

BIOGRAPHICAL SKETCH

NAME Carlos, Ruth C.		POSITION TITLE Professor with Tenure, Dept. of Radiology	
eRA COMMONS USER NAME rcarlos			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Chicago, the College, Chicago, IL	AB	1989	Biological Sciences
University of Chicago, Pritzker School of Medicine	MD	1993	Medicine
University of Chicago Hospitals, Chicago IL		7/93 – 6/97	Radiology Residency
U Michigan Medical Systems, Ann Arbor, MI		7/97 – 6/98	MRI / US Fellowship
U Michigan Medical School, Ann Arbor, MI		7/99 – 6/01	Robert Wood Johnson Clinical Scholar
University of Michigan School of Public Health	MS	7/99 – 6/01	Clinical Research Design & Statistical Analysis

A. PERSONAL STATEMENT:

Dr. Carlos is a radiologist and former Robert Wood Johnson Clinical Scholar, trained in comparative effectiveness and health services research with a focus on cancer prevention and control. Her work over the past 10 years has encompassed cost-effectiveness analysis, patient preference measurement and meta-analysis and systematic reviews in diagnostic imaging. More recently, her research focuses on the novel use of existing health encounters, including imaging encounters, as teachable moments to improve global health behavior. She has evaluated the use of screening mammography and cervical cancer screening encounters as teachable moments to improve colon cancer screening in women. Current work seeks to understand the effectiveness of maternally-directed interventions to improve vaccine uptake in their adolescent daughters as a significant and innovative extension of her previous work, specifically examining parental decision making on behalf of a child. The results of this project have the potential to serve as a model for improving adherence to adolescent preventive services. Dr. Carlos brings her specific expertise in evaluating cultural barriers to adolescent HPV vaccination in African-American mothers and developing and pilot testing tailored interventions directed at these cultural barriers.

Dr. Carlos is the Assistant Chair of Clinical Research in the Department of Radiology and has mentored numerous junior faculty members, residents and medical students in health services research with an emphasis on diagnostic imaging. She serves on several editorial boards and holds assistant editorships in health services research in radiology.

B. POSITIONS AND HONORS.

Positions and Employment

2011 – present Professor, Department of Radiology, University of Michigan, Ann Arbor, MI
 2010 – present Assistant Chair of Clinical Research, Dept. of Radiology, University of Michigan, MI

Other Experience and Professional Memberships

2004 – present Data and Safety Monitoring Committee Member, American College of Radiology Imaging Network (ACRIN)
 2011 – 2012 President-elect, Association of University Radiologists
 2006 – present Associate Editor, Health Services Research, Journal of the American College of Radiology
 2006 – present Deputy Editor, Health Services Research, Academic Radiology
 2008 – present Assistant Editor, Women's Health, American Journal of Roentgenology
 2006, 2007 Reviewer, NIH NIBIB Novel Imaging Technology Study Section
 2009 Reviewer, NIH Health Services Organization and Delivery Study Section
 2009, 2010 Reviewer, NIH NCI Subcommittee H Cooperative Group Review Section
 2010 Organizer/Speaker, NIH NIBIB/RSNA Comparative Effectiveness in Radiology Workshop

Honors and Awards

1998	Recipient, Robert Wood Johnson Clinical Scholarship
2006	Elected Fellow of the Society of Computed Body Tomography and Magnetic Resonance
2009	Elected Fellow of the American College of Radiology

C. Selected peer-reviewed publications (in chronological order). (Selected from 87 publications)

1. **Carlos RC** and Fendrick AM. Improving Cancer Screening Adherence: Using the “Teachable Moment” as a Delivery Setting for Educational Interventions. *Am J Managed Care* 2004; 10:247-48.
2. **Carlos RC**, Fendrick AM, Abrahamse PH, et al. Colorectal Cancer Screening Behavior in Women Attending Screening Mammography: Longitudinal Trends and Predictors. *Womens Health Issues* 2005; 15:249-57.
3. **Carlos RC**, Axelrod DA, Ellis J, Abrahamse PA, Fendrick AM. Incorporating Patient-Centered Outcomes in Cost-Effectiveness Analysis: The Effect of Short-Term Disutilities and Quality-of-Life on the Economic Comparison of MR and Conventional Angiography in Evaluating Renal Artery Stenosis. *Am J Roentgenol* 2003; 181:1653-1661.
4. **Carlos RC**. The Added Value of Screening Mammography in Improved Screening for Other Cancers. *J Am Coll Radiol* 2004; 1:597-600.
5. **Carlos RC**, Fendrick AM. Value Added Radiology: Using Existing Screening Programs to Improve Cancer Screening. *Radiology Perspective. Acad Radiol* 2005; 12:475-8.
6. **Carlos RC**, Fendrick AM, Patterson SK, Bernstein SJ. Associations in Breast and Colon Cancer Screening Behavior in Women. *Acad Radiol* 2005; 12:451-8.
7. Nandalur KR, Dwamena BA, Choudhri AF, Nandalur MR, **Carlos RC** (senior author). Diagnostic performance of stress cardiac magnetic resonance imaging in the detection of coronary artery disease: a meta-analysis. *J Am Coll Cardiol*. 2007 Oct 2;50(14):1343-53. Epub 2007 Sep 17.
8. Cronin P, Dwamena BA, Kelly AM, **Carlos RC**. Solitary Pulmonary Nodule: Meta-analytic Comparison of Contemporary Cross-sectional Imaging Modalities for Diagnosis of Malignancy. *Radiology*. 2008 Jan 30;
9. **Carlos RC**. Value-driven Health Care: the purchasers’ perspective. *J Am Coll Radiol* 2008; 5:719-26.
10. Cronin P, Dwamena BA, Kelly AM, Bernstein SJ, **Carlos RC** (senior author). Solitary Pulmonary Nodules: A Meta-analysis of the Diagnostic Utility of Alternative Imaging Tests. *Eur Radiol* 2008 Jul 8
11. Kelly AM, Dwamena BA, Cronin P, Bernstein SJ, **Carlos RC** (senior author). Effectiveness of Drugs used to Prevent Contrast Induced Nephropathy: A Meta-analysis. *Ann Intern Med*. 2008 Feb 19;148(4):284-94.
12. Gordon JRS, Wahls T, **Carlos RC**, Pipinos II, Rosenthal GE, Cram P. Missed dilation of the abdominal aorta detected on CT scanning in a healthcare system with an advanced Electronic Medical Record. *Ann Intern Med*. 2009 Jul 7;151(1):21-7.
13. **Carlos RC**, Dempsey AF, Patel DA, Dalton VA. Cervical Cancer Prevention through HPV Vaccination: using the “teachable moment” as a delivery setting for educational interventions. *Obstet Gynecol*. 2010 Apr;115(4):834-8.
14. **Carlos RC**, Ruffin MT, Dempsey AF, Patel DA, Resnicow K, Dalton VA HPV Vaccine Uptake in Adolescent Daughters of Mothers Who Receive Cancer Preventive Services. *J Women’s Health* 2010; 19:608-09.
15. **Carlos RC**, Sadigh G, Kelly AM. Women’s health, accountable care organizations, and radiology practice: maximizing radiology’s value under health care reform. *AJR Am J Roentgenol*. 2011 Feb;196(2):257-8.
16. **Carlos RC**, Dempsey AF, Resnicow K, Ruffin M, Patel DA, Straus CM, Vanessa K D. Maternal characteristics that predict a preference for mandatory adolescent HPV vaccination. *Hum Vaccin*. 2011 Feb 1;7(2).
17. **Carlos RC**, Cronin P. Making sense of the evidence using comparative effectiveness to guide clinical decision making, policy and coverage. *Acad Radiol*. 2011 Sep;18(9):1065-6