



# Progress achieved: The 2021 John M. Eisenberg Patient Safety and Quality Award Winners

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JOHN M. EISENBERG PATIENT SAFETY & QUALITY AWARDS

> Presented by The Joint Commission & National Quality Forum

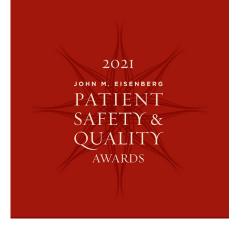
> > April 19, 2022

The **2021 John M. Eisenberg Patient Safety and Quality Awards** recognize those who have made significant and long-lasting contributions to improving patient safety and healthcare quality. Established in 2002 by The Joint Commission and the National Quality Forum (NQF), this annual awards program is named after former

Agency for Healthcare Research and Quality (AHRQ) Administrator John M. Eisenberg.

"This award program, now 20 years ongoing, is an annual reminder of Dr. Eisenberg's legacy and measurement's critical role in our healthcare system's continuous improvement. There is so much to be proud of for this year's awardees. Together, they display innovation and immense dedication to improving patient outcomes. Congratulations to Dr. Hardeep Singh, Dr. Mark R. Chassin, Prime Healthcare Services, and Kaiser Permanente Northern California from all of us at NQF."

> —Dana Gelb Safran, ScD, President and CEO, National Quality Forum



## The winners of the 2021 Eisenberg Awards are:

Hardeep Singh, MD, MPH - Individual Achievement

**Prime Healthcare Services** — Innovation in Patient Safety and Quality at the National Level

**Kaiser Permanente Northern California** — Innovation in Patient Safety and Quality at the Local Level

Mark R. Chassin, MD, FACP, MPP, MPH — Honorary Lifetime Achievement

"The John M. Eisenberg Awards were created to honor the enduring legacy of Dr. Eisenberg. Twenty years later, they continue to showcase how innovation and dedication to process improvement can lead to sustainable solutions to some of healthcare's greatest challenges. The recipients of this year's Eisenberg Awards uphold Dr. Eisenberg's life's work and those who have come before them in furthering the mission of improving patient safety and quality of care. Congratulations to Dr. Hardeep Singh, Dr. Mark R. Chassin, Prime Healthcare Services, and Kaiser Permanente Northern California for being the recipients of the 2021 Eisenberg Awards."

David Baker, MD, MPH, FACP, executive vice president, Division of Health Care Quality Evaluation, The Joint Commission



# Dr. Eisenberg's legacy

An impassioned advocate for healthcare quality improvement, John M. Eisenberg, MD, MBA, was a founding member of NQF's board of directors and the former AHRQ administrator (1997-2002). Dr. Eisenberg was a leader in healthcare quality, and he dedicated his life to ensuring care was based on a strong foundation of research and that it considered the patient's needs and perspectives.

"I was fortunate to be a contemporary of John's. We trained in the Robert Wood Johnson Foundation Clinical Scholars Program at around the same time and worked together a number of times, particularly in the battle to save the Agency for Health Care Policy and Research from extinction and preserve its critical mission. His essential role in so successfully leading AHRQ, the agency that emerged from that battle, inspired me and many others. John encouraged us to 'think big' about the potential impact of our quest to undergird the practice of medicine and the delivery of healthcare with a solid foundation of evidence of effectiveness."

### - Mark R. Chassin, MD, FACP, MPP, MPH, President Emeritus, The Joint Commission



Hardeep Singh, MD, MPH Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine



Hardeep Singh, MD, MPH, chief of the health policy, quality and informatics program in the Center for Innovations in Quality, Effectiveness and Safety at Michael E. DeBakey VA Medical Center, and professor at Baylor College of Medicine, was selected as the winner for Individual Achievement for being a pioneer in diagnostic and health information technology (IT) safety.

Some of his significant accomplishments include:

- Developing "E-trigger tools," sophisticated electronic health record (EHR)-based algorithms that identify patients with missed opportunities in the diagnostic process.
- Working with the Agency for Healthcare Research and Quality (AHRQ) to develop tools and resources to <u>measure</u> and improve diagnostic safety, including "Diagnostic Safety Measurement for Learning and Improvement: A Resource to Identify, Analyze, and Learn from Diagnostic Safety Events" and "Common Formats for Event Reporting – Diagnostic Safety," a standardized reporting format using common definitions to report diagnostic errors.
- Co-developing an eight-dimension sociotechnical <u>model</u> that is now accepted as a paradigm in health IT and patient safety work.
- Co-developing the "<u>ONC SAFER Guides</u>" that help hospitals perform a safety assessment of their electronic health record to address a wide range of patient safety issues related to health IT use. The Centers for Medicare & Medicaid Services (CMS) will require all eligible U.S. hospitals to use SAFER Guides starting in 2022.
- Conducting foundational research on defining and measuring diagnostic error, some of which influenced the 2015 National Academies <u>report</u>, "Improving Diagnosis in Health Care," which cited 32 papers he authored on diagnostic safety.
- Developing national VA policy with accompanying tools and checklists for safely <u>communicating</u> test results to patients and providers.

The breadth and depth of Dr. Singh's research work is remarkable because he has succeeded in translating his research into pragmatic tools, strategies, and innovations for improving patient safety.

"As an immigrant and an international medical graduate, I have had a lifelong dream to make an impact on healthcare. Advancing Dr. Eisenberg's legacy through this award is thus an incredible honor of a lifetime.

"After residency, I practiced full-time general medicine for years and witnessed patients experiencing poor outcomes from misdiagnosis and unsafe care. This is when I was first motivated to understand and solve patient safety problems through research. I saw every scientific project as an opportunity to change healthcare. So, I made a personal commitment that my research must use a pragmatic, real-world improvement lens and challenge the status quo in quality and safety. I am grateful to my mentors for their unwavering support while I explored uncharted waters of improving diagnosis through multidisciplinary research that involved complex cognitive and systems sciences. Many prior awardees have inspired my passion, which makes receiving this award even more special.

"Back in 2005, when I began this journey, diagnostic error was considered a difficult problem to address with no real solutions. Few opportunities for grant funding were available and top experts I spoke to cautioned me about taking on a complex topic. Beginning a research career in an area where scientific knowledge is underdeveloped, and research funding is little is an enormous risk. But perseverance helped me create a vision for diagnostic safety research and build a strong, mission-driven multidisciplinary team to improve diagnosis. We not only helped define a scientific path forward on measuring, analyzing, and tackling diagnostic error but we also embarked on translating research into practice through new tools, strategies, and innovations."

 Hardeep Singh, MD, MPH, Chief, Health Policy, Quality and Informatics Program, Center for Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine

## Prime Healthcare

## **Prime Healthcare Services**

Ontario, California

- Ahmad Imran, MD, MBA, CHC, CPHQ, CHCQM, Corporate Vice President Quality and Value Base Care, Prime Healthcare
- Mayur Rawal, MBBS, MPH, HACP, Corporate PI Supervisor
- Neha Botre, BHMS, MHA, Corporate PI Manager, Prime Healthcare
- Aditya Patil, MBBS, HACP, Corporate PI coordinator



Prime Healthcare Services was selected as the winner at the National Level for developing and implementing a cohesive and system-wide approach to addressing social determinants of health (SDOH). The initiative links and addresses SDOH to patient outcomes. By assessing patients' SDOH needs, Prime Health Care Services' helps providers more effectively deliver patient care and reduce healthcare disparities. Its facilities engage senior leadership, strengthen relationships with community partners, and develop digital workflows that promote real-time patient monitoring and data use. To reduce healthcare disparities, Prime developed and uses a roadmap to:

- Identify SDOH needs based on an opportunities index.
- Design and implement care interventions.
- Establish bidirectional flow of information.

After implementing their new screening tool, community partnerships and bidirectional communications flow, Prime Healthcare Services observed improvements in all-cause hospital-wide readmission rates.

"Our initiative highlighted how patients' health and their outcomes are notably driven by various SDOH. Addressing these factors will not only improve the overall health of our communities but will help in reducing health disparities that have been deeply rooted in, but are not limited to, inequities in education, income, housing, and accessing healthcare services. As Prime Healthcare Services has taken a significant step forward in improving and promoting social determinants, our goal remains to address the unmet social needs of our patients, improve health outcomes, and ensure they can safely transition back to the community. We will continue with our unified approach nationwide to engage multidisciplinary teams and community partners within and beyond our hospital walls and leverage this with a well-integrated digital platform that would further enhance coordination between all care providers.

"Through our initiative, Prime has created sustainable changes to its practice to further bolster a culture of safety and patient engagement. This initiative continues to identify social needs of our community members and ensures they receive treatment that aligns with their goals and values. It has increased patient engagement which has further improved clinical outcomes, overall quality of life, and has reduced unnecessary and undesirable healthcare utilization and expenditure.

"We are humbled to receive recognition at a system level for our efforts to improve patient safety and healthcare quality. To receive such a prestigious award from The Joint Commission and NQF in the midst of the COVID-19 pandemic further inspires us to ensure we keep safety of our community members, patients and staff as our highest priority. Our goal remains to have a systematic practice to screen patients for SDOH needs by 'patient-centered care' approach and connect them to the right resources for better outcomes. We shall continue to align our strategies and policies to address social determinants of health and advance health equity, improve patient outcomes, and support innovation by participating in Value Based Care (VBC) initiatives."

### - Ahmad Imran, MD, MBA, CHC, CPHQ, CHCQM, Corporate Vice President Quality and Value Base Care, Prime Healthcare

## KAISER PERMANENTE®

### Kaiser Permanente Northern California

Oakland, California

- Robin Betts, MBA-HM, RN, CPHQ, Vice President, Safety, Quality & Regulatory Services, Kaiser Foundation Health Plan & Hospitals, Northern California
- Elizabeth Scruth, PhD, MPH, RN, CNS, CCRN-K, CCNS, FCCM, FCNS, CPHQ, Regional Director Clinical Quality Programs, Data Analytics and Tele Critical Care, Kaiser Foundation Hospital and Health Plan, Northern California
- Vanessa A. Martinez, DNP, MHA, RN, Director Virtual Nursing Care, Regional Clinical Quality Programs and Data Analytics, Kaiser Foundation Hospital and Health Plan, Northern California



Kaiser Permanente Northern California was selected as the winner at the Local Level for its initiative that developed a predictive analytic scoring system called Advance Alert Monitor (AAM) that proactively identifies patients with a high risk of mortality or transfer to the intensive care unit (ICU), including integration of life care planning or palliative care. AAM alerts clinicians 12 hours before clinical deterioration, permitting early detection and more nuanced response. AAM analyzes EHR data for medical-surgical inpatients, and then alerts the virtual quality nurse consultants who connect with rapid response teams at the patient's bedside to develop a care plan. This system combines predictive analytics and has 99 elements, including laboratory tests, vital signs, neurological status, pulse oximetry, and all outpatient and inpatient diagnoses in the preceding 12 months. The AAM score is generated every hour on medical, surgical, and telemetry adult patients.

The program standardized the workflows for addressing in-hospital emergencies and the needs of patients near the end of life. Evaluation of the program showed statistically significant decreases in mortality with between 550 to 3020 lives saved over four years. Data supplied with the application also indicated:

- Lower unadjusted incidence of ICU admission.
- Shorter hospital of stay among survivors.
- Lower in-hospital mortality.

• Lower mortality within 30 days after an event reaching the alert threshold. Kaiser Permanente Northern California implemented AAM within 21 hospitals since 2019 and is currently evaluating integration of the predictive model for additional markets for inter-regional spread and is piloting the model in Labor and Delivery. "We continue to maximize the benefits of our data and predictive model technology in enhancing patient care and culture of safety by integrating the predictive model for the inter-regional spread. The predictive modeling program has also allowed us to implement other forms of clinical decision support and population management of our patients in outpatient mental health, labor and delivery, and the emergency department, most especially during the COVID-19 pandemic. Through early detection, the program aims to give the clinical team a 12-hour lead time to assess and plan interventions aligned with a patient's goals and wishes of care.

"The Eisenberg award has given us the opportunity to share how we elevated patient safety and quality of care with other healthcare systems through innovation, humancentered design, and predictive models.

Highly reliable organizations build into their operations the ability to detect emerging issues before things exacerbate, placing them in a position of anticipation and containment of risk rather than reaction. AAM augments our ability to move upstream in our detection and intervene early optimizing the outcomes of our patients."

## Robin Betts, MBA-HM, RN, CPHQ, Vice President, Safety, Quality & Regulatory Services, Kaiser Foundation Health Plan & Hospitals, Northern California



Mark R. Chassin, MD, FACP, MPP, MPH President emeritus, The Joint Commission



Mark R. Chassin, MD, FACP, MPP, MPH, president emeritus of The Joint Commission, oversaw the activities of the nation's predominant standards-setting and accrediting body in healthcare for 14 years. During that time, he introduced profound changes such as shifting accreditation away from simply citing deficiencies and toward helping to drive improvement.

A key part of his effort was the creation of the Joint Commission Center for Transforming Healthcare. Established in 2009, the Center works with the nation's leading hospitals and health systems to create effective solutions for healthcare's most critical safety and quality problems, including healthcare-associated infections (HAIs), hand-off communication failures, wrong site surgery, patient falls, and healthcare-associated pressure injuries. The Center has been a key part of Dr. Chassin's efforts to transform healthcare into a high reliability industry and to speed healthcare organizations' progress toward zero harm.

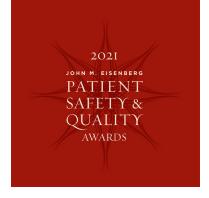
Dr. Chassin also ushered in great change to The Joint Commission's internal improvement culture by introducing lean, six sigma, and change management concepts and tools that were later melded into The Joint Commission's Robust Process Improvement® (RPI®) methodology.

Prior to coming to The Joint Commission, Dr. Chassin was already a leading figure in healthcare quality and safety. He was the Edmond A. Guggenheim Professor of Health Policy and founding Chairman of the Department of Health Policy at the Mount Sinai School of Medicine, New York, and Executive Vice President for Excellence in Patient Care at The Mount Sinai Medical Center.

Dr. Chassin served as commissioner of the New York State Department of Health, is a board-certified internist and practiced emergency medicine for 12 years. He was selected in the first group of honorees as a lifetime member of the National Associates of the National Academies. In addition, Dr. Chassin was a member of the Institute of Medicine committee that authored "To Err is Human" and "Crossing the Quality Chasm." He is a recipient of the Founders' Award of the American College of Medical Quality and the Ellwood Individual Award of the Foundation for Accountability. "Much of my work has concentrated on improving the quality of healthcare by eliminating overuse, greatly reducing adverse outcomes that result from errors in care and maximizing the use of effective care. As a practitioner, I learned firsthand how difficult it is to apply evidence and how often there is no evidence to guide decision making. As a researcher, I developed and tested hypotheses to build the most effective methods to achieve those goals. In government, I engaged in the implementation of effective quality solutions and learned both the strengths and limitations of government as a vehicle for quality improvement. At The Joint Commission, I sought to learn from organizations and industries outside of healthcare that have established long-lasting, superlative safety performance in the face of extremely hazardous environments. This initiative resulted in the creation and deployment of strategies, tools, and training programs to help healthcare organizations achieve zero harm or consistent excellence.

"I am honored and humbled to receive the Eisenberg Award. I am greatly honored to join the group of amazingly accomplished individuals who have received the award previously. I am most humbled by the realization that despite all of our efforts — and the work of countless others — healthcare still has a long way to go before any of us can be satisfied with its level of safety and quality."

## - Mark R. Chassin, MD, FACP, MPP, MPH, 2021 Eisenberg Award winner for Honorary Lifetime Achievement



## The 2021 Eisenberg Award Panel

Carolyn M. Clancy, MD, MACP, Department of Veterans Affairs

Brent C. James, MD, MStat, Clinical Excellence Research Center, Stanford University School of Medicine

Richard Christopher Antonelli, MD, MS, Boston Children's Hospital, Harvard Medical School

Meika Neblett, MD, MS, Robert Wood Johnson Barnabas Health

Lisa C. Patton, PhD, JBS International, Inc.

David M. Shahian, MD, Harvard Medical School

Charleen Tachibana, DNP, RN, FAAN, Virginia Mason Franciscan Health

Andrew M. Wiesenthal, MD, SM, Deloitte Consulting, LLP

Laurie Zephyrin, MD, MBA, MPH, The Commonwealth Fund



"Overall, the best part of working on the panel is seeing firsthand that the aspirations of John Eisenberg continue to inspire individuals and health systems across the country — and the bar keeps moving higher. Every year brings more ambitious and exciting submissions. Learning how systems across the country are pushing the limits of what can be considered excellence in healthcare is especially exciting for me."

 Carolyn M. Clancy, Assistant Under Secretary for Health for Discovery, Education & Affiliate Networks, Department of Veterans Affairs, John M. Eisenberg Award Panel Chair





### The Joint Commission

Founded in 1951, The Joint Commission seeks to continuously improve health care for the public, in collaboration with other stakeholders, by evaluating health care organizations and inspiring them to excel in providing safe and effective care of the highest quality and value. The Joint Commission accredits and certifies more than 21,000 health care organizations and programs in the United States. An independent, nonprofit organization, The Joint Commission is the nation's oldest and largest standards-setting and accrediting body in health care. Learn more at www.jointcommission.org.



### **National Quality Forum**

The National Quality Forum (NQF) works with members of the healthcare community to drive measurable health improvements together. NQF is a not-forprofit, membership-based organization that gives all healthcare stakeholders a voice in advancing quality measures and improvement strategies that lead to better outcomes and greater value. Learn more at www.qualityforum.org.

#### 2020

David M. Gaba Veterans Health Administration Northwestern Medicine

#### 2019

Gordon D. Schiff, MD HCA Healthcare WellSpan Health

#### 2018

Brent C. James, MD The Society of Thoracic Surgeons BJC HealthCare

#### 2017

Thomas H. Gallagher, MD Children's Hospitals' Solutions for Patient Safety LifePoint Health's National Quality Forum

#### 2016

Carolyn M. Clancy, MD I-PASS Study Group Christiana Care Health System

#### 2015

Pascale Carayon, PhD Premier, Inc. Mayo Clinic-Rochester

#### 2014

Mark L. Graber, MD, FACP American College of Surgeons Northshore-LIJ Health System

#### 2013

Gail L. Warden Institute for Clinical Systems Improvement Minnesota Hospital Association Stratis Health Anthem Blue Cross National Health Foundation Hospital Association of Southern California Hospital Association of San Diego & Imperial Counties Hospital Council of Northern & Central California Vidant Health

#### 2012

Saul N. Weingart, MD, PhD Kaiser Permanente Memorial Hermann Healthcare System 2011

Kenneth I. Shine, MD Jerod M. Loeb, PhD Henry Ford Health System New York Presbyterian Hospital The Society of Hospital Medicine

#### 2010

John H. Eichhorn, MD James L. Reinertsen, MD The Children's Hospital at Providence Newborn Intensive Care Unit Washington State Hospital Association

#### 2009

Gary S. Kaplan, MD Virginia Mason Medical Center Tejal Gandhi, MD Dr. Noreen Zafar, MD Mercy Hospital Anderson Michigan Health & Hospital Association Keystone Center for Patient Safety & Quality 2008

Michael S. Cohen, RPh, MS, ScD Institute for Safe Medication Practices Research Dennis O'Leary, MD, president emeritus of The Joint Commission The RAND Corporation and University of California at Los Angeles School of Medicine National Coordinating Council for Medication Error Reporting and Prevention Anthem Blue Cross and Blue Shield of Virginia New York City Health and Hospitals Corporation

#### 2007

Flaura Koplin Winston, MD, PhD Darrell A. Campbell, Jr., MD Eric J. Thomas, MD, MPH Beth Israel Deaconess Medical Center Harvard Medical School Evanston Northwestern Healthcare 2006

Donald Berwick, MD, MPP, KBE Jerry H. Gurwitz, MD Minnesota Alliance for Patient Safety Pennsylvania Patient Safety Authority Wichita Citywide Heart Care Collaborative

#### 2005

Audrey L. Nelson, PhD, RN Maryland Patient Safety Center Meridian Health Sentara Healthcare **2004** Lucian L. Leape, MD Peter J. Provonost, MD, PhD Major Danny Jaghab, MS, RD Kaveh G. Sojania, MD and Robert M. Wachter, MD University of Pittsburgh Medical Center **2003** Jeffrey Cooper, PhD

The Leapfrog Group Lehigh Valley Hospital and Health Network Abington Memorial Hospital

#### 2002

Julianne Morath, RN, MS David W. Bates, MD, MSc Veterans Affairs Medical Center Concord Hospital Veterans Affairs National Center for Patient Safety

