

**BIOGRAPHICAL SKETCH**

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NAME: Chan, Benjamin

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

POSITION TITLE: Senior Associate Biostatistician I

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

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
University of California, Berkeley	BA	1992	Statistics
University of Washington, Seattle	MS	1994	Biostatistics
Concordia University, Portland, Oregon	MOTH	2009	Teaching

**A. Personal Statement**

As a Senior Associate Biostatistician I in the Biostatistics and Design Program, I am one of a team providing biostatistics support to basic, clinical, and population science investigators who are conducting research at OHSU. Over my career I have participated as the data analyst and coauthor for numerous clinical trials, prospective and retrospective observational studies, and systematic reviews.

1. Englander H, Weimer M, Solotaroff R, Nicolaidis C, Chan B, Velez C, Noice A, Hartnett T, Blackburn E, Barnes P, Korthuis PT. Planning and Designing the Improving Addiction Care Team (IMPACT) for Hospitalized Adults with Substance Use Disorder. J Hosp Med. 2017 May;12(5):339-342. PubMed PMID: [28459904](#); PubMed Central PMCID: [PMC5542562](#).
2. McConnell KJ, Renfro S, Chan BK, Meath TH, Mendelson A, Cohen D, Waxmonsky J, McCarty D, Wallace N, Lindrooth RC. Early Performance in Medicaid Accountable Care Organizations: A Comparison of Oregon and Colorado. JAMA Intern Med. 2017 Apr 1;177(4):538-545. PubMed PMID: [28192568](#); PubMed Central PMCID: [PMC5440252](#).
3. Sun BC, Chi DL, Schwarz E, Milgrom P, Yagapen A, Malveau S, Chen Z, Chan B, Danner S, Owen E, Morton V, Lowe RA. Emergency department visits for nontraumatic dental problems: a mixed-methods study. Am J Public Health. 2015 May;105(5):947-55. PubMed PMID: [25790415](#); PubMed Central PMCID: [PMC4386544](#).
4. Englander H, Michaels L, Chan B, Kansagara D. The care transitions innovation (C-Train) for socioeconomically disadvantaged adults: results of a cluster randomized controlled trial. J Gen Intern Med. 2014 Nov;29(11):1460-7. PubMed PMID: [24913003](#); PubMed Central PMCID: [PMC4238212](#).

**B. Positions and Honors****Positions and Employment**

1994 - 1998	Assistant Statistician, Division of General Medicine, Department of Internal Medicine, School of Medicine, University of California, Davis, Sacramento, CA
1996 - 1998	Assistant Statistician, Department of Family Practice, School of Medicine, University of California, Davis, Sacramento, CA
1998 - 2003	Research Associate, Clinical Information and Decision Support and Division of Medical Informatics and Outcomes Research, Oregon Health and Science University, Portland, OR
2003 - 2007	Research Associate, Bone and Mineral Unit, Department of Endocrinology, Oregon Health

	and Science University, Portland, OR
2006 - 2009	Research Associate, Evidence-based Practice Center , Oregon Health and Science University, Portland, OR
2009 - 2011	Teacher (mathematics), Union High School, Evergreen School District, Vancouver, WA
2011 - 2016	Research Associate, Center for Health Systems Effectiveness, Oregon Health and Science University, Portland, OR
2016 -	Senior Associate Biostatistician I, OHSU-PSU School of Public Health, Biostatistics and Design Program (BDP), Portland, OR

## **Other Experience and Professional Memberships**

### **Honors**

### **C. Contribution to Science**

1. I have been analyzing large administrative data sets since early in my career. First, using California's hospital inpatient discharge abstracts to support research for the California Hospital Outcomes Project, under the direction of Patrick Romano. More recently, I have spent the last four years managing and analyzing data from the Oregon All Payer All Claims (APAC) data. APAC data is composed of medical and pharmacy claims, member enrollment, and provider files, collected from health insurance payers for residents of the State of Oregon. The data contains on the order of hundreds of millions of rows of claim line information data and billions of member months information. Working with large data is challenging and requires a different skill set compared to working with the usual observational study or clinical trial data. In addition to medical and pharmacy claims data from Oregon, I have also started work on similar data from Colorado's Medicaid program. This data presents similar challenges as the Oregon APAC data.
  - a. Romano PS, Chan BK. Risk-adjusting acute myocardial infarction mortality: are APR-DRGs the right tool?. Health Serv Res. 2000 Mar;34(7):1469-89. PubMed PMID: [10737448](#); PubMed Central PMCID: [PMC1975668](#).
  - b. García JA, Romano PS, Chan BK, Kass PH, Robbins JA. Sociodemographic factors and the assignment of do-not-resuscitate orders in patients with acute myocardial infarctions. Med Care. 2000 Jun;38(6):670-8. PubMed PMID: [10843314](#).
  - c. Romano PS, Chan BK, Schembri ME, Rainwater JA. Can administrative data be used to compare postoperative complication rates across hospitals?. Med Care. 2002 Oct;40(10):856-67. PubMed PMID: [12395020](#).
  - d. Sun BC, Chi DL, Schwarz E, Milgrom P, Yagapen A, Malveau S, Chen Z, Chan B, Danner S, Owen E, Morton V, Lowe RA. Emergency department visits for nontraumatic dental problems: a mixed-methods study. Am J Public Health. 2015 May;105(5):947-55. PubMed PMID: [25790415](#); PubMed Central PMCID: [PMC4386544](#).
2. A large portion of my previous and current work is in service of informing health care policy. Since 2000, I have been involved with the United States Preventive Services Task Force, performing meta-analysis for a number of systematic reviews. These systematic reviews were used to inform treatment guidelines and recommendations by the USPSTF. As an independent contractor, I have also conducted a meta-analysis on posttreatment HPV testing for recurrent CIN. My current work revolves around the evaluation of Oregon's Medicaid transformation to Coordinated Care Organizations.
  - a. Humphrey LL, Chan BK, Sox HC. Postmenopausal hormone replacement therapy and the primary prevention of cardiovascular disease. Ann Intern Med. 2002 Aug 20;137(4):273-84. PubMed PMID: [12186518](#).
  - b. Guise JM, Berlin M, McDonagh M, Osterweil P, Chan B, Helfand M. Safety of vaginal birth after

cesarean: a systematic review. *Obstet Gynecol.* 2004 Mar;103(3):420-9. PubMed PMID: [14990401](#).

- c. Chan BK, Melnikow J, Slee CA, Arellanes R, Sawaya GF. Posttreatment human papillomavirus testing for recurrent cervical intraepithelial neoplasia: a systematic review. *Am J Obstet Gynecol.* 2009 Apr;200(4):422.e1-9. PubMed PMID: [19167697](#); PubMed Central PMCID: [PMC2784953](#).
- d. Nelson HD, Tyne K, Naik A, Bougatsos C, Chan BK, Humphrey L. Screening for breast cancer: an update for the U.S. Preventive Services Task Force. *Ann Intern Med.* 2009 Nov 17;151(10):727-37, W237-42. PubMed PMID: [19920273](#); PubMed Central PMCID: [PMC2972726](#).

## **D. Additional Information: Research Support and/or Scholastic Performance**

### **Completed Research Support**

1R01MH1000001, National Institute of Mental Health      McConnell/Lindrooth (PI)      09/07/12-07/31/16  
Evaluating Coordinated Care Organizations

This project assesses the effects on costs and quality from a statewide Medicaid transformation focusing on alternative reimbursement methodologies and integration of behavioral and physical health care.

Role: KP

NA, Oregon Health Authority      McConnell (PI)      07/24/14-08/01/16  
Sustainable Health Expenditures Working Plan

Health care expenditures have generally grown at a rate that exceeds the growth of national and state incomes and tax revenues. These problems are coupled with a lack of data to provide information on where health care expenditures are high and what activities are causing increases in the rate of health care spending. The Oregon Health Authority wishes to develop a methodology to track health care spending within the state. In line with those aims, this study will use Oregon Medicaid data and data from Oregon's All-Payer-All-Claims database to construct per-member-per-month costs for commercially insured and Medicaid populations. From these estimates, study personnel will then construct a preliminary estimate of statewide per capita expenditures, including Medicare expenditures. Finally, researchers will critically assess study limitations and suggest next steps in crafting methodology, collecting data, and focusing on specific cost sources. This last phase will incorporate stakeholder feedback.

Role: KP

NA, Oregon Health Authority      McConnell (PI)      07/24/14-08/01/16  
Priority Areas for the Health Evidence Review Commission

The Health Evidence Review Commission (HERC) reviews clinical evidence in order to guide the Oregon Health Authority (OHA) in making benefit-related decisions for its health plans. Its main products are the Prioritized List of Health Services, used by the legislature to guide funding decisions for the Oregon Health Plan (OHP), and evidence-based reports on specific topics of interest to Oregon health payers and providers as well as members of the public. The work described in this protocol supplements the clinical evidence with evidence provided by analysis using administrative claims data, specifically, from the Oregon All Payer All Claims (APAC) data source

(<http://www.oregon.gov/oha/ohpr/rsch/pages/apac.aspx>). Specific tasks include: 1. Topic selection 2. Analysis across payers and regions 3. Estimate impacts of changes in benefit coverage 4. Reporting

Role: KP