What is Driving Hospitals' Patient Safety Efforts?

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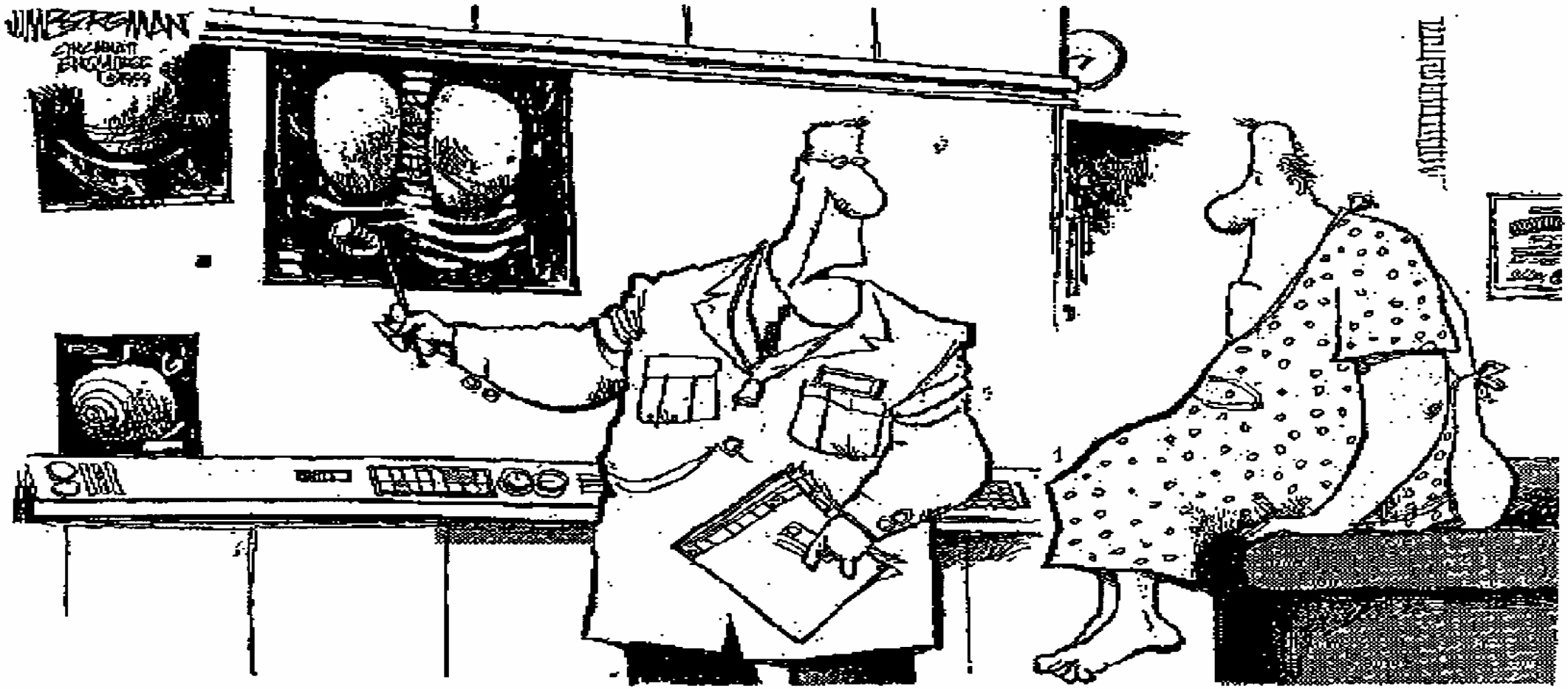


"CONTRARY TO ALL THESE REPORTS ON DOCTOR ERRORS, MR. JOHNSON, YOUR SURGERY WAS PERFORMED COMPETENTLY AND PUNCTUALLY, AS MY WATCH CLEARLY INDICATES."

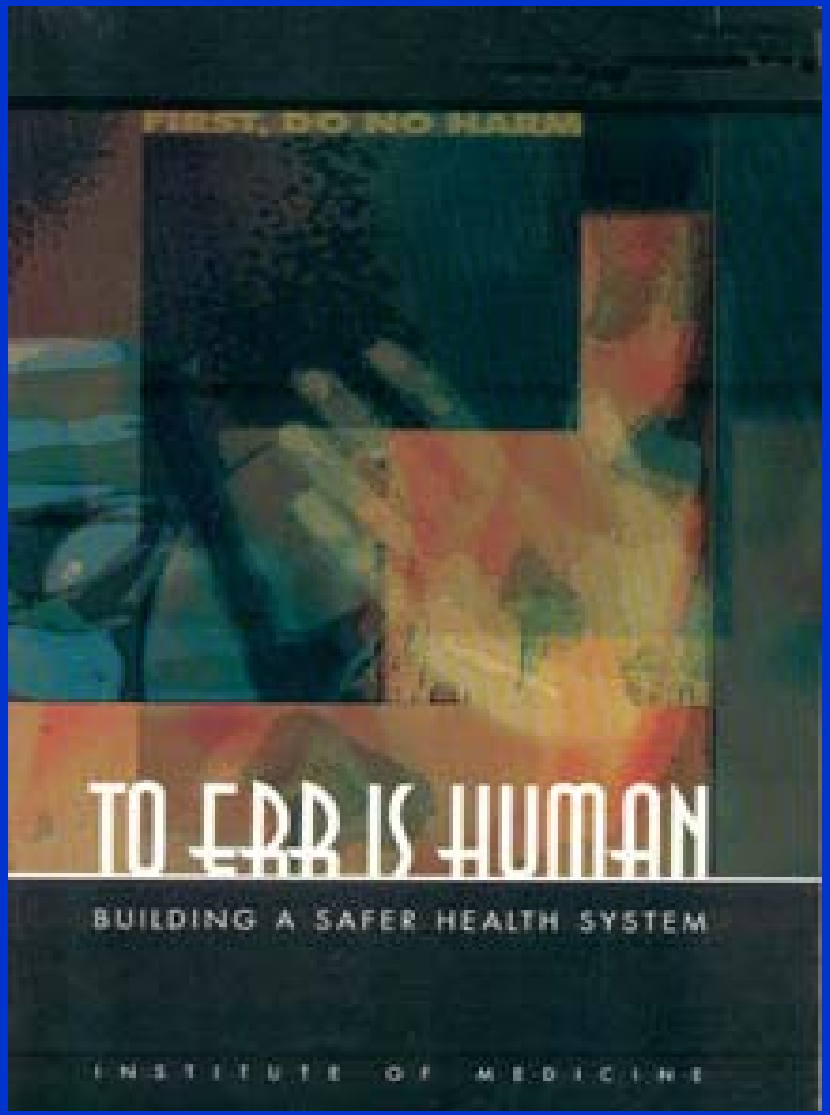
What is Patient Safety?

In its simplest form, patient safety is freedom from accidental injury while receiving healthcare services.

The objective –

to splice safety into the genome of all health care systems at all levels

Institute of Medicine November 1999

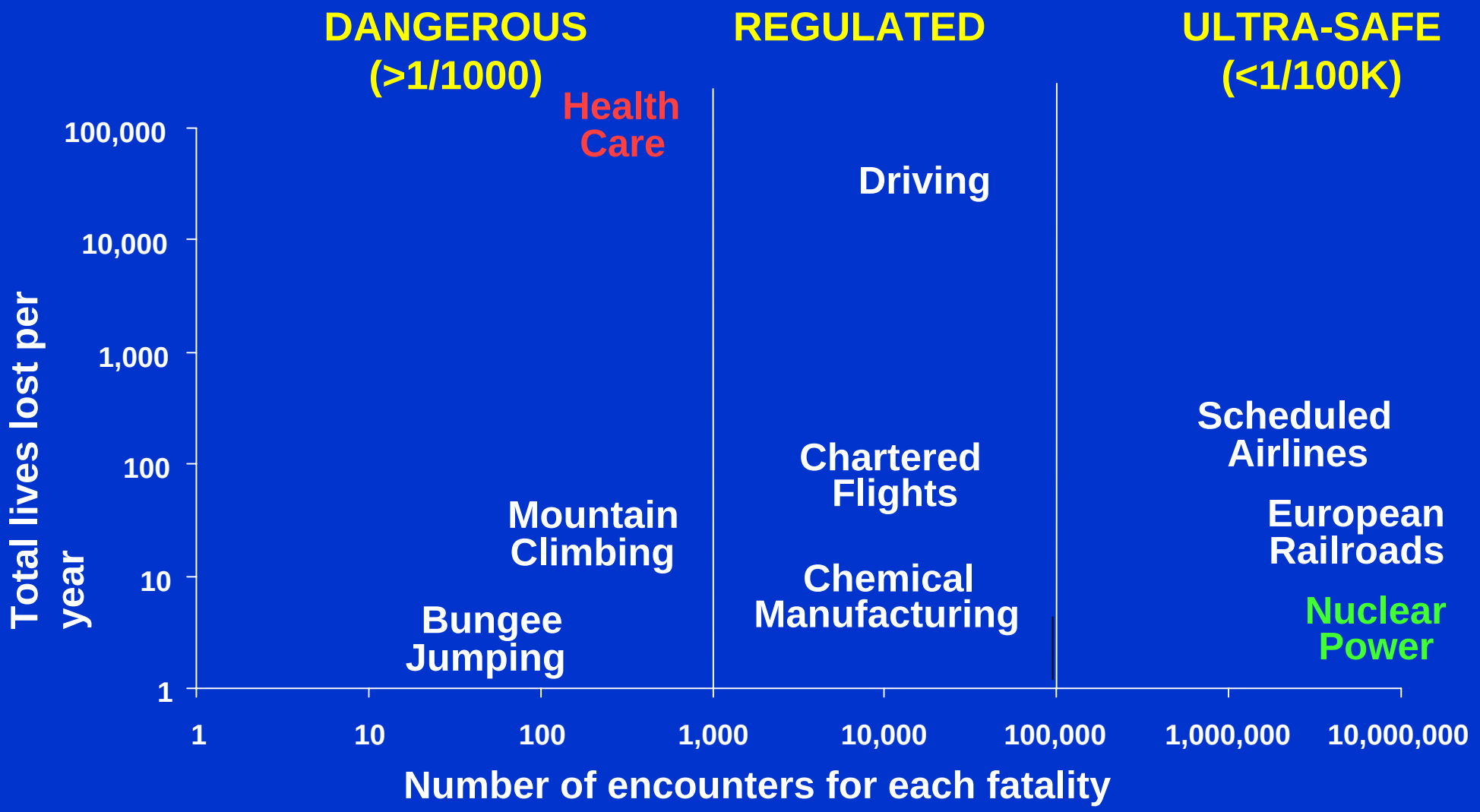


- The patient safety problem is large
- It (usually) isn't the fault of health care workers
- Most patient injuries are due to system
- Team Training
- We must change the way we train our future clinicians
- **Simulation and and team training**

Impact of Medical Errors

- 44,000-98,000 annual deaths as result of errors
- Medical errors are the leading cause followed by surgical mistakes and complications
- More Americans die from medical errors than from breast cancer, AIDS or car accidents
- Two percent (2%) of admission to the hospital experience an adverse drug event that results in an increased stay and nearly $4700 added cost per event
- 7 % of hospital patients experience a serious medication error
- Total national cost is estimated to be between $8.5 billion to $29 billion

How hazardous is health care?



Note: both dimensions are logarithmic scales

Institute of Medicine *Chasm* Report

"Americans can have a health care system of the quality they need, want, and deserve…This level of quality cannot be achieved by further stressing current systems of care.

The current care systems cannot do the job. Trying harder will not work. Changing systems of care will."

IOM 2001

6 Dimensions of Care Quality

- Safe
- Patient Centered-customer value and expectations
- Effective-Evidence based practices and outcomes
- Timely
- Efficient
- Equitable

IOM. Crossing the Quality Chasm. National Academy Press, 2001.


Medical Mistakes # 8 Killer
MIKE Luckovich
ATLANTA CONSTITUTION
HOSPITAL
THE DECEASED SUCCUMBED DURING HIS TRANSPLANT....
THE TRAGEDY IS COMPOUNDED BY THE FACT THAT HE WAS ONLY VISITING...
NEWS
MEDICAL MISTAKES #8 KILLER

What is Driving Hospital Patient Safety Efforts?

- What are hospitals' major patient safety initiatives and how far along are they?
- What facilitates and impedes hospitals' progress in patient safety
- What impact have patient safety efforts had on hospitals

Major JCAHO Policies 2000-2004

- Sentinel Event Policy
  - RCA
  - FMEA
- Patient Safety Standards
  - Creating a culture of safety
    - Surveys
    - Walk rounds
    - Non-punitive
  - Truth telling
    - Disclosure and confidentiality
- Patient Safety Goals
  - Improve accuracy of patient indentification
  - Safety of High Alert medications
  - Eliminate wrong site-, patient, procedure surgery
  - Safety of infusion pumps
  - Clinical alarm systems

Leapfrog Group

- Computerized drug entry systems
- Intensivists
- Evidence based hospital referral

Information Technology

- Electronic Medical Records
- Drug order entry systems
- Automated dispensing
- Bar-coding


IT SAYS HERE THAT THE RATE OF MEDICAL ERRORS IS STUNNINGLY HIGH.
THAT EXPLAINS MY HYSTERECTOMY.
LAS VEGAS SUN UNITED FEATURE SYNDICATE
MIKE SMITH

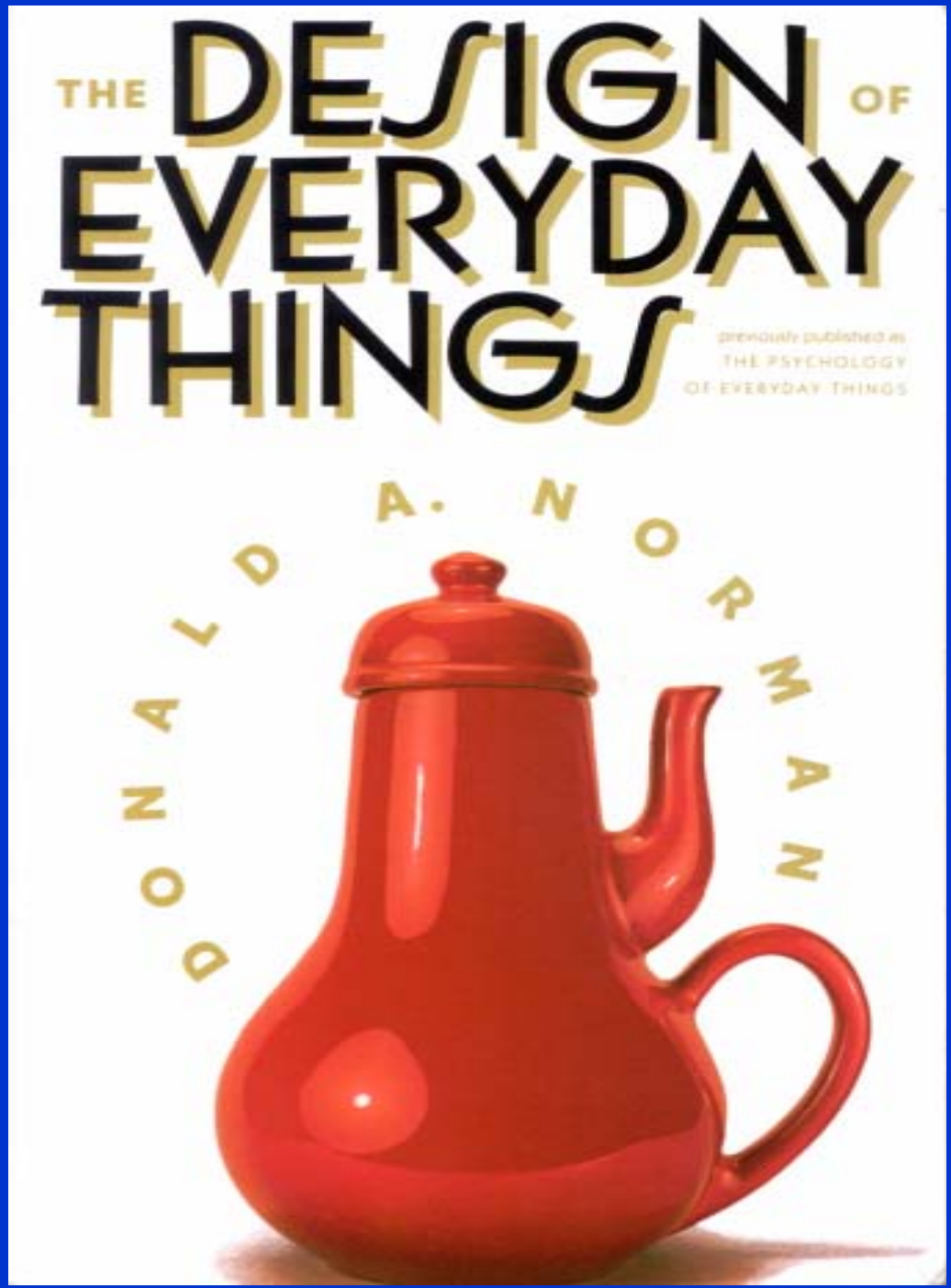
Barriers To Safety

- Absence of strong local incentives
- Cost
- IT infrastructure
- Commitment
- Structure
- Resources
- Failure to buy-in
- Malpractice liability

Barach, et al. BMJ 2000

"We can't change the human condition, but we can change the conditions under which humans work"

James Reason, 1999


THE DESIGN OF EVERYDAY THINGS
previously published as
THE PSYCHOLOGY OF EVERYDAY THINGS
DONALD A. NORMAN

Human Factors Principles

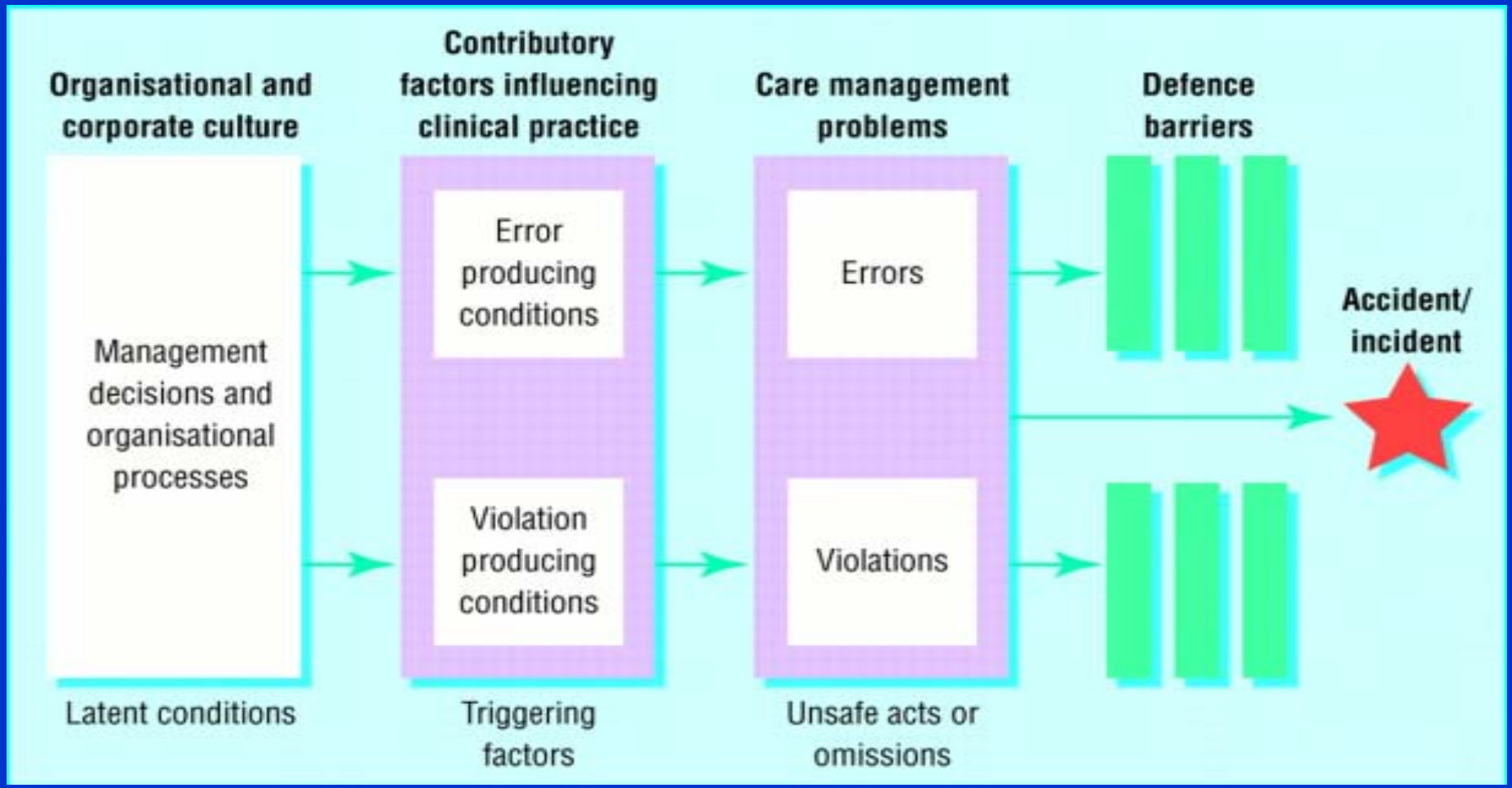
- Avoid reliance on memory
- Simplify and Standardize
- Use constraints and forcing functions
- Use protocols and checklists
- Improve access to information
- Decrease reliance on vigilance
- Reduce hand-offs
- Careful automation
- Work conditions--i,e., sleep hours


10 mL
EAU STÉRILE
POUR INJECTION USP
SANS AGENT DE CONSERVATION
DIN 00624721
Prod. No. 351
ASTRA
10 mL 9 mg/mL
SODIUM CHLORIDE
INJECTION USP
WITHOUT PRESERVATIVE
DIN 00624748
Prod. No. 356
0.9%
Isotonic Vehicle
ASTRA
DE 02
10 mL 1 mEq/mL
POTASSIUM CHLORIDE
FOR INJECTION CONCENTRATE USP
DIN 00624756
Prod. No. 362
20
mEq/10 mL
ASTRA

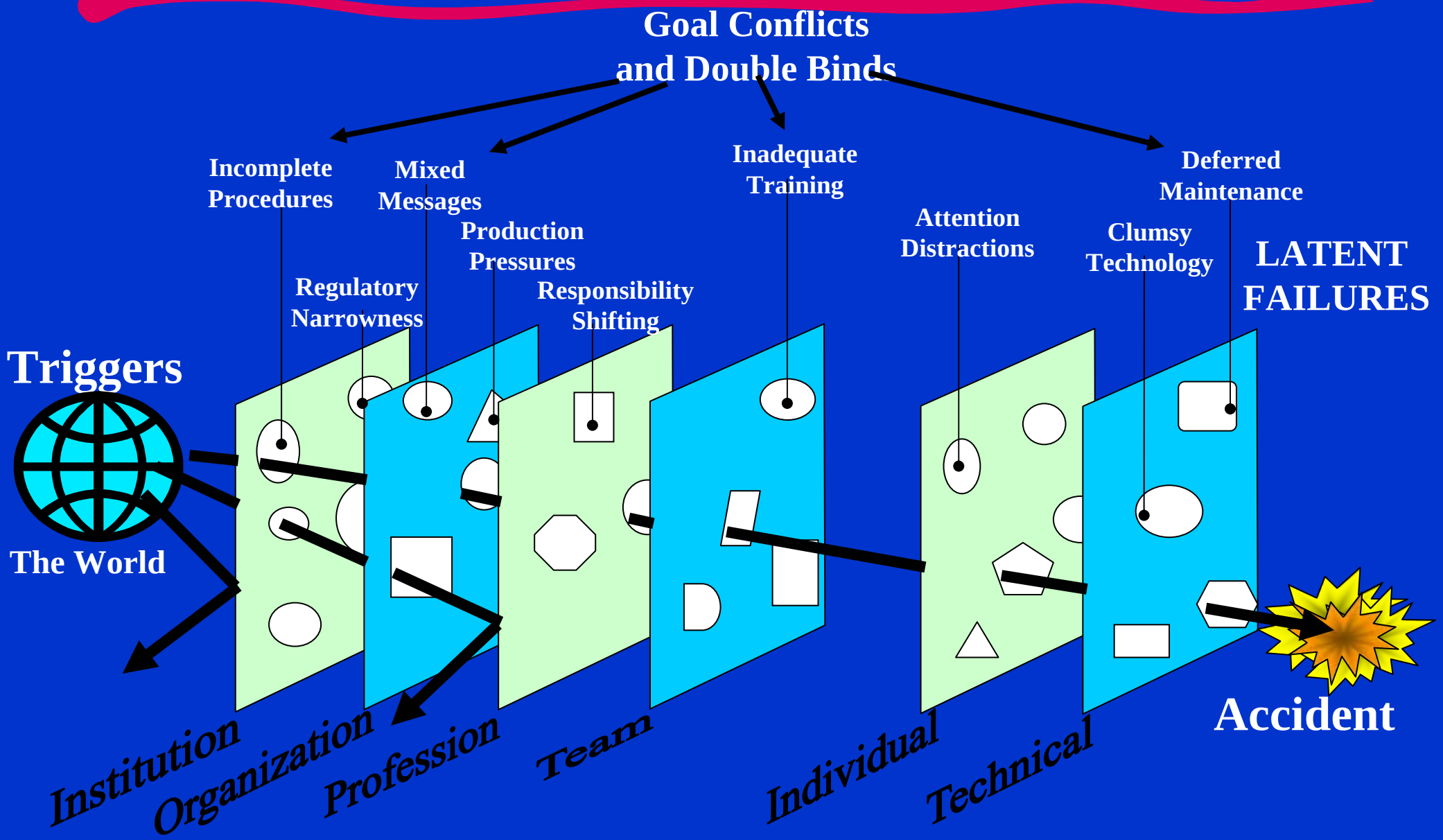

20 mEq / 10 mL
CONCENTRATE: MUST BE DILUTED BEFORE USE.
SODIUM CHLORIDE
INJECTION USP 0.9%
DILUENT - NO PRESERVATIVE
SINGLE DOSE:
DISCARD UNUSED PORTION
Sterile Water
for Injection USP
SINGLE DOSE
DISCARD UNUSED PORTION


Paralyzing
Agent

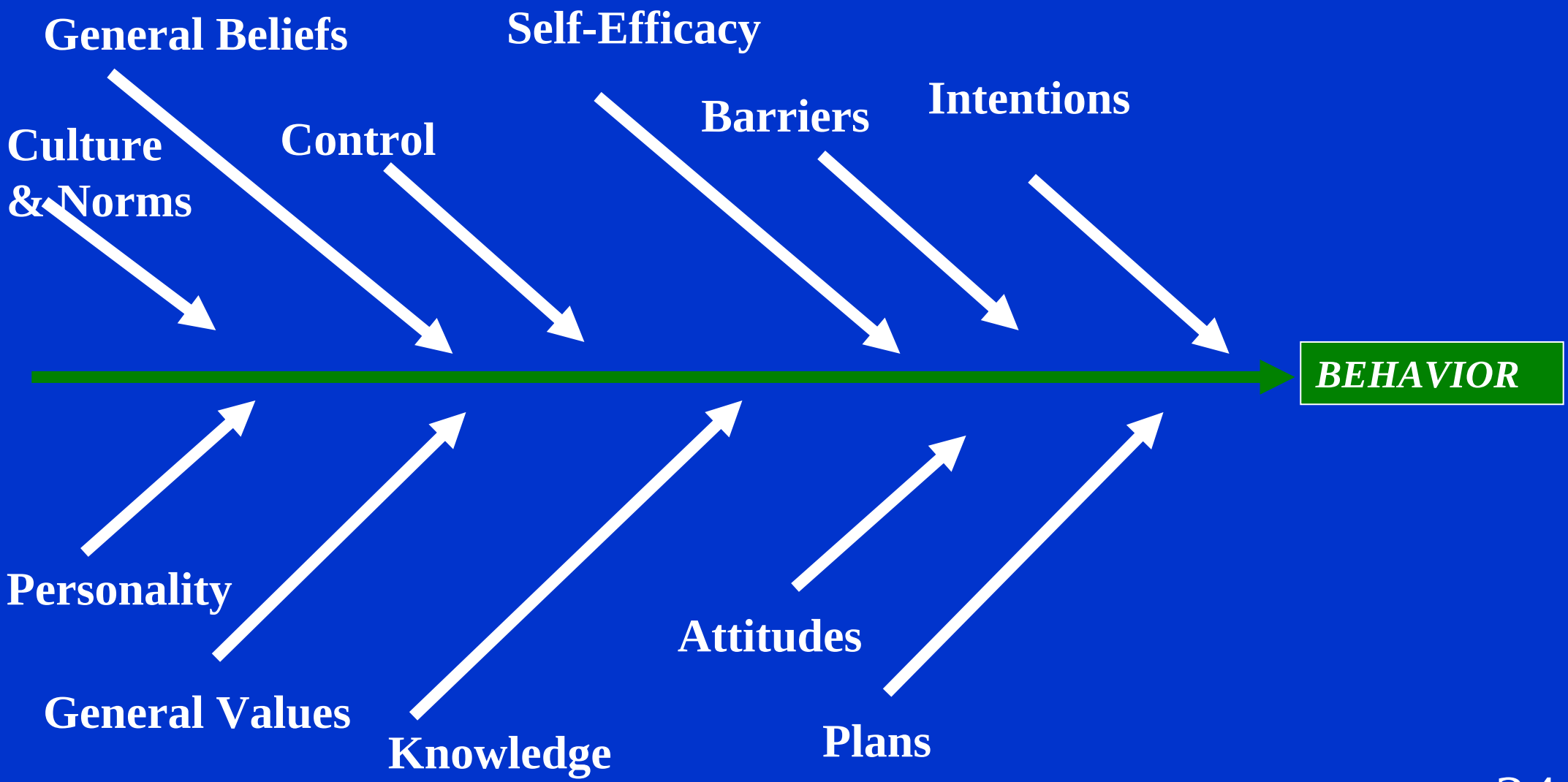
Reason - Complex Systems



Swiss Cheese Model of Accident Causation



Motivational Theories: Behavior Change

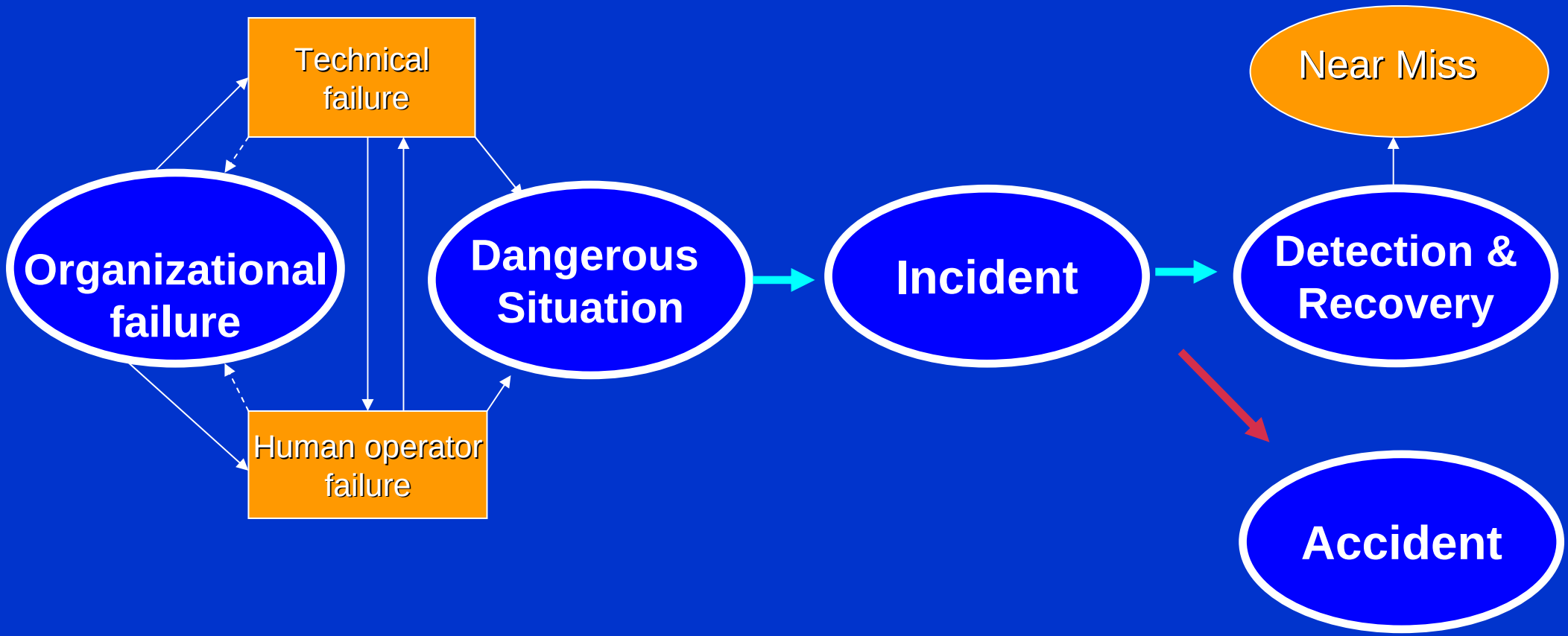


Near Miss Reporting: Remains Underutilized

Designed to look below the water-line

Kaplan, et al., 2004

A Model of Incident Causation



Van Vuuren, 1998

Examination of Effective non-medical Near Miss Reporting Systems

- Indicates that the following factors are important in determining the quality of incident reports and the success of incident reporting systems:
  - Immunity (as far as practical);
  - Confidentiality or data de-identification (making data untraceable to caregivers, patients, institutions, time)
  - Independent outsourcing of report collection and analysis by peer experts
  - Rapid meaningful feedback to reporters and all interested parties
  - Ease of reporting
  - Critical and sustained leadership support
  - Visible system change

  And that it be:
  - Philanthropic-reporters identify with injured patients and other healthcare providers that could benefit from data),
  - Therapeutic-(reporters learn from reporting about adverse events

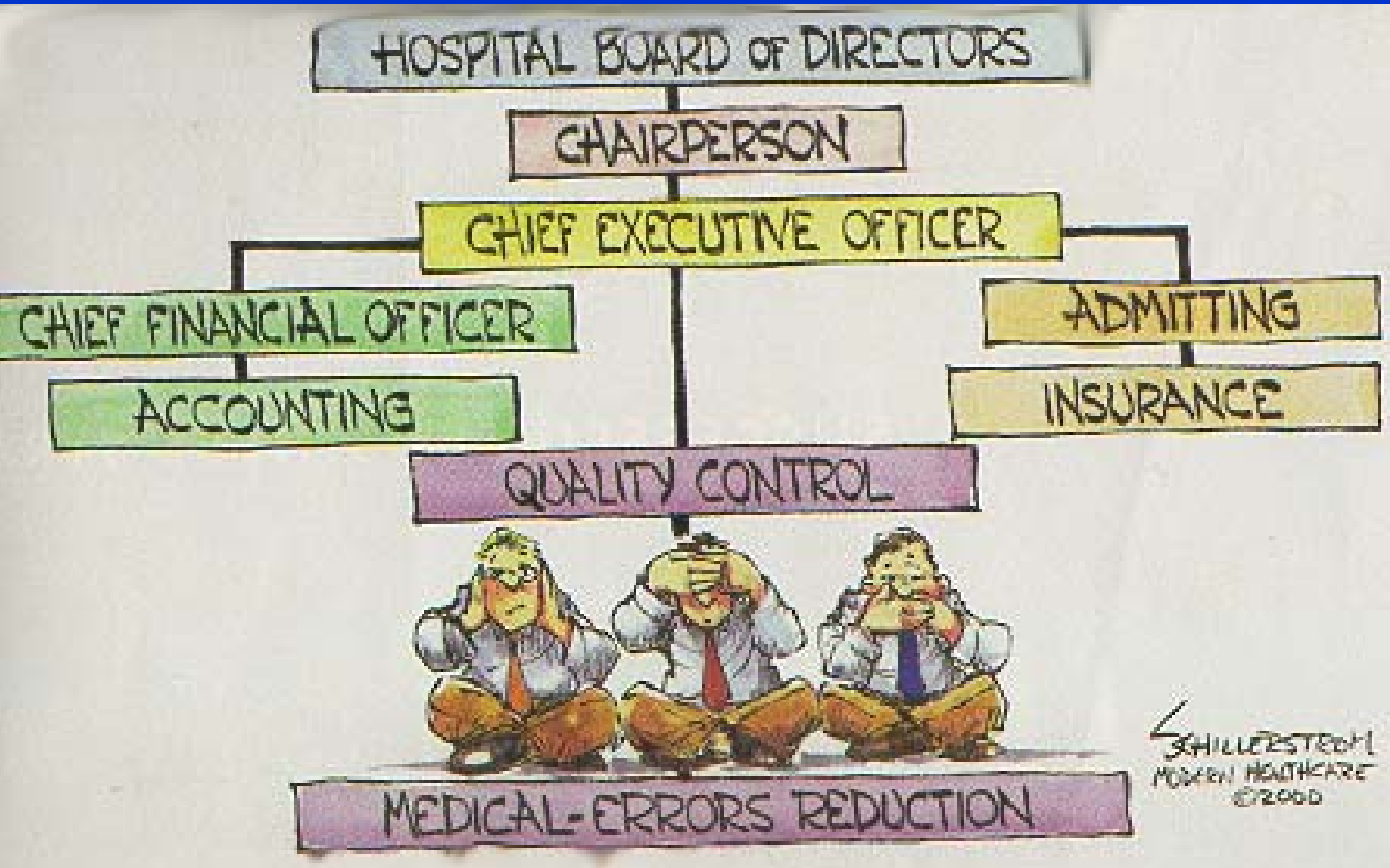
Benefits of Near Misses Reporting

- High frequency allows quantitative and qualitative analysis
- 3-300 time more common than adverse events
- Fewer barriers to data collection
- Limited to no liability or shame
- No hindsight bias
- Provides incentives for voluntary reporting
- Bolsters accountability

Barach. Journal of Legal Medicine, 2003

“Mistakes are a fact of life.
It’s the response
to the error that counts”

- *Nikki Giovanni*


HOSPITAL BOARD OF DIRECTORS
CHAIRPERSON
CHIEF EXECUTIVE OFFICER
CHIEF FINANCIAL OFFICER
ACCOUNTING
ADMITTING
INSURANCE
QUALITY CONTROL
MEDICAL-ERRORS REDUCTION
SCHILLERSTEDT
MODERN HEALTHCARE
©2000

Actively Develop a Learning Organization

Having been stuck on the escalator for hours, the passengers began to fear they would never be rescued.

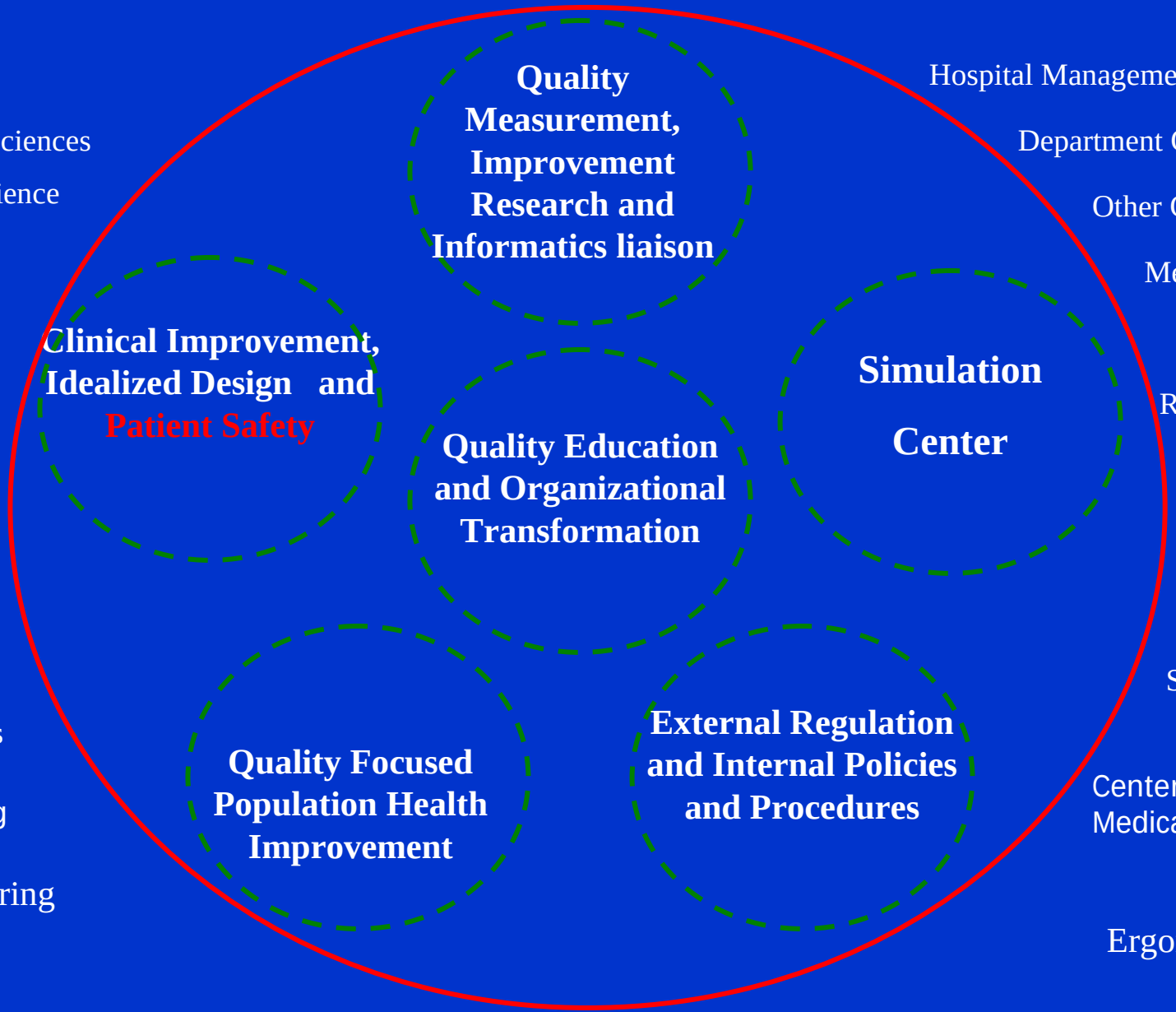
- Do you have a serious continuous improvement program?
- How are task groups organized?
- How is information shared?
- How are new ideas processed?
- Entropy: Newton's 4th law

Safety Curriculum
Core Content Areas

- Knowledge of the needs and preferences of those we serve (“customer knowledge”)
- Health care as a process, system
- Variation and measurement
- Human Factors
- Team training
- Developing new locally useful knowledge
- Social context & accountability
- Professional subject matter

Barach et al., Medical Education, in press

Center for Clinical Improvement and Patient Safety



School of Arts and Sciences

Computer Science

Psychology

Sociology

Economics

Statistics

University Centers

Graduate Schools

School of Law

School of Business

School of Nursing

School of Engineering

Hospital Management

Department Chairs

Other Clinical Leaders

Medical Informatics

Residency Programs

Epidemeology & Public Health

Clinics

Surgery VR center

Center for Research in Medical Education

Ergonomics Lab

Quality isn’t something you lay on top of subjects and objects like tinsel on a tree …it is the core from which the tree must start.”

Zen and the Art of Motorcycle Maintenance