diabetes and cardiovascular disease during androgen deprivation therapy: observational study of veterans with prostate cancer. *J Natl Cancer Inst* 2010. 102:39-46.
56. **Keating NL**, Landrum MB, Rogers SO, Baum SK, Virnig BA, Huskamp HA, Earle CC, Kahn KL. Physician factors associated with discussions about end-of-life care. *Cancer* 2010. 116:998-1006.
57. Fang F, **Keating NL**, Mucci L, Adami H-O, Stampfer M, Valdimarsdóttir U, Fall K. Immediate risk of suicide and cardiovascular death following a prostate cancer diagnosis in the Surveillance, Epidemiology, and End Results Program. *J Natl Cancer Inst* 2010. 102:307-314.
58. Lamont EB, Landrum MB, **Keating NL**, Archer L, Lan L, Strauss GM, Lilenbaum R, Niell HB, Maurer LH, Kosty MP, Miller AA, Clamon GH, Elias AD, McClay EF, Vokes EE, and McNeil BJ. Differences in clinical trial patients' attributes and outcomes according to enrollment setting. *J Clin Oncol* 2010. 28:215-21.

59. Oh WK, Landrum MB, Lamont EB, McNeil BJ, **Keating NL**. Does oral antiandrogen use before luteinizing hormone-releasing hormone therapy in patients with metastatic prostate cancer prevent clinical consequences of a testosterone flare? *Urology* 2010; 75:642-647.
60. Earle CC, Chretien Y, Morris C, Ayanian JZ, **Keating NL**, Polgreen LA, Wallace R, Ganz PA, Weeks JC. Employment and insurance coverage among survivors of lung cancer and colorectal cancer. *J Clin Oncol* 2010; 28:1700-1705.
61. **Keating NL**, Landrum MB, Lamont EB, Earle CC, Bozeman SR, McNeil BJ. End-of-life care for older cancer patients in the Veterans Health Administration versus the private sector. *Cancer* 2010; 116:3732-9.
62. Kouri EM, He Y, Winer EP, **Keating NL**. Influence of birthplace on breast cancer diagnosis and treatment for Hispanic women. *Breast Cancer Res Treat* 2010. 121:743–751.
63. Rogers SR, Gray SW, Landrum MB, Klabunde CN, Fletcher RH, Kahn KL, Clauser S, Tisnado D, Doucette W, **Keating NL**. Variations in surgeon treatment recommendations for lobectomy in early-stage non small cell lung cancer by patient age and comorbidity. *Ann Surg Oncol* 2010; 17:1581-1588.
64. Cooper Z, Meyers M, **Keating NL**, Gu X, Lipsitz SR, Rogers SO. Resident education and management of end of life care: the resident’s perspective. *J Surg Educat* 2010; 67:79-84.
65. Huskamp HA, Stevenson DG, Grabowski DC, Brennan E, **Keating NL**. Long and short hospice stays among nursing home residents at the end of life. *J Palliat Med* 2010. 13:957-964.
66. **Keating NL**, Landrum MB, Arora NK, Malin JL, Ganz PA, vanRyn M, Weeks JC. Cancer patients’ roles in treatment decisions: do characteristics of the decision influence roles? *J Clin Oncol* 2010. 28:4364-4370.
67. Wright AA, **Keating NL**, Balboni TA, Matulonis UA, Block SD, Prigerson HG. Place of death: associations with patients’ quality of life and bereaved caregivers’ mental health. *J Clin Oncol* 2010. 28:4457-4464.
68. Smith Nielsen S, He Y, Ayanian JZ, Lin Gomez S, Kahn KL, West DW, **Keating NL**. Quality of cancer care among foreign-born and US-born patients with lung or colorectal cancer. *Cancer* 2010; 116:5497-506.
69. **Keating NL**, Landrum MB, Brooks JM, Chrischilles EA, Winer EP, Wright K, Volya R. Outcomes following surgery for early-stage breast cancer in non-trial populations. *Br Can Res Treat* 2011;125:803-813.
70. Freedman RA, Virgo KS, He Y, Pavluck AL, Winer EP, Ward EM, **Keating NL**. The association of race/ethnicity, insurance status, and socioeconomic factors with breast cancer care. *Cancer* 2011; 117: 180-9.
71. Klabunde CN, **Keating NL**, Potosky AL, Ambs A, He Y, Hornbrook MC, Ganz PA. A population-based assessment of specialty physicians’ involvement in cancer clinical trials. *J Natl Cancer Inst* 2011; 103:384-397.
72. Lamont EB, Landrum MB, **Keating NL**, Bozeman SR, McNeil BJ. Evaluating colorectal cancer care in the Veterans Health Administration: How good are the data? *J Geriatric Oncol*. 2011; 2: 187-193.

73. **Keating NL**, Landrum MB, Lamont EB, Bozeman SR, Krasnow SH, Shulman LN, Brown JR, Earle CC, Oh WK, Rabin M, McNeil BJ. Quality of care for older patients with cancer in the Veterans Health Administration versus the private sector. *Ann Intern Med*. 2011; 154: 727-736.
74. **Keating NL**, O'Malley AJ, Murabito JM, Smith KP, Christakis NA. Minimal social networks effects evident in cancer screening behavior. *Cancer* 2011; 117: 3045-3052.
75. Barnett ML, Landon BE, O'Malley AJ, **Keating NL**, Christakis NA. Mapping physician networks with self-reported and administrative data. *Health Serv Res* 2011; 46: 1592-609.
76. Barnett ML, Christakis NA, O'Malley AJ, Onnela JP, **Keating NL**, Landon BE. Physician patient-sharing networks and the cost and intensity of care in US hospitals. *Med Care* 2012. 50:152-60.
77. Ligibel JA, O'Malley AJ, Fisher M, Daniel GW, Winer EP, **Keating NL**. Risk of myocardial infarction, stroke, and fracture in a cohort of community-based breast cancer patients. *Br Can Res Treat* 2012; 131: 589-597.
78. Mack JW, Cronin A, Taback N, Huskamp HA, **Keating NL**, Malin JL, Earle CC, Weeks JC. End-of-life discussions among patients with advanced cancer: a cohort study. *Ann Intern Med* 2012. 156: 204-210.
79. Gray SW, Landrum MB, Lamont EB, McNeil BJ, Jaklitsch MT, **Keating NL**. Improved outcomes associated with higher surgery rates for older patients with early stage nonsmall cell lung cancer. *Cancer* 2012. 118: 1404-1411.
80. Kouri EM, Landrum MB, Lamont EB, Bozeman SR, McNeil BJ, **Keating NL**. Location of care for veterans with cancer. *Health Serv Res* 2012; 47: 783-793.
81. Landrum MB, **Keating NL**, Lamont EB, Bozeman SR, Krasnow SH, Shulman LN, Brown JR, Earle CC, Oh WK, Rabin M, McNeil BJ. Survival of older cancer patients in the Veterans Health Administration versus fee-for-service Medicare. *J Clin Oncol* 2012; 30:1072-1079.
82. Nambudiri VE, Landrum MB, Lamont EB, McNeil BJ, Bozeman SR, Freedland SJ, **Keating NL**. Understanding variation in primary prostate cancer treatment within the Veterans Health Administration. *Urology* 2012; 79:537-45.
83. Kiderlen M, Bastiaannet E, Walsh PM, **Keating NL**, Schrodi S, Engel J, van de Water W, Ess SM, van Eycken L, Miranda A, de Munck L, van de Velde CJH, de Craen AJM, Liefers GJ. Surgical treatment of early-stage breast cancer in elderly: an international comparison. *Br Cancer Res Treat* 2012; 132:675-682.
84. Hu JC, O'Malley AJ, Williams SB, Smith MR, Nguyen PL, **Keating NL**. Androgen-deprivation therapy for non-metastatic prostate cancer is associated with an increased risk for peripheral arterial disease and venous thromboembolism. *Eur Urol* 2012; 61: 1119-1128.
85. Park ER, Japuntich S, Rigotti NA, Traeger L, He Y, Wallace R, Malin J, Pandiscio J, **Keating NL**. A snapshot of smokers after lung and colorectal cancer diagnosis. *Cancer* 2012; 118: 3153-3164.
86. Landrum MB, **Keating NL**, Lamont EB, Bozeman SR, McNeil BJ. Reasons for underuse of recommended therapies for colorectal and lung cancer in the Veterans Health Administration. *Cancer* 2012; 118: 3345-3355.
87. Barnett ML, **Keating NL**, O'Malley AJ, Christakis NC, Landon BE. Reasons for referral among primary care and specialist physicians. *J Gen Intern Med* 2012; 27: 506-512.

88. McGinty E, Zhang Y, Guallar E, Ford D, Steinwachs D, Dixon L, **Keating NL**, Daumit G. Cancer incidence in a sample of Maryland residents with serious mental illness. *Psych Services* 2012; 63: 714-717.
89. **Keating NL**, Landrum MB, Lamont EB, Bozeman SR, McNeil BJ. Area-level variations in cancer care and outcomes. *Med Care* 2012. 50: 366-373.
90. Abel GA, Friese CR, Neville BA, Wilson KM, Hastings BT, Earle CC, **Keating NL**, Richardson LC. Primary care referrals for suspected hematologic malignancies. *Am J Hematol.* 2012; 87: 634-636. (Published as a Peer-Reviewed Original Research Letter)
91. Taksler G, **Keating NL**, Cutler DC. Explaining racial differences in prostate cancer mortality. *Cancer* 2012. 118: 4280-4289.
92. Brooks J, Chrischilles E, Landrum MB, Wright K, Fang G, Winer EP, **Keating NL**. Survival implications associated with variation in mastectomy rates for early-staged breast cancer. *Int J Surg Oncol.* Volume 2012; Article ID 127854, 9 pages.
93. Landon BL, **Keating NL**, Barnett ML, Onnela J-P, Paul S, O'Malley AJ, Keegan T, Christakis NA. Variation in patient-sharing networks of physicians across the United States. *JAMA* 2012 18; 308: 265-73.
94. Freedman RA, Virgo KS, Labadie J, He Y, Partridge AH, **Keating NL**. Receipt of locoregional therapy among young women with breast cancer. *Br Cancer Res Treat.* 2012;135: 893-906.
95. Ligibel JA, O'Malley AJ, Fisher M, Daniel GW, Winer EP, **Keating NL**. Patterns of bone density evaluation in a community population treated with aromatase inhibitors. *Br Cancer Res Treat* 2012; 134:1305–1313.
96. Weeks JC, Catalano PJ, Cronin A, Finkelman MD, Mack JW, **Keating NL**, Schrag D. Advanced cancer patients' expectations about chemotherapy effectiveness. *N Engl J Med.* 2012; 367:1616-1625.
97. Mack JW, Cronin A, **Keating NL**, Taback N, Huskamp HA, Malin JL, Earle CC, Weeks JC. Associations between end-of-life discussion characteristics and care received near death: A prospective cohort study. *J Clin Oncol* 2012; 30: 4387-4395.
98. Chatterjee NA, He Y, **Keating NL**. Racial disparities in breast cancer stage at diagnosis in the mammography era. *Am J Pub Health* 2013;103: 170-176.
99. **Keating NL**, O'Malley AJ, Freedland SJ, Smith MR. Does comorbidity influence risk of myocardial infarction or diabetes during androgen deprivation therapy for prostate cancer? *Eur Urol* 2013; 64: 159-166.
100. **Keating NL**, Kouri EM, He Y, West DW, Winer EP. Effect of Massachusetts health insurance reform on mammography use and breast cancer stage at diagnosis. *Cancer.* 2013; 119:250-258.
101. **Keating NL**, Landrum MB, Lamont EB, Bozeman SR, Shulman LN, McNeil BJ. Tumor boards and the quality of cancer care. *J Natl Cancer Inst.* 2013; 105: 113-121.
102. Dusetzina SB, Alexander GC, Freedman RA, Huskamp HA, **Keating NL**. Trends in co-prescribing of antidepressants and tamoxifen among women with breast cancer, 2004-2010. *Br Can Res Treat* 2013; 137: 285-296.

103. Freedman RA, Hughs ME, Otteson RA, Weeks JC, He Y, Wong Y-N, Theriault R, **Keating NL**. Use of adjuvant trastuzumab in women with human epidermal growth factor receptor 2 (HER2)-positive breast cancer by race/ethnicity and education within the National Comprehensive Cancer Network. *Cancer* 2013; 119: 839-846.
104. Malin JL, Weeks JC, Potosky AL, Hornbrook M, **Keating NL**. Medical oncologists' perceptions of financial incentives in cancer care. *J Clin Oncol* 2013; 31: 530-535.
105. Morgans AK, Smith MR, O'Malley AJ, **Keating NL**. Bone density testing among prostate cancer survivors treated with androgen deprivation therapy. *Cancer* 2013; 119:863-870.
106. Liu P-H, Wang J-D, **Keating NL**. Expected years of life lost for six potentially preventable cancers in the United States. *Prev Med* 2013; 56: 309-313.
107. Freedman RA, Pitcher B, **Keating NL**, Ballman KV, Kornblith AB, Mandelblatt J, Kimmick GG, Hurria A, Winer EP, Hudis CA, Cohen HJ, Muss HB. Cognitive function in older women with breast cancer treated with standard chemotherapy and capecitabine on Cancer and Leukemia Group B 49907. *Br Cancer Res Treat* 2013; 139: 607-616.
108. Conti RM, Dusetzina SB, Herbert AC, Berndt ER, Huskamp HA, **Keating NL**. The impact of emerging safety and effectiveness evidence on the use of physician-administered drugs: the case of bevacizumab for breast cancer. *Med Care* 2013; 51:622-627.
109. Pace LE, He Y, **Keating NL**. Trends in mammography screening rates following the 2009 United States Preventive Services Task Force recommendations. *Cancer* 2013; 119: 2518-2523.
110. Freedman RA, He Y, Winer EP, **Keating NL**. Racial/ethnic differences in receipt of timely adjuvant therapy for older women: are delays influenced by the hospitals where patients obtain surgical care? *Health Serv Res* 2013; 48:5, 1669-1683.
111. Taksler GB, Cutler DM, Giovannucci E, Smith MR, **Keating NL**. UV index and racial differences in prostate cancer incidence and mortality. *Cancer* 2013; 119: 3195-3203.
112. Landon BE, Onnela J-P, **Keating NL**, O'Malley AJ, Barnett ML, Keegan T, Christakis NA. Using administrative data to identify naturally occurring networks of physicians. *Med Care* 2013; 51-8:715-721.
113. Pace LE, Dusetzina SB, Fendrick AM, **Keating NL**, Dalton VK. The impact of out-of-pocket costs on use of intrauterine contraception among women with employer-sponsored insurance. *Med Care* 2013; 51: 959-963.
114. Saylor PJ, Smith MR, O'Malley AJ, **Keating NL**. Androgen deprivation therapy and risk for biliary disease in men with prostate cancer. *Eur Urol*. 2014; 65:3, 642-649.
115. **Keating NL**, Liu P-H, O'Malley AJ, Freedland SJ, Smith MR. Androgen deprivation therapy and diabetes control among diabetic men with prostate cancer. *Eur Urol* 2014; 65: 816-824.
116. Ito K, Elkin EB, Blinder VS, **Keating NL**, Choudhry, NK. Cost-effectiveness of full coverage of aromatase inhibitors for Medicare beneficiaries with early breast cancer. *Cancer*, 2013; 119: 2494-2502.
117. Chung C, York T, Nelson K, Xu Y, **Keating NL***, Tarbell NJ*. Incidence of second malignancies among patients treated with proton versus photon radiation. *Int J Radiat Oncol Biol Phys* 2013; 87: 46-52. *Shared senior author.

118. Wachterman MW, Lipsitz SR, Simon SR, Lorenz KA, **Keating NL**. Patterns of hospice care among military veterans and non-veterans. *J Pain Symptom Manage* 2014; 48: 36-44.
119. Dusetzina SB, Winn A, Abel G, Huskamp HA, **Keating NL**. Cost sharing and adherence to tyrosine kinase inhibitors for patients with chronic myeloid leukemia. *J Clin Oncol* 2014; 32:306-11.
120. Chinn GM, Liu PH, Klabunde CN, Kahn KL, **Keating NL**. Physicians' preferences for hospice if they were terminally ill and the timing of hospice discussions with their patients. *JAMA Intern Med* 2014; 174:466-468. (Published as a Peer-Reviewed Original Research Letter)
121. Traeger L, Cannon S, **Keating NL**, Pirl WF, Lathan C, Martin MY, He Y, Park ER. Comparing depression symptoms and psychosocial service utilization among non-Hispanic black and white patients with lung cancer. *J Clin Oncol* 2014; 32: 107-113.
122. Vaz-Luis I, **Keating NL**, Lin NU, Lii H, Winer EP, Freedman RA. Duration and toxicity of adjuvant trastuzumab in older patients with early-breast cancer: a population-based study. *J Clin Oncol* 2014; 32:927-934.
123. Potosky AL, Haque R, Cassidy-Bushrow AE, Ulcikas Yood M, Jiang M, Tsai, H-T, Luta G, **Keating NL**, Smith MR, Van Den Eeden SK. Effectiveness of primary androgen deprivation therapy for clinically localized prostate cancer. *J Clin Oncol*. 2014; 32:1324-30.
124. Pace LE, **Keating NL**. A systematic assessment of benefits and risks to guide breast cancer screening decisions. *JAMA* 2014; 311: 1327-1335.
125. Huskamp HA, **Keating NL**, Dalton JB, Chernew ME, Newhouse JP. Drug plan design incentives among Medicare prescription drug plans. *Am J Manag Care* 2014; 20: 562.
126. Liu P-H, Landrum MB, Weeks JC, He Y, Huskamp HA, Kahn KL, Mack JW, **Keating NL**. Physicians' propensity to discuss prognosis is associated with prognosis awareness of patients with metastatic lung or colorectal cancer. *J Pall Med* 2014; 17: 673-682.
127. Wright AA, Zhang B, **Keating NL**, Weeks JC, Prigerson H. Prospective cohort study of palliative chemotherapy: associations with adult advanced cancer patients' end-of-life care and place of death. *BMJ* 2014; 348: g1219.
128. Kehl KL, Arora NK, Schrag D, Ayanian JZ, Clauser SB, Klabunder CN, Kahn KL, Fletcher RH, **Keating NL**. Discussions about clinical trials among patients with newly diagnosed lung and colorectal cancer. *J Natl Cancer Inst* 2014; 106 (10): dju216.
129. Wong AC, Stock S, Schrag D, Kahn KL, Salz T, Charlton ME, Rogers SO, Goodman KA*, **Keating NL***. Physicians' beliefs about the benefits and risks of adjuvant therapies for stage II and stage III colorectal cancer. *J Oncol Pract*. 2014; 10:e360-7. *Shared senior author.
130. Taksler GB, Cutler DC, Giovanucci E, **Keating NL**. Vitamin D deficiency in minority populations. *Pub Health Nutrition* 2014; Apr 15: 1-13.
131. Freedman RA, Vaz-Luis I, Barry WT, Lii H, Lin NU, Winer EP, **Keating NL**. Patterns of chemotherapy, toxicity, and short-term outcomes for older women receiving adjuvant trastuzumab-based therapy. *Br Can Res Treat* 2014; 145: 491-501.

132. Samuel CA, Landrum MB, McNeil BJ, Bozeman SR, Williams CD, **Keating NL**. Racial disparities in cancer care in the Veterans Affairs Healthcare System and the role of site of care. *Am J Public Health* 2014; 104 (Suppl 4) S562-S571.
133. Zipkin DA, Umscheid CA, **Keating NL**, Allen E, Aung K, Beyth R, Kaatz S, Mann DM, Sussman JB, Korenstein D, Schardt C, Nagi A, Sloan R, Feldstein DA. Evidence-based risk communication: A systematic review. *Ann Intern Med*, 2014; 161:4, 270-80.
134. Hornbrook MC, Malin JL, Weeks JC, Makgoeng SB, **Keating NL**, Potosky AL. Did changes in drug reimbursement following the Medicare Modernization Act affect chemotherapy prescribing? *J Clin Oncol*; 2014 Dec 20;32(36):4042-9.
135. Gonzalez A, Japuntich S, **Keating NL**, Wallace R, He Y, Streck JM, Park ER. Pain experiences among a population-based cohort of current, former and never regular smokers with lung and colorectal cancer. *Cancer* 2014; 120: 3554-3561.
136. Wright AA, Hatfield LA, Earle CC, **Keating NL**. End-of-life care for older patients with ovarian cancer is intensive despite high rates of hospice utilization. *J Clin Oncol*. 2014; 32,31: 3534-9.
137. Paul S, **Keating NL**, Landon BE, O'Malley AJ. Results from using a new dyadic-dependence model to analyze sociocentric physician networks. *Soc Sci Med* 2014; 117: 67-75. (Republished: *Social Science & Medicine* 2015; 125: 51-59, <http://dx.doi.org/10.1016/j.socscimed.2014.08.027>.)
138. **Keating NL**, Kouri EM, Arreola Ornelas H, Mendez O, Magaña Valladares L, Knaul FM. Evaluation of breast cancer knowledge among health promoters in Mexico before and after focused training. *Oncologist* 2014; 19: 1091-1099.
139. McWilliams JM, Dalton JB, Landrum MB, Frakt AB, Pizer SD, **Keating NL**. Cancer-related imaging in the Veterans Affairs health care system versus Medicare: does a system with lower use exhibit less geographic variation? *Annals Intern Med* 2014; 161: 794-802.
140. Walling AM, Weeks JC, Kahn KL, Tisnado D, **Keating NL**, Dy S, Arora N, Mack JW, Pantoja PM, Malin JL. Symptom prevalence in lung and colorectal cancer patients. *J Pain Symptom Mgmt* 2015; 49(2):192-202.
141. Kwon DH, Tisnado DM, **Keating NL**, Klabunde CN, Adams JL, Rastegar A, Hornbrook MC, Kahn KL. Physician-reported barriers to referring cancer patients to specialists: prevalence, factors, and association with career satisfaction. *Cancer* 2015; 121:113-122.
142. Freedman RA, Kouri EM, West DW, **Keating NL**. Racial/ethnic disparities in knowledge about one's breast cancer characteristics. *Cancer* 2015; 121:724-732. PMID: PMC4946569
143. Samuel CA, Zaslavsky AM, Landrum MB, Lorenz KA, **Keating NL**. Developing and evaluating composite measures of cancer care quality. *Med Care*. 2015; 53(1):54-64.
144. Hobbs GS, Landrum MB, Arora NK, Ganz PA, vanRyn M, Weeks JC, Mack JW, **Keating NL**. The role of families in decisions about cancer treatments. *Cancer* 2015; 121(7):1079-87.

145. Dusetzina SB, Basch EM, **Keating NL**. For uninsured cancer patients, outpatient charges can be costly, putting treatments out of reach. *Health Aff* 2015; 34:584-591. PMID: PMC4947373
146. Kehl KL, Gray SW, Kim B, Kahn KL, Haggstrom D, Roudier M, **Keating NL**. Oncologists' experiences with drug shortages. *J Onc Pract*. 2015; 11:e154-e162. PMID: PMC4371121
147. Kehl KL, Landrum MB, Arora NK, Ganz P, van Ryn M, Mack JW, **Keating NL**. Shared decision making in cancer care: the association of actual and preferred decision roles with patient-reported quality. *JAMA Oncology* 2015; 1:50-58. PMID: PMC4937185
148. Bosco C, Bosnyak Z, Malmberg A, Adolfsson J, **Keating NL**, Van Hemeljrijck M. Quantifying observational evidence for risk of fatal and non-fatal cardiovascular disease following androgen deprivation therapy for prostate cancer: A meta-analysis. *Eur Urology* 2014; pii: S0302-2838(14)01222-6.
149. Mack JW, Walling A, Dy S, Adams J, **Keating NL**, Tisnado D. Patient beliefs that chemotherapy may be curative and care received at the end of life among patients with metastatic lung and colorectal cancer. *Cancer* 2015; 121(11):1891-7. PMID: PMC4441582
150. Tsai, H-T, **Keating NL**, Van Den Eeden SK, Haque R, Cassidy-Bushrow AE, Ulcikas Yood M, Smith MR, Potosky AL. Risk of diabetes among patients receiving primary androgen deprivation therapy for clinically localized prostate cancer. *J Urology* 2015; 193(6): 1956-52.
151. Freedman RA, Kouri EM, West D, **Keating NL**. Racial/ethnic differences in patients' selection of surgeons and hospitals for breast cancer surgery. *JAMA Oncol* 2015; 1: 222-230. PMID: PMC4944092
152. Pollack CE, Rastegar A, **Keating NL**, Adams JL, Pisu M, Kahn KL. Is self-referral associated with higher quality care? *Health Serv Res*. 2015;50(5):1472-90.
153. Kehl KL, Landrum MB, Kahn KL, Gray SW, Chen AB, **Keating NL**. Tumor board participation among physicians caring for patients with lung or colorectal cancer. *J Oncol Pract* 2015; 11: e267-e278. PMID: PMC4438111
154. Obermeyer Z, Powers BW, Makar M, **Keating NL**, Cutler D. Physician characteristics strongly predict patient enrollment in hospice. *Health Aff* 2015; 34: 993-1000. PMID: PMC4852702
155. Kehl KL, Lamont EB, McNeil BJ, Bozeman SR, Kelley MJ, **Keating NL**. Comparing a medical-records-based and a claims-based index for measuring comorbidity in patients with lung or colon cancer. *J Geriatric Oncol* 2015; 6: 202-10.
156. Lyratzopoulos G, Liu P-H, Abel GA, Wardle J, **Keating NL**. The association between fatalistic beliefs and late stage at diagnosis of lung and colorectal cancer. *Cancer Epidemiol Biomarkers Prev* 2015; 24(4):720-6. PMID: PMC4384982
157. Pace LE, Mpunga T, Hategekimana V, Dusengimana J-MV, Habineza H, Bigirmana JB, Mutumbira C, Mpanumusingo E, Ngiruwera JP, Tapela N, Amoroso C, Shulman LN, **Keating NL**. Delays in breast cancer presentation and diagnosis in Rwanda: a cross-sectional analysis. *Oncologist* 2015; 20(7):780-8. PMID: PMC4492236

158. Dusetzina SB, Ellis S, Freedman RA, Conti RM, Winn A, Chambers J, Alexander GC, Huskamp HA, **Keating NL**. How do payers respond to regulatory actions? The case of bevacizumab. *J Oncol Pract*. 2015; 11(4):313-8. PMID: PMC4507391
159. Vaz Luis, I; Lin N, **Keating NL**, Barry W, Winer EP, Freedman RA. Racial differences in outcomes for patients with metastatic breast cancer by disease subtype. *Br Cancer Res Treat* 2015; 151(3):697-707.
160. Wright AA, Cronin A, Milne DE, Bookman M, Burger R, Cohn DE, Cristea MC, Griggs JJ, **Keating NL**, Levenback C, Mantia-Smaldone G, Matulonis UA, Meyer LA, Niland JC, Weeks JC, OMalley DM. Use and effectiveness of intraperitoneal chemotherapy for ovarian cancer. *J Clin Oncol* 2015; 33:2841-2847.
161. Hoffman RM, Shi Y, Freedland SJ, **Keating NL**, Powell AA, Walter LC. Treatment patterns for older veterans with localized prostate cancer. *Cancer Epidemiol* 2015; pii: S1877-7821(15)00142-3.
162. Freedman RA, Kouri EM, West DW, Rosenberg S, Partridge AH, Lii J, **Keating NL**. Higher stage of disease is associated with bilateral mastectomy among patients with breast cancer: a population based survey. *Clinical Breast Cancer*. 2016;16(2):105-12.
163. Mack JW, Cronin A, Fasciano K, Block SD, **Keating NL**. Cancer treatment decision-making among young adults with lung and colorectal cancer: A comparison with adults in middle age. *Psychooncology*. 2016;25(9):1085-91. PMID: PMC4775442.
164. Stevenson DG, Grabowski DC, **Keating NL**, Huskamp HA. Effect of ownership on hospice service use, 2005-2011. *J Am Geriatr Soc* 2016; 64(5):1024-31. PMID: PMC4882235
165. Brooks GA, Cronin A, Uno H, Schrag D, **Keating, NL**, Mack JW. Intensity of medical interventions between diagnosis and death in patients with advanced lung and colorectal cancer: A CanCORS analysis. *J Palliat Med* 2016;19:42-50. PMID: PMC4692113.
166. Franco-Marina F, Lopez-Carrilo L, **Keating NL**, Arreola-Ornelas H, Knaul FM. Breast cancer age at diagnosis patterns in four Latin American populations: a comparison with North American countries. *Cancer Epidemiol*. 2015; 39:831-837.
167. Wright AA, **Keating NL**, Ayanian JZ, Chrischilles EA, Kahn KL, Ritchie CS, Weeks JC, Earle CC, Landrum MB. Family perspectives on aggressive cancer care near the end of life. *JAMA* 2016; 315:284-292. PMID: PMC4919118
168. **Keating NL**, Landrum MB, Huskamp HA, Kouri EM, Prigerson HG, Schrag D, Maciejewski PK, Hornbrook MC, Haggstrom DA. Dartmouth atlas area-level estimates of end-of-life expenditures: how well do they reflect expenditures for prospectively identified advanced lung cancer patients? *Health Serv Res*, 2016; 51(4):1584-94. PMID: PMC4946029
169. **Keating NL**, Kouri EM, He Y, Freedman RA, Volya R, Zaslavsky AM. Location isn't everything: proximity, hospital characteristics, choice of hospital and disparities for breast cancer surgery patients. *Health Serv Res*. 2016; 51(4):1561-83.

170. Dusetzina SB, **Keating NL**. Mind the gap: why closing the doughnut hole is insufficient for increasing Medicare beneficiary access to oral chemotherapy. *J Clin Oncol* 2016; 34:375-380. PMID: PMC5070580
171. Parikh AR, **Keating NL**, Pang-Hsiang L, Gray SW, Klabunde CN, Kahn KL, Haggstrom DA, Syngal S, Kim B. Oncologists' Selection of Genetic and Molecular Testing in the Evolving Landscape of Stage II Colorectal Cancer. *J Oncol Pract* 2016; 12(3):259-60. PMID: PMC4960467
172. Pace LE, Dusengimana JMV, Hategekimana V, Habineza H, Bigirimana JB, Tapela N, Mutumbira C, Mpanumusingo E, Brock J, Meserve E, Uwumugambi A, Dillon D, **Keating NL**, Shulman LN, Mpunga T. Benign and malignant breast disease at Rwanda's first public cancer referral center. *Oncologist* 2016; pii: theoncologist.2015-0388. PMID: PMC4861361
173. Wachterman MW, Pilver C, Smith D, Ersek M, Lipsitz SR, **Keating NL**. Quality of end-of-life care provided to patients with different serious illnesses. *JAMA Intern Med* 2016; 176(8):1095-102.
174. Pace LE, Dusetzina SB, **Keating NL**. Early impact of the Affordable Care Act on uptake of long-acting reversible contraceptive methods. *Med Care*. 2016;54(9):811-7.
175. Freedman RA, Kouri EM, West D, **Keating NL**. The association of breast cancer knowledge with receipt of guideline-recommended breast cancer treatment. *J Oncol Pract* 2016; 12(6): e613-25. PMID: PMC4957257
176. Tisnado D, Malin JL, Kahn KL, Landrum MB, Fletcher RH, Klabunde CN, Clauser S, Selwyn OR, **Keating NL**. Variations in oncologist recommendations for chemotherapy for stage IV lung cancer: What is the role of performance status? *J Oncol Pract*. 2016;12(7):653-62. PMID: PMC4957251
177. Walling AM, **Keating NL**, Kahn KL, Dy S, Mack JW, Malin JL, Arora N, Adams JL, Antonio AL, Tisnado D. Lower patient ratings of physician communication are associated with greater unmet need for symptom management in lung and colorectal cancer patients. *J Oncol Pract*. 2016;12(6):e654-69. PMID: PMC4957255
178. Fu AZ, Tsai H-T, Haque R, Yood M, Van Den Eeden SK, Cassidy-Bushrow AE, Zhou Y, **Keating NL**, Smith MR, Aaronson DS, Potosky AL. Use of salvage androgen deprivation therapy after primary therapy for clinically localized prostate cancer. *World J Urol* 2016; 34 (12):1611-1619.
179. Di Meglio A, Freedman RA, Lin NU, Barry WT, Metzger-Filho O, **Keating NL**, King TA, Sertoli MR, Boccardo F, Winer EP, Vaz-Luis I. Time trends in incidence rates and survival of newly diagnosed stage IV breast cancer by tumor histology: a population-based analysis. *Breast Cancer Res Treat* 2016; 157(3):587-96.
180. Freedman RA, Viswanath K, Vas-Luiz I, **Keating NL**. Learning from social media: utilizing advanced data extraction techniques to understand barriers to breast cancer treatment. *Br Cancer Res Treat* 2016 158(2):395-405.
181. Pace LE, Dusetzina SB, **Keating NL**. Early impact of the Affordable Care Act on oral contraceptive cost-sharing, discontinuation, and nonadherence. *Health Aff*. 2016;35(9):1616-24.

182. Vaz-Luis I, Lin NU, **Keating NL**, Barry WT, Lii J, Burstein HJ, Winer EP, Freedman RA. Treatment of early-stage human epidermal growth factor 2 (HER2)-positive cancers among Medicare enrollees: older age and race are strongly associated with non-use of trastuzumab. *Br Ca Res Treat* 2016; 159(1):151-62.
183. Winn AN, **Keating NL**, Dusetzina SB. Factors associated with tyrosine kinase inhibitors initiation and adherence among Medicare beneficiaries with chronic myeloid leukemia. *J Clin Oncol* 2016; 34(36):4323-4328. PMID: PMC5455309
184. Kumar P, Wright AA, Hatfield LA, Temel JS, **Keating NL**. Family perspectives on hospice care experiences of patients with cancer. *J Clin Oncol* 2017; 35 (4):432-439. PMID: PMC5455697
185. Melamed A, **Keating NL**, Clemmer JT, Wright JD, Boruta DM, Schorge JO, del Carmen MG, Rauh-Hain JA. Laparoscopic staging for apparent stage I epithelial ovarian cancer: analysis of the National Cancer Data Base. *Am J Obstet Gynecol* 2017; 216(1):50.e1-50.e12.
186. Rauh-Hain JA, Melamed A, Wright A, Gockley A, Clemmer JT, Schorge JO, del Carmen MG, **Keating NL**. Overall survival following neoadjuvant chemotherapy vs primary cytoreductive surgery in women with epithelial ovarian cancer: Analysis of the National Cancer Database. *JAMA Oncol* 2017; 3(1): 76-82.
187. Klabunde CN, Haggstrom D, Kahn KL, Gray SW, Kim B, Liu B, Eisenstein J, **Keating NL**. Oncologists' perspectives on post-cancer treatment communication and care coordination with primary care physicians. *Eur J Cancer Care* 2017; 1-9.
188. Vaz-Luis I, Lin NU, **Keating NL**, Barry WT, Winer EP, Freedman RA. Factors associated with early mortality in metastatic breast cancer: A population-based study. *Oncologist*. 2017; 22(4):386-393. PMID: 5388378.
189. Gray SW, Kim B, Sholl LM, Cronin A, Parikh AR, Klabunde CN, Kahn KL, Haggstrom D, **Keating NL**. Medical oncologists' experiences in using genomic testing for lung and colorectal cancer care. *J Oncol Pract*. 2017; 13(3):e185-e196. PMID: 5456256
190. Roydhouse JK, Gutman R, **Keating NL**, Mor V, Wilson IB. Differences between proxy and patient assessments of cancer care experiences and quality ratings. *Health Serv Res*. 2017; doi: 10.1111/1475-6773.12672.
191. Fu AZ, Huei-Ting T, Haque R, Yood MU, Van Den Eeden SK, Cassidy-Bushrow AE, Zhou U, **Keating NL**, Smith MR, Aaronson DS, Potosky AL. Mortality and androgen-deprivation therapy as salvage treatment for biochemical recurrence after primary therapy for clinically localized prostate cancer. *J Urol*. 2017; 197(6):1448-1454. PMID: 5433922.
192. O'Neil D, **Keating NL**, Dusengimana JMV, Hategekimana V, Umwizera A, Mpunga T, Shulman LN, Pace LE. Quality of breast cancer treatment at a rural cancer center in Rwanda. *J Glob Oncol*. 2017. doi: 10.1200/jgo.2016.008672
193. **Keating NL**, O'Malley AJ, Onnela J-P, Landon BE. Assessing the impact of colonoscopy complications on use of colonoscopy among primary care physicians and other connected physicians: an observational study of older Americans. *BMJ Open* 2017;7(6):e014239. PMID:

PMC5623374.

194. Freedman RA, **Keating NL**, Pace LE, Lii J, McCarthy EP, Schonberg MA. Use of surveillance mammography among older breast cancer survivors by life expectancy. *J Clin Oncol* 2017; 35: 3123-3130.
195. Colligan EM, Ewald E, **Keating NL**, Prashuram S, Spafford M, Ruiz S, Moiduddin A. Two innovative cancer care programs have potential to reduce utilization and spending. *Med Care* 2017; 55 (10); 873-878.
196. Griffiths RI, McFadden EC, Stevens RJ, Valderas JM, Lavery BA, Kahn NF, **Keating NL**,* Bankhead CR.* Outcomes of preexisting diabetes mellitus in breast, colorectal, and prostate cancer. *J Cancer Surviv.* 2017 Jul 22. doi: 10.1007/s11764-017-0631-2. *Co-senior authors. PMID: PMC5602069.
197. Haque R, Ulcickas Yood ME, Xu X, Cassidy Bushrow AE, Tsai HT, **Keating NL**, Van Den Eeden SK, Potosky AL. Cardiovascular disease risk and androgen deprivation therapy in patients with localised prostate cancer: a prospective cohort study. *Br J Cancer* 2017; 117(8):1233-1240. PMID: PMC5674100.
198. Wachterman MW, Lipsitz SR, Lorenz KA, Marcantonio ER, Li Z, **Keating NL**. End-of-life experience of older adults dying of end-stage renal disease: a comparison with cancer. *J Pain Symptom Manage* 2017; 54(6):789-797. PMID: PMC5786651
199. Landon BE, **Keating NL**, Onnela JP, Zaslavsky AM, Christakis NA, O'Malley AJ. Patient-sharing networks of physicians and healthcare utilization and spending among Medicare beneficiaries. *JAMA Intern Med.* 2018;178(1):66-73. PMID: PMC5833496.
200. Taksler GB, **Keating NL**, Rothberg MB. Implications of false-positive results for future cancer screenings. *Cancer.* 2018;124(11):2390-2398. PMID: PMC5992010.
201. Pace LE, Dusengimana JMV, **Keating NL**, Hategekimana V, Rugema V, Bigirimana JB, Costas-Chavarri A, Umwizera A, Park PH, Shulman LN, Mpunga T. Impact of breast cancer early detection training on Rwandan health workers' knowledge and skills. *J Global Oncol* 2018;4, 1-10.
202. **Keating NL**, Huskamp HA, Schrag D, McWilliams JM, McNeil BJ, Landon BE, Chernew ME, Normand SLT. Diffusion of bevacizumab across oncology practices: an observational study. *Med Care* 2018; 56: 69-77.
203. Bergquist SL, Brooks GA, **Keating NL**, Landrum MB, Rose S. Classifying lung cancer severity with ensemble machine learning in health care claims data. *Proceed Mach Learn Res*; 2017; 68. http://mucmd.org/CameraReadySubmissions/9%5CCameraReadySubmission%5CCLC_camera_ready.pdf.
204. Melamed A, Fink G, Wright AA, **Keating NL**, Gockley AA, del Carmen MG, Schorge JO, Rauh-Hain JA. Effect of adoption of neoadjuvant chemotherapy for advanced ovarian cancer on all-cause mortality: a quasi-experimental study. *BMJ.* 2018;360:j5463. PMID: PMC5751831.

205. Freedman RA; Revette AC, Hershman DL, Silva K, Sporn NJ, Gagne JJ, Kouri EM, **Keating NL**. Understanding breast cancer knowledge and barriers to treatment adherence: a qualitative study among breast cancer survivors. *Biores Open Access*. 2017;6(1):159-168. PMID: PMC5743034.
206. Dusetzina SB, Huskamp HA, Winn AN, Basch EM, **Keating NL**. Out-of-pocket and health care spending changes for patients using orally administered anticancer therapy after adoption of state parity laws. *JAMA Oncol* 2018; 4(6):e173598.
207. Lage DA, Caudrey DJ, Ackerly DC, **Keating NL**, Grabowski, D. The care continuum for hospitalized Medicare beneficiaries near death. *Ann Intern Med*. 2018;168(10):748-750.
208. Rotenstein LS, Dusetzina SB, **Keating NL**. Out-of-pocket spending not associated with oral oncolytic survival benefit. *J Manag Care Spec Pharm*. 2018;24(6):494-502.
209. Wachterman MW, Hailpern SM, **Keating NL**, Tamura MK, O'Hare AM. Association between hospice length of stay, healthcare utilization and Medicare costs at the end of life among patients who received maintenance hemodialysis. *JAMA Intern Med*. 2018;178(6):792-799. PMID: PMC5988968.
210. Japuntich SJ, Kumar P, Pendergast J, Juarez G, Malin J, Wallace R, Chrischilles E, **Keating NL**, Park ER. Smoking status and survival among a national cohort of lung and colorectal cancer patients. *Nicotine Tob Res*. 2018. doi: 10.1093/ntr/nty012.
211. Fairweather M, Jiang W, **Keating NL**, Freedman RA, King TA, Nakhliis F. Morbidity of local therapy for locally advanced metastatic breast cancer: an analysis of the Surveillance, Epidemiology, and End Results (SEER)-Medicare Registry. *Breast Cancer Res Treat*. 2018;169(2):287-293.
212. Freedman RA, **Keating NL**, Lin NU, Winer EP, Vaz-Luis I, Lii J, Exman P, Barry W. Breast cancer-specific survival by age: worse outcomes for the oldest patients. *Cancer*. 2018;124(10):2184-2191. PMID: PMC5935594.
213. Gu Q, Hassol A, Creel A, **Keating NL**. Tailored strategies to enhance survey response among proxies of deceased patients. *Health Serv Res*. 2018;53(5):3825-3835
214. Lamont E, **Keating NL**, Azzoli C, Landrum MB (2018) Superiority of carboplatin-based doublets to cisplatin-based doublets among Medicare patients aged 70 and older with advanced lung cancer. *Arch Med*. 2018; Vol. 10, No. 2:4. DOI: [10.21767/1989-5216.1000264](https://doi.org/10.21767/1989-5216.1000264)
215. **Keating NL**, Huskamp HA, Kouri EM, Schrag D, Hornbrook MC, Haggstrom DA, Landrum MB. Factors contributing to geographic variation in end-of-life expenditures. *Health Aff* 2018; 37(7): 1136-1143.
216. Wright AA, Raman N, Staples P, Schonholz S, Cronin A, Carlson K, **Keating NL**, Onnela JP. The HOPE Pilot Study: Harnessing Patient-Reported Outcomes and Biometric Data to Enhance Cancer Care. *JCO Clin Cancer Inform*. 2018;2, 1-12.
217. Griffiths RI, **Keating NL***, Bankhead CR*. Quality of diabetes care in cancer: a systematic review. *Int J Qual Health Care*. 2019 Mar 1;31(2):75-88: doi: 10.1093/intqhc/mzy124. [Epub ahead of print]. *Co-senior authors.

218. Roydhouse JK, Gutman R, **Keating NL**, Mor V, Wilson IB. The association of proxy care engagement with proxy reports of patient experience and quality of life. *Health Serv Res.* 2018;53(5):3809-3824.
219. Winn AN, **Keating NL**, Trogdon JG, Basch EM, Dusetzina SB. Spending by commercial insurers on chemotherapy based on site of care, 2004-2014. *JAMA Oncol.* 2018;4(4):580-581. PMID: PMC5885220.
220. Roydhouse JK, Gutman R, **Keating NL**, Mor V, Wilson IB. Proxy and patient reports of health-related quality of life in a national cancer survey. *Health Qual Life Outcomes.* 2018;16(1):6. PMID: PMC5756370.
221. Onnela JP, O'Malley AJ, **Keating NL**, Landon BE. Comparison of physician networks constructed from thresholded ties versus shared clinical episodes. *Applied Network Science* 2018; 3: 28.
222. Mehta A, Stock S, Gray SW, Nerenz DR, Ayanian JZ, **Keating NL**. Factors Contributing to Disparities in Mortality Among Patients with Non-Small Cell Lung Cancer. *Cancer Med.* 2018;7(11):5832-5842.
223. Freedman AN, Klabunde CN, Wiant K, Enewold L, Gray SW, Filipinski KK, **Keating NL**, Leonard DGB, Lively T, McNeel TS, Minasian L, Potosky AL, Rivera DR, Schilsky RL, Schrag D, Simonds NI, Sineshaw HM, Struewing JP, Willis G, de Moor JS. Use of next-generation sequencing tests to guide cancer treatment: results from a nationally representative survey of U.S. oncologists. *JCO Precision Oncology* 2018, 2;1-13
224. Melamed A, Margul DJ, Chen L, **Keating NL**, del Carmen MG, Yang J, Seigel B-LL, Alexander A, Barbar EL, Rice WL, Wright JD, Kocherginsky M, Shahabi S, Rauh-Hain JA. Minimally invasive radical hysterectomy for early-stage cervical cancer. *N Engl J Med* 2018; 379: 1905-1914.
225. Griffiths RI, McFadden EC, Stevens RJ, Valderas JM, Lavery BA, Khan NF, **Keating NL**, Bankhead CR. Quality of diabetes care in breast, colorectal, and prostate cancer. *J Cancer Surviv* 2018. doi: 10.1007/s11764-018-0717-5.
226. Pace LE, Dusetzina SB, Murray Horwitz ME, **Keating NL**. Long-acting reversible contraceptive use in the United States following the 2016 presidential election. *JAMA Intern Med* 2019; 179:444-446. [published as a peer-reviewed original research letter]
227. Brooks GA, Bergquist SL, Landrum MB, Rose S, **Keating NL**. Classifying stage IV lung cancer from health care claims: a comparison of multiple analytic approaches. *Clin Cancer Inform* 2019. Epub DOI <https://doi.org/10.1200/CCI.18.00156>
228. Rauh-Hain JA, Hidrue MK, Gaccione P, Melamed A, Meyer LA, **Keating NL**, Giordano SH, Rice LW, Birrer MJ, del Carmen, MG. Variation in resource utilization associated with the surgical management of ovarian cancer. *Gynecol Oncol.* 2019;152(3):587-593
229. Freedman RA, **Keating NL**, Kouri EM, Clark CR, Bonner SN. Examining associations of racial residential segregation with patient knowledge of breast cancer and treatment receipt. *Clin Breast Cancer.* 2019 Jun;19(3):178-187

230. Kim H, **Keating NL**, Perloff, JN, Hodgkin D, Liu X, Bishop CE. Aggressive care near the end of life for cancer patients in Medicare Accountable Care Organizations. *J Am Geriatr Soc*. 2019 May;67(5):961-968
231. **Keating NL**, O'Malley AJ, Onnela JP, Gray SW, Landon BE. Influence of peer physicians on intensity of end-of-life care for cancer decedents. *Medical Care*. 2019;57(6):468-474.
232. Saulsberry L, Pace LE, **Keating NL**. The impact of breast density notification laws on supplemental breast imaging and breast biopsy. *J Gen Intern Med*. 2019; 34(8): 1441-1451.
233. Dusetzina SB, Huskamp HA, **Keating NL**. Specialty drug pricing and out-of-pocket spending on orally-administered anticancer drugs in Medicare Part D, 2010 to 2018. *JAMA* 2019; 321(20): 2025-2027. [published as a peer-reviewed original research letter]
234. Brooks GA, Jhatakia S, Tripp A, Landrum MB, Christian TJ, Newes-Adeyi G, Hassol SCA, Simon C, and **Keating NL**. Early findings from the Oncology Care Model evaluation. *J Oncol Pract* 2019 15:10, e888-e896.
235. Schleimer LE, Dusengimana JV, Butonzi J, Kigonya C, Natarajan A, Umwizerwa A, O'Neil DS, Costas-Chavarri A, Majyambere J, Shulman LN, **Keating NL**, Shyirambere C, Mpunga T, Pace L. Barriers to timely surgery for breast cancer in Rwanda. *Surgery* 2019; Dec;166(6):1188-1195
236. Dusetzina SB, **Keating NL**, Huskamp HA. Proposals to redesign Medicare Part D—Easing the burden of rising drug prices. *N Engl J Med* 2019; 381: 1401-1404.
237. Gondi S, Wright AA, Landrum MB, Zubizarreta J, Chernew ME, **Keating NL**. Receipt of multimodality cancer care and implications for episode payments for newly-diagnosed cancer patients. *Am J Manage Care* 2019; 25(11):294-295. [published as a peer-reviewed original research letter]
238. Wachterman MW, Leveille T, **Keating NL**, Simon S, Waikar S, Bokhour B. Nephrologists' emotional burden regarding decision-making about dialysis initiation in older adults: a qualitative study. *BMC Nephrol* 2019 Oct 24;20(1):385
239. Pace LE, Dusengimana JMV, Shulman LN, Schleimer LE, Shyirambere S, Rusangwa C, Muvugabigwi G, Park PH, Huang C, Bigirimana JB, Hategekimana V, Rugema V, Umwizerwa A, **Keating NL***, Mpunga T* (co-senior authors). A cluster randomized trial to facilitate breast cancer early diagnosis in a rural district of Rwanda. *J Glob Onc* 2019 Nov; 5:1-13.
240. Graves JA, Hatfield LA, Blot WJ, **Keating NL**, McWilliams JM. Medicaid expansion reduced rates of health status declines among low-income safety net patients in southern states. *Health Aff* 2019. 2020 Jan;39(1):67-76.
241. **Keating NL**, O'Malley AJ, Onnela JP, Gray S, Landon BE. Association of physician peer influence with subsequent physician adoption and use of bevacizumab. *JAMA Netw Open*. 2020 Jan 3;3(1):e1918586. PMID: PMC6991243.

242. Dusetzina SB, Huskamp HA, Jazowski SA, Winn AN, Wood WA, Olszewski A, Basch E, **Keating NL**. Oral oncology parity laws, medication use, and out-of-pocket spending for patients with blood cancers. *J Natl Cancer Inst*. 2019 Dec 27. doi: 10.1093/jnci/djz243. [Epub ahead of print]
243. Udelsman BV, Moseley ET, Sudore RL, **Keating NL**, Lindvall C. Deep natural language processing identifies variation in care preference documentation. *J Pain Symptom Manage* 2020 Jun; 59(6): 1186-1194.e3
244. Haggstrom DA, Kahn K, Klabunde CN, Gray SW, **Keating NL**. Oncologist's perceptions of the usefulness of cancer survivorship care plan components. *Supp Care Cancer* 2020 Jun 14. doi: 10.1007/s00520-020-05531-9. Online ahead of print.
245. Dusetzina SB, Huskamp HA, Keohane LM, **Keating NL**. Medicare Part D and insulin affordability - The devil is in the details. *N Engl J Med*. 2020 May; 382(20): 1878-1880.
246. Pace LE, Lee YS, Tung N, Hamilton JG, Gabriel C, Raja SC, Jenkins C, Braswell A, Domchek SM, Symecko H, Spielman K, Karlan BY, Lester J, Kamara D, Levin J, Morgan K, Offit K, Garber J, **Keating NL**. Comparison of up-front cash cards and checks as incentives for participation in a clinician survey: a study within a trial. *BMC Med Res Method*. In press.
247. Pace LE, Schleimer LE, Shyirambere C, Ilbawi A, Dusengimana JMV, Bigirimana JB, Uwizeye FR, Chamberlin M, Lee YS, Shulman LN, Troyan S, Anderson BO, Duggan C, O'Neil DS, Dvaladze A, Brock J, Nguyen C, Ruhangaza D, Habimana, Nsabimana N, Butonzi J, Nkusi E, Mpunga T, **Keating NL**. Identifying breast cancer care quality measures for a cancer facility in rural Sub-Saharan Africa: Results of a systematic literature review and modified Delphi process. *J Global Oncol* 2020. In press.
248. Roydhouse JK, Gutman R, Wilson IB, Kehl KL, **Keating NL**. Patient and proxy reports regarding the experience of treatment decision-making in cancer care. *Psycho Oncol* 2020. In Press.
249. Lam MB, Phelan J, Orav EJ, Jha AK, **Keating NL**. Association of Medicaid expansion and mortality among patients with breast, lung, and colorectal cancer. *JAMA Netw Open* 2020. In press.
250. O'Malley AJ, Onnela JP, **Keating NL**, Landon BE. The impact of sampling patients on measuring physician patient-sharing networks using Medicare data. *JAMA Netw Open* 2020. In press.
251. JK Roydhouse, R Gutman, IB Wilson, KL Kehl, **NL Keating**. Patient and proxy reports regarding the experience of treatment decision-making in cancer care. *Patient Educ Counsel* 2020. In press.
252. Dusetzina SB, Munluneh B, **Keating NL**, Huskamp HA. Broken promises—how Medicare Part D has failed to deliver savings to older adults. *N Engl J Med* 2020. In press.
253. Christian TJ, Hassol A, Brooks GA, Gu Q, Kim S, Landrum MB, Keating. How do claims-based measures of end-of-life care compare to family ratings of care quality? *J Am Geriatr Soc* 2020. In press.

Other Peer-Reviewed Publications

1. Saylor PJ, **Keating NL**, Smith MR. Prostate cancer survivorship: prevention and treatment of the adverse effects of androgen deprivation therapy. *J Gen Intern Med* 2009; 2009; 24 Suppl 2:S389-94.
2. Levine GN, D'Amico AV, Berger P, Clark PE, Eckel RH, **Keating NL**, Milani RV, Sagalowsky AI, Smith MR, Zakai N. Scientific advisory: androgen deprivation therapy in prostate cancer and cardiovascular risk. *Circulation* 2010;121:833-840.
3. Levine GN, D'Amico AV, Berger P, Clark PE, Eckel RH, **Keating NL**, Milani RV, Sagalowsky AI, Smith MR, Zakai N. Scientific advisory: androgen deprivation therapy in prostate cancer and cardiovascular risk. *CA Cancer J Clin* 2010; 60:194-201.
4. Nambudiri VE, **Keating NL**. Metabolic and cardiovascular risks of androgen deprivation therapy for prostate cancer. *Expert Rev Endo Metab* 2010; 5:531-537.
5. Saylor PJ, **Keating NL**, Freedland SJ, Smith MR. Use of gonadotropin releasing hormone (GnRH) agonists and the risk of diabetes and cardiovascular disease. *Drugs* 2011; 71:255-261.
6. Armstrong K, **Keating NL**, Landry M, Crotty B, Phillips R, Selker HP. Academic general internal medicine: a mission for the future. *J Gen Intern Med* 2013; 28: 845-851.
7. Nguyen P, Alibhai SM, Basaria S, D'Amico AV, Kantoff PW, **Keating NL**, Penson DF, Rosario DJ, Tombal DB, Smith MR. Adverse effects of androgen deprivation therapy and strategies to mitigate them. *Eur Urol* 2015 May;67(5):825-36.
8. Freedman RA, **Keating NL**, Partridge AH, Muss HB, Hurria A, Winer EP. Surveillance Mammography in Older Patients With Breast Cancer-Can We Ever Stop?: A Review. *JAMA Oncol*. 2017; 3(3):402-409.
9. Kehl KL, **Keating NL**, Giordano SH, Schrag D. Insurance networks and access to affordable cancer care. *J Clin Oncol*. 2020 Feb 1;38(4):310-315. doi: 10.1200/JCO.19.01484. Epub 2019 Dec 5. PMID: PMC6994255.

Non-peer reviewed scientific or medical publications/materials in print or other media

Reviews, Chapters, Monographs and Editorials

1. **Keating NL**, Ayanian JZ. Challenges and opportunities for primary care evaluation. *Int J Qual Health Care*. 2003; 15:371-373.
2. Huskamp HA, **Keating NL**. The new Medicare drug benefit: potential effects of pharmacy management tools on access to medications. Report to Kaiser Family Foundation. July 2004. Accessed at <http://www.kff.org/medicare/7120a.cfm>.
3. Malin JL, **Keating NL**. The cost-quality trade-off: need for data quality standards for studies that impact clinical practice and health policy. *J Clin Oncol* 2005; 23:4581-4584.
4. Smith MR, O'Malley AJ, **Keating NL**. GnRH agonists, diabetes, and cardiovascular disease in men with prostate cancer: what metabolic syndrome? *BJU Int* 2008. 101:1335-1336.

5. Steinwachs DM, Allen J, Barlow W, Egede LE, Friedman L, Duncan R, **Keating NL**, Kim P, Virnig BA, Lave J, LaVeist T, Ness R, Optican O. Consensus conference statement on quality of colorectal cancer screening. *Ann Intern Med* 2010; 152:663-667.
6. **Keating NL**. Medicare reimbursement and prescribing of hormone therapy for prostate cancer. *J Natl Cancer Inst* 2010; 102:1814-5.
7. Kouri EM, **Keating NL**. Managing symptoms over time. Book chapter in *Health Services for Cancer Survivors: Practice, Policy, and Research*. Editors: Michael Feuerstein and Patricia A. Ganz. Springer, New York, NY. 2011.
8. **Keating NL**, Malin JL. Providing cancer care: individual or team sport? *J Gen Intern Med* 2012; 27: 3-4.
9. Knaul FM, Arreola-Ornelas H, Adami H-O, **Keating NL**, Hunter D, O'Brien M, Cleary J, Frenk J. The global cancer divide: an equity imperative. Chapter in: *Closing the Cancer Divide: A Blueprint to Expand Access in Low and Middle Income Countries*. Editors: Knaul FM, Frenk J, Shulman L for the Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries. Harvard Global Equity Initiative, Boston MA. October 2011. Accessed at http://ghsm.hms.harvard.edu/uploads/pdf/ccd_report_111027.pdf.
10. **Keating NL**, Knaul FM. Evidence for decision making. Chapter in: *Closing the Cancer Divide: A Blueprint to Expand Access in Low and Middle Income Countries*. Editors: Knaul FM, Frenk J, Shulman L for the Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries. Harvard Global Equity Initiative, Boston MA. October 2011. Accessed at http://ghsm.hms.harvard.edu/uploads/pdf/ccd_report_111027.pdf.
11. Hurria A, Browner IS, Cohen HJ, Denlinger CS, Deshazo M, Extermann M, Ganti AK, Holland JC, Holmes HM, Karlekar MB, **Keating NL**, McKoy J, Medeiros BC, Mrozek E, O'Connor T, Petersdorf SH, Rugo HS, Silliman RA, Tew WP, Walter LC, Weir AB 3rd, Wildes T. Senior adult oncology guidelines. *J Natl Compr Canc Netw*. 2012;10:162-209.
12. **Keating NL**, Smith MR, Hu JC. Still much to understand about androgen deprivation therapy and cardiovascular disease. *Eur Urol* 2012; 61: 1120-1130.
13. Rosario DJ, Bourke L, **Keating NL**. Androgen deprivation therapy and cardiovascular harm - are all men created equal? *Eur Urol* 2014; 65:574-6.
14. El Saghir NS, **Keating NL**, Carlson RW, Khoury KE, Fallowfield L. Tumor boards: optimizing the structure and improving efficiency of multidisciplinary management of patients with cancer worldwide. *Am Soc Clin Oncol Educ Book* 2019; 34: e461-6
15. **Keating NL**, Pace LE. New guidelines for breast cancer screening in US women. *JAMA* 2015; 314: 1569-1571.
16. **Keating NL**. Peer influence and opportunities for physician behavior change. *J Natl Cancer Inst* 2017; 109(8): djx009.
16. Subramanian S, **Keating NL**. Delays in breast cancer diagnosis after a state policy limiting Medicaid enrollment. *Cancer*. 2017;123(17):3219-3221.

17. **Keating NL**. From the guest editor: The Affordable Care Act and cancer care. *Cancer J*. 2017;23(3):149-150. PMID: PMC5445926.
18. **Keating NL**. Type of androgen deprivation therapy and risk of cardiovascular disease. *Eur Urol* 2017; 72: 929-930.
19. **Keating NL**, Pace LE. Breast cancer screening in 2018: Time for shared decisions. *JAMA*. 2018;319(17):1814-1815.
20. **Keating NL**, Pace LE. A promising tool to increase individualized discussions about lifestyle risk factors for breast cancer. *J Womens Health (Larchmt)*. 2018. doi: 10.1089/jwh.2018.7421. [Epub ahead of print].
21. Pace LE, **Keating NL**. The role of quality measures in improving breast cancer care in low-income countries. *Current Breast Cancer Reports*. 2018 Sep 1;10(3):196-201.
22. **Keating NL**, Mohile S. Increasing engagement in peer review. *J Geriatr Oncol*. 2019 (10): 526-527.
23. Chambers DA, Amir E, Saleh RR, Rodin D, **Keating NL**, Osterman TJ, Chen JL The Impact of Big Data Research on Practice, Policy, and Cancer Care. *Am Soc Clin Oncol Educ Book*. 2019 Jan;39:e167-e175. doi: 10.1200/EDBK_238057. Epub 2019 May 17.
24. **Keating NL**, Pace LE. New federal requirements to inform patients about breast density: will they help patients? *JAMA* 2019. Jun 18;321(23):2275-2276. doi: 10.1001/jama.2019.5919
25. Pace LE, **Keating NL**. Medications to reduce breast cancer risk: promise and limitations. *JAMA* 2019. Sep 3;322(9):821-823. doi: 10.1001/jama.2019.9689.

Books/Textbooks for the Medical or Scientific Community

1. **Keating NL**, contributing editor. Komaroff AL, editor. *Harvard Medical School Family Health Guide*, 1999. New York: Simon and Schuster.

Letters to the Editor

1. **Keating NL**, Ayanian JZ, Zaslavsky AM. Hormone replacement therapy in postmenopausal U.S. women [letter]. *Ann Intern Med* 1999; 131:791.
2. **Keating NL**, Herrinton LJ, Zaslavsky AM, Liu L, Ayanian JZ. Understanding variations in hospice enrollment [letter]. *J Natl Cancer Inst* 2007; 99: 84.
3. Freedman RA, **Keating NL**. Reply to adjuvant breast cancer therapy in minority women [letter]. *Cancer* 2012; 118: 865.
4. **Keating NL**. Response to tumor boards and the quality of cancer care [letter]. *J Natl Cancer Inst* 2013; 105(2):113-21.
5. Pace LE, **Keating NL**. Risks and benefits of screening mammography-reply [letter]. *JAMA* 2014; 312: 649.

6. Samuel CA, **Keating NL**. Racial disparities in cancer care in the Veterans Affairs healthcare system and the role of site of care-reply [letter]. *Am J Pub Health* 2014 104 Suppl 4:S562-71.
7. **Keating NL**, Pace LE. Reply to new breast cancer screening guidelines [letter]. *JAMA* 2016; 315(13):1405.
8. Winn A, **Keating NL**, Dusetzina SB. Reply to E Ritchie [letter]. *J Clin Oncol*. 2017; 20;35(15):1745-1746.
9. Kim H, **Keating NL**, Hodgkin D, Bishop C. Reply to including palliative care in the assessment of Accountable Care Organization for end of life care. *J Am Geriatr Soc* 2019. In press.
10. **Keating NL**, Tripp A, Jhatakia S, Hassol A, Simon C. Letter to the Editor: Oncology practices and clinicians participating in the Oncology Care Model. *J Oncol Pract* 2019. In press.

Clinical Guidelines and Reports

1. Gallagher PM, Hauser H, Guadagnoli E, **Keating NL**. Report of tests of strategies to increase response rates from physicians. *Proc Statistics Canada Symposium* 2001. Accessed at <http://www.statcan.gc.ca/pub/11-522-x/2001001/session9/6257-eng.pdf>.
2. Hurria A, Wildes T, Blair SL, Browner IS, Cohen HJ, Deshazo M, Dotan E, Edil BH, Extermann M, Ganti AK, Holmes HM, Jagsi R, Karlekar MB, **Keating NL**, Korc-Grodzicki B, McKoy JM, Medeiros BC, Mrozek E, O'Connor T, Rugo HS, Rupper RW, Silliman RA, Stirewalt DL, Tew WP, Walter LC, Weir AB 3rd, Bergman MA, Sundar H. Senior adult oncology, version 2.2014: clinical practice guidelines in oncology. *J Natl Compr Canc Netw*. 2014 Jan;12(1):82-126.
3. Institute of Medicine. 2015. Review of VA clinical guidance for the health conditions identified by the Camp Lejeune legislation. Washington, DC: The National Academies Press. [served as committee member/author of the report]
4. VanderWalde N, Jagsi R, Dotan E, Baumgartner J, Browner IS, Burhenn P, Cohen HJ, Edil BH, Edwards B, Extermann M, Ganti AK, Gross C, Hubbard J, **Keating NL**, Korc-Grodzicki B, McKoy JM, Medeiros BC, Mrozek E, O'Connor T, Rugo HS, Rupper RW, Shepard D, Silliman RA, Stirewalt DL, Tew WP, Walter LC, Wildes T, Bergman MA, Sundar H, Hurria A. NCCN Guidelines Insights: Older Adult Oncology. Version 2.2016. *J Natl Compr Canc Netw*. 2016 Nov;14(11):1357-1370.

Narrative Report

As a clinician investigator, I focus 80% of my effort on research, and the remaining time in clinical work and teaching. My health services **research activities** focus on two major areas: 1) provider, patient, and health system factors that influence quality of care and treatment decisions and (2) the effectiveness, and comparative effectiveness, of treatments in non-trial populations. My research, which primarily uses cancer care as a model, is collaborative and uses a variety of methods to address challenges to the receipt of optimal care.

I have conducted numerous studies examining factors influencing the quality of cancer care across the spectrum of disease, including screening and diagnosis, treatment, surveillance care, and end-of-life care. This work has focused on provider factors (including the types of physicians patients see and the hospitals and organizations (e.g., Veterans Affairs providers), patient factors, such as age, race/ethnicity, insurance, and clinical factors. I also have substantial experience studying end-of-life care, demonstrating sizable variations in the intensity of end-of-life care; work that has prompted my current NCI R01 focused on understanding the reasons behind these variations. I conducted work under a NCI-funded R01 to examine the effects of physician networks on adoption of new and existing cancer therapies. More recently, I am the Clinical Lead on the Oncology Care Model Evaluation team, assessing the impact of the Oncology Care Model on spending, utilization, and quality.

I have conducted several studies examining effectiveness of treatments frequently used in clinical practice in patients who were not like those in the original clinical trials. In widely-cited work, I identified an association of androgen deprivation therapy for prostate cancer with an increased risk of diabetes and cardiovascular disease. This work has led to new guidelines and an FDA drug safety communication about the risk of GnRH agonists (<http://www.fda.gov/Drugs/DrugSafety/ucm229986.htm>). My research assessing physicians' recommendations for cancer treatment of older patients and those with comorbid illness is stimulating new efforts to enroll these patients in clinical trials.

My **clinical and teaching activities** include seeing patients in my longitudinal primary care clinic one-half day per week and precepting four residents weekly during their afternoon continuity clinic. Remaining clinically active allows me to understand first-hand the challenges that physicians face in delivering of high quality care and the challenges that patients face in accessing affordable, high quality care. I also provide regular lectures to the residents on topics including cancer screening and reading the medical literature. Since 2012, I have served as Team Leader for my clinical team (the Red Team) in the Phyllis Jen Center, leading primary care transformation at the practice, initially as part of the Harvard Medical School Primary Care Collaborative.

Finally, I have been very active nationally in the Society of General Internal Medicine (SGIM). I served as the Program Chair of the Annual Meeting in 2004 and recently completed a 3-year term on the organization's Council. I am currently chair of the Research Subcommittee of the SGIM Health Policy Committee. I have served as an Associate Editor for the Journal of Clinical Oncology and was previously a member of the American Society of Clinical Oncology (ASCO) Clinical Guidelines Committee. I am currently Associate Editor at the Journal of the National Cancer Institute, a member of the editorial board of the Journal of Geriatric Oncology, and a member of the National Comprehensive Cancer Center Older Adult Oncology Guideline Panel.