

# The Salzburg Statement on Moving Measurement into Action: Global Principles for Measuring Patient Safety

**Adverse events due to unsafe care are one of the top ten leading causes of death and disability across the world, according to the World Health Organization. This rank will not fall without a global effort to measure safety in a way that is effective, efficient and focused on learning and improvement.**

Despite the innovative approaches to patient safety measurement being developed, tested and used, health care still lacks universally accepted, standard methods for measuring, understanding and improving the safety of patients. Poorly devised or utilized measures currently accessible to the field carry the potential for unintended negative consequences, including overburdening those who collect and analyze metrics or overspending resources on areas with less opportunity for impact. In addition, existing measures seldom incorporate the essential perspective of patients and families in their development or execution. Finally, current methods predominantly focus on inpatient safety issues rather than safety across the entire continuum and are very often retrospective and reactive, not allowing for the identification and measurement of risks or hazards before an adverse event occurs.

To turn the tide, the safety field needs to establish standard measures that span the entire care continuum. Processes and tools also need to be developed to identify risks and manage hazards proactively. Once standard measures are in place throughout the care continuum, the focus must be on further innovation and improvement. To begin this work, it is essential for all stakeholders to agree upon and enact a common set of principles to guide the evolution of the measurement of patient safety across care settings around the globe.

## INTRODUCTION

Patient safety is essential to high-quality health care. In 2018, three reports authored and released by key international institutions – including the World Health Organization, Organisation for Economic Co-operation and Development, the National Academies of Sciences, Engineering, and Medicine, the World Bank, and the Lancet Commission on High-Quality Health Systems – detailed the global burden of patient safety on public health. Each report acknowledged the limitations of current methods for measuring quality and safety and recommended the development of more effective data collection, management, and analysis approaches. With yearly economic and social costs of patient harm estimated in the trillions of dollars, it is critical that effectively and efficiently measuring, evaluating, and improving safety of care be a widely accepted priority.

The participants in the Salzburg Global Seminar program, *Moving Measurement into Action* agreed that there is no single measure that allows all stakeholders in all settings to assess the past, current, and future safety of their system. Rather, a set or system of measures must be thoughtfully designed to assess the safety of patients throughout their health journeys. These measures must be selected carefully, incorporating:

- The perspectives of patients and other key stakeholders;
- The context in which care is provided and received; and
- Safety's strong connection to other domains of quality, particularly equitable care.

The most appropriate and actionable measures of safety will therefore differ based on the context of care. Among other characteristics, these measures may vary depending on resources, including technology, staffing, and expertise available in specific settings; local, national, and international regulatory requirements; and the values and needs of patient populations and communities served.

However, the principles of measurement and key characteristics of measuring safety should not vary across care settings or continents. Health care providers, patients, systems, and regulators must have shared global measurement principles that drive understanding of and improvement in patient safety across all settings.

*Global Principles for Measuring Patient Safety overleaf*

## GLOBAL PRINCIPLES FOR MEASURING PATIENT SAFETY

The conversations of participants of the Salzburg Global Seminar program *Moving Measurement into Action* resulted in the following eight global principles for the measurement of patient safety. These principles are meant as a call to action for all stakeholders in reducing harm, including policymakers, managers and senior leaders, researchers, health care professionals, and patients, families, and communities. The principles are meant to apply to all care settings across the continuum and around the globe.

- **The purpose of measurement is to collect and disseminate knowledge that results in action and improvement.** Measures must feed into a learning health system focused on improvement. Selected measures must be evidence-based, balanced between assessing downstream harm and informing upstream risk, and incorporate measures that matter to patients and all staff.
- **Effective measurement requires the full involvement of patients, families, and communities within and across the health system.** Patients and families must be involved in the co-design of measures and processes, meaningful patient reported outcome measures, and feedback loops. Patients should also directly contribute data on outcomes, system structures, processes, and degree of patient-centeredness. Safety measures must be transparent and readily accessible to patients and their families.
- **Safety measurement must advance equity.** Equity, the absence of avoidable, unfair, or remediable differences among groups of people, must be considered in the development and collection of new and existing measures. All safety and quality data should be stratified and analyzed by key demographic characteristics that reflect the community served.
- **Selected measures must illuminate an integrated view of the health system across the continuum of care and the entire trajectory of the patient's health journey.** Measures should be applicable across the continuum of care and focus safety of care as it matters through the eyes of the patient. Selected sets of measures should be relevant across the entire trajectory of each patient's care, rather than at single disconnected points in time.
- **Data should be collected and analyzed in real time to proactively identify and prevent harm as often as possible.** New and existing technologies should be harnessed to shorten the life cycle between data collection, analysis, and action. New predictive technologies can help understand and intervene in high risk situations before harm occurs and measurement should focus on identifying these risky situations to allow for real-time response.
- **Measurement systems, evidence, and practices must continuously evolve and adapt.** New technology and best practices should be adopted to make measurement simple, modern, and consistently relevant within changing systems of care. Measures and methods should be selected to include both quantitative and qualitative data that is applicable to the specific context in which care is provided.
- **The burden of measures collected and analyzed must be reduced.** Organizations and regulatory bodies must optimize systems to reduce collection burden, facilitate analysis and data-sharing, and eliminate the collection of ineffective measures that result in fruitless actions and impede care. The creation and implementation of new measures should be driven by multiple relevant stakeholders, with resource- and cost-effectiveness as a key consideration.
- **Stakeholders must intentionally foster a culture that is safe and just to fully optimize the value of measurement.** All leaders must invest in and commit to eliminating cultures of fear and blame and replacing them with cultures that are just, welcoming, and nurturing of curiosity and innovation. Culture should be measured consistently and in a way that is transparent and promotes action and improvement.

Copyright © 2019 Institute for Healthcare Improvement and Salzburg Global Seminar.

All rights reserved. Individuals may photocopy these materials for educational, not-for-profit uses, provided that the contents are not altered in any way and that proper attribution is given to the Institute for Healthcare Improvement and Salzburg Global Seminar as the source of the content. These materials may not be reproduced for commercial, for-profit use in any form or by any means, or republished under any circumstances, without written permission.

The content of this paper is provided by the IHI Lucian Leape Institute, an initiative of the Institute for Healthcare Improvement committed to guiding the global patient safety community. This meeting and resulting materials were generously funded in part by an unrestricted educational grant from Medtronic, Inaugural Funder of the IHI Lucian Leape Institute, and by a grant from the Gordon and Betty Moore Foundation. The funders had no control or influence over the selection of experts, the content, or the views expressed in this statement.

The views expressed in this statement represent consensus among a majority of the participants and should not be taken to represent the views of all participants or of any organization with which they are affiliated.

## ENDORSEMENTS

### ORGANIZATIONS



### INDIVIDUALS

*Endorsements from individuals do not necessarily represent endorsements from their affiliated institutions.*

**Nor'Aishah Abu Bakar**, Senior Public Health Physician, Head of Patient Safety Unit, Ministry of Health Malaysia

**Ernest Konadu Asiedu BSc MBChB MPhil DOSHEM**, Improvement Advisor and Field Epidemiologist; Head, National Quality Management Unit PPMED, Ministry of Health, Ghana

**Donald M. Berwick MD MPP**, President Emeritus and Senior Fellow, Institute for Healthcare Improvement, Boston, Massachusetts

**Riccardo Chiarelli MD**, Founder of Onda Consulting Ltd, London, UK

**David C. Classen MD MS**, University of Utah School of Medicine, Salt Lake City, Utah

**Karen Cosby MD FACEP CPPS**, Emergency Physician, Palo Alto, California

**Helen Crisp**, Editor-in-Chief of BMJ Open Quality, London, UK

**Maryanne D'Arpino RN BScN MScN CHE**, Senior Director, Safety Improvement and Capability Building, Canadian Patient Safety Institute

**Ezequiel García-Elorrio MD MSc MBA PhD**, Director of Health Care Quality and Patient Safety at the Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina

**Wessam Ali El-Sherief MD**, Associate Professor, Clinical Oncology, Cairo University, Cairo, Egypt

**Doris Grinspun RN MSN PhD LLD (Hon) Dr (HC) FAAN O.ONT**, Chief Executive Officer of Registered Nurses' Association of Ontario, Canada

**John T. James PhD**, Founder, Patient Safety America, Houston, Texas

**Erik Jylling**, Executive Vice President, Danish Regions, Copenhagen, Denmark

**Kanav Kahol PhD**, CEO of PinkTech Design Pvt Ltd and Adjunct Faculty at Arizona State University, New Delhi, India

**Gary S. Kaplan MD**, Chairman and CEO of Virginia Mason Health System, Seattle, Washington

**Kathryn McDonald MM/MBA PhD**, Bloomberg Distinguished Professor, John Hopkins University, Schools of Nursing

and of Medicine, Armstrong Institute for Patient Safety and Quality, Baltimore, Maryland

**Julianne M. Morath RN MS**, Healthcare Consultant in Quality and Safety Systems and Workforce Experience, Sacramento, California

**Anna M. Shepherd FACN (Hon) GAICD**, President of Regal Home Health, Sydney, Austria

**Hardeep Singh MD MPH**, Houston Veterans Affairs and Baylor College of Medicine

**Johanna Westbrook**, Director, Centre for Health Systems and Safety Research, Australian Institute of Health Information, Faculty of Medicine and Health Sciences, Macquarie University, Sydney, Australia

**Eyal Zimlichman MD MSc**, Deputy General Director, Chief Medical Officer, and Chief Innovation Officer at Sheba Medical Center, Tel Hashomer, Israel