

Ian Leistikow, PhD

Inspector at Dutch Health and Youth
Care Inspectorate & professor at
Erasmus University



From Human Error to System Resilience: Applying Safety Science in Healthcare

In his presentation, professor Leistikow will guide you through the development of safety science, and how this can be applied in healthcare.

Drawing on practical examples, he explores how different schools of thought within safety science shape the way healthcare professionals understand adverse events, patient harm, and organizational learning. While healthcare has traditionally focused on individual responsibility and human error, safety science has evolved significantly over the past century, offering increasingly sophisticated perspectives on why things sometimes go wrong—and why they usually go right.

The presentation traces this evolution from early views that regarded adverse outcomes as unavoidable misfortune, through behavioral approaches that emphasized incentives and compliance, to cognitive psychology's focus on human error, decision-making, and performance limitations. It then introduces systems-based perspectives, including the SEIPS framework, which highlight how outcomes emerge from interactions between people, tasks, technology, organizations, and the working environment.

Finally, professor Leistikow discusses the emergence of Safety-II, an approach that shifts attention from incidents and failures to understanding how everyday work succeeds under complex and often challenging conditions. Rather than searching for blame, Safety-II encourages organizations to learn from routine practice and adapt systems to support resilient performance.

For clinicians, managers, and healthcare executives, this presentation offers practical insights into creating safer care by moving beyond individual blame and adopting a systems perspective. Participants will gain a richer understanding of safety, resilience, and organizational learning, along with concrete ideas for improving quality and reducing risk in healthcare settings.

Keywords: Patient Safety, Systems Thinking, Human Factors, Safety-II, Organizational Learning



Quality of Healthcare
CONFERENCE IVA 2026
“Risky Business”