

CURRICULUM VITAE

Robert Douglas Wellman

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1. BIOGRAPHICAL INFORMATION:

Robert D. Wellman, M.S.
Biostatistician I
Biostatistics Unit, Group Health Research Institute
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2. EDUCATION:

University of California Santa Cruz, Santa Cruz, CA

B.A. Economics (1997)

- Minor: Mathematics
- Highest honors in the major

University of Washington, Seattle, WA

M.S. in Biostatistics (2008)

- Master's Thesis Topic: Multiple Imputation & Marginal Structural Models for Estimating Causal Effects in the Presence of Intermittent Missing Data: Breastfeeding's Effect on HIV Progression in a Cohort of Kenyan Mothers.
- Advisor: Dr. Elizabeth Brown

3. PROFESSIONAL POSITIONS:

- 3/01/2015 Biostatistician II, Group Health Research Institute, Seattle, WA.
- 10/20//2009-2/28/2015 Biostatistician I, Group Health Research Institute, Seattle, WA.
- Fall 2007 & Winter 2008 Teaching Assistant, Applied Biostatistics I & II, Department of Biostatistics, University of Washington.
- 06/2004-09/2009 Research Assistant, Biostatistics Core, Center for AIDS Research, Harborview Medical Center, University of Washington.
- 1997-2004 Account Supervisor, Dallabrida & Associates Pharmaceutical Marketing & Patient Communications, San Francisco, CA.
- Fall 1996 Teaching Assistant, Introduction to Macroeconomics, UC Santa Cruz.

4. HONORS, AWARDS and SCHOLARSHIPS:

HIV/AIDS Training Grant, Ruth L. Kirschstein National Research Service Award, Department of Health and Human Services Public Health Service, 2006-2009.

5. PROFESSIONAL MEMBERSHIPS

American Statistical Association

International Biometric Society, Eastern North America Region

6. PROFESSIONAL ACTIVITIES

Statistical Advisor, BMC Complementary and Alternative Medicine

Reviewer, BMJ Open 2015

Reviewer, *Annals of Internal Medicine* 2015

Reviewer, *Annals of Internal Medicine* 2013

Reviewer, *BMJ Open* 2013

7. BIBLIOGRAPHY:

a) Peer-reviewed research articles:

1. Sherman KJ, Cherkin DC, Cook AJ, Hawkes RJ, Deyo RA, **Wellman R**, Khalsa PS. Comparison of yoga versus stretching for chronic low back pain: protocol for the Yoga Exercise Self-care (YES) trial. *Trials*. 2010;11(1):36. [Epub ahead of print].
2. Daniel Cherkin, Karen Sherman, Janet Kahn, **Robert Wellman**, Andrea Cook, Eric Johnson, Janet Erro, Kristin Delaney, Richard Deyo. Effects of two types of massage on chronic low back pain: A randomized, controlled trial. *Annals of Internal Medicine* 2011 Jul 5;155(1):1-9.
3. Karen J. Sherman, Daniel C. Cherkin, **Robert D. Wellman**, Andrea J. Cook, Rene J. Hawkes, Kristin Delaney, Partap S. Khalsa, Richard A. Deyo. A Randomized Trial Comparing Yoga, Stretching, and a Self-care Book for Chronic Low Back Pain. *Archives of Internal Medicine*. October 24, 2011 [Epub ahead of print]
4. Frederick Hecht, **Robert Wellman**, Michael Busch, Susan Little, Martin Markowitz, Ann Collier, Joseph Margolick, Philip Norris, Jean-Pierre Routy, Sarah Holte. Use of Quantitative Results From HIV Antibody EIAs to Identify Persons in Early Post-Seroconversion Periods. *J Infect Dis*. (2011) 204(4): 526-533.
5. Cook, A.J., **Wellman, R.D.**, Tiwari, R.C., Li, L., Heckbert, S., Marsh, T., Heagerty, P., and Nelson, J.C. (2012) Statistical approaches to group sequential monitoring of post-marketing safety surveillance data: Current state of the art for use in the mini-sentinel surveillance project. *Pharmacoepidemiol Drug Safety* 21 Suppl:72-81.
6. Bowles EJ, **Wellman R**, Feigelson HS, Onitilo AA, Freedman AN, Delate T, Allen LA, Nekhlyudov L, Goddard KA, Davis RL, Habel LA, Yood MU, Magid D, Wagner EH, for the Pharmacovigilance Study Team. Risk of heart failure in breast cancer patients after anthracycline and trastuzumab treatment: a retrospective cohort study. *J Natl Cancer Inst*. 2012 Sep 5;104(17):1293-305.
7. T. Delate, E. J. A. Bowles, R. Pardee, **R. D. Wellman**, L. A. Habel, M. U. Yood, L. Nekhlyudov, K. A. Goddard, R. L. Davis, C. A. McCarty, A. A. Onitilo, H. S. Feigelson, J. Freml and E. Wagner. Validity of Eight Integrated Healthcare Delivery Organizations' Administrative Clinical Data to Capture Breast Cancer Chemotherapy Exposure. *Cancer Epidemiology Biomarkers & Prevention* 2012;21:673-80.
8. Allen LA, Yood MU, Wagner EH, Aiello Bowles EJ, Pardee R, **Wellman R**, Habel L, Nekhlyudov L, Davis RL, Onitilo AA, Magid DJ; for the Pharmacovigilance Research Group. Performance of Claims-based Algorithms for Identifying Heart Failure and Cardiomyopathy Among Patients Diagnosed With Breast Cancer. *Med Care*. ePub Ahead of Print, 25 May 2012.
9. J. D. Stekler, **R. Wellman**, S. Holte, J. Maenza, C. E. Stevens, L. Corey and A. C. Collier. Are there benefits to starting antiretroviral therapy during primary HIV infection? Conclusions from the Seattle Primary Infection Cohort vary by control group. *International Journal of STD & AIDS*. 2012;23(3):201-206.

10. David Arterburn, **Robert D. Wellman**, Emily O. Westbrook, Carolyn Rutter, Tyler Ross, David McCulloch, Matt Handley, Charles Jung. Introducing Decision Aids At Group Health Was Linked To Sharply Lower Hip And Knee Surgery Rates And Costs. *Health Affairs*. September 2012 31:92094-2104.
11. Karen J. Sherman, Andrea J. Cook, Janet R. Kahn, Rene J. Hawkes, **Robert D. Wellman** and Daniel C. Cherkin. Dosing study of massage for chronic neck pain: protocol for the dose response evaluation and analysis of massage [DREAM] trial. *BMC Complementary and Alternative Medicine* 2012, 12:158
12. Schairer C, Li Y, Frawley P, Graubard BI, **Wellman RD**, Buist DS, Kerlikowske K, Onega TL, Anderson WF, Miglioretti DL.. Risk Factors for Inflammatory Breast Cancer and Other Invasive Breast Cancers. *J Natl Cancer Inst*. 2013 Sep 18;105(18):1373-1384.
13. Karen J. Sherman, **Robert D. Wellman**, Andrea J. Cook, Daniel C. Cherkin, and Rachel M. Ceballos, “Mediators of Yoga and Stretching for Chronic Low Back Pain,” *Evidence-Based Complementary and Alternative Medicine*, vol. 2013, Article ID 130818, 11 pages, 2013. doi:10.1155/2013/130818
14. Karen J. Sherman, Andrea J. Cook, **Robert D. Wellman**, Rene J. Hawkes , Janet R. Kahn, Richard A. Deyo, Daniel C. Cherkin. Five-Week Outcomes from a Dosing Trial of Therapeutic Massage for Chronic Neck Pain. *Annals of Family Medicine* 2014 Mar-Apr;12(2):112-20.
15. Cook, A. J., Wellman, R. D., Nelson, J. C., Jackson, L. A. and Tiwari, R. C. (2015), Group sequential method for observational data by using generalized estimating equations: application to Vaccine Safety Datalink. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 64: 319–338. doi: 10.1111/rssc.12076
16. Brian Sprague, Ronald Gangnon, Veronica Burt, Amy Trentham-Dietz, John Hampton, **Robert Wellman**, Karla Kerlikowske, and Diana Miglioretti. Prevalence of Mammographically Dense Breasts in the United States. *JNCI* (07/09/2014 in press).
17. Arterburn DE, **Wellman R**, Westbrook EO, Ross TR, McCulloch D, Handley M, Lowe M, Cable C, Zeliadt SB, Hoffman RM. Decision Aids for Benign Prostatic Hyperplasia and Prostate Cancer. *Am J Managed Care*. (Published Online: March 20, 2015)
18. Andrea J. Cook, **Robert D. Wellman**, Janet R. Kahn, Dan Cherkin and Karen J. Sherman. Positive benefits of additional massage treatments for chronic neck pain on 12 and 26 week outcomes. (*Spine* 2015 in press).
19. C.Lehman, D.Miglioretti, **R.Wellman**, W.DeMartini, B.Yankaskas, D.Buist, L.Ichikawa, K.Kerlikowske, A.Tosteson. Diagnostic Accuracy of Digital Screening Mammography with and without Computer-aided Detection. *JAMA Internal Medicine* (accepted 8/2015).

b) Other non-peer-reviewed scholarly publications:

1. Cook, A.J., **Wellman, R.D.**, Tiwari, R.C., Li, L., Heckbert, S., Marsh, T., Heagerty, P., and Nelson, J.C. (2011) Mini-Sentinel Methods Development: Statistical approaches for group sequential monitoring of postmarketing safety surveillance data: Overview and simulation evaluation of methods applicable to the Mini-Sentinel surveillance project, FDA's Sentinel Initiative: Project Report.
2. Cook, A.J., **Wellman, R.D.**, Marsh, T., Tiwari, R.C., Nguyen, M.D., Russek-Cohen, E., Jiang, Z., and Nelson, J.C. (2012) Mini-Sentinel Methods Development: Statistical Methods

for Estimating Causal Risk Differences in the Distributed Data Setting for Postmarket Safety Outcomes, FDA's Sentinel Initiative: Project Report.

3. Andrea J Cook, **Robert D Wellman**, Azadeh Shoaibi, Ram C Tiwari, Denise Boudreau, Sunali Gooneseker, Tracey L Marsh, and Jennifer C Nelson. Mini-Sentinel Methods Task Order Report: Demonstrate Feasibility Of New Mini-Sentinel Group Sequential Monitoring Methods in a Distributed Setting by Implementing Them in Practice (2013), FDA's Sentinel Initiative: Project Report.

c) Submitted manuscripts:

1. **Robert D. Wellman**, Andrea J. Cook, PhD , Daniel C. Cherkin, Janet R. Kahn, and Karen J. Sherman. Analysis of Pain Outcomes from the DREAM trial of Massage for Neck Pain Using Parallel Non-Randomized Natural History Control. (Journal of Clinical Pain 2/2015)
2. Jennifer S. Haas MD, MSc, Deirdre A. Hill, Ph.D., **Robert D Wellman MS**, Rebecca A Hubbard PhD, Christoph I. Lee MD MSHS, Karen J. Wernli PhD, Natasha K. Stout PhD, Anna N.A. Tosteson ScD, Louise M. Henderson MSPH PhD, Jennifer Alford-Teaster MA, MPH, Tracy Onega PhD, MA, MS. Disparities in the Use of Screening Breast MRI in Community Practice by Race, Ethnicity and Socioeconomic Status. Cancer (in revision August 2015).

d) Manuscripts in draft:

1. Hill, D, **Wellman, RD**, Hubbard, R, Haas, J, Wernli, K, Onega, T. MRI utilization and risk factors for breast cancer. (Analyses completed 8/2015)
2. Cook, AJ, **Wellman, RD**, et al. Statistical methods for estimating risk differences in the distributed data setting for postmarket safety outcomes. Biostatistics (submitted XXXX).
3. Nelson, JC, **Wellman, RD**, et al. A synthesis of current surveillance planning methods for the sequential monitoring of drug and vaccine adverse effects using electronic health care data. eGEMS

e) Posters, presentations and abstracts:

1. Presentation: Multiple Imputation with Marginal Structural Models for Estimating Causal Effects with Intermittent Missing Data in Observational Studies: The Effect of Breastfeeding on Disease Progression in HIV+ African Mothers.
 - December 2007 Kenya Research Group, Department of Medicine, University of Washington.
 - April 2007 Statistical Center for HIV/AIDS Research & Prevention (SCHARP).
2. Poster: Frederick Hecht, **Robert Wellman**, Michael Busch, Susan Little, Martin Markowitz, Ann Collier, Joseph Margolick, Philip Norris, Jean-Pierre Routy, Sarah Holte. Quantitative Results from HIV Antibody EIAs to Identify Persons in Early Post-Seroconversion Periods. 14th Conference on Retroviruses and Opportunistic Infections, February 2007, Poster #341.
3. Abstract: Cardiotoxic Chemotherapy Is Associated With Increased Heart Failure Risk Among Women With Breast Cancer In The Cancer Research Network. Erin Aiello Bowles, MPH, Group Health Cooperative; **Robert Wellman**, MS, Group Health Cooperative; Thomas Delate, PhD, Kaiser Permanente Colorado; Larry Allen, MD, Univeristy of Colorado, Denver; Heather Spencer Feigelson, PhD, Kaiser Permanente Colorado; Marianne Ulcickas Yood, PhD, Henry Ford Health System; Robert Davis, MD, Kaiser Permanente Georgia; Larissa Nekhlyudov, MD, Harvard Pilgrim Health Care; Catherine McCarty, PhD, Marshfield Clinic; Laurel Habel, PhD, Kaiser Permanente Northern California; David Magid, MD, Kaiser Permanente Colorado; Adedayo Onitilo, MD, Marshfield Clinic;

Andrew Freedman, PhD, National Cancer Institute; Edward Wagner, MD, Group Health Cooperative. 17th Annual HMO Research Network Conference 2011, Abstract C-B2-01.

4. Abstract: Validity of HMO Administrative Data for Breast Cancer Chemotherapy Exposure. Thomas Delate, PhD, Kaiser Permanente Colorado; Erin Bowles, MPH, Group Health Cooperative; Roy Perdee, JD, Group Health Cooperative; **Robert Wellman**, MS, Group Health Cooperative; Laurel Habel, PhD, Kaiser Permanente Northern California; Marianne Yood, DSC, Henry Ford Health System; Larissa Nekhlyudov, MD, Harvard Pilgrim Healthcare Institute; Katrina Goddard, PhD, Kaiser Permanente Northwest; Robert Davis, MD, Kaiser Permanente Georgia; Catherine Mccarty, PhD, Marshfield Clinic; Adedayo Onitilo, MD, Marshfield Clinic; Heather Feigelson, PhD, Kaiser Permanente Colorado; Jared Freml, PharmD, Kaiser Permanente Colorado; Edward Wagner, MD, Group Health Cooperative. 17th Annual HMO Research Network Conference 2011, Abstract C-C1-02.
5. Presentation: MRI Data for Breast Cancer Screening, Breast Cancer Surveillance Consortium Annual Meetings, May 8, 2012.
6. Poster: KJ Sherman, AJ Cook, **RD Wellman**, RJ Hawkes, DC Cherkin. Optimal Dose of Massage for Chronic Neck Pain: A Randomized Trial. Odense International Forum XII, Primary Care Research on Back Pain. October 2012 Odense Denmark.
7. Abstract: A Telephone-Based Diabetes Prevention Program and Social Support for Weight Loss: the Call-2-Health Study. Sharon Fuller, Group Health Cooperative; Evette Ludman, Group Health Cooperative; Amy Mohelnitzky, Group Health Cooperative; Gabrielle Gundersen, Group Health Cooperative; **Rob Wellman**, Group Health Cooperative; Rob Reid, Group Health Cooperative; Katherine Newton, Group Health Cooperative. 18th Annual HMO Research Network Conference 2011, Abstract C2-01.
8. Sherman KJ, Cook A, **Wellman R**, Kahn J, Cherkin D. Influence of the amount and duration of therapeutic massage for chronic neck pain on 12 and 26 week outcomes of pain and function. *J Altern Complement Med.* 2014; 20(5):A49-50.

8. PROFESSIONAL DEVELOPMENT COURSEWORK:

1. Causal Inference (Miguel Hernan, PhD, James Robins, PhD), 2010 Joint Statistical Meetings, Vancouver, British Columbia, Canada.
2. Bayesian Adaptive Methods for Clinical Trials (Bradley P. Carlin, University of Minnesota, Donald Arthur Berry, MD Anderson Cancer Center, Scott Berry, Berry Consultants, LLC, J. Jack Lee, MD Anderson Cancer Center), 2010 Joint Statistical Meetings, Vancouver, British Columbia, Canada.
3. Statistical Design of Sequential Clinical Trials in R (Scott Emerson, PhD, University of Washington, Daniel Gillen, PhD, University of California Irvine), Fourth Seattle Symposium in Biostatistics: Clinical Trials, November 20, 2010.
4. Data Simulation in SAS® for Evaluating Statistical Methods (Rick Wicklin, SAS), 2012 Joint Statistical Meetings, San Diego, CA.
5. Advanced R (Hadley Wickam), 2015 Joint Statistical Meetings, Seattle, WA.
6. Software Engineering for Statisticians, 2015 Joint Statistical Meetings, Seattle, WA.

9. PROFESSIONAL SERVICE:

Presenter GHRI Epidemiology 101: Basic Biostatistics (8/2015)

GHRI Biostatistics Group Coordinator (4/2014 to present)

Grant writing for Dori Rosenberg's K-award (10/2012)

Consulting project: Assist pharmacy resident Meg Kilcup with analysis for publication of research conducted during residency, 5/2012.

GHRI Methods Strategy Subgroup, Strategic Planning Process, 2011/2012.

GHRI Biostatistician Hire Search Committee 10/2011

Statistical Consulting, Student Mentoring Program, Group Health Research Institute, Maastricht University, Netherlands, 2010-2011.

Grant Reviewer, Institute of Translational Health Sciences, University of Washington, 2011.

Faculty Student Relations Committee, Department of Biostatistics, University of Washington, 2006-2008.

Software & Computing Committee, Department of Biostatistics, University of Washington, 2006-2007.