

CURRICULUM VITAE

H. Gilbert Welch, M.D., M.P.H.

Professor of Medicine, Dartmouth Institute for Health Policy & Clinical Practice
Geisel School of Medicine at Dartmouth

EDUCATION:

- 1988 - 1990 University of Washington, Seattle, Washington; M.P.H.
1977 - 1982 University of Cincinnati Medical Center, Cincinnati, Ohio; M.D.
1972 - 1976 Harvard College, Cambridge, Massachusetts; B.A. (Economics)

POSTDOCTORAL TRAINING:

- 1988 - 1990 VA Robert Wood Johnson Clinical Scholar, University of Washington, Seattle
1985 - 1987 Internal Medicine Residency, University of Utah, Salt Lake City
1982 - 1983 Rotating Internship, Conemaugh Valley Memorial Hospital, Johnstown, PA

ACADEMIC POSITIONS:

- 2011 - present Professor of Business Administration (adjunct), Tuck School of Business
2010 - present Professor of Public Policy (adjunct), Dartmouth College
2008 - 2009 Visiting Professor, WWAMI Program, Montana State University, Bozeman
2007 - 2012 Executive Council, The Dartmouth Institute for Health Policy & Clinical Practice
2001 - 2002 Visiting Scientist, International Agency for Research on Cancer, Lyon, France
2000 - present Professor of Medicine and Community & Family Medicine
Dartmouth Medical School
1998 - 2002 Editor, *Effective Clinical Practice*
1995 - 2000 Associate Professor, Dartmouth Medical School
1991 - 2011 Co-Director, VA Outcomes Group
1990 - 1995 Assistant Professor, Dartmouth Medical School
1988 - 1990 Acting Instructor, Department of Medicine, University of Washington
1982 - 1983 Instructor, University of Pittsburgh at Johnstown
1976 - 1977 Master, Brooks School, North Andover, Massachusetts

CLINICAL APPOINTMENTS – VETERANS AFFAIRS/US PUBLIC HEALTH SERVICE

- 1990 - present Medical Staff, White River Junction VA, White River Junction, Vermont
1991 (short tour) General Medical Officer, Indian Health Service, Navajo Nation, Chinle, Arizona
1989 (short tour) General Medical Officer, National Health Service Corps, Clinch River Health Services, Dungannon, Virginia
1989 (short tour) General Medical Officer, Indian Health Service, Warm Springs Health Center, Warm Springs, Oregon
1988 (short tour) General Medical Officer, National Health Service Corps, North Beach Health Care Clinic, Copalis Beach, Washington
1987 (short tour) Ship Physician - NOAA Vessel "Oceanographer" (Townsville, Australia - Seattle, USA), National Oceanic and Atmospheric Administration.
1983 - 1985 General Medical Officer, Indian Health Service, Yukon-Kuskokwim Delta Regional Hospital, Bethel, Alaska

ELECTED MEMBERSHIPS/AWARDS:

- 1992 Fellowship in the American College of Physicians (Direct election)
1997 American Society for Clinical Investigation
2009 Recipient of the VA Undersecretary's Award in Health Services Research

CLASSROOM TEACHING

Dartmouth Medical School (1991 - 2014)

Served as a section leader and occasional lecturer. From 2003 on, developed and implemented a 6-8 lecture curriculum on critical evaluations skills clinically integrated within the Scientific Basis of Medicine course during the 2nd year of medical school.

The Dartmouth Institute and the Center for the Evaluative Clinical Sciences (1992 - 2014)

Initiated the Biostatistics course in 1992, took the entire responsibility for directing and teaching the Introduction to Epidemiology & Biostatistics course in 2002.

Dartmouth College (1999, 2010 - present)

1999 Rockefeller Center Seminar Course on “Prevention vs. Cure”. In 2010, initiated PBPL 26: Health Policy & Clinical Practice (70 students) – a course that combines quantitative & deductive reasoning and basic spreadsheet skills with public policy, epidemiology, and an introduction to clinical medicine.

The Dartmouth Institute / Tuck School of Business at Dartmouth (2011 - present)

In 2011, initiated & taught “Introduction to the Science of Inference: Basic Skills & Disturbing Truths” – a 22 hour on-the-ground course to kick-off the newly created Master of Health Care Delivery Science program for health care executives.

SELECTED PUBLICATIONS FOR THE GENERAL PUBLIC:

Books

Welch HG. **Should I Be Tested for Cancer? Maybe Not and Here's Why.** University of California Press (2006 paperback, 2004 hardback) *Dois-je me faire tester pour le cancer ? Peut-être pas et voici pourquoi.* Les Presses de l'Université Laval (2005, translated by Dr Fernand Turcotte)

Welch HG, Schwartz LM, Woloshin S. **Overdiagnosed: Making People Sick in the Pursuit of Health.** Beacon Press (2012 paperback, 2011 hardback). Subsequently translated into French, Portuguese, Hebrew, Korean, Chinese, German, Italian, Japanese and Turkish.

Welch HG. **Less Medicine, More Health: 7 Assumptions that Drive Too Much Medical Care.** Beacon Press (2015)

Op Eds/Essays

[We should look less hard for cancer. Los Angeles Times, November, 19, 2015.](#)

[When screening is bad for a woman's health. Los Angeles Times, July 19, 2015](#)

[Why whole-genome testing hurts more than it helps. \(with Wylie Burke\) Los Angeles Times April 27, 2015](#)

[Will more medical tests make us healthier? CNN Opinion April 15, 2015](#)

[An Epidemic of Thyroid Cancer? The New York Times, November 5, 2014.](#)

[The Problem With Free Health Care. The New York Times, April 30, 2014.](#)

[Don't slam Canada for mammogram study. CNN Opinion, February 19, 2014.](#)

[Breast Cancer Screenings: What We Still Don't Know. The New York Times, December 30, 2013.](#)

[Mammograms can help – and harm. CNN Opinion, Nov 20, 2013](#)

[Discovering the epidemic of overtreatment. Los Angeles Times, October 15, 2013.](#)

[Diagnosis: Insufficient Outrage. The New York Times, July 4, 2013.](#)

[What Angelina Jolie forgot to mention. CNN Opinion, May 18, 2013.](#)

[Breast Practices: The Mammogram Dilemma. Los Angeles Times, February 21, 2013.](#)

[Should All Women Over 40 Get Annual Mammograms? The Wall Street Journal, February 18, 2013.](#)

[Cancer Survivor or Victim of Overdiagnosis? The New York Times, Nov 21, 2012.](#)

[Testing What We Think We Know. The New York Times, August 19, 2012.](#)

[Healthcare: The testing glut. Los Angeles Times, May 2, 2012.](#)

[If You Feel OK, Maybe You Are OK. The New York Times, February 22, 2012.](#)

A doctor's vision for Medicare. [Los Angeles Times](#), October 16, 2011.

You Have to Gamble on Your Health. [The New York Times](#), October 12, 2011.

Diagnosis as disease. [Los Angeles Times](#), May 6, 2011.

Cancer breakthrough – or nightmare? [CNN Opinion](#), January 11, 2011.

The risk of being too aware. [Los Angeles Times](#), October 20, 2010.

The medicalization of life. [Los Angeles Times](#), March 15, 2010.

To Overhaul the System, 'Health' Needs Redefining. [The New York Times](#), July 28, 2009.

Prostate cancer screenings: a second opinion. [Los Angeles Times](#), April 1, 2009.

The Excessive Focus on Mammography. [Los Angeles Times](#), November 3, 2008.

Campaign Myths: Prevention as Cure All. [The New York Times](#), October 7, 2008.

What's in Your Genes? You Don't Want to Know --Yet. [The Washington Post](#), May 11, 2008.

A Test You Shouldn't Jump At: A Genetic Test for Prostate Cancer May Boost Worry, Little More. [The Washington Post](#), February 19, 2008.

Healthy skepticism. [The Boston Globe](#), January 1, 2008.

Finding more cancer isn't the answer. [The Washington Post](#), April 10, 2007; Health.

How Two Studies on Cancer Screening Led to Two Results. [The New York Times](#), March 13, 2007.

What's Making Us Sick Is an Epidemic of Diagnoses. [The New York Times](#), January 2, 2007.

Welch HG. Dangers in Early Detection. The Washington Post. July 1, 2004.

Behind the Good News on Cancer, There's the Same Old Bad News. Los Angeles Times. Wednesday, July 19, 2000.

The Epidemic of Tests Can Make You Sick. Los Angeles Times, Wednesday, September 29, 1993.

SELECTED SCIENTIFIC PUBLICATIONS:

Welch HG, Gorski DH, Albertsen PC. Trends in Metastatic Breast and Prostate Cancer--Lessons in Cancer Dynamics. N Engl J Med. 2015;373:1685-7

Harding C, Pompei F, Burmistrov D, Welch HG, Abebe R, Wilson R. Breast Cancer Screening, Incidence, and Mortality Across US Counties. JAMA Intern Med. 2015;175:1483-9.

Ahn HS, Kim HJ, Welch HG. Korea's thyroid-cancer "epidemic" – Screening and overdiagnosis. N Engl J Med. 2014;371:1765-7.

Davies L, Welch HG. Current Thyroid Cancer Trends in the United States. JAMA Otolaryngol Head Neck Surg. 2014;140:317-22.

Welch HG, Passow HJ. Quantifying the Benefits and Harms of Screening Mammography. JAMA Intern Med. 2014;174:448-54.

Bleyer A, Welch HG. Effect of three decades of screening mammography on breast-cancer incidence. N Engl J Med. 2012;367:1998-2005.

Welch HG, Frankel BA. Likelihood that a woman with screen-detected breast cancer has had her "life saved" by that screening. Arch Intern Med. 2011;171:2043-6.

Welch HG, Sharp SM, Gottlieb DJ, Skinner JS, Wennberg JE. Geographic variation in diagnosis frequency and risk of death among Medicare beneficiaries. JAMA 2011;305:1113-8.

Welch HG. Screening mammography--a long run for a short slide? N Engl J Med 2010;363:1276.

Welch HG, Black WC. Overdiagnosis in Cancer. J Natl Cancer Inst. 2010;102:605-13.

Welch HG. Overdiagnosis and mammography screening. BMJ. 2009;339:b1425.

Welch HG, Albertsen PC. Prostate cancer diagnosis and treatment after the introduction of prostate-specific antigen screening: 1986-2005. J Natl Cancer Inst. 2009;101:1325-9.

Zahl PH, Maehlen J, Welch HG. The natural history of invasive breast cancers detected by screening mammography. Arch Intern Med. 2008;168:2311-6.

Welch HG, Woloshin S, Schwartz LM. The sea of uncertainty surrounding ductal carcinoma in situ--the price of screening mammography. J Natl Cancer Inst. 2008;100:228-9.

Welch HG, Woloshin S, Schwartz LM, Gordis L, Gøtzsche PC, Harris R, Kramer BS, Ransohoff DF. Overstating the evidence for lung cancer screening: The International Early Lung Cancer Action Program (I-ELCAP) Study. Arch Intern Med 2007 ;167:2289-95..

Herndon MB, Schwartz LM, Woloshin S, Welch HG. Implications of expanding disease definitions: the case of osteoporosis. Health Aff (Millwood). 2007;26:1702-11.

Welch HG, Fisher ES, Gottlieb DJ, Barry MJ. Detection of Prostate Cancer via Biopsy in the Medicare – SEER Population During the PSA Era. J Natl Cancer Inst 2007;99:1395-400.

Wiener RS, Welch HG. Trends in the use of the pulmonary artery catheter in the United States, 1993-2004. JAMA 2007;298:423-9.

Davies L, Welch HG. The increasing incidence of thyroid cancer in the United States, 1973-2002. JAMA 2006;295:2164-7.

Welch HG, Woloshin S, Schwartz LM. Skin biopsy rates and incidence of melanoma: population based ecological study. BMJ. 2005;331:481-4.

Welch HG, Schwartz LM, Woloshin S. Prostate-specific antigen levels in the United States: implications of various definitions for abnormal. J Natl Cancer Inst. 2005;97:1132-7.

Welch HG. Search and destroy--the right cancer strategy for Europeans? Eur J Cancer. 2005;41:660-3.

Dimick JB, Welch HG, Birkmeyer JD. Surgical mortality as an indicator of hospital quality: the problem with small sample size. JAMA 2004;292:847-51.

Sirovich BE, Welch HG. Cervical cancer screening among women without a cervix. JAMA 2004;291:2990-3.

Schwartz LM, Woloshin S, Fowler FJ Jr, Welch HG. Enthusiasm for cancer screening in the United States. JAMA. 2004;291:71-8.

Welch HG, Black WC. Are deaths within one month of cancer-directed surgery attributed to cancer? J Natl Cancer Inst 2002;94:1066-70.

Black WC, Haggstrom DA, Welch HG. All-cause mortality in randomized trials of cancer screening. J Natl Cancer Inst 2002;94:167-73.

Welch HG, Mogielnicki J. Presumed benefit: lessons from the American experience with marrow transplantation for breast cancer. BMJ 2002; 324:1088-92.

Welch HG. Informed choice in cancer screening. JAMA 2001;285:2776-78.

Welch HG, Schwartz LM, Woloshin S. Are increasing 5-year survival rates evidence of success against cancer? JAMA 2000 283:2975-78.

Schwartz LM, Woloshin S, Sox HC, Fischhoff B, Welch HG. Screening Mammography: Women's reactions to false positive results and ductal carcinoma in situ. BMJ 2000; 320:1635-1640.

Woloshin S, Schwartz LM, Byram SJ, Sox HC, Fischhoff B, Welch HG. Women's understanding of the mammography screening debate. Arch Intern Med 2000;160:1434-1440.

Lurie JM, Welch HG. Diagnostic testing following fecal occult blood screening in the elderly. J Natl Cancer Inst 1999;91:1641-1646.

Schwartz LM, Woloshin S, Welch HG. Misunderstandings about the effect of race and sex on physician's referrals for cardiac catheterization. N Engl J Med 1999;341:279-283.

Fisher ES, Welch HG. Avoiding the unintended consequences of growth in medical care: How might more be worse? JAMA. 281:446-453, 1999.

Welch HG, Burke W. Uncertainties in genetic testing for chronic disease. JAMA 280:1525-1527, 1998.

Silvestri G, Pritchard R, Welch HG. Preferences for chemotherapy in patients with advanced non-small cell lung cancer: descriptive study based on scripted interviews. BMJ 317:771-775, 1998

Welch HG, Fisher ES. Diagnostic Testing Following Screening Mammography in the Elderly. J Natl Cancer Inst. 90:1389-92, 1998

Welch HG, Black WC. Using autopsy series to estimate the disease "Reservoir" for ductal carcinoma in situ of the breast: How much more breast cancer can we find? Ann Intern Med.127:1023-1028, 1997.

Schwartz LM, Woloshin S, Black WC, Welch HG. The role of numeracy in understanding the benefit of screening mammography. Ann Intern Med 127:966-972, 1997.

Welch HG, Black WC. Evaluating randomized trials of screening. J Gen Intern Med. 12:118-124, 1997.

Welch HG, Wennberg DE, Welch WP. The use of Medicare home health care services. N Engl J Med 335:324-329, 1996.

Welch HG. Questions about the value of early interventions. N Engl J Med 334:1472-1473, 1996.

Verrilli D, Welch HG. The impact of diagnostic testing on therapeutic interventions. JAMA 275:1189-1191, 1996.

Welch HG, Albertsen PC, Nease RF, Bubolz TA, Wasson JH. Estimating treatment benefits for the elderly: The effect of competing risks. Ann Intern Med 124:577-584, 1996.

Fisher ES, Welch HG. The future of the Department of Veterans Affairs health care system. JAMA 273:651-655, 1995.

Weeks WB, Wallace AE, Wallace MM, Welch HG. A comparison of educational costs and income of physicians and other professionals. N Engl J Med 330:1280-1286, 1994.

Welch HG, Miller ME, Welch WP. Physician profiling: An analysis of inpatient practice patterns in Florida and Oregon. N Engl J Med 330:607-612, 1994.

Feil E, Welch HG, Fisher ES. Why estimates of physician supply and requirements disagree: A methodologic review of the major studies. JAMA 269:2659-2663, 1993.

Black WC, Welch HG. Advances in diagnostic imaging and overestimations of disease prevalence and the benefits of therapy. N Engl J Med 328:1237-1243, 1993.

Welch WP, Miller ME, Welch HG, Fisher ES, Wennberg JE. The variation in expenditures for physician services across the United States. N Engl J Med 328:621-627, 1993.

Welch HG, Fisher ES. Let's make a deal - Negotiating a settlement between physicians and society. N Engl J Med 327:1312-1215, 1992.

Fisher ES, Welch HG, Wennberg JE. Prioritizing Oregon's hospital resources: An example based on variations in discretionary medical utilization. JAMA 267:1925-1931, 1992.

Welch HG. Valuing clinical strategies early in their development. Ann Intern Med 116:263-4, 1992.

Welch HG. Should the health care forest be selectively cut by physicians or clear cut by payors? Ann Intern Med 115:223-6, 1991.

Katz SJ, Mizgala HF, Welch HG. British Columbia sends patients to Seattle for coronary artery surgery: Bypassing the queue in Canada. JAMA 266:1108-11, 1991.

Dixon J, Welch HG. Priority Setting: Lessons from Oregon. Lancet 337:891-894, 1991.

Welch HG: Health care tickets for the uninsured: First class, coach, or stand-by? N Engl J Med 321:1261-1264, 1989.

Welch HG, Larson EB: Cost effectiveness of bone marrow transplantation in acute nonlymphocytic leukemia. N Engl J Med 321:807-812, 1989.

Welch HG, Larson EB: Dealing with limited resources: The Oregon decision to curtail funding for organ transplantation. N Engl J Med 319:171-173, 1988

Welch HG. In Zambia: Doing More with Less. Ann Intern Med 1983;98(4):551-552.