# Stanford



# **Eleanor Levin**

Clinical Professor, Medicine - Cardiovascular Medicine

NIH Biosketch available Online

#### CLINICAL OFFICE (PRIMARY)

• Portola Valley Medical Clinic

3260 Alpine Road Portola Valley, CA null

**Tel** (650) 725-5909 **Fax** (650) 498-2710

#### Bio

#### BIO

Eleanor Levin completed her undergraduate degree at Stanford, Phi Beta Kappa in Human Biology with Distinction, and her MD at UCSF as a Phi Beta Kappa Scholar. Her first internship was at Children's Hospital of San Francisco in pediatrics and her second at the Cleveland Clinic in internal medicine. She completed internal medicine training at Georgetown University and cardiology fellowship at George Washington University in Washington, D.C. At GW she undertook an advanced fellowship in echocardiography and lipids following her general cardiology fellowship. After fellowship training, Dr. Levin joined the GW faculty as an assistant professor of medicine in the Lipid Research Clinic. Subsequently she joined The Permanente Medical Group in northern California as a non-invasive cardiologist. She directed the Echocardiography Lab at Kaiser Santa Clara and introduced TEE and stress echo during her 25-year tenure. She introduced CT angiography of the heart at Santa Clara and coordinated joint readings between Radiology and Cardiology for 15 years. She created the Cholesterol Management and Heart Failure Programs initially at Santa Clara and eventually at more than 20 medical centers in Northern California. She was Kaiser's regional expert in lipidology as well as in cardiac disease in pregnancy in a patient population of 4 million. Dr. Levin served as Chief of Cardiology at Santa Clara for 14 years and as Chair of the Chiefs of Cardiology (120 cardiologists) for Northern California Kaiser for 8 years. She directed the Regional Cardiac Rehabilitation Program using home-based comprehensive rehabilitation across 18 medical centers for nearly three decades. During this time, she led teams developing cardiac guidelines embedded in order sets and electronic medical records throughout Kaiser medical centers to improve quality. She has spoken about and presented her work on population management and quality improvement nationally and internationally. Her awards include the national NCQA (National Committee of Quality Assurance) Award for Excellence in Cardiac Care, the Exceptional Contribution Award from The Permanente Medical Group for "exceptional work in care management programs" for heart failure and cholesterol management, the Santa Clara County Medical Association Outstanding Achievement Award for cardiac care management, and the Silicon Business Journal Award as one of the "Top 100 Influential Women in Silicon Valley." She is a fellow of the American College of Cardiology and the American Heart Association. She is board certified in both Internal Medicine and in Cardiovascular Diseases by the American Board of Internal Medicine. She joined the Stanford University School of Medicine as a Clinical Professor in 2018 after decades as Voluntary Affiliate Faculty at Kaiser Santa Clara. Currently she teaches medical students, medical residents, and Cardiology fellows, as well as directing the Stanford undergraduate shadowing program. She conducts collaborative research in cardio-obstetrics, Value Based Care, and cardiac rehabilitation.

Dr. Levin is a member of the Preventive Cardiology group. She consults on pregnant patients with heart disease as well as general cardiology patients with lipid disorders and a broad range of cardiovascular diseases.

#### **CLINICAL FOCUS**

- · Cardiovascular Disease
- · Lipid management
- Heart disease in pregnancy
- Heart Disease in Women

#### ACADEMIC APPOINTMENTS

· Clinical Professor, Medicine - Cardiovascular Medicine

#### HONORS AND AWARDS

- Top Doctors as Chosen by Their Peers, Bay Area Consumer's Checkbook (2022)
- Women of Influence Award, Silicon Valley Business Journal (2013)
- Achievement in Medicine for improving cardiac outcomes in a large population, Santa Clara County Medical Society (2012)
- Scientific Excellence Oral Presentation, Preventive Medicine Society (2008)
- Plenary Speaker, Coronary Heart Disease, National Conference to Improve Cardiac Care, National Health Service, United Kingdom (2004)
- AHA Excellence Award for Chronic Conditions Programs, American Heart Association (2003)
- Exceptional Contribution Award for regional cholesterol and heart failure management programs., The Permanente Medical Group (2003)
- National Award for Innovations in Health Care, Adaptive Business Leaders (2003)
- National Award for Quality Improvement for population management programs in CAD and Heart Failure, National Committee for Quality Assurance (2002)
- Phi Beta Kappa, Stanford University (1974)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Fellow, American Heart Association (1990 present)
- Fellow, American College of Cardiology (1990 present)
- Invited Participant, LDL Think Tank, American College of Cardiology (2016 2017)
- Scientific Advisor, Moving Analytics, Inc. (2018 2021)
- Home-based Cardiac Rehab Group member, Million Hearts Cardiac Rehabilitation Collaborative: U.S. Dept of HHS initiative co-led by CDC &CMS (2018 present)
- Representative from Stanford, California Medical Leadership Forum for Prevention and Public Health (2018 present)
- Clinical Cardiology Consultant, AliveCor (2020 2022)
- Invited Panelist, AHA Center for Technology and Innovation (2021 2021)
- Chief of Medical Affairs, MovingAnalytics (2022 present)
- Hybrid Cardiac Rehabilitation Work Group, American Heart Association (2022 present)
- Liaison Member, CLCD Exercise, Cardiac Rehabilitation, and Secondary Prevention Committee of the Council on Clinical Cardiology, American Heart Association (2022 - present)

#### PROFESSIONAL EDUCATION

- Board Certification, American Board of Internal Medicine, Cardiovascular Disease (1989)
- Board Certification, American Board of Internal Medicine, Internal Medicine (1985)
- Fellowship, George Washington University , Lipidology and Echocardiography (1988)
- Fellowship, George Washington University, Cardiovascular Disease (1987)
- Residency, Georgetown University, Internal Medicine (1985)

- Internship, Cleveland Clinic, Internal Medicine (1983)
- Internship, Children's Hospital of San Francisco, Pediatrics (1980)
- M.D., University of California, San Francisco, Medicine (1979)
- B.A. with Distinction, Stanford University, Human Biology (1975)

## Research & Scholarship

#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Cardiovascular Value Based Care, Cardio-Obstetrics, Dyslipidemia Treatment

#### CLINICAL TRIALS

• Assessing the Impact of Lipoprotein (a) Lowering With Pelacarsen (TQJ230) on Major Cardiovascular Events in Patients With CVD, Recruiting

#### **Publications**

#### **PUBLICATIONS**

 An initiative to promote value-based stress test selection in primary care and cardiology clinics: A mixed methods evaluation. Journal of evaluation in clinical practice

Kling, S. M., Kalwani, N. M., Winget, M., Gupta, K., Saliba-Gustafsson, E. A., Baratta, J., Garvert, D. W., Veruttipong, D., Brown-Johnson, C. G., Vilendrer, S., Gaspar, C., Levin, E., Tsai, et al 2023

- Appropriateness And Clinical Utility Of Echocardiograms For (Pre)Syncope And Palpitations In An Academic Primary Care Practice QCOR
  Gupta, K., Kalwani, N., Gaspar, C., Bokokalonova, Z., Paul, R., Tsai, S., Levin, E.
   2022
- Implementation of guideline-concordant use of stress echocardiography in primary care and cardiology clinics: a mixed methods evaluation. 15th Annual Conference on the Science of Dissemination and Implementation in Health

Kling, S., Kalwani, N., Saliba-Gustafsson , E., Barrata, J., Brown-Johnson , C., Garvert , D., Gaspar, C., Levin, E., Tsai, S., Veruttipong , D., Winget , M., Vilendrer, S.

2022

AN ELECTRONIC HEALTH RECORD INTERVENTION TO INCREASE USE OF LIMITED ECHOCARDIOGRAMS IN CARDIOLOGY CLINIC:
 A MIXED METHODS EVALUATION ACC Virtual Cardiovascular Summit

Kalwani, N. M., Kling, S. M., Barrata, J., Salina-Gustafsson, E. A., Veruttipong, D., Brown-Johnson, C. G., Vilendrer, S., Gaspar, C., Tsai, S., Winget, M., Levin, E.

2022

Association of Neighborhood Income with Clinical Outcomes Among Pregnant Patients with Cardiac Disease Reproductive Sciences

Carland, C., Panelli, D. M., Leonard, S. A., Bryant, E., Sherwin, E. B., Lee, C. J., Levin, E., Jimenez, S., Tremmel, J. A., Tsai, S., Heidenreich, P. A., Bianco, K., Khandelwal, et al 2022

• Digital Health Interventions for Cardiac Rehabilitation: Systematic Literature Review. Journal of medical Internet research

Wongvibulsin, S., Habeos, E. E., Huynh, P. P., Xun, H., Shan, R., Porosnicu Rodriguez, K. A., Wang, J., Gandapur, Y. K., Osuji, N., Shah, L. M., Spaulding, E. M., Hung, G., Knowles, et al 2021; 23 (2): e18773

 An Education and Electronic Health Record Intervention Increased Utilization of Exercise Tolerance Testing at an Academic Medical Center Cardiovascular Summit Virtual, from February 1-April 30, 2021. ACC Virtual Cardiovascular Summit

Kalwani, N., Tsai, S., Gaspar, C., Gafencu, M., Paul, R., Bobokalonova, Z., Levin, E. 2021

• Recurrence of Atrial Myxoma in Pregnancy: Successful Intrapartum Management and Postpartum Resection Cardiology and Cardiovascular Medicine Joudi, N., Levin, E., Miller, P., Nieman, K., Lathi, R., Boyd, J., El-Sayed, Y. Y., Khandelwal, A. 2021; 5 (1)

• Cumulative Adherence to Secondary Prevention Guidelines and Mortality After Acute Myocardial Infarction Cumulative Adherence to Secondary Prevention Guidelines and Mortality After Acute Myocardial Infarction

Solomon, M., Leong, T., Levin, E., et al

2020

Bicuspid Aortic Valve and Ascending Aortic Aneurysm in a Twin Pregnancy. JACC. Case reports

Bryant, E., Tsai, S., Levin, E., Fleischman, D., Ansari, J., Fischbein, M., Bianco, K., Khandelwal, A. 2020; 2 (1): 96-100

• Effect of Social Determinants on Outcomes in a High-risk Cardio-obstetrics Population AHA Scientific Sessions

Carland, C., Panelli, D., Lee, C., Sherwin, E., Levin, E., Zarafshar, S., Tremmel, J. A., Tsai, S., Bianco, K., Khandelwal, A. 2020: 1

SUCCESS OF A HOME-BASED CARDIAC REHABILITATION PROGRAM IN A POPULATION OF NEARLY 4 MILLION

Levin, E. G., von Coll, S., Dlott, R. ELSEVIER SCIENCE INC.2017: 1731

• Adherence to Secondary Prevention Guidelines and Mortality After Acute Myocardial Infarction

Solomon, M. D., Leong, T. K., Sung, S. H., Jaffe, M., Levin, E., Rana, J. S., Go, A. S.

American Heart Association. Circulation.

2017; 136 (A16268):

• Outcomes of Chest Pain Calls to an Advice and Appointment Call Center

Bhargava, R., Temkin, T. L., Fireman, B., Levin, E., Amaral, D.

LIPPINCOTT WILLIAMS & WILKINS.2012

 Standardized Discharge Orders after Stroke Results of the Quality Improvement in Stroke Prevention (QUISP) Cluster Randomized Trial ANNALS OF NEUROLOGY

Johnston, S., Sidney, S., Hills, N. K., Grosvenor, D., Klingman, J. G., Bernstein, A., Levin, E. 2010; 67 (5): 579–89

Standardized Discharge Orders After Stroke: Results of the Quality Improvement in Stroke Prevention (QUISP) Trial

Johnston, S., Sidney, S., Hills, N. K., Grosvenor, D., Klingman, J. G., Bernstein, A., Levin, E.

LIPPINCOTT WILLIAMS & WILKINS.2010: E289

Preventing Heart Attack and Stroke Everyday (PHASE): Optimizing Cardiovascular Risk Reduction in a Coronary Artery Disease-Equivalent
Population Within a Large Integrated Health Care System Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke, Oral Presentations
Levin, E., Sidney, S., Selby, J. V., Jaffe, M.

2009

• Blood pressure control among women six months after ischemic stroke

Hills, N., Grosvenor, D., Sidney, S., Klingman, J., Bernstein, A., Levin, E., Johnston, S. LIPPINCOTT WILLIAMS & WILKINS.2008: A232

• Race and blood pressure control six months after ischemic stroke

Hills, N. K., Nguyen-Huynh, M., Grosvenor, D., Sidney, S., Klingman, J., Bernstein, A., Levin, E., Johnston, S. C. LIPPINCOTT WILLIAMS & WILKINS.2008: 622–23

• Successful clinical guidelines implementation in a large integrated healthcare system

Levin, E., Emerson, L., Whippy, A., Steimle, A. E., Pearl, R.

LIPPINCOTT WILLIAMS & WILKINS.2007: 785

• Acute Coronary Syndromes Clinical Practice Guidelines. Critical pathways in cardiology

Brindis, R. G., Fischer, E., Besinque, G., Gjedsted, A., Lee, P. C., Padgett, T., Petru, M., Raley, J., Levin, E., Strohmeier, A. 2006; 5 (2): 69-102

• Myocardial infarction in Asian Indians (MIAI) study: The Kaiser Permanente Northern California experience

Rau, J., Johnsen, N., Lee, P., Chandra, M., Go, A., Levin, E.

LIPPINCOTT WILLIAMS & WILKINS.2006: E378

• Gender bias in the use of lipid-lowering therapy

Bhargava, R., Sandhu, G., Armstrong, M., Nasiri, H., Sah, A., Levin, E.

LIPPINCOTT WILLIAMS & WILKINS.2005: U893

Differential association between statin exposure and elevated levels of creatine kinase ANNALS OF PHARMACOTHERAPY

Chan, J., Hui, R. L., Levin, E. 2005; 39 (10): 1611–16

Successful conversion of patients with hypercholesterolemia from a brand name to a generic cholesterol-lowering drug

Cheetham, T. C., Chan, J., Benson, Richmond, C., Levin, E., Campen, D.

AMER MED PUBLISHING, M W C COMPANY, 2005: 546-52

Women at Risk for Coronary Heart Disease: How Research is Translated Into Innovation and Quality Outcomes at Kaiser Permanente. The Permanente
iournal

Levin, E., Arango, J. 2005; 9 (1): 48-51

• Chronic Kidney Disease and Lipid Control in Patients with Coronary Artery Disease American Society of Nephrology

Nasiri, H., Armstrong, M., Sandhu, G., Levin, E., Bhargava, R., Hung, Y. 2005

• Successful conversion of 33,318 patients with hypercholesterolernia from a brand-name to a generic cholesterol-lowering drug

Levin, E., Cheetham, C. T., Chan, J., Richmond, C., Benson, V. M., Campen, D. LIPPINCOTT WILLIAMS & WILKINS.2004: 819

• Putting Heart Disease Guidelines into Practice: Kaiser Permanente Leads the Way The Permanente Journal

L, P., Ralph, B., Levin, E. 2003; 7 (1)

Population-based approach to heart failure management is associated with improved outcomes

Steimle, A., Levin, E., Arango, J., Kim, E., Stone, B. LIPPINCOTT WILLIAMS & WILKINS.2002: 568

 Myocardial infarction mortality in patients administered thrombolytic therapy versus primary percutaneous coronary intervention: A two-county comparison in northern California

Levin, E., Brindis, R., Petru, M., Lee, P.

LIPPINCOTT WILLIAMS & WILKINS.2002: 761

Innovative approach to guidelines implementation is associated with declining cardiovascular mortality in a population of three million

Levin, E. G., Arango, J., Steimle, A. E., Lee, P. C., Fireman, B.

LIPPINCOTT WILLIAMS & WILKINS.2001: 789

• Home-based cardiac rehabilitation program is associated with excellent outcomes

Krowley, J., Levin, E. G.

LIPPINCOTT WILLIAMS & WILKINS.2001: 800

• COMPARISON OF PSYLLIUM HYDROPHILIC MUCILLOID AND CELLULOSE AS ADJUNCTS TO A PRUDENT DIET IN THE TREATMENT OF MILD TO MODERATE HYPERCHOLESTEROLEMIA ARCHIVES OF INTERNAL MEDICINE

LEVIN, E. G., MILLER, V. T., MUESING, R. A., STOY, D. B., BALM, T. K., LAROSA, J. C. 1990; 150 (9): 1822–27

 Improving Cardiac Rehabilitation Referral Rate in a Post-PCI Population: Using NCDR CathPCI® Registry and Integrated Electronic Medical Record, ACC NCDR 11, April 1, 2011

Chen, S., Lee, A., Levin, E., Jackson, J., Ford, T. 2011

 Comparison of Screening Outcomes Among Different Healthcare Delivery Systems for Three Major Diseases: February 2008, Oral Presentation Preventive Medicine Society Annual Scientific Meeting

Levin, E., Loftus, B., Pearl, R.

2008

### **PRESENTATIONS**

- Cardiac Rehabilitation Best Practices California Dept of Public Health: Healthy Hearts Conference (6/17/2019 6/17/2019)
- Keynote: Lipid Management Advances for Improved Outcomes Right Care University of Best Practices (January 11, 2021)
- Preventive Cardiology Public Heath Leadership Forum (6/12/2022 6/12/2022)