

## **2023 John M. Eisenberg Patient Safety and Quality Awards**

## **Individual Achievement**

Eduardo Salas, PhD – Rice University

Dr. Eduardo Salas was selected in recognition of his body of work across 40 years designing, developing, and evaluating evidence-based principles and tools to help healthcare organizations create a culture of teamwork and safety. Dr. Salas' decades of work with the Department of the Navy regarding air crew coordination and teamwork, as well as in other high-risk industries, was foundational to establish core competencies speci c to healthcare teams. Dr. Salas was instrumental in the design, development, and delivery of TeamSTEPPSTM - Team Strategies & Tools to Enhance Performance & Patient Safety, which has now been adopted by 70% of U.S. hospitals. TeamSTEPPS was initially funded by the Department of Defense and the Agency for Healthcare Research and Quality (AHRQ) in response to the Institute of Medicine's plea to reduce medical errors. As a subject matter expert and principal scienti c advisor, Dr. Salas provided theoretical models that served as the framework for TeamSTEPPS.

His work has reinforced focus on critical areas such as:

- Strategy design to facilitate adoption of team principles into high-stress, high-stakes environments.
- The use of innovative technologies such as medical simulation to advance the science and training of teamwork in healthcare environments.

He is well known for the translation of science into evidence-based best practices, which he has used to provide practical advice on topics including designing and deploying medical team training, creating a safety culture, and managing and evaluating teamwork.

Dr. Salas is a proli c scholar and has published more than 420 journal articles in top-tier journals and two books, edited

## John M. Eisenberg Patient Safety and Quality Awards

National Level Innovation in Patient Safety and Quality The Surgical Pause - Veterans Health Administration

Data demonstrate that among high-risk, frail patients, there is no such thing as "low-risk" surgery. The Surgical Pause, an initiative from the Veterans Health Administration (VHA), uses routine frailty screening with the Risk Analysis Index (a bedside frailty assessment that can be completed in 30 seconds without disrupting work ow) to identify 5-10% of the highest risk patients who experience disproportionately high rates of postoperative complications, loss of independence, and mortality. If patients are found to be frail, a brief "pause" permits further evaluation to review of goals of care and optimize treatment plans.

For the majority of patients who decide to pursue surgery, multidisciplinary care plans can be tailored to mitigate frailty-associated risks prior to surgery through nutritional supplementation, preoperative exercise to improve physical condition and respiratory function, and tailored surgical care such as the use of narcotic-sparing regional anesthetics during surgery and systematic delirium assessment during recovery. For some patients, goal clari cation empowers them to choose non-operative treatment as most consistent with their goals. These prehabilitative interventions shift the paradigm and effort from simply focusing on rescuing patients experiencing postoperative complications to strengthening the frail patient and mitigating potential complications before they happen.

Data provided from the initial pilot sites support this initiative's success. Omaha VA Medical Center in Omaha, Nebraska, cut six-month mortality among frail patients from 25% to 8%, and later efforts at Pittsburgh VA Medical Center in Pittsburgh, Pennsylvania, and Malcom Randall VA Medical Center in Gainesville, Florida, replicated this improvement. Supporting data cited by VHA included an interrupted time series a0 - mst ser3ts, goa latwBox (A Medical Center in

DUtlitzng asnon15.1 (viel)50 (raluda,td an dsimply frailty assessment twhiy fl)10. (vemragng aexsteng recsouressfocrper)iperat

secorDhes Ese nbr g A15.1 (vw20 (oardt snel )20.1 (ep bmprossmd b)20.1 (y Vte Simplyicty amd effoecoveesvsof the hRsk pA0

## John M. Eisenberg Patient Safety and Quality Awards

Local Level Innovation in Patient Safety and Quality Creating a Culture of Quality for Cardiovascular Care in Michigan – BMC2

BMC2 (Blue Cross Blue Shield of Michigan Cardiovascular Consortium) is a state-wide quality improvement collaborative that develops and administers a portfolio of quality improvement interventions for patients who undergo percutaneous coronary interventions (PCI), vascular surgical procedures, and transcatheter valve procedures in Michigan. The consortium is one of 22 Collaborative Quality Initiatives sponsored by Blue Cross Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships program. Facilities contribute procedural and outcome data to registries, which are aggregated into hospital and physician-level reports and benchmarked to statewide performance. BMC2 is recognized for its remarkable improvements in the documentation of radiation use, a decrease in high-dose radiation exposure, and opioid pill prescribing rates.

BMC2 annually impacts 30,000 patients treated by hundreds of physicians from more than 100 hospital teams. The collaborative creates data-driven quality improvement goals and initiatives, develops best practice protocols, convenes members at statewide collaborative meetings, and supports sites with annual site and chart reviews and staff training.

In Michigan, documentation of radiation use improved from 73.1% in 2019 to 85.5% in 2021, and BMC2 sites are