2022 John M. Eisenberg Patient Safety and Quality Awards
Awardee Summaries

Presented by The Joint Commission and National Quality Forum

Individual Achievement

Jason S. Adelman, MD, MS

Chief Patient Safety Officer and Associate Chief Quality Officer,
Executive Director, Center for Patient Safety Research,
Director, Patient Safety Research Fellowship,
Columbia University Irving Medical Center and NewYork-Presbyterian

Associate Professor of Medicine (in biomedical informatics),
Vice Chair for Quality and Patient Safety,
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Jason Adelman, MD, MS, is a leader and innovator in the medical errors field and has developed novel methods to measure and prevent errors in health information technology (IT) systems. Improvement in safety events has been hindered by lack of systematic methods to measure safety events and evaluate system improvements. Dr. Adelman developed the first health IT safety measure endorsed by National Quality Forum (NQF), the Wrong-Patient Retract-and-Reorder (RAR) Measure that detects wrong patient orders in EHR data (NQF #2723), which subsequently facilitated a large body of patient safety research. Dr. Adelman used the RAR method to develop a set of new medication error measures, demonstrating utility of this approach to capture a range of error types. Using the Wrong-Patient RAR Measure, Dr. Adelman also demonstrated a significantly higher rate of wrong-patient orders in neonatal intensive care units (NICUs) versus general pediatric units, a greater risk for errors in the presence of multiple versus singleton births, and a significant reduction in errors using a distinct naming convention. This work influenced The Joint Commission to require all hospitals to use distinct methods of newborn identification as part of its National Patient Safety Goals (NPSGs).

As executive director and founder of the Center for Patient Safety Research, a multi-disciplinary collaboration between Columbia University Irving Medical Center, Weill Cornell Medicine, and NewYork-Presbyterian, he has led several National Institutes of Health (NIH) and Agency for Healthcare Research and Quality (AHRQ) funded projects to rigorously test safety interventions across the interventions' lifespans. Dr. Adelman's research has had far-reaching impact, leading to national and international safety recommendations. For example, he developed a Just Culture Tool and video highlighted in The Joint Commission's *Sentinel Event Alert*: "Developing a reporting culture: Learning from close calls and hazardous conditions," and disseminated the tool to hundreds of hospitals through the National Patient Safety Foundation. Dr. Adelman is now leading safety culture transformation throughout the NewYork-Presbyterian enterprise, designing and conducting an interactive safety culture training program for senior leadership, management, and staff.

The panelists strongly supported Dr. Adelman as deserving of the 2022 Eisenberg Award for Individual Achievement for his previous and ongoing body of work and the achievements and innovations he has brought to the patient safety and quality field.

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National Level Innovation in Patient Safety and Quality

Anesthesia Risk Alerts Program

North American Partners in Anesthesia

The Anesthesia Risk Alert (ARA) Program is a patient safety intervention under the North American Partners in Anesthesia (NAPA) Patient Safety Institute. ARA was implemented across NAPA's nearly 500 hospital and ambulatory surgery center (ASC) partners in March 2019. They conducted a systemwide review of serious adverse events using their anesthesia clinical outcomes database. Within this program, the strategies employed for complex patients include:

- Use of a standardized protocol incorporating risk assessment
- Clinical collaboration
- A defined decision-making process that optimizes analytical thinking

The NAPA Patient Safety Institute identified five high-risk clinical scenarios, and through the improvement project, identified and implemented specific mitigation strategies:

1) **Known or suspected difficult airway:** Second practitioner present to assist for induction and emergence for all general endotracheal anesthetics
2) **Body mass index (BMI) greater than or equal to 45:** Second practitioner present to assist for induction and emergence for all general anesthesia cases
3) **Pulmonary hypertension:** Consultation about the case with a second clinician
4) **Risk category American Society of Anesthesiologists (ASA) status 4 or 5:** Consultation about the case with a second clinician
5) **Operating room fire risk:** Follow fire mitigation protocols as prescribed by the local institution

Within this program, every patient is assessed by the anesthesia clinician for these five scenarios prior to undergoing an anesthetic. If one or more risks is identified, a specific mitigation strategy paired to that clinical scenario is recommended to prevent patient harm. Continually leveraging their clinical database permits NAPA to track compliance and provide performance feedback to facilities and practitioners.

Since launching the ARA program, analyses of critical adverse events related to both high-BMI patients and patients presenting as ASA status 4 or 5 significantly decreased the number of relevant critical events over time. Compliance with the ARA program now exceeds 95% organization wide. Data shows the incidence rate of critical events (i.e., aspiration, cardiac arrest, death, hypoxic brain injury, myocardial infarction (MI), negative pressure pulmonary edema) for patients with a BMI greater than or equal to 45 and under general anesthesia decreased by approximately 42%.

The panel commended this large-scale effort with one panelist noting, this was a “rock solid improvement project with concrete outcomes and led to real change on a very broad scale.”

Local Level Innovation in Patient Safety and Quality

Improving Maternal Safety and Quality Through Extending Maternal Care After Pregnancy (eMCAP) in Dallas County

Parkland Health

The Extending Maternal Care After Pregnancy (eMCAP) program provides postpartum access to care for 12 months after birth for women with the highest social needs and limited access to physical clinic locations, impacting mostly minority women. Initiated in October 2020, this program:

- Utilizes community health workers, nurse home visits, scheduled virtual visits, and an in-person mobile van unit deployed to different community locations in Dallas County
- Is staffed by advance practice providers, medical providers, social workers, and pharmacy services
- Enhances care for diabetes, hypertension, and behavioral health services

Evidence-based approaches are utilized to target gaps in screening and improve follow-up care, including culturally and linguistically appropriate services (CLAS) guidelines, social determinants of health (SDOH) screening based on the U.S. Office of Disease Prevention and Health Promotion Healthy People 2030, mental health screening using Edinburgh Postnatal Depression Scale, and generalized anxiety disorder screening instruments.

Compared to matched controls, follow-up postpartum attendance for eMCAP patients with chronic hypertension was significantly better at two weeks, one month, three months, six months, nine months, and 12 months (all $P<0.001$). Women with diabetes management (DM) had significantly better follow up at two weeks ($P=0.04$), one month ($P=0.002$), and three months ($P=0.049$) resulting in HbA1c values for DM being significantly lower ($P<0.05$). Finally, women with abnormal mental health screening scores were successfully referred (71%) for behavioral therapy and completed sessions with licensed mental health counselors (72%), with 80% accepting therapeutic intervention.

The award panel was impressed with the innovation, the intention to reduce disparities for this vulnerable population by meeting patients where they are, removing barriers to care access, and specifically that the team focused on postpartum care, an area where significant improvement is needed. In terms of replicability, although significant resources are required to implement such postpartum interventions, a panelist noted, “[Parkland Health] has given us the blueprint of what others could do.”