BIOGRAPHICAL SKETCH

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NAME: Milstein, Arnold S

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

POSITION TITLE: Professor of Medicine and Clinical Excellence Research Center Director

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

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
Univ of California, Berkeley, CA	MPH	12/1975	Health Care Evaluation
Tufts University, Boston, MA	MD	12/1971	Medicine
Harvard University, Cambridge, MA	BA	12/1967	Economics
Mt Zion, San Francisco, CA	Resident	1974	Psychiatry
Mt Zion Hospital, San Francisco, CA	Other training	12/1972	Medicine and Psychiatry

A. Personal Statement

I direct Stanford's Clinical Excellence Research Center. The Center engages faculty and students from Health, Computer, and Social Sciences in the discovery and scaling of innovative health care delivery methods that safely lower per capita health care spending for high quality care domestically and internationally. Before joining Stanford's faculty, I applied at multi-state scale research scaled to improve private and public-sector healthcare delivery and policy. I co-founded the Leapfrog Group in partnership with the Business Roundtable in 1998 to create market demand for adoption of evidence-based patient safety practices. Appointed to consecutive terms as a Congressional MedPAC Commissioner, I originated two subsequently enacted legislative changes to improve the value of US healthcare. I was selected for the highest annual award of the American College of Medical Quality. Elected to the Institute of Medicine (now, NAM) of the National Academy of Sciences, I chaired the planning committee of its workshop series on best methods to lower per capita health care spending and improve clinical outcomes.

1. Termglinchan V, Daswani S, Duangtaweesub P, Assavapokee T, Milstein A, Schulman K. Identifying solutions to meet unmet needs of family caregivers using human-centered design. BMC Geriatr. 2022 Feb 2;22(1):94. PubMed Central PMCID: PMC8812059.
2. Martinez-Martin N, Luo Z, Kaushal A, Adeli E, Haque A, Kelly SS, Wieten S, Cho MK, Magnus D, Fei-Fei L, Schulman K, Milstein A. Ethical issues in using ambient intelligence in health-care settings. Lancet Digit Health. 2021 Feb;3(2):e115-e123. PubMed Central PMCID: PMC8310737.
3. Haque A, Milstein A, Fei-Fei L. Illuminating the dark spaces of healthcare with ambient intelligence. Nature. 2020 Sep;585(7824):193-202. PubMed PMID: 32908264.
4. Milstein A, Topol EJ. Computer vision's potential to improve health care. Lancet. 2020 May 16;395(10236):1537. PubMed PMID: 32416778.

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

2010 -	Professor of Medicine and Clinical Excellence Research Center Director, Stanford University, Palo Alto, CA
1986 - 2010	Worldwide Partner and U.S. Health Care Thought Leader, Mercer Human Resource Consulting, San Francisco, CA
1984 - 2010	Founder and President, National Medical Audit, San Francisco, CA

1982 - 1984	Chief Medical Advisor, Health Care Financing Administration, Washington, DC
1977 - 1981	Director, Division of Professional Standards Review, Health Care Financing Administration, Washington, DC
1976 - 1976	Regional Program Consultant for HSA Development, U.S. Public Health Service, Washington, DC
1974 - 1988	Private medical practice , Inpatient and office-based psychiatry, San Francisco, CA
1965 - 1967	Research Assistant, Harvard University, Cambridge, MA

Honors

2013 - 2018	Visiting Scholar, Center for Advanced Study in the Behavioral Sciences, Stanford University
2018	Annual Vaughn Lecturer, Brigham and Women's Hospital, Harvard Medical School
2013	Annual Kassirer Lecturer, Tufts University School of Medicine
2009	Annual Elliott M. Stone Award for Excellence National Health Data Leadership 'For charting the rough seas of health care performance transparency', National Association of State Health Data Organizations
2009	Annual Founders' Award '…in recognition of national leadership and exceptional ability to bring constituencies together to improve care quality for populations…', American College of Medical Quality
2006	Elected to National Academy of Medicine , National Academy of Sciences
2005	'…for tireless pursuit of health system improvements, defining the leading edge while making things happen in the real world…', National Business Group on Health
2004	Annual Keystone Award Winner,'…for innovation and effectiveness in improving the value of U.S. health care…', World at Work
1998	Rosenthal Lecturer 'accelerating health care performance improvement…', National Academy of Medicine, National Academy of Sciences
1981	Commendation Medal, U.S. Public Health Service
1980	Plaque, U.S. Public Health Service
1974	Mark Berke Prize, the house officer best exemplifying the qualities of the complete physician., Mount Zion Hospital
1972	Career Development Fellowship, National Institute of Mental Health
1964	Graduation with Honors, Harvard College
1964	Honorary Harvard College Scholarship, Harvard College

C. Contribution to Science

1. Original investigation to discover factors associated with the effectiveness and efficiency of healthcare delivery and healthcare management innovations.

    a. Wong V, Pham M, Godfrey K, Milstein A. Distilling innovative US autism care programs that address widely perceived unmet patient and family needs. Autism. 2022 Jan;26(1):281-286. PubMed PMID: 34210189.

2. Demonstration and evaluation of market and regulatory initiatives to apply evidence on such factors generated by health services researchers.

    a. Rinaldo F, Altman M, Cannon K, Platchek T, Shah N, Kaplan R, Milstein A. Slowing AQW¬¬Medicare Spending by Optimizing Late-Life Needs. NEJM catalyst innovations in care delivery. 2020 June 17; 1(4). Available from: https://doi.org/10.1056/CAT.20.0290

3. Congressional testimony, publication and successful advocacy to encourage the application by public and private policy-makers of sound scientific evidence on factors associated with healthcare

effectiveness and efficiency.

a. Holmgren AJ, Downing NL, Bates DW, Shanafelt TD, Milstein A, Sharp CD, Cutler DM, Huckman RS, Schulman KA. Assessment of Electronic Health Record Use Between US and Non-US Health Systems. JAMA Intern Med. 2021 Feb 1;181(2):251-259. PubMed Central PMCID: PMC7737152.
b. Rochlin DH, Lee CM, Scheuter C, Platchek T, Kaplan RM, Milstein A. Health Care Is Failing the Most Vulnerable Patients: Three Underused Solutions. Public Health Rep. 2020 Nov/Dec;135(6):711-716. PubMed Central PMCID: PMC7649988.
c. Schulman KA, Milstein A. The Implications of "Medicare for All" for US Hospitals. JAMA. 2019 May 7;321(17):1661-1662. PubMed PMID: 30946429.

4. Computer vision research to increase healthcare productivity by automating the discernment and prevention of imminent health crises for medically fragile populations in hospital and home settings.

a. Yeung S, Rinaldo F, Jopling J, Liu B, Mehra R, Downing NL, Guo M, Bianconi GM, Alahi A, Lee J, Campbell B, Deru K, Beninati W, Fei-Fei L, Milstein A. A computer vision system for deep learning-based detection of patient mobilization activities in the ICU. NPJ Digit Med. 2019;2:11. PubMed Central PMCID: PMC6550251.