

UNIVERSITY OF PENNSYLVANIA PERELMAN SCHOOL OF MEDICINE
CURRICULUM VITAE

Date: March 15, 2016

JEFFREY HOWARD SILBER, M.D., Ph.D.

Office Address: The Children's Hospital of Philadelphia
Center for Outcomes Research
3535 Market Street, Suite 1029
Philadelphia, PA 19104
Tel.: (215) 590-5635
Fax: (215) 590-2378
email: silber@email.chop.edu

Education:

1972-1976	A.B. (summa)	Washington University, Department of Economics, St. Louis, Missouri
1976-1980	M.D.	Johns Hopkins Medical School, Baltimore, Maryland
1985-1990	Ph.D.	The University of Pennsylvania (Department of Health Care Systems, The Graduate Group in Managerial Science and Applied Economics), Philadelphia, PA
1997	M.A.	Honorary Masters Degree, Philosophy, The University of Pennsylvania, Philadelphia, PA

Postgraduate Training and Fellowship Appointments:

1980-1981	Intern in Pediatrics, Johns Hopkins Hospital, Baltimore, MD
1981-1982	Junior Resident in Pediatrics, Johns Hopkins Hospital, Baltimore, MD
1982-1983	Senior Resident in Pediatrics, Johns Hopkins Hospital, Baltimore, MD
1983-1985	Robert Wood Johnson Foundation Clinical Scholar, The University of Pennsylvania School of Medicine, Philadelphia, PA
1985-1988	Fellow, Pediatric Hematology-Oncology, The Children's Hospital of Philadelphia, Philadelphia, PA

Faculty Appointments:

1985-present	Senior Fellow, Leonard Davis Institute of Health Economics, The Wharton School, The University of Pennsylvania
1988-1989	Instructor, Division of Pediatric Oncology, The Department of Pediatrics, The University of Pennsylvania School of Medicine
1989-1997	Assistant Professor of Pediatrics, The University of Pennsylvania School of Medicine
1992-present	Associate Scholar, Center for Clinical Epidemiology and Biostatistics, The University of Pennsylvania
1996-1997	Assistant Professor of Anesthesiology and Critical Care, The University of Pennsylvania School of Medicine
1997-2004	Associate Professor of Anesthesiology and Critical Care, The University of Pennsylvania School of Medicine
1997-2004	Associate Professor of Pediatrics, The University of Pennsylvania School of Medicine
1997-2004	Associate Professor of Health Care Systems, The Wharton School, The University of Pennsylvania
2004-present	Professor of Pediatrics, The University of Pennsylvania School of Medicine

- 2004-present Professor of Health Care Management (formerly Health Care Systems),
The Wharton School, The University of Pennsylvania
- 2004-present Professor of Anesthesiology and Critical Care, The University of
Pennsylvania School of Medicine

Hospital and Administrative Appointments:

- 1989-present Attending, Pediatric Oncology Long Term Follow-Up Clinic, Division of
Oncology, The Children's Hospital of Philadelphia
- 1993-2008 Faculty Member, Division of Biostatistics and Epidemiology, Department
of Pediatrics, The University of Pennsylvania School of Medicine
- 1997-present Director, Center for Outcomes Research, The Children's Hospital of
Philadelphia
- 2013-present Nancy Abramson Wolfson Professor of Health Services Research, The
Children's Hospital of Philadelphia

Specialty Certification:

- 1985 Board Certified, American Board of Pediatrics
- 1987 Board Certified, Pediatric Hematology and Oncology (subspecialty),
American Board of Pediatrics

Licensure: 1983 Pennsylvania: MD 028141-E

Awards, Honors and Memberships in Honorary Societies:

- 1976 A.B. summa cum laude; John M. Olin Prize in Economics; Phi Beta
Kappa: Washington University
- 1978 Henry Strong Denison Research Award: Johns Hopkins Medical School
- 1986 & 1988 National Research Service Award
- 1988 The Health Services Improvement Fund, Inc. Doctoral Student Award
- 1989 National Institute of Health Research Career Development Award
- 1995 John Morgan Society
- 1996 National Institute of Health Insurers of America Finalist (top 3 papers)
- 1997 Ethel Brown Foerderer Fund for Excellence Award
- 2000 Samuel P. Martin Health Services Research Award
- 2003 AcademyHealth Article-of-the-Year Award
- 2003 The Hummeler Research Prize (Article-of-the-Year), Joseph Stokes, Jr.
Research Institute
- 2007 AcademyHealth Abstract-of-the-Year Award
- 2011 AcademyHealth Article-of-the-Year Award
- 2013-present Nancy Abramson Wolfson Professor of Health Services Research, The
Children's Hospital of Philadelphia
- 2015-present Fellow, The College of Physicians of Philadelphia

Memberships in Professional and Scientific Societies:

National Societies:

AcademyHealth
American Economics Association
American Federation for Medical Research
American Medical Association
American Society of Clinical Oncology
International Biometric Society
International Health Economic Association
Society for Medical Decision Making
Society for Clinical Trials
Society for Pediatric Research

Local Societies:

John Morgan Society (President, 2014-present; Treasurer, 2012-2014)

National Committees:

1992	Long-Term Follow Up (Late Effects), Children's Cancer Group (CCG)
1992	CCG Third-Party Payment Committee
1993	CCG Lymphoma Committee
1994	CCG Long Term Follow-up Committee
1995-1999	Committee on Health Services Research of the American Society of Clinical Oncology (ASCO)
1996-1997	Committee on Guidelines for Use of Antiemetics (ASCO)
1998-2003	Oncology Measurement Advisory Panel of the National Committee for Quality Assurance (NCQA)
2004-2008	Children's Asthma Care Core Measure Advisory Panel of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
2008-present	Technical Expert Panel, Measures Support Work for Centers for Medicare and Medicaid (CMS): Measuring Complications of Inpatient Care
2009-2010	Association of American Medical Colleges, Working Group for Developing Process Measures
2011-present	Chair, Pediatric Quality Measurement Program Working Group on Racial Disparities (Agency for Healthcare Research and Quality)
2014-present	Linking Cost and Quality Measures Expert Panel (National Quality Forum)

Reviewer:

Anesthesiology
Annals Internal Medicine
Health Services Research
Journal of the American Medical Association
Journal of Clinical Oncology
Journal of General Internal Medicine
Medical Care
New England Journal of Medicine
Pediatrics

Editorial/Peer Review Positions:

1993	Special Reviewer, American Academy of Pediatrics in collaboration with the Agency for Health Care Policy and Research. In: Clinical Practice and Guidelines for Management of Otitis Media with Effusion in Children
1993	Special Reviewer, AHCPR, Technology Assessment Study Section
1994	Special Reviewer, British Columbia Health Research Foundation, 3/94
1996	Panelist, National Cancer Institute/American Society of Clinical Oncology Economics Workshop "Economic Analysis in Clinical Trials," Washington, DC, 5/13-14/96 (To draft policy regarding the use of cost benefit and effectiveness analysis in cancer clinical trials.)
1996	Panelist, National Cancer Institute "Unresolved Issues in Cancer Survivorship, Economics Workgroup," Bethesda, MD, 11/4/96
1997	Agency for Health Care Policy Research: Study Section on Small Grants, Rockville, MD, 8/13/97
2002	Reviewer, Special Emphasis Panel of the National Center for Complementary and Alternative Medicine

2004	Reviewer, Behavioral and Social Science of Aging Review Committee, National Institute of Aging
2009	Reviewer, Robert Wood Johnson Foundation Interdisciplinary Nursing Quality Research Initiative Program
2011	Advisor, Medicare Payment Advisory Commission Panel, 11/18/11
2012	Advisor, The Joint Commission's Development of Risk-Adjusted Outcome Measures in the Electronic Health Record Environment Invitational Conference, 3/13-14/12

Academic Committees at The Children's Hospital of Philadelphia:

1990-1991	Fellowship Committee
1991-1993	Departmental Computer Committee
1994-1995	General Clinical Research Center Committee
1996-1998	Pediatric Fellowship Committee
2008-2010	Search Committee, Division of Epidemiology and Biostatistics

Academic Committees at the University of Pennsylvania:

1992, 1993	Subcommittee on Health Care Organization, Law, and Financing Task Force on Social, Preventive, and Community Medicine
1993	Chair, Committee on Technology Adoption and Global Budgets, The Leonard Davis Institute of Health Economics
1997-1999	Greenwall Project, Center for Bioethics
1998-present	Executive Committee, Leonard Davis Institute of Health Economics, The Wharton School, The University of Pennsylvania
2001-2003	Research Committee, The University of Pennsylvania
2002-2004	Search Committee, Department of Anesthesia Chair
2005-2007	University Research Foundation Biomedical Committee
2005-present	Center for Clinical Epidemiology and Biostatistics Admissions Committee
2008-2009	Search Committee, General Internal Medicine

Major Teaching Responsibilities at the University of Pennsylvania School of Medicine:

1993	Epidemiology Course for Medical Students, ME254
1994	Proseminar in Health Services Research, HCM 900
1997-present	Center for Clinical Epidemiology and Biostatistics: Outcomes Research, EPI 580 (fall semester)
1997-present	Health Care Quality: Measurement and Management, HCMG 212 (spring semester)

Lectures by Invitation (past 5 years):

May 13, 2011	The President's Lecture: Large administrative database research: Medicare and beyond. Association of University Anesthesiologists Annual Meeting, Philadelphia, PA
June 12, 2011	Article of the Year Award Lecture: Aggressive treatment style and surgical outcomes. AcademyHealth Annual Meeting, Seattle, WA
October 17, 2011	Measuring quality of care in surgery and anesthesia. Foundation for Anesthesia Education and Research Invited Panel on Outcomes Research. American Society of Anesthesiologists Annual Meeting, Chicago, IL
November 1, 2011	Describing and understanding healthcare disparities in operative procedure length. American Public Health Association Annual Meeting, Washington, DC

- November 15, 2011 Do you get what you pay for – Quality in healthcare? Critical Care Canada Forum, Toronto, Canada
- November 18, 2011 Mistaken advice on AMI by Hospital Compare. Medicare Payment Advisory Commission Panel, Washington, DC
- December 6, 2011 Examining perioperative care using multivariate matching. Division of Clinical and Translational Research Seminar Lecture, Department of Anesthesiology, Washington University, St. Louis, MO.
- December 7, 2011 Public reporting of healthcare quality: Misleading advice from Medicare’s Hospital Compare. Grand Rounds, Department of Anesthesiology, Washington University, St. Louis, MO
- April 2, 2012 Challenges implementing a hierarchical model for use in public reporting: The case of Hospital Compare. Eastern North American Region (ENAR) of the International Biometric Society Annual Meeting, Washington, DC
- May 1, 2012 Challenges in estimating continuous enrollment in Medicaid and CHIP. Pediatric Academic Societies Annual Meeting, Boston, MA
- May 9, 2012 Using multivariate matching to identify and understand disparities. Pediatric Quality Measurement Program Working Group on Racial Disparities, AHRQ Webconference, Philadelphia, PA
- May 30, 2012 The pediatric quality measurement project. Grand Rounds, Department of Pediatrics, The Children’s Hospital of Philadelphia, Philadelphia, PA
- June 2, 2012 Racial disparities in breast cancer survival. American Society of Clinical Oncology Annual Meeting, Chicago, IL
- June 14, 2012 Using multivariate matching to study racial disparities. 2nd Annual CMS Medicaid/CHIP Quality Conference: Improving Care and Proving It!, Baltimore, MD
- June 23, 2012 Challenges in estimating continuous enrollment in Medicaid and CHIP. AcademyHealth Annual Meeting, Orlando, FL
- October 16, 2012 Studies of cancer survival using multivariate matching: Examining treatment questions in ovarian and breast cancer. Grand Rounds, Department of Medicine, Jersey Shore University Medical Center, Neptune, NJ
- January 7, 2014 Understanding racial disparities in breast and colon cancer survival using tapered multivariate matching. Center for Childhood Cancer Research Hematology/Oncology Seminar Series, The Children’s Hospital of Philadelphia, Philadelphia, PA
- January 10, 2014 Template matching for auditing hospital quality and cost. Center for Pediatric Clinical Effectiveness Research Faculty Seminar Series, The Children’s Hospital of Philadelphia, Philadelphia, PA

- February 17, 2014 Misleading advice on AMI mortality from Hospital Compare. Pediatric Cardiology Research Lecture, The Children's Hospital of Philadelphia, Philadelphia, PA
- April 29, 2014 Misleading advice on heart attack mortality: How Medicare's Hospital Compare misleads the public. The John Morgan Society, The University of Pennsylvania, Philadelphia, PA
- September 8, 2014 Template matching to compare hospital resource utilization. The Children's Hospital Association, Washington, DC
- September 23, 2014 Template matching to compare hospital resource utilization and quality of care. Department of Pediatrics, Quality and Patient Safety Champions Meeting, The Children's Hospital of Philadelphia, Philadelphia, PA
- November 11, 2014 Misleading advice on heart attack mortality from Medicare's Hospital Compare random effects model. Department of Statistics and Operations Research, Tel Aviv University, Tel Aviv, Israel
- February 13, 2015 Assessing hospital cost, quality, and comparative advantage using multivariate matching. Public Health Economics Seminar. Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- February 19, 2015 Comparing children's hospitals on resource utilization in asthma and complex chronic disease. PolicyLab, The Children's Hospital of Philadelphia, Philadelphia, PA
- February 23, 2015 Matching methods to audit hospital cost, quality, and value. Center for Medicare & Medicaid Innovation and Centers for Medicare & Medicaid Services, Baltimore, MD
- March 12, 2015 Using matching methods to compare hospital cost and quality. Pediatric Health Information System (PHIS) Spring Meeting, San Francisco, CA
- March 30, 2015 Using multivariate matching to study racial disparities and hospital quality of care. Comprehensive Cancer Center Research Seminar, University of Alabama, Birmingham, AL
- May 6, 2015 Template matching of children with complex chronic conditions hospitalized for surgical procedures. Defense Health Agency, Falls Church, VA
- May 14, 2015 Using multivariate matching to compare hospital quality of care. Association of American Medical Colleges (AAMC), Washington, DC
- May 28, 2015 Using matching methods to compare hospital cost and quality in PHIS. Pediatric Health Information System (PHIS), Webinar, Philadelphia, PA

June 13, 2015	Comparing hospitals on resource use in medical admissions of children with complex chronic conditions. AcademyHealth Annual Meeting, Minneapolis, MN
June 13, 2015	New approaches for measuring quality, cost and value: Applications for studying nursing care. Keynote Speaker, Interdisciplinary Research Group on Nursing Issues (IRGNI) Meeting, AcademyHealth Annual Meeting, Minneapolis, MN
June 13, 2015	Template matching, hospital specific template matching and indirect standardization matching. The Anesthesiology and Surgery Interest Group, AcademyHealth Annual Meeting, Minneapolis, MN
June 14, 2015	New tools for studying racial disparities and hospital quality of care: Tapered matching, template matching and indirect standardization matching. AcademyHealth Annual Meeting, Minneapolis, MN
June 15, 2015	Practice style variation in pediatric inpatient asthma care. AcademyHealth Annual Meeting, Minneapolis, MN
June 15, 2015	Template matching of children with complex chronic conditions hospitalized for surgical procedures. AcademyHealth Annual Meeting, Minneapolis, MN
September 10, 2015	New methods for comparing hospital quality, cost and value. Ophthalmology Grand Rounds, Scheie Eye Institute, Philadelphia, PA
October 4, 2015	Improving Medicare's Hospital Compare Mortality Model. AHRQ Research Conference – Producing Evidence and Engaging Partners to Improve Health Care, Arlington, VA
October 9, 2015	Enhancing the Hospital Compare mortality model using a Bayesian framework. International Conference on Health Policy Statistics, Providence, RI
November 17, 2015	Indirect standardization matching. Center for Childhood Cancer Research Seminar Series, The Children's Hospital of Philadelphia, Philadelphia, PA
January 13, 2016	Multivariate matching to assess hospital cost, quality, and value. Grand Rounds, Children's National Health System, Washington, DC
March 11, 2016	Auditing resource utilization in Medicaid and Non-Medicaid hospitalizations. Pediatric Health Information System (PHIS) Spring Meeting, New Orleans, LA

Bibliography:

Research Publications, Peer Reviewed:

1. Silber JH, Kaizer H. Loss weighting and the human cost of experimentation. J Chron Dis 1985; 38:507-516. PMID: 4008591.
2. Meadows AT, Silber JH. Delayed consequences of therapy for childhood cancer. CA Cancer J Clin 1985; 35:271-286. PMID: 3930013.

3. Peyster RG, Ginsberg F, Silber JH, Adler LP. Exophthalmos caused by excessive fat. CT volumetric analysis and differential diagnosis. *Am J Radiol* 1986; 146:459-464. PMID: 3484861.
4. Silber JH. Forecasting asthmatic wheezing using temperature velocity. *Pediatr Emerg Care* 1987; 3:13-17. PMID: 3562305.
5. Silber JH, Kaizer H. Marginal analysis applied to the dose-response curve. *Med Pediatr Oncol* 1988; 16:344-348. PMID: 3185363.
6. Silber JH, Littman PS, Meadows AT. Stature loss following skeletal irradiation for childhood cancer. *J Clin Oncol* 1990; 8:304-312. PMID: 2299373.
7. Silber JH, Evans AE, Fridman M. Models to predict outcome from childhood neuroblastoma: The role of serum ferritin and tumor histology. *Cancer Res* 1991; 51:1426-1433. PMID: 1997181.
8. Cohen AR, Martin MB, Silber JH, Kim HC, Ohene-Frempong K, Schwartz E. A modified transfusion program for prevention of stroke in sickle cell disease. *Blood* 1992; 79:1657-1661. PMID: 1558963.
9. Silber JH, Williams SV, Krakauer H, Schwartz JS: Hospital and patient characteristics associated with death after surgery. A study of adverse occurrence and failure to rescue. *Med Care* 1992; 30:615-629. PMID: 1614231.
10. Larsen R, Jakacki R, Vetter V, Silber JH, Barber G. Electrocardiographic changes and arrhythmias after cancer therapy in children and young adults. *Am J Cardiol* 1992; 70:73-77. PMID: 1615874.
11. Silber JH, Radcliffe J, Peckham V, Perilongo G, Kishnani P, Fridman M, Goldwein JW, Meadows AT. Whole brain irradiation and decline in intelligence: The influence of dose and age on IQ-score. *J Clin Oncol* 1992; 10:1390-1396. PMID: 1517781.
12. Wasserman R, Galili N, Ito Y, Silber JH, Reichard BA, Shane S, Womer RB, Lange B, Rovera G. Residual disease at the end of induction therapy as a predictor of relapse during therapy in childhood B-lineage acute lymphoblastic leukemia. *J Clin Oncol* 1992; 10:1879-1888. PMID: 1453203.
13. Jakacki RI, Goldwein JW, Larsen RL, Barber G, Silber JH. Cardiac dysfunction following spinal irradiation during childhood. *J Clin Oncol* 1993; 11:1033-1038. PMID: 8501489.
14. Rackoff WR, Kunkel N, Silber JH, Asakura T, Ohene-Frempong K. Pulse oximetry and factors associated with hemoglobin oxygen desaturation in children with sickle cell disease. *Blood* 1993; 81:3422-3427. PMID: 7685205.
15. Silber JH, Jakacki RI, Larsen RL, Goldwein JW, Barber G. Increased risk of cardiac dysfunction after anthracyclines in girls. *Med Pediatr Oncol* 1993; 21:477-479. PMID: 8341214.
16. Legorreta AP, Silber JH, Constantino GN, Kobylinski RW, Zatz SL. Increased cholecystectomy rate after the introduction of laparoscopic cholecystectomy. *JAMA* 1993; 270:1429-1432. PMID: 8371441.
17. Jakacki RI, Larsen RL, Barber G, Heyman S, Fridman M, Silber JH. Comparison of cardiac function tests after anthracycline therapy in childhood: Implications for screening. *Cancer* 1993; 72:2739-2745. PMID: 8402498.

18. Kim HC, Dugan NP, Silber JH, Martin MB, Schwartz E, Ohene-Frempong K, Cohen AR. Erythrocytapheresis therapy to reduce iron overload in chronically transfused patients with sickle cell disease. *Blood* 1994; 83:1136-1142. PMID: 8111053.
19. Torres C, Rebsamen S, Silber JH, Sutton L, Bilaniuk LT, Zimmerman RA, Goldwein J, Phillips P, Lange B. Surveillance scanning of children with medulloblastoma. *N Eng J Med* 1994; 330:892-895. PMID: 8114859.
20. Silber JH, Rosenbaum PR, Ross RN. Comparing the contributions of groups of predictors: Which outcomes vary with hospital rather than patient characteristics? *J Am Stat Assoc* 1995; 90:7-18.
21. Silber JH, Rosenbaum PR, Schwartz JS, Ross RN, Williams SV. Evaluation of the complication rate as a measure of quality of care in coronary artery bypass graft surgery. *JAMA* 1995; 274:317-323. PMID: 7609261.
22. Williams S, Pauly MV, Rosenbaum PR, Ross R, Schwartz JS, Shpilsky A, Silber JH. Ranking hospitals by the quality of care for medical conditions: The role of complications. *Trans Am Clin Climatol Assoc* 1995; 107:263-274. PMID: 8725576; PMC2376554.
23. Evans AE, Silber JH, Shpilsky A, D'Angio GJ. Successful management of low-stage neuroblastoma without adjuvant therapies: A comparison of two decades in a single institution 1972-1981, 1982-1992. *J Clin Oncol* 1996; 14:2504-2510. PMID: 8823329.
24. Janss AJ, Yachnis AT, Silber JH, Trojanowski JQ, Lee VM-Y, Sutton LN, Perilongo G, Rorke LB, Phillips PC. Glial differentiation predicts poor clinical outcome in primitive neuroectodermal tumors of the central nervous system. *Ann Neurol* 1996; 39:481-489. PMID: 8619526.
25. Mahboubi S and Silber JH. Radiation-induced esophageal strictures in children with cancer. *Eur Radiol* 1997; 7:119-122. PMID: 9000412.
26. Silber JH, Rosenbaum PR, Williams SV, Ross RN, Schwartz JS. The relationship between choice of outcome measure and hospital rank in general surgical procedures: Implications for quality assessment. *Int J Qual Health Care* 1997; 9:193-200. PMID: 9209916.
27. Durbin DR, Giardio AP, Shaw KN, Harris MC, Silber JH. The effect of insurance status on likelihood of neonatal interhospital transfer. *Pediatrics (Electronic Journal)* 1997; 100:e1-e5. PMID: 9271623.
28. Silber JH and Rosenbaum PR. A spurious correlation between hospital mortality and complication rates: The importance of severity adjustment. *Med Care* 1997; 35:OS77-OS92. PMID: 9339779.
29. Silber JH, Fridman M, DiPaola RS, Erder MH, Pauly MV, Fox KR. First cycle blood counts and subsequent neutropenia, dose reduction or delay in early stage breast cancer therapy. *J Clin Oncol* 1998; 16:2392-2400. PMID: 9667256.
30. Silber JH, Fridman M, Shpilsky A, Even-Shoshan O, Smink DS, Jayaraman J, Fox KR, Pauly MV. Modeling the cost effectiveness of granulocyte colony-stimulating factor use in early-stage breast cancer. *J Clin Oncol* 1998; 16:2435-2444. PMID: 9667261.
31. Silber JH, Gleeson S, Zhao H. The influence of chronic disease on resource utilization in common acute pediatric conditions: Financial concerns for Children's Hospitals. *Arch Pediatr Adolesc Med* 1999; 153:169-179. PMID: 9988247.

32. Silber JH, Rosenbaum PR, Koziol LF, Sutaria N, Marsh RR, Even-Shoshan O. Conditional Length of Stay. *Health Serv Res* 1999; 34:349-363. PMID: 10199680; PMC1089006.
33. Gralla RJ, Osoba D, Kris MG, Kirkbride P, Hesketh PJ, Chinnery LW, Clark-Snow R, Gill DP, Groshen S, Grunberg S, Koeller JM, Morrow GR, Perez EA, Silber JH, Pfister DG. Recommendations for the use of antiemetics: Evidence-based, clinical practice guidelines. *J Clin Oncol* 1999; 17:2971-2994. PMID: 10561376.
34. Silber JH, Kennedy SK, Even-Shoshan O, Chen W, Koziol LF, Showan AM, Longnecker DE. Anesthesiologist direction and patient outcomes. *Anesthesiology* 2000; 93:152-163. PMID: 10861159.
35. Rosenbaum PR and Silber JH. Matching and thick description in an observational study of mortality after surgery. *Biostatistics* 2001; 2:217-232. PMID: 12933551.
36. Silber JH, Cnaan A, Clark BJ, Paridon SM, Chin AJ, Rychik J, Hogarty AN, Cohen MI, Barber G, Rutkowsky M, Kimball TR, DeLaat C, Steinherz LJ, Zhao H, Tartaglione MR. Design and baseline characteristics for the ACE-inhibitor after anthracycline (AAA) study of cardiac dysfunction in pediatric oncology long-term survivors. *Am Heart J* 2001; 142:577-585. PMID: 11579345.
37. Silber JH, Rosenbaum PR, Trudeau ME, Even-Shoshan O, Chen W, Zhang X, Mosher RE. Multivariate matching and bias reduction in the surgical outcomes study. *Med Care* 2001; 39:1048-1064. PMID: 11567168.
38. Silber JH, Kennedy SK, Even-Shoshan O, Chen W, Mosher RE, Showan AM, Longnecker DE. Anesthesiologist board certification and patient outcomes. *Anesthesiology*, 2002; 96:1044-1052. PMID: 11981141.
39. Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA* 2002; 288:1987-1993. PMID: 12387650.
40. Volpp KGM, Waldfogel J, Williams SV, Silber JH, Schwartz JS, Pauly MV. Market reform in New Jersey and the effect on mortality from acute myocardial infarction. *Health Serv Res* 2003; 38:515-533. PMID: 12785559; PMC1360901.
41. Silber JH, Rosenbaum PR, Even-Shoshan O, Shabbout M, Zhang X, Bradlow ET, Marsh, RR. Length of stay, conditional length of stay, and prolonged stay in pediatric asthma. *Health Serv Res* 2003; 38:867-886. PMID: 12822916; PMC1360920.
42. Aiken LH, Clarke SP, Cheung RB, Sloane DM, Silber JH. Educational levels of hospital nurses and surgical patient mortality. *JAMA* 2003; 290:1617-1623. PMID: 14506121. PMC3077115.
43. Howard DL, Silber JH, Jobs DR. Do regulations limiting residents' work hours affect patient mortality? *J Gen Intern Med* 2004; 19:1-7. PMID: 14748854; PMC1494680.
44. Silber JH, Cnaan A, Clark BJ, Paridon SM, Chin AJ, Rychik J, Hogarty AN, Cohen MI, Barber G, Rutkowski M, Kimball, TR, DeLaat C, Steinherz LJ, Zhao H. Enalapril to prevent cardiac function decline in long-term survivors of pediatric cancer exposed to anthracyclines. *J Clin Oncol* 2004; 22:820-828. PMID: 14990637.
45. Greevy R, Lu B. Silber JH, Rosenbaum P. Optimal multivariate matching before randomization: An algorithm and case-study. *Biostatistics* 2004; 5:263-275. PMID: 15054030.

46. Greevy R, [Silber JH](#), Cnaan A, Rosenbaum PR. Randomization inference with imperfect compliance in the ACE-inhibitor after anthracycline randomized trial. *J Am Stat Assoc* 2004; 99:7-15.
47. Ginsberg JP, Cnaan A, Zhao H, Clark BJ, Paridon SM, Chin AJ, Rychik J, Hogarty AN, Barbar G, Rutkowski M, Kimball TR, DeLaat C, Steinherz L, [Silber JH](#). Using health related quality of life measures to predict cardiac function in survivors exposed to anthracyclines. *J Clin Oncol* 2004; 22:3149-3159. PMID: 15284267.
48. Li Y, Womer RB, [Silber JH](#). Predicting cisplatin ototoxicity in children. The influence of age and the cumulative dose. *Eur J Cancer* 2004; 40:2445-2451. PMID: 15519518.
49. McGuire KJ, Bernstein J, Polsky D, [Silber JH](#). The 2004 Marshall Urist award. Delays until surgery after hip fracture increases mortality. *Clin Orthop Relat Res* 2004; 428:294-301. PMID: 15534555.
50. Lorch SA, Zhang X, Rosenbaum PR, Even-Shoshan O, [Silber JH](#). Equivalent length of stay of pediatric patients hospitalized in rural and non-rural hospitals. *Pediatrics* 2004; 114:e400-e408. PMID: 15466064.
51. [Silber JH](#), Rosenbaum PR, Trudeau ME, Chen W, Zhang X, Rapaport RK, Mosher RE, Even-Shoshan O. Changes in prognosis after the first postoperative complication. *Med Care* 2005; 43:122-131. PMID: 15655425.
52. [Silber JH](#), Rosenbaum PR, Trudeau ME, Chen W, Zhang X, Lorch SA, Kelz RR, Mosher RE, Even-Shoshan O. Preoperative antibiotics and mortality in the elderly. *Ann Surg* 2005; 242:107-114. PMID: 15973108; PMC1357711.
53. Tabak YP, Johannes RS, [Silber JH](#), Kurtz SG, Gibber EM. Should do-not resuscitate status be included as a mortality risk adjustor? The impact of DNR variations on performance reporting. *Med Care* 2005; 43:658-666. PMID: 15970780.
54. [Silber JH](#). Challenges in conducting a pediatric longitudinal prevention study. Lessons from the ACE-inhibitor after anthracycline trial. *Progress in Pediatric Cardiology* 2005; 20:65-70.
55. Polsky D, Armstrong KA, Randall TC, Ross RN, Even-Shoshan O, Rosenbaum PR, [Silber JH](#). Variation in chemotherapy utilization in ovarian cancer: The relative contribution of geography. *Health Serv Res* 2006; 41:2201-2218. PMID: 17116116; PMC1955308.
56. Fiks AG, Alessandrini EA, Luberti AA, Ostapenko S, Zhang X, [Silber JH](#). Identifying factors predicting immunization delay for children followed in an urban primary care network using an electronic health record. *Pediatrics* 2006; 118:e1680-e1686. PMID: 17088398.
57. [Silber JH](#), Rosenbaum PR, Zhang X, Even-Shoshan O. Estimating anesthesia and surgical procedure times from Medicare anesthesia claims. *Anesthesiology* 2007; 106:346-355. PMID: 17264730.
58. [Silber JH](#), Rosenbaum PR, Zhang X, Even-Shoshan O. Influence of patient and hospital characteristics on anesthesia time in Medicare patients undergoing general and orthopedics surgery. *Anesthesiology* 2007; 106:356-364. PMID: 17264731.
59. Rosenbaum PR, Ross RN, [Silber JH](#). Minimum distance matched sampling with fine balance in an observational study of treatment for ovarian cancer. *J Am Stat Assoc* 2007; 102:75-83.

60. Seifert HA, Howard DL, [Silber JH](#), Jobes DR. Female gender increases the risk of death during hospitalization for pediatric cardiac surgery. *J Thorac Cardiovasc Surg* 2007; 133:668-675. PMID: 17320563.
61. Weiner MG, Ross SJ, Mathew JI, Millman AM, Even-Shoshan O, Fox KR, [Silber JH](#). Estimating the costs of chemotherapy-associated adverse event clusters. *Hlth Serv Outcomes Res Methodol* 2007; 7:1-21.
62. [Silber JH](#), Rosenbaum PR, Polsky D, Ross RN, Even-Shoshan O, Schwartz JS, Armstrong KA, Randall TC. Does ovarian cancer treatment and survival differ by the specialty providing chemotherapy? *J Clin Oncol* 2007; 25:1169-1175. PMID: 17401005.
63. Tabak YP, Johannes RS, [Silber JH](#). Using automated clinical data for risk adjustment: Development and validation of six disease-specific mortality predictive models for pay-for-performance. *Med Care* 2007; 45:789-805. PMID: 17667314.
64. Volpp KG, Rosen AK, Rosenbaum PR, Romano PS, Even-Shoshan O, Wang Y, Bellini L, Behringer T, [Silber JH](#). Mortality among hospitalized Medicare beneficiaries in the first 2 years following ACGME resident duty hour reform. *JAMA* 2007; 298:975-983. PMID: 17785642.
65. Volpp KG, Rosen AK, Rosenbaum PR, Romano PS, Even-Shoshan O, Canamucio A, Bellini L, Behringer T, [Silber JH](#). Mortality among patients in VA hospitals in the first 2 years following ACGME resident duty hour reform. *JAMA* 2007; 298:984-992. PMID: 17785643.
66. [Silber JH](#), Romano PS, Rosen AP, Wang Y, Ross RN, Even-Shoshan O, Volpp K. Failure-to-rescue: Comparing definitions to measure quality of care. *Med Care* 2007; 45:918-925. PMID: 17890988.
67. Lorch SA, Wade KC, Bakewell-Sachs S, Medoff-Cooper B, Escobar GJ, [Silber JH](#). Racial differences in the use of respiratory medications in premature infants after discharge from the Neonatal Intensive Care Unit. *J Pediatr* 2007; 151:604-610. PMID: 18035139.
68. Rosenbaum PR, [Silber JH](#). Aberrant effects of treatment. *J Amer Stat Assoc* 2008; 103:240-247.
69. Lorch SA, Millman AM, Zhang X, Even-Shoshan O, [Silber JH](#). Impact of admission-day crowding on the length of stay of pediatric hospitalizations. *Pediatrics* 2008; 121:e718-e730. PMID: 18381501.
70. Wade KC, Lorch SA, Bakewell-Sachs S, Medoff-Cooper B, [Silber JH](#), Escobar GJ. Pediatric care for preterm infants after NICU discharge: High number of office visits and prescription medications. *J Perinatol* 2008; 28:696-701. PMID: 18596711.
71. Friese C, Lake E, Aiken LH, [Silber JH](#), Sochalski J. Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Serv Res* 2008; 43:1145-1163. PMID: 18248404; PMC2517272.
72. Daniel SR, Armstrong K, [Silber JH](#), Rosenbaum PR. An algorithm for optimal tapered matching, with application to disparities in survival. *J Comput Graph Stat* 2008; 17:914-924. PMID: 25580069; PMC4287259.
73. [Silber JH](#), Rosenbaum PR, Romano PS, Rosen AK, Wang Y, Teng Y, Halenar MJ, Even-Shoshan O, Volpp KG. Hospital teaching intensity, patient race, and surgical outcomes. *Arch Surg* 2009; 144:113-121. PMID: 19221321; PMC2814447.

74. Silber JH, Lorch SA, Rosenbaum PR, Medoff-Cooper B, Bakewell-Sachs S, Millman A, Mi L, Even-Shoshan O, Escobar GJ. Time to send the preemie home? Additional maturity at discharge and subsequent healthcare costs and outcomes. *Health Serv Res* 2009; 44:444-463. PMID: 19207592. PMC2677048.
75. Lorch SA, Silber JH, Even-Shoshan O, Millman A. Use of prolonged travel to improve pediatric risk adjustment models. *Health Serv Res* 2009; 44:519-541. PMID: 19207591; PMC2677052.
76. Bakewell-Sachs S, Medoff-Cooper B, Escobar GJ, Silber JH, Lorch SA. Infant functional status: The timing of physiologic maturation of premature infants. *Pediatrics*, 2009; 123:e878-e886. PMID: 19403481.
77. Feudtner C, Hexem KR, Shabbout M, Feinstein JA, Sochalski J, Silber JH. Prediction of pediatric death in the year after hospitalization: A population-level retrospective cohort study. *J Palliative Medicine* 2009; 12:160-169. PMID: 19207060; PMC2656437.
78. Prasad M, Iwashyna TJ, Christie JD, Kramer AA, Silber JH, Volpp KG, Kahn JM. Effect of work-hours regulations on intensive care unit mortality in United States teaching hospitals. *Crit Care Med* 2009; 37:2564-2569. PMID: 19623042; PMC2849632.
79. Rosen AK, Loveland SA, Romano PS, Itani KMF, Silber JH, Even-Shoshan O, Halenar MJ, Teng Y, Zhu J, Volpp KG. Effects of resident duty hour reform on surgical and procedural patient safety indicators among hospitalized VA and Medicare patients. *Med Care* 2009; 47:723-731. PMID: 19536029; PMC3893754.
80. Putt M, Long JA, Montagnet C, Silber JH, Chang VW, Liao K, Schwartz JS, Pollack CE, Wong Y, Armstrong K. Racial differences in the impact of comorbidities on survival among elderly men with prostate cancer. *Med Care Res Rev* 2009; 66:409-435. PMID: 19357389; PMC2780425.
81. Silber JH, Rosenbaum PR, Rosen AK, Romano PS, Itani KMF, Cen L, Mi L, Halenar MJ, Even-Shoshan O, Volpp KG. Prolonged hospital stay and the resident duty hour rules of 2003. *Med Care* 2009; 47:1191-1200. PMID: 19786912; PMC3279179.
82. Volpp KG, Rosen AK, Rosenbaum PR, Romano PS, Itani KMF, Bellini L, Even-Shoshan O, Cen L, Wang Y, Halenar MJ, Silber JH. Did duty hour reform lead to better outcomes among the highest risk patients? *J Gen Intern Med* 2009; 24:1149-1155. PMID: 19455368; PMC2762498.
83. Rosenbaum PR and Silber JH. Sensitivity analysis for equivalence and difference in an observational study of neonatal intensive care units. *J Am Stat Assoc* 2009; 104:501-511.
84. Rosenbaum PR and Silber JH. Amplification of sensitivity analysis in matched observational studies. *J Am Stat Assoc* 2009; 104:1398-1405. PMID: 22888178; PMC3416023.
85. Lorch SA, Baiocchi M, Silber JH, Even-Shoshan O, Escobar GJ, Small DS. The role of outpatient facilities in explaining variations in risk-adjusted readmission rates between hospitals. *Health Serv Res* 2010; 45:24-41. PMID: 19780853; PMC2813435.
86. Lorch SA, Wade KC, Bakewell-Sachs S, Medoff-Cooper B, Silber JH, Escobar GJ. Antibiotic use in premature infants after discharge from the Neonatal Intensive Care Unit. *Clin Pediatr* 2010; 49:249-257. PMID: 19448131.
87. Friese CR, Earle CC, Silber JH, Aiken LH. Hospital characteristics, clinical severity, and outcomes for surgical oncology patients. *Surgery* 2010; 147:602-609. PMID: 20403513; PMC2858347.

88. Silber JH, Rosenbaum PR, Brachet TJ, Ross RN, Bressler LJ, Even-Shoshan O, Lorch SA, Volpp KG. The Hospital Compare mortality model and the volume-outcome relationship. *Health Serv Res* 2010; 45:1148-1167. PMID: 20579125; PMC2965498.
89. Silber JH, Kaestner R, Even-Shoshan O, Wang Y, Bressler LJ. Aggressive treatment style and surgical outcomes. *Health Serv Res* 2010; 45:1872-1892. PMID: 20880043; PMC3029844.
90. Neuman MD, Fleisher LA, Even-Shoshan O, Mi L, Silber JH. Nonoperative care for hip fracture in the elderly: The influence of race, income, and comorbidities. *Med Care* 2010; 48:314-320. PMID: 20355262; PMC Journal – In Process.
91. Friese CR, Silber JH, Aiken LH. National Cancer Institute cancer center designation and 30-day Mortality for hospitalized, immunocompromised cancer patients. *Cancer Invest* 2010; 28:751-757. PMID: 20504224; PMC2906620.
92. Kaestner R, Silber JH. Evidence on the efficacy of inpatient spending on Medicare patients. *Milbank Q* 2010; 88:560-594. PMID: 21166869; PMC3037176.
93. Armstrong K, Randall TC, Polsky D, Moye E, Silber JH. Racial differences in surgeons and hospitals for endometrial cancer treatment. *Med Care* 2011; 49:207-214. PMID: 21150796; PMC3332036.
94. Neuman MD, David G, Silber JH, Schwartz JS, Fleisher LA. Changing access to emergency care for patients undergoing outpatient procedures at ambulatory surgery centers: Evidence from Florida. *Med Care Res Rev* 2011; 68:247-258. PMID: 20675344.
95. Press MJ, Silber JH, Rosen AK, Romano PS, Itani KMF, Zhu J, Wang Y, Even-Shoshan O, Halenar MJ, Volpp KG. The impact of resident duty hour reform on hospital readmission rates among Medicare beneficiaries. *J Gen Intern Med* 2011; 26:405-411. PMID: 21057883; PMC3055962.
96. Kaplan HC, Lorch SA, Pinto-Martin J, Putt M, Silber JH. Assessment of surfactant use in preterm infants as a marker of neonatal intensive care unit quality. *BMC Health Serv Res* 2011; 11:22. PMID: 21281485; PMC3045285.
97. Silber JH, Rosenbaum PR, Even-Shoshan O, Mi L, Kyle F, Teng Y, Bratzler DW, Fleisher LA. Estimating anesthesia time using the Medicare claim: A validation study. *Anesthesiology* 2011; 115:322-333. PMID: 21720242; PMC3273329.
98. Zubizarreta JR, Reinke CE, Kelz RR, Silber JH, Rosenbaum PR. Matching for several sparse nominal variables in a case-control study of readmission following surgery. *Am Stat* 2011; 65:229-238. PMC4237023.
99. Yang D, Small DS, Silber JH, Rosenbaum PR. Optimal matching with minimal deviation from fine balance in a study of obesity and surgical outcomes. *Biometrics* 2012; 68:628-636. PMC3966214.
100. Silber JH, Rosenbaum PR, Kelz RR, Reinke CE, Neuman MD, Ross RN, Even-Shoshan O, David G, Saynisch PA, Kyle FA, Bratzler DW, Fleisher LA. Medical and financial risks associated with surgery in the elderly obese. *Ann Surg* 2012; 256:79-86. PMID: 22566017; PMC3623296.
101. Reinke CE, Kelz RR, Zubizarreta JR, Mi L, Saynisch P, Kyle FA, Even-Shoshan O, Fleisher LA, Silber JH. Obesity and readmission in elderly surgical patients. *Surgery* 2012; 152:355-362. PMID: 22938896; PMC3637915.

102. Neuman MD, [Silber JH](#), Elkassabany NM, Ludwig JM, Fleisher LA. Comparative effectiveness of regional versus general anesthesia for hip fracture surgery in adults. *Anesthesiology* 2012; 117:72-92. PMID: 22713634.
103. Zubizarreta, JR, Neuman MD, [Silber JH](#), Rosenbaum PR. Contrasting evidence within and between institutions that supply treatment in an observational study of alternative forms of anesthesia. *J Am Stat Assoc* 2012; 107:901-915. PMID: 26664027; PMC4673003.
104. Shea JA, Weissman A, McKinney S, [Silber JH](#), Volpp KG. Internal medicine trainees' views of training adequacy and duty hour restrictions in 2009. *Acad Med* 2012; 87:889-894. PMID: 22622211; PMC3386471.
105. Navathe AS, [Silber JH](#), Small DS, Rosen AK, Romano PS, Even-Shoshan O, Wang Y, Zhu J, Halenar MJ, Volpp KG. Teaching hospital financial status and patient outcomes following ACGME duty hour reform. *Health Serv Res* 2013; 48:476-98. PMID: 22862427; PMC3626351.
106. Rosenbaum PR and [Silber JH](#). Using the exterior match to compare two entwined matched control groups. *Am Stat* 2013; 67:67-75.
107. Volpp KG, Small DS, Romano PS, Itani KMF, Rosen AK, Even-Shoshan O, Wang Y, Bellini L, Halenar MJ, Korovaichuk S, Zhu J, [Silber JH](#). Teaching hospital five-year mortality trends in the wake of duty hour reforms. *J Gen Intern Med* 2013; 28:1048-1055. PMID: 23592241; PMC3710388.
108. Tubbs-Cooley HL, Cimiotti JP, [Silber JH](#), Sloane DM, Aiken LK. An observational study of nurse staffing ratios and hospital readmission among children admitted for common conditions. *BMJ Qual Saf* 2013; 22:735-42. PMID: 23657609; PMC3756461.
109. Kelz RR, Reinke CE, Zubizarreta JR, Wang M, Saynisch P, Even-Shoshan O, Reese PP, Fleisher LA, [Silber JH](#). Acute kidney injury, renal function, and the elderly obese surgical patient: A matched case-control study. *Ann Surg* 2013; 258:359-363. PMID: 23676533; PMC3931547.
110. [Silber JH](#), Rosenbaum PR, Ross RN, Even-Shoshan O, Kelz RR, Neuman MD, Reinke CE, Ludwig JM, Kyle FA, Bratzler DW, Fleisher LA. Racial disparities in operative procedure time: The influence of obesity. *Anesthesiology* 2013; 119:43-51. PMID: 23719571; PMC3889464.
111. [Silber JH](#), Rosenbaum PR, Clark AS, Giantonio BJ, Ross RN, Teng Y, Wang M, Niknam BA, Ludwig JM, Wang W, Even-Shoshan O, Fox KR. Characteristics associated with differences in survival among black and white women with breast cancer. *JAMA* 2013; 310:389-397. PMID: 23917289.
112. Navathe A, [Silber JH](#), Zhu J, Volpp KE. Does admission to a teaching hospital affect acute myocardial infarction survival? *Acad Med* 2013; 88:475-482. PMID: 23425988.
113. Guevara JP, Moon J, Hines EM, Fremont E, Wong A, Forrest CB, [Silber JH](#), Pati S. Continuity of public insurance coverage: A systematic review of the literature. *Med Care Res Rev* 2014; 71:115-137. PMID: 24227811.
114. [Silber JH](#), Romano PS, Itani KMF, Rosen AK, Small D, Lipner RS, Bosk CL, Wang Y, Halenar MJ, Korovaichuk S, Even-Shoshan O, Volpp KG. Assessing the effects of the 2003 Resident Duty Hours Reform on internal medicine board scores. *Acad Med* 2014; 89:644-651. PMID: 24556772. PMC4139168.

115. Neuman MD, Rosenbaum PR, Ludwig JM, Zubizaretta JR, Silber JH. Anesthesia technique, mortality, and length of stay after hip fracture surgery. *JAMA* 2014; 311:2508-2517.
116. Neuman MD, Silber JH, Magaziner JS, Passarella MA, Mehta S, Werner RM. Survival and functional outcomes after hip fracture among nursing home residents. *JAMA Intern Med* 2014; 174:1273-1280. PMID: 25055155; PMC4122620.
117. Reese PP, Bloom RD, Feldman HI, Rosenbaum P, Wang W, Saynisch P, Tarsi NM, Mukherjee N, Garg AX, Mussell A, Shults J, Even-Shoshan O, Townsend RR, Silber JH. Mortality and cardiovascular disease among older live kidney donors. *Am J Transplant* 2014; 14:1853-1861. PMID: 25039276; PMC4105987.
118. Forrest CB and Silber JH. Concept and measurement of pediatric value. *Acad Pediatr* 2014; 14:S33-8. PMID: 25169455.
119. Silber JH, Rosenbaum PR, Ross RN, Ludwig JM, Wang W, Niknam BA, Mukherjee N, Saynisch PA, Even-Shoshan O, Kelz RR, Fleisher LA. Template matching for auditing hospital cost and quality. *Health Serv Res* 2014; 49:1446-1474. PMID: 24588413.
120. Silber JH, Rosenbaum PR, Ross, RN, Ludwig JM, Wang W, Niknam BA, Saynisch PA, Even-Shoshan O, Kelz RR, Fleisher LA. A hospital-specific template for benchmarking its cost and quality. *Health Serv Res* 2014; 49:1475-1497. PMID: 25201167.
121. Patel MS, Volpp KG, Small DS, Hill AS, Even-Shoshan O, Rosenbaum L, Ross RN, Bellini L, Zhu J, Silber JH. Association of the 2011 ACGME resident duty hour reforms with mortality and readmissions among hospitalized Medicare patients. *JAMA* 2014; 312:2364-2373. PMID: 25490327.
122. Silber JH, Rosenbaum PR, Ross RN, Niknam BA, Ludwig JM, Wang W, Clark AS, Fox KR, Wang M, Even-Shoshan O, Giantonio BJ. Racial disparities in colon cancer survival. A matched cohort study. *Ann Intern Med* 2014; 161:845-854. PMID: 25506853.
123. Pati S, Wong AT, Calixte RE, Ludwig J, Zeigler A, Localio AR, Moon J, Silber JH. Medicaid and CHIP retention among children in 12 states. *Acad Pediatr* 2015; 15:249-257. PMID: 25454028.
124. Pimentel SD, Kelz RR, Silber JH, Rosenbaum PR. Large, sparse optimal matching with refined covariate balance in an observational study of the health outcomes produced by new surgeons. *J Am Stat Assoc* 2015; 110:515-527. PMC4531000.
125. Silber JH, Rosenbaum PR, Kelz RR, Gaskin DJ, Ludwig JM, Ross RN, Niknam BA, Hill A, Wang M, Shoshan O, Fleisher LA. Examining causes of racial disparities in general surgical mortality: Hospital quality versus patient risk. *Med Care* 2015; 53:619-29. PMID: 26057575.
126. Silber JH, Rosenbaum PR, McHugh MD, Ludwig JM, Smith HL, Niknam BA, Even-Shoshan O, Fleisher LA, Kelz RR, Aiken LH. Comparing the value of better nursing work environments across different levels of patient risk. *JAMA Surg*. 2016 Jan 20. doi:10.1001/jamasurg.2015.4908. [Epub ahead of print]. PMID: 26791112.
127. Silber JH, Rosenbaum PR, Ross RN, Ludwig JM, Wang W, Niknam BA, Hill AS, Even-Shoshan O, Kelz RR, Fleisher LA. Indirect standardization matching: Assessing specific advantage and risk synergy. *Health Serv Res*. 2016 Feb 29. doi: 10.1111/1475-6773.12470. [Epub ahead of print]. PMID: 26927625.

128. Silber JH, Satopää VA, Mukherjee N, Rockova V, Wang W, Hill AS, Even-Shoshan O, Rosenbaum PR, George EI. Improving Medicare's Hospital Compare Mortality Model. *Health Serv Res*. 2016 Mar 14. doi: 10.1111/1475-6773.12478. [Epub ahead of print].

Research Publications, Non-Peer Reviewed:

1. Alessandrini M, Silber JH. Chemoendocrine versus endocrine therapy in breast cancer. *Lancet* 1984; 324:922-923 (letter). PMID: 6148637.
2. Silber JH, Fridman M. Age effects of radiation-associated neurotoxicity in children. *J Clin Oncol* 1993; 11:195-197 (letter).
3. Legorreta AP, Costantino GN, Kobylnski RW, Zatz SL, Silber JH. Increased cholecystectomy rate after introduction of laparoscopic cholecystectomy. *JAMA* 1994; 271:501 (letter).
4. Silber JH. The anthracycline cardiotoxicity debate. *Pediatrics* 1994; 94:779-780 (letter). PMID: 7936924.
5. Silber JH and Rosenbaum PR. Measuring quality of hospital care—Reply. *JAMA* 1995; 273:21 (letter). PMID: 7996639.
6. Silber JH and Barber G. Increased risk of cardiac dysfunction after anthracyclines in girls. *Med Pediatr Oncol* 1995; 25:130-131 (letter). PMID: 7603400.
7. Silber JH. Report cards on cardiac surgeons. *N Engl J Med* 1995; 333:938-939 (letter). PMID: 7666886. PMID: 7666886.
8. Silber JH and Barber G. Doxorubicin-induced cardiotoxicity. *N Engl J Med* 1995; 333:1359-1360 (letter). PMID: 7566043.
9. Silber JH and Rosenbaum PR. Complication rates and quality of care. *JAMA* 1995; 274:1674-1675 (letter).
10. Silber JH. Des données suffisantes pour l'évaluation des résultats des soins. Composer avec la réalité tout en aspirant à la perfection. *Gestions Hospitalières* 1997; 369:660-667.
11. Silber JH. Anesthesiologist direction and patient outcomes. *Anesthesiology* 2001; 94:714-715 (letter).
12. Cnaan A, Zhao H, Silber JH. Measuring compliance and its effect on analyses in longitudinal clinical trials. Proceedings of the ENAR Spring Meeting-Biometric Section to include ENAR & WNAR, 2002; 591-595.
13. Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Nursing burnout and patient safety. *JAMA* 2003; 289:550-551 (letter).
14. Aiken LH, Clarke SP, Cheung RB, Sloane DM, Silber JH. Relationship between patient mortality and nurses' level of education—Reply. *JAMA* 2004; 291:1322-1323 (letter).
15. Silber JH. Comment on "Wall stress misrepresents afterload in children and young adults with abnormal left ventricular geometry". *J Appl Physiol* 2004; 97:2395-2397 (letter). PMID: 15531577.
16. Silber JH. Role of afterload reduction in the prevention of late anthracycline cardiomyopathy. *Pediatr Blood and Cancer* 2005; 44:607-613. PMID: 15795884.

17. Tabak Y, Johannes RS, Silber JH, Kurtz SG. Response to Letter from Joseph P. Parker, PhD. *Med Care*. 2005; 43:1160 (letter). PMID: 16224311.
18. Silber JH. Weekend admission for myocardial infarction. *N Engl J Med* 2007; 357:85-86 (letter). PMID: 17611213.
19. Silber JH, Rosenbaum PR. Does ovarian cancer treatment and survival differ by the specialty providing chemotherapy? *J Clin Oncol* 2007; 25:3555-3557 (letter).
20. Silber JH, Rosenbaum PR. Similarity of operation times for common general surgical procedures in the United Kingdom and the United States. *Anesthesiology* 2007;107:513 (letter).
21. Silber JH, Rosenbaum PR, Fox KR. Differences in breast cancer survival by race—Reply. *JAMA* 2013; 310:2457 (letter). PMID: 24327042.
22. Silber JH. Failure to Rescue. *JAMA Surg* 2014; 149:747-748 (letter). PMID: 25029183.
23. Patel MS, Small DS, Silber JH. Duty hour reforms and patient outcomes—Reply. *JAMA* 2015; 313:1269 (letter). PMID: 25803355.

Abstracts (selected):

1. Lorch SA, Escobar GJ, Wang Y, Medoff-Cooper B, Bakewell-Sachs S, Gardner M, Greene J, Even-Shoshan O, Silber JH. Prognostic factors for readmission after NICU Discharge. Society for Pediatric Research, Washington, DC, 2005.
2. Lorch SA, Escobar GJ, Wang Y, Medoff-Cooper B, Bakewell-Sachs B, Gardner M, Greene J, Even-Shoshan O, Silber JH. The relationship between timing of NICU discharge and post-discharge medical use for premature infants. Society for Pediatric Research, Washington, DC, 2005.
3. Lorch SA, Wade KC, Escobar GJ, Medoff-Cooper B, Bakewell-Sachs S, Gardner M, Greene J, Even-Shoshan O, Silber JH. Racial disparities and low frequency of antibiotic use among premature infants after hospital discharge. Eastern Society for Pediatric Research, Greenwich, CT, 2005.
4. Lorch SA, Wade KC, Escobar GJ, Medoff-Cooper B, Bakewell-Sachs S, Gardner M, Greene J, Even-Shoshan O, Silber JH. Racial disparities and low frequency of antibiotic use among premature infants after hospital discharge. Society for Pediatric Research, Washington, DC, 2005.
5. Lorch SA, Wade KC, Escobar GJ, Medoff-Cooper B, Bakewell-Sachs S, Gardner M, Greene J, Even-Shoshan O, Silber JH. Predictive factors for the use of medications for reactive airways disease (RAD) in premature infants after hospital discharge. Eastern Society for Pediatric Research, Greenwich, CT, 2005.
6. Lorch SA, Wade KC, Escobar GJ, Medoff-Cooper B, Bakewell-Sachs S, Gardner M, Greene J, Even-Shoshan O, Silber JH. Predictive factors for the use of medications for reactive airways disease (RAD) in premature infants after hospital discharge. Society for Pediatric Research, Washington, DC, 2005.
7. Wade KC, Lorch SA, Escobar GJ, Medoff-Cooper B, Bakewell-Sachs S, Gardner MN, Greene J, Even-Shoshan O, Silber JH. High incidence and short duration of prescription drug use among premature NICU graduates one year after discharge. Eastern Society for Pediatric Research, Greenwich, CT, 2005.

8. Wade KC, Lorch SA, Escobar GJ, Medoff-Cooper B, Bakewell-Sachs S, Gardner MN, Greene J, Even-Shoshan O, Silber JH. High incidence and short duration of prescription drug use among premature NICU graduates one year after discharge. Society for Pediatric Research, Washington, DC, 2005.
9. Kaplan HC, Lorch SA, Pinto-Martin J, Putt M, Silber JH. Variations in Surfactant Use among Infants 30-34 Weeks' Gestation with Respiratory Distress Syndrome (RDS). Eastern Society for Pediatric Research Annual Meeting, Philadelphia, PA, March 10, 2007.
10. Kaplan HC, Lorch SA, Pinto-Martin J, Putt M, Silber JH. Variations in Surfactant Use among Infants 30-34 Weeks' Gestation with Respiratory Distress Syndrome (RDS). Pediatric Academic Societies' Annual Meeting, Toronto, Canada, May 7, 2007.
11. Volpp KG, Rosen AK, Rosenbaum P, Romano P, Even-Shoshan O, Canamucio A, Bellini L, Behringer T, Lee A, Silber JH. Impact of ACGME duty hour rules on mortality in VA hospitals. AcademyHealth Annual Research Meeting, Orlando, FL, June 4, 2007.
12. Loveland SA, Rosen AK, Romano PS, Silber JH, Rosenbaum PR, Even-Shoshan O, Halenar M, Volpp KG. The effect of ACGME resident duty hour reform on three patient safety indicator composite measures. VA HSR&D 26th Annual National Meeting, Baltimore, MD, 2008.
13. Lorch SA, Silber JH, Escobar GE, Small D. Readmissions as a measure of inpatient and outpatient quality for premature infants. Pediatric Academic Societies Annual Meeting, Honolulu, Hawaii, May 5, 2008.
14. Lorch SA, Silber JH, Fager C, Ross R, Even-Shoshan O. Fetal deaths may bias the assessment of neonatal intensive care quality. Pediatric Academic Societies Annual Meeting, Honolulu, Hawaii, May 6, 2008.
15. Rosen A, Loveland S, Romano P, Rosenbaum P, Silber JH, Volpp K. Rates of patient safety indicators (PSIs) among VA patients in the first two years following ACGME resident duty hour reform. AcademyHealth Annual Research Meeting, Washington, DC, June 2008.
16. Lorch SA, Silber JH, Fager C, Ross R, Even-Shoshan O. Fetal deaths may influence the assessment of neonatal intensive care quality. Academy Health Annual Meeting, Washington, DC, June 8, 2008.
17. Silber JH, Lorch SA, Rosenbaum PR, Medoff-Cooper B, Bakewell-Sachs S, Millman AM, Mi L, Even-Shoshan O, Escobar GJ. Premature infant maturity at discharge and subsequent healthcare costs. AcademyHealth Annual Research Meeting, Washington, DC, June 8, 2008.
18. Silber JH, Rosenbaum PR, Rosen AK, Romano PS, Itani KMF, Cen L, Mi L, Halenar MJ, Even-Shoshan O, Volpp KG. Impact of ACGME duty hour rules on prolonged length of stay among Medicare patients. AcademyHealth Annual Research Meeting, Washington, DC, June 8, 2008.
19. Lorch SA, Silber JH, Escobar GE, Small D. Readmissions as a measure of the quality of care of neonatal intensive care units and outpatient facilities. Academy Health Annual Meeting, Washington, DC, June 9, 2008.
20. Silber JH, Rosenbaum PR, Romano PS, Rosen AK, Wang Y, Halenar MJ, Even-Shoshan O, Volpp KG. Teaching intensity, race, and surgical outcomes. AcademyHealth Annual Research Meeting, Washington, DC, June 10, 2008.

21. Lorch SA, Srinivas SK, Silber JH, Fager C. The impact of obstetric unit closures on maternal and neonatal outcomes of pregnancy. Pediatric Academic Societies Annual Meeting, Baltimore, MD, May 2, 2009.
22. Silber JH, Rosenbaum PR, Brachet TJ, Ross RN, Lorch SA, Volpp KG. Misleading advice about AMI mortality from Medicare. AcademyHealth Annual Research Meeting, Chicago, IL, June 29, 2009.
23. Silber JH, Kaestner R. Dartmouth aggressive care & surgical outcomes. AcademyHealth Annual Research Meeting, Chicago, IL, June 30, 2009.
24. Neuman N, Fleisher LA, Even-Shoshan O, Mi L, Silber JH. Why didn't that hip get fixed? Race & variations in operative & non-operative treatment for hip fracture. AcademyHealth Annual Research Meeting, Chicago, IL, June 30, 2009.
25. Silber JH. Failure-to-rescue: Theory and applications to congenital heart surgery. The Society of Thoracic Surgeons Congenital Heart Surgery Database Task Force, Fort Lauderdale, FL, January 23, 2010.
26. Silber JH, Lorch SA, Even-Shoshan O, Fager CE. Severity adjustment for assessing outcomes of transfer-in newborns. Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 2010.
27. Silber JH, Rosenbaum PR, Ross RN, Even-Shoshan O, Kelz RR, Neuman MD, Reinke CE, Mi L, Kyle FA, Bratzler DW, Fleisher LA. Obesity does not explain racial disparities in surgical procedure time. AcademyHealth Annual Meeting, Seattle, WA, June 11, 2011.
28. Silber JH, Rosenbaum PR, Clark AS, Wang M, Teng Y, Ross RN, Even-Shoshan O, Fox KR. Are efforts to reduce racial disparities in breast cancer survival succeeding? AcademyHealth Annual Meeting, Orlando, FL, June 24, 2012.
29. Silber JH, Romano PS, Itani K, Small D, Lipner RS, Galbraith RM, Bosk CL, Volpp KG. Internal medicine board scores and resident duty hour reform. AcademyHealth Annual Meeting, Orlando, FL, June 24, 2012.
30. Pati S, Wong AT, Zeigler A, Calixte RE, Ludwig J, Wang W, Localio R, Moon JH, Silber JH. Medicaid and CHIP retention among children in nine states. Pediatric Academic Societies Annual Meeting, Washington, DC, May 4, 2013.
31. Pati S, Wong AT, Zeigler A, Calixte RE, Ludwig J, Wang W, Localio R, Moon JH, Silber JH. Disparities in continuity of public health insurance coverage among vulnerable children. Pediatric Academic Societies Annual Meeting, Washington, DC, May 5, 2013.
32. Pati S, Wong AT, Zeigler A, Ludwig J, Wang W, Localio R, Moon JH, Silber JH. Determine the association between public insurance retention and hospitalizations for ACSCs for children. Pediatric Academic Societies Annual Meeting, Washington, DC, May 5, 2013.
33. Lorch SA, Zeigler A, Moon J, Pati S, Silber JH. Impact of eligibility requirements and disenrollment on quality measures of pediatric care. Pediatric Academic Societies Annual Meeting, Washington, DC, May 5, 2013.
34. Pati S, Wong AT, Zeigler A, Calixte RE, Ludwig J, Wang W, Localio R, Moon JH, Silber JH. Medicaid and CHIP retention among children in nine states. AcademyHealth Annual Meeting, Baltimore, MD, June 24, 2013.

35. Pati S, Wong AT, Zeigler A, Calixte RE, Ludwig J, Wang W, Localio R, Moon JH, Silber JH. Disparities in continuity of public health insurance coverage among vulnerable children. AcademyHealth Annual Meeting, Baltimore, MD, June 24, 2013.
36. Pati S, Wong AT, Zeigler A, Calixte RE, Ludwig J, Wang W, Localio R, Moon JH, Silber JH. Association of ambulatory care sensitive conditions with public insurance coverage. AcademyHealth Annual Meeting, Baltimore, MD, June 24, 2013.
37. Silber JH, Ludwig JM, Zeigler AE, Wang W, Localio AR. Using CMS “MAX” claims to estimate eligible patient enrollment in Medicaid and CHIP. Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 3, 2014.
38. Lorch SA, Passarella M, Zeigler A, Silber JH. State variation in hospital readmission rates of Neonatal Intensive Care (NICU) Patients. Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 5, 2014.
39. Silber JH, Rosenbaum PR, Wang W, Ludwig JM, Calhoun S, Zeigler A, Even-Shoshan O. Practice style variation in pediatric inpatient asthma care. Pediatric Academic Societies Annual Meeting, San Diego, CA, April 25, 2015.
40. Silber JH, Rosenbaum PR, Wang W, Ludwig JM, Pimentel SD, Calhoun S, Zeigler A, Even-Shoshan O. Template matching of children with complex chronic conditions hospitalized for surgical procedures. Pediatric Academic Societies Annual Meeting, San Diego, CA, April 27, 2015.
41. Silber JH, Rosenbaum PR, Wang W, Ludwig JM, Pimentel SD, Calhoun S, Zeigler A, Even-Shoshan O. Comparing hospitals on resource use in medical admissions of children with complex chronic conditions. Pediatric Academic Societies Annual Meeting, San Diego, CA, April 28, 2015.
42. Silber JH, Rosenbaum PR, Wang W, Ludwig JM, Calhoun S, Zeigler A, Even-Shoshan O. Practice style variation in pediatric inpatient asthma care. Child Health Services Research Interest Group, AcademyHealth Annual Meeting, Minneapolis, MN, June 13, 2015.
43. Silber JH, Template matching of children with complex chronic conditions hospitalized for surgical procedures. Child Health Services Research Interest Group, AcademyHealth Annual Meeting, Minneapolis, MN, June 13, 2015.
44. Silber JH, Rosenbaum PR, Ludwig JM, Ross RN, Wang W, Niknam BA, Hill A, Even-Shoshan O, Kelz RR, Smith HL, McHugh MD, Aiken LD, Fleisher LA. Multivariate Matching Methods in Health Services Research. Innovations Lecture, AcademyHealth Annual Meeting, Minneapolis, MN, June 14, 2015.
45. Silber JH, Rosenbaum PR, Wang W, Ludwig JM, Pimentel SD, Calhoun S, Zeigler A, Even-Shoshan O. Comparing hospitals on resource use in medical admissions of children with complex chronic conditions. AcademyHealth Annual Meeting, Minneapolis, MN, June 15, 2015.
46. Silber JH, Rosenbaum PR, McHugh MD, Ludwig JM, Smith HL, Niknam BA, Even-Shoshan O, Aiken LH. Multivariate matching to examine nursing environment cost, quality and value. AcademyHealth Annual Meeting, Minneapolis, MN, June 15, 2015.

Editorials, Reviews, Chapters:

1. Meadows AT, Silber JH. Delayed consequences of therapy. In: Cancer in Children, Clinical Management, Second Edition, J Bloom, J Lemerle, PA Voute, A Barrett (eds), Springer Verlag: Heidelberg, Germany, 1986; 70-81.

2. Silber JH, Meadows AT. Retinoblastoma. In: Decision Making Series in Oncology, Philip Schein (ed), B.C. Decker, Inc.: Hamilton, Ontario, 1988; 214-215.
3. Silber JH, D'Angio GJ. Langerhans' cell histiocytosis. In: Decision Making Series in Oncology, Philip Schein (ed), B.C. Decker, Inc.: Hamilton, Ontario, 1988; 216-217.
4. Bunin GR, Silber JH. Design and analysis of clinical trials. In: Handbook of Pediatric Oncology, D Sinniah, GJ D'Angio (eds), Edward Arnold: London, England, 1992; 369-373.
5. Meadows AT, Burk CD, Silber JH. Delayed consequences of therapy. In: Cancer in Children, Clinical Management, Third Edition, J Bloom, J Lemerle, PA Voute, A Barrett (eds), Springer Verlag: Heidelberg, Germany, 1992; 71-82.
6. Jakacki R, Larsen R, Barber G, Silber JH. Chapter 9. Cardiac function following cardiotoxic therapy during childhood: Assessing the damage. In: Cardiac Toxicity after Treatment for Childhood Cancer, JT Bricker, DM Green, GJ D'Angio, (eds), John Wiley and Sons: New York, 1993; 87-94.
7. Silber JH, Jakacki R, Larsen R, Barber G. Chapter 10. Forecasting cardiac function after anthracyclines in childhood: The role of dose, age, and gender. In: Cardiac Toxicity after Treatment for Childhood Cancer, JT Bricker, DM Green, GJ D'Angio, (eds), John Wiley and Sons: New York, 1993; 95-102.
8. Silber JH, Fridman M, Erder MH. Modeling cost-effective use of Filgrastim (r-metHuG-CSF) in the treatment of patients with early-stage breast cancer receiving adjuvant chemotherapy. In: Filgrastim (r-metHuG-GSF) in Practice, Second Edition, G Morstyn, TM Dexter, M Foote, (eds), Marcel Dekker, Inc.: New York, 1998; 615-635.
9. Hogarty AN, Silber JH, Paridon SM. Cardiopulmonary exercise testing in evaluation of the functional capacity of survivors of childhood cancer. *Prog Pediatr Cardiol*, 1998; 8:109-119.
10. Silber JH. Using outcomes analysis to assess quality of care: Applications for cardiovascular surgery. In: Outcome Measurements in Cardiovascular Medicine, A Society of Cardiovascular Anesthesiologists Monograph, KJ Tuman, (ed), Lippincott Williams and Wilkins: Baltimore, 1999; 1-22.
11. Silber JH. Medicare claims and anesthesia clinical research: A perfect match. *Reg Anesth Pain Med* 2003; 28:259-261 (editorial). PMID: 12945015.
12. Silber JH. Practice Point: Can dexrazoxane reduce myocardial injury in anthracycline-treated children with acute lymphoblastic leukemia? *Nature Clinical Practice Oncology* 2004; 1:16-17 (editorial). PMID: 16264791.
13. Silber JH and Kaestner R. Response to Commentaries on Silber et al.: Aggressive treatment style and surgical outcomes. *Health Serv Res* 2010; 45:1908-1911.
14. Volpp KG, Friedman W, Romano PS, Rosen A, Silber JH. Residency training at a crossroads: Duty hour standards 2010. *Ann Intern Med* 2010; 153:826-828. PMID: 20956679; PMC3366286.