



LATVIJAS
UNIVERSITATE
ANNO 1919

MF

Medicīnas
fakultāte

Patient safety and health care risk management

Ingrīda Kužniece

LU Medicīnas fakultātes lektore

Sabiedrības veselības maģistre (MPH)

Vadības zinību maģistre

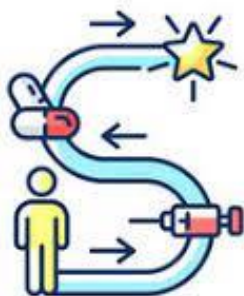
Veselības aprūpes vadības ārsts

Content of the lecture

- The concept of patient safety
- Possible types of damage
- Risks, their diversity
- Types of risk identification
- Risk mitigation measures
- Patient involvement



Patient safety, factors and actions affecting it



WHAT IS SAFETY

- S** – Sense the error
- A** – Act to prevent it
- F** – Follow Safety Guidelines
- E** – Enquire into accidents/Deaths
- T** – Take appropriate remedial measure
- Y** – Your responsibility



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What is patient safety?

Patient safety is the absence of preventable harm to a patient during the process of health care and reduction of risk of unnecessary harm associated with health care to an acceptable minimum(WHO)

A definition for patient safety has emerged from the health care quality movement that is equally abstract, with various approaches to the more concrete essential components.

Patient safety was defined as

“the prevention of harm to patients”

Emphasis is placed on the system of care delivery that

- (1) prevents errors
- (2) learns from the errors that do occur
- (3) built on a culture of safety that involves health care professionals, organizations, and patients

[Patient Safety and Quality An Evidence-Based Handbook for Nurses](#) Editor: Ronda G Hughes, PhD, MHS, RN.



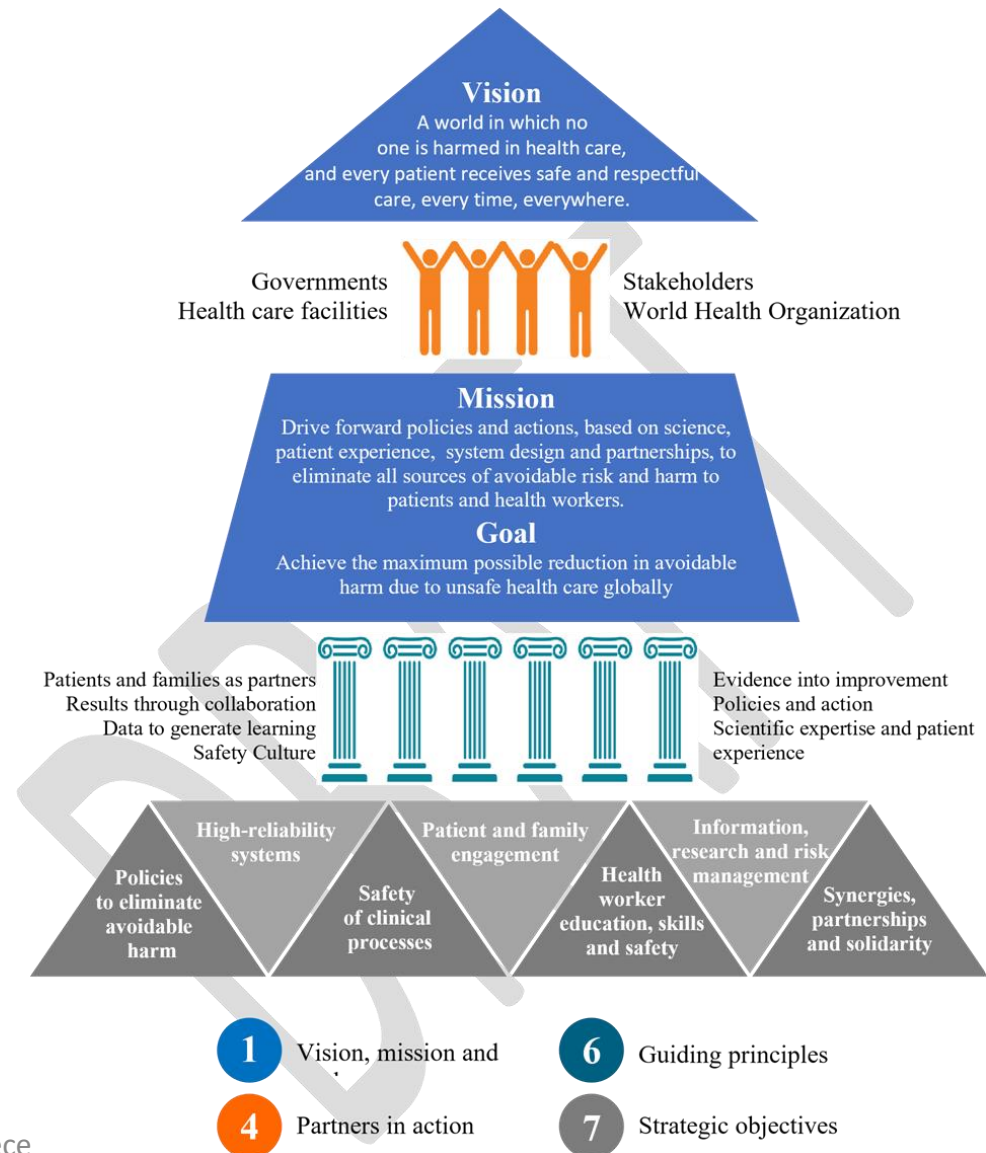
Global importance

- World Patient Safety Day
- In May 2019, the Seventy-second World Health Assembly endorsed the establishment of World Patient Safety Day, to be marked annually on 17 September
- World Patient Safety Day aims to improve awareness about the importance of patient safety, embrace the involvement of people and communities in delivering high-quality health care, lessen the occurrence and high cost of medical error, and reaffirm the fundamental medical principle of **“First, do no harm”**
- For World Patient Safety Day, 17 September 2021, WHO urges all stakeholders to **“Act now for safe and respectful childbirth!”** with the theme **“Safe maternal and newborn care”**
- **‘Medication Safety’** has been selected as the theme for World Patient Safety Day 2022, with the slogan **‘Medication Without Harm’**
- World Patient Safety Day 2023 has been selected under the theme **“Engaging patients for patient safety”**, in recognition of the crucial role patients, families and caregivers play in the safety of health care with the slogan **“Elevate the voice of patients!”**



Global Patient Safety Action Plan 2021–2030 Towards Zero Patient Harm in Health Care

The global action plan was adopted by 74th WHO Assembly in 2021 with a **vision** of “a world in which **no one is harmed in health care, and every patient receives safe and respectful care, every time, everywhere**”



Core Aspects of Safety Culture¹

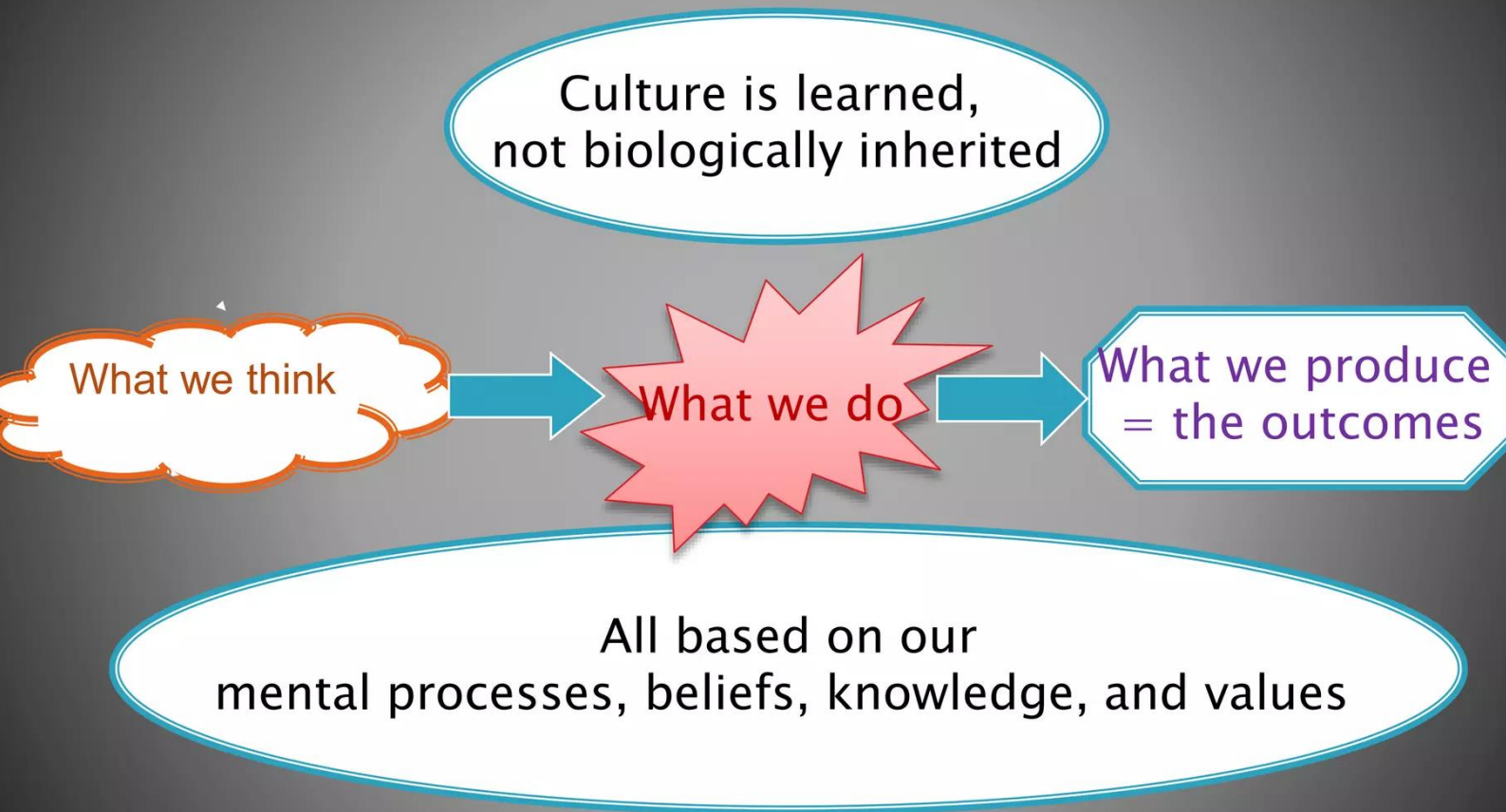


1. Schein E. Organizational culture and leadership, 4th edition. San Francisco, CA: Jossey-Bass; 2010.

APR03 Safety Program for Mechanically Ventilated Patients

Using POCUS 14

What is safety culture



Adapted from Reason

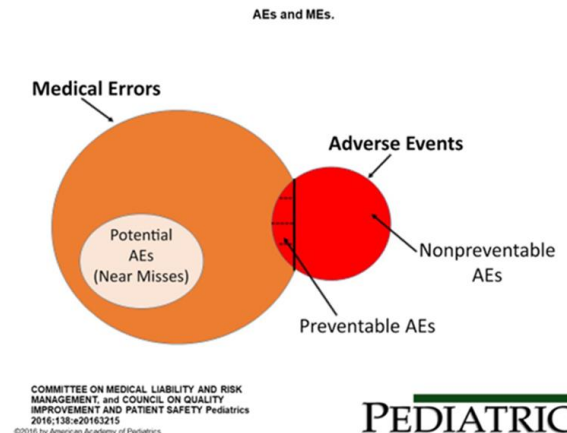
Relationship between safety and culture

Promoting a culture of safety is the responsibility of everyone in the organization, whether they are leaders, frontline staff, contract personnel or volunteers

https://www.jointcommission.org/assets/1/6/SEA_57_infographic_11_tenets_safety_culture.pdf

Patients and medical facilities

- **Patients**
- Insecurity
- Addiction
- Biographical gap
- Confusion and reflections of existential nature
- Psychological difficulties
- Professional restrictions
- Problems in the family
- Difficulties of socialization
- Additional payment



What happens on the patients' journey...

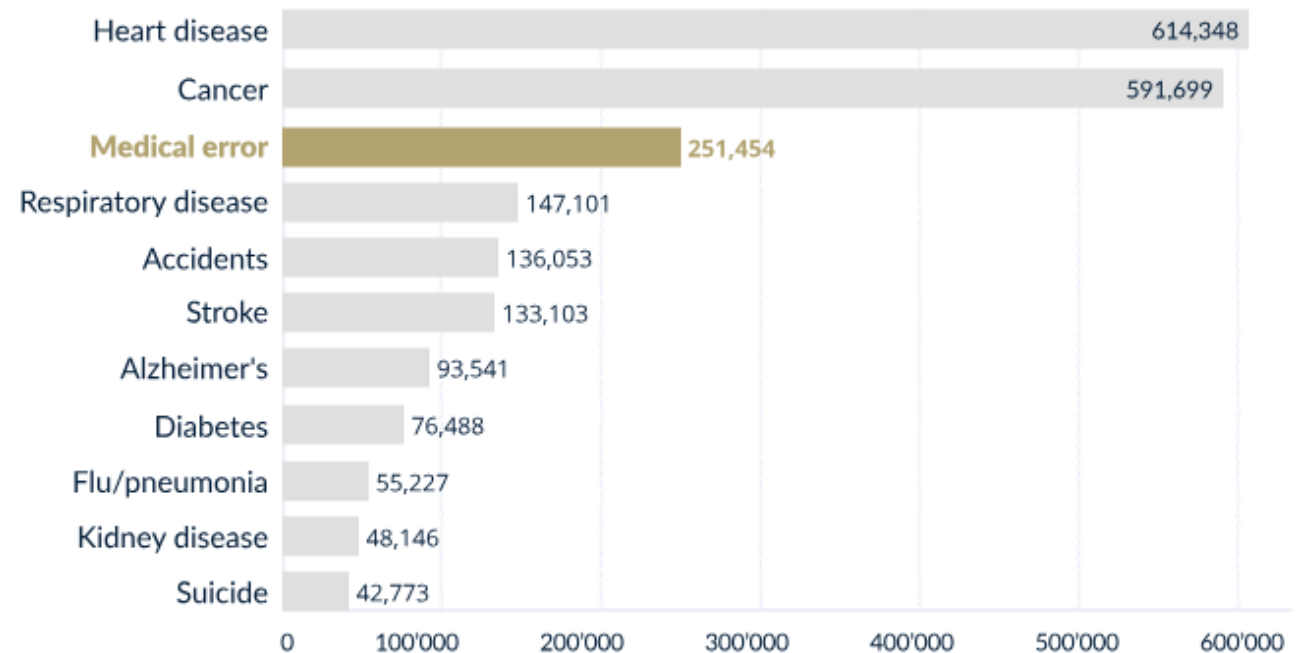
- Injury occurs during treatment in 8-12% of patients
- Inadvertent accidents occur in 3-4% of hospitalizations
- 15% of disease expenditure in OECD countries
- The leading cause of the global disease burden
- 30% increase in “Medical risk fund” expenditures” in Latvia in the last 3 years

L.Slawonski et al “Strengthening a value-based approach to reducing patient harm at the national level.OECD.2017”

Source: <https://www.washingtonpost.com/news/to-your-health/wp/2016/05/03/researchers-medical-errors-now-third-leading-cause-of-death-in-united-states>

Death in the United States

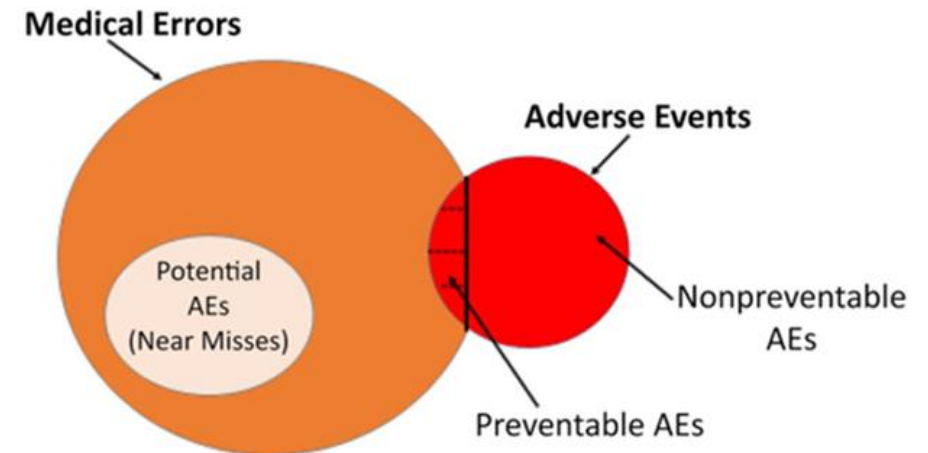
Johns Hopkins University researchers estimate that medical error is now the third leading cause of death. Here's a ranking by yearly



Patient safety has typically been outcome-dependent and the focus has been on preventing patients from experiencing adverse outcomes when receiving medical care. This may stem from Hippocrates, primum no nocere, or “First, do no harm.”

On the way on patient safety...medical errors, adverse events

AEs and MEs.



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2016;138:e20163215
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Patient safety and....What happens

Adverse event(effect)

An unexpected medical problem that happens during treatment with a drug or other therapy

Adverse events may be mild, moderate, or severe, and may be caused by something other than the drug or therapy being given

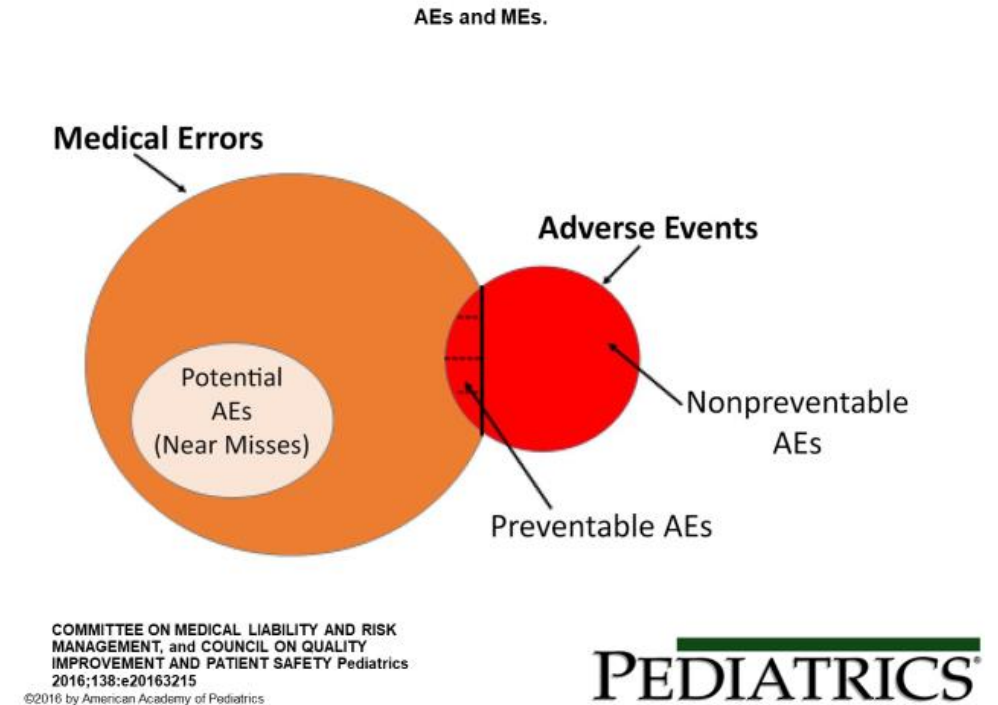
Harm

The **“unintended physical injury”** resulting from or contributed to by medical care (including the absence of indicated medical treatment), that requires additional monitoring, treatment or hospitalization, or that results in death

Near miss or „close call”

An **unsafe situation** that is distinguishable from a preventable adverse event except for the outcome

A patient is exposed to a hazardous situation, but does not experience harm either through luck or early detection



Adverse event

Surgical events

- Surgery performed on the wrong body part
- Surgery performed on the wrong patient
- Wrong surgical procedure performed on a patient
- Retention of a foreign object in a patient after surgery or otl

Care management events

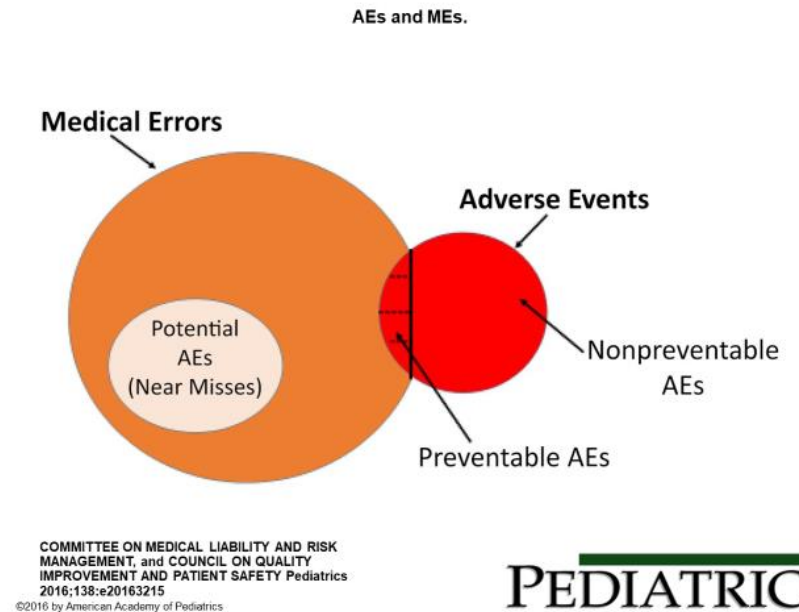
- Patient death or serious disability associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation, or wrong route of administration)

Patient protection events

Infant discharged to the wrong person

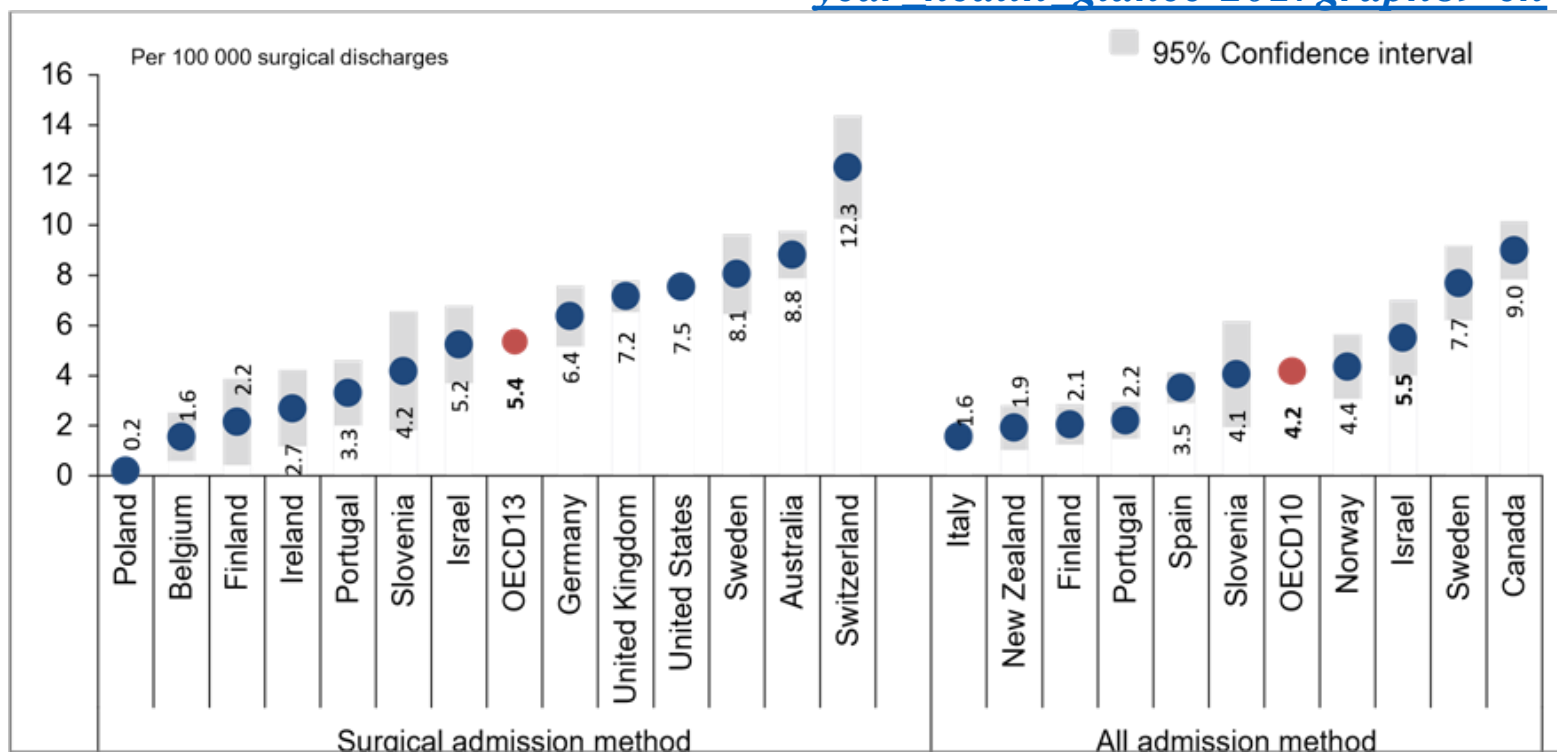
Patient suicide, or attempted suicide resulting in serious disability, while being cared for in a health care facility

Advances in Patient Safety: From Research to Implementation (Volume 4: Programs, Tools, and Products). Serious Reportable Adverse Events in Health Care Kenneth W. Kizer and Melissa B. Stegun.



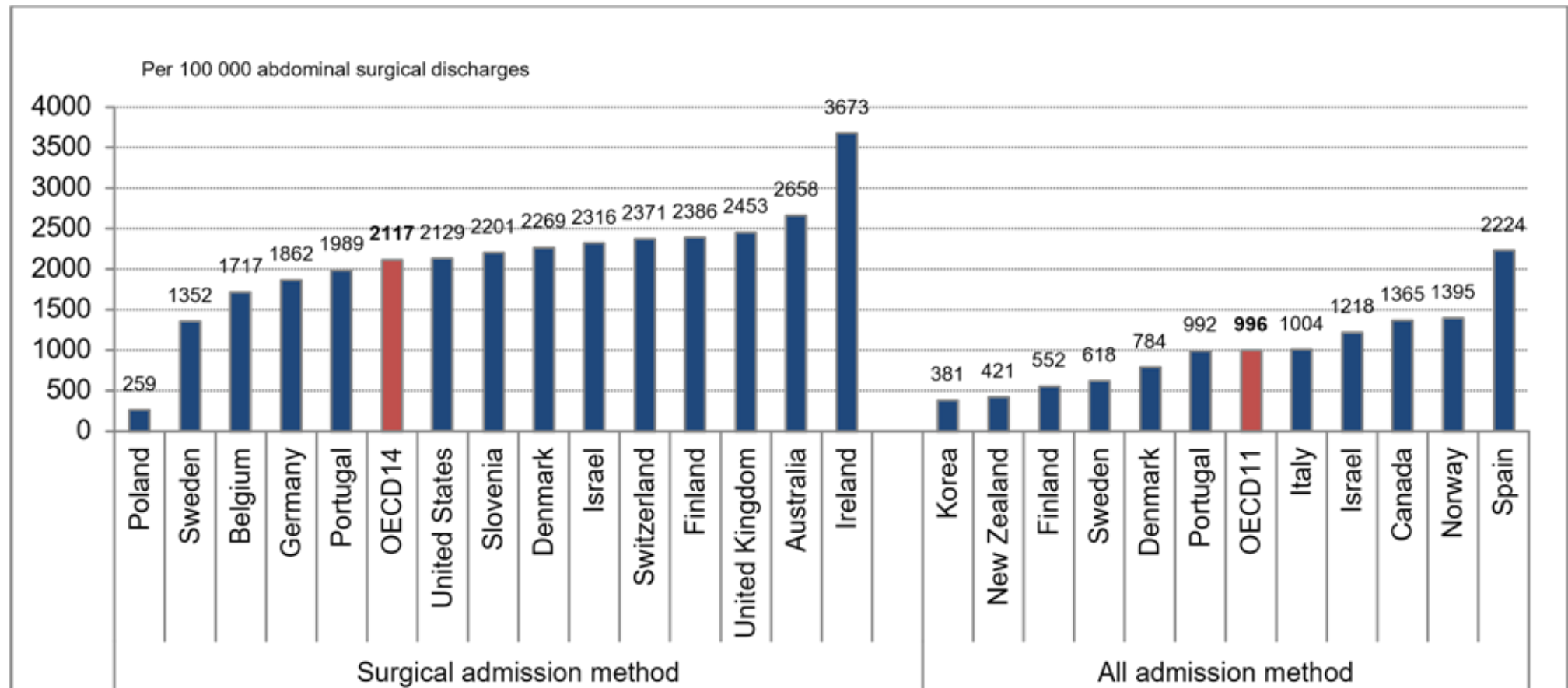
Retention of a foreign object in a patient after surgery

Source: https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance2017/foreign-body-left-in-during-procedure-2015-or-nearest-year_health_glance-2017graph89-en



Postoperative sepsis in abdominal surgeries, 2015 (or nearest year)

Source: www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance2017/postoperative-sepsis-in-abdominal-surgeries-2015-or-nearest-year_health_glance2017-graph91-en

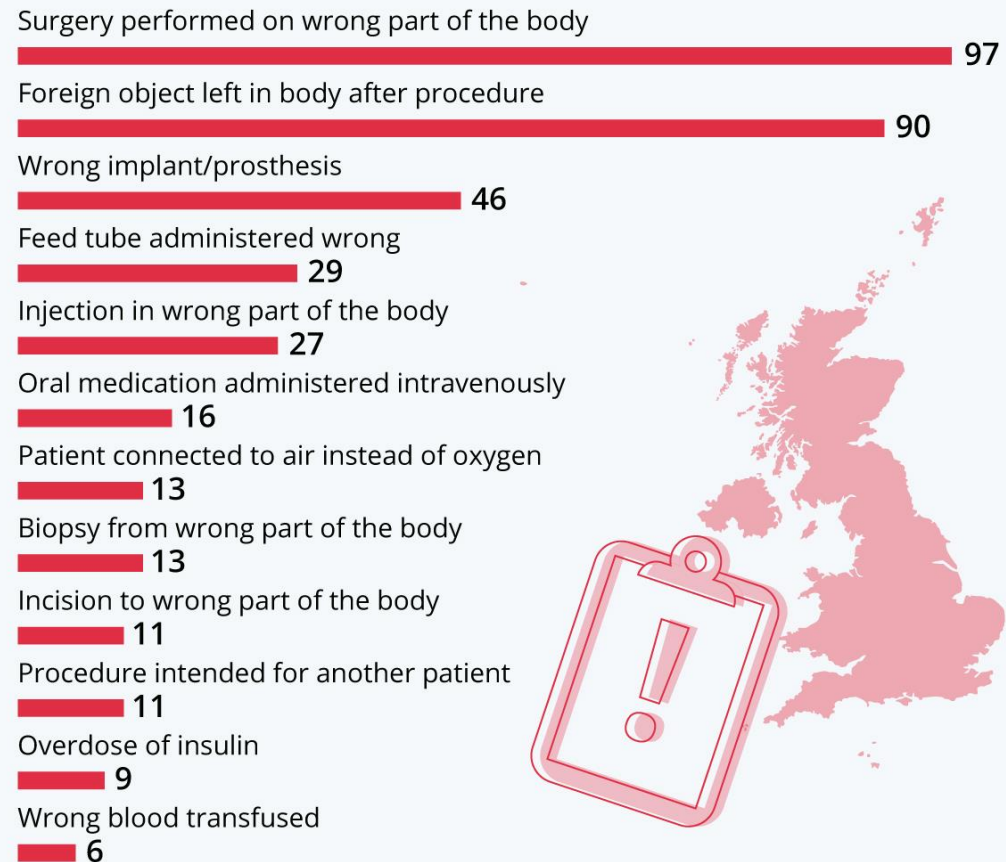


Medical errors

- Adverse effect
- Harm
- Neas miss

The NHS's Most Serious (and Avoidable) Errors of 2021

Number of serious medical errors that occurred in England despite being wholly preventable (Apr 2021-Feb 2022)



Source: NHS



I.kužniece

statista

Harm

Key sources of preventable patient harm could include

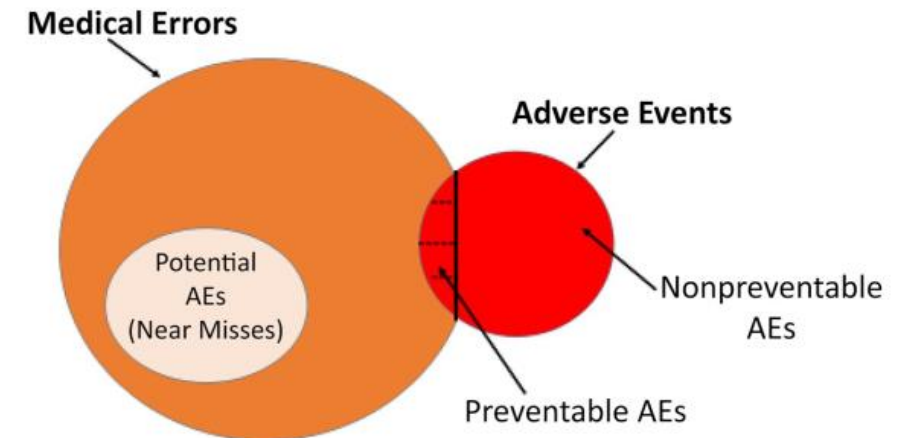
- the actions of healthcare professionals – commission (doing something wrong) or omission (failing to do the right thing)
- healthcare system failures
- a combination of errors made by individuals, system failures, and patient characteristics

The most common types of harm in healthcare overall

- related to drug incidents and invasive procedures
- medication errors, central line infections
- hospital-stay related venous thromboembolism are procedure-related injuries

Preventable harm affects around one in 20 patients (6%) in medical care, with around 12% of those dying or becoming permanently disabled as a result

AEs and MEs.



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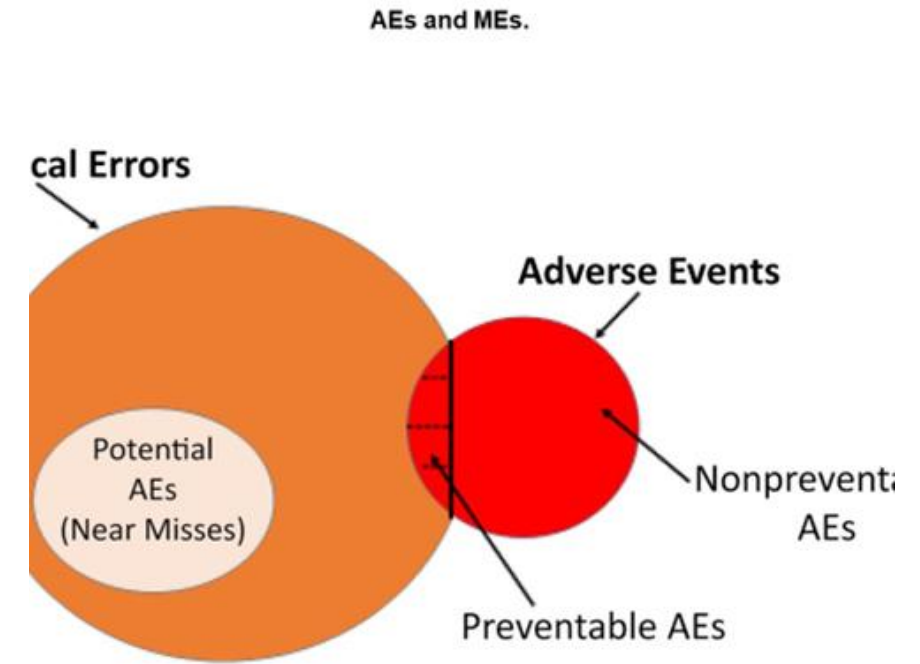
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Harm(2)

In PRIMARY HEALTH CARE (PHC)

- ❑ Diagnostic error — defined as delayed, missed or incorrect diagnoses — is a common type of preventable harm, especially among serious harm
- ❑ Diagnostic error can be due to misinterpretation of symptoms and signs or may stem from breakdown in communication, resulting in patients not receiving correct treatment in a timely manner
- ❑ The frequency of diagnostic errors in outpatient care has been estimated at 5%

[Scandinavian Journal of Primary Health Care](#) Volume 38, 2020 - [Issue 1](#)



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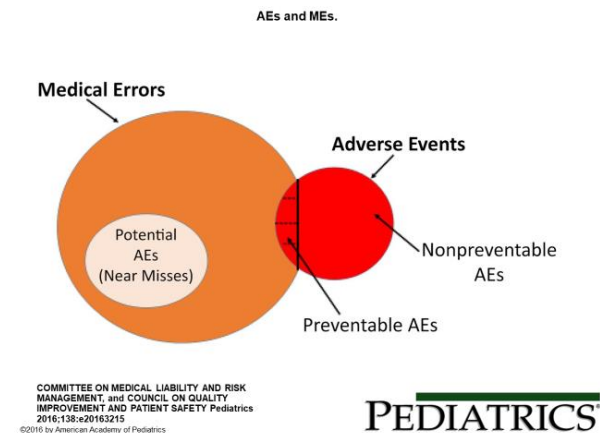
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Near miss

In a near miss, an error was committed, but the patient did not experience clinical harm, either through early detection or sheer luck

Near-miss events are much more common than adverse events—as much as 7–100 times more frequent—reporting systems for such events are much less common

- *For example, consider a patient who is admitted to the hospital and placed in a shared room. A nurse comes to administer his medications, but inadvertently gives his pills to the other patient in the room. The other patient recognizes that these are not his medications, does not take them, and alerts the nurse so that the medications can be given to the correct patient. This situation involved a high potential for harm, as a cognitively impaired or less aware patient may have taken the incorrect medications*
- *Other example: Sometimes a medication is prescribed without considering the patient's allergies or potential for significant drug interactions. In many, but not all, situations the patient or pharmacist recognizes the risk in time*



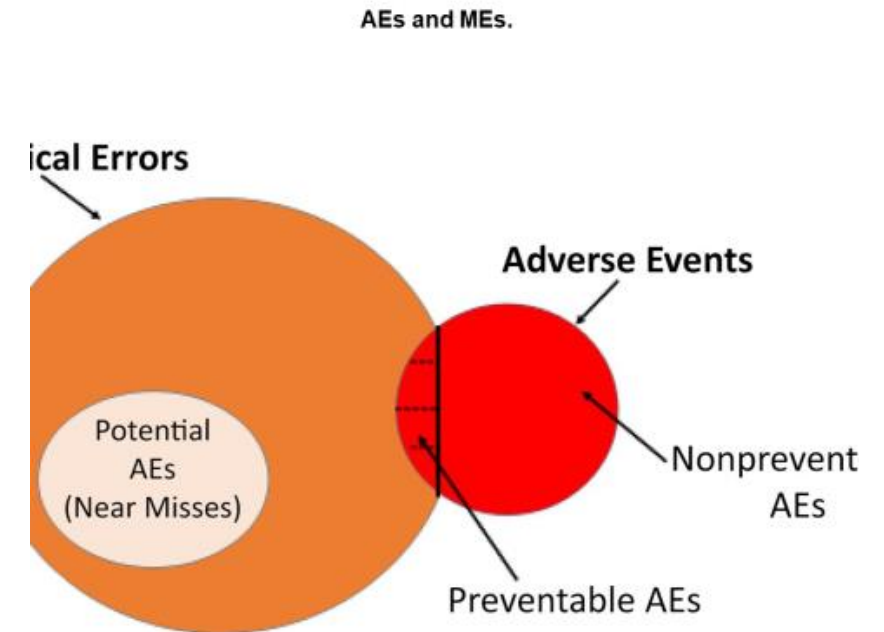
Near miss....2

Near miss prior to surgery

- Mrs. G is scheduled for important surgery. She takes warfarin for treatment of atrial fibrillation. It is discovered in the operating room that Mrs. G. had not stopped her warfarin as instructed
- Near miss with paralyzing drug

During preparation for an operation, a vial of the neuromuscular blocking agent succinylcholine is inadvertently used instead of sodium chloride as a reconstitution agent. Both vials have a similar appearance

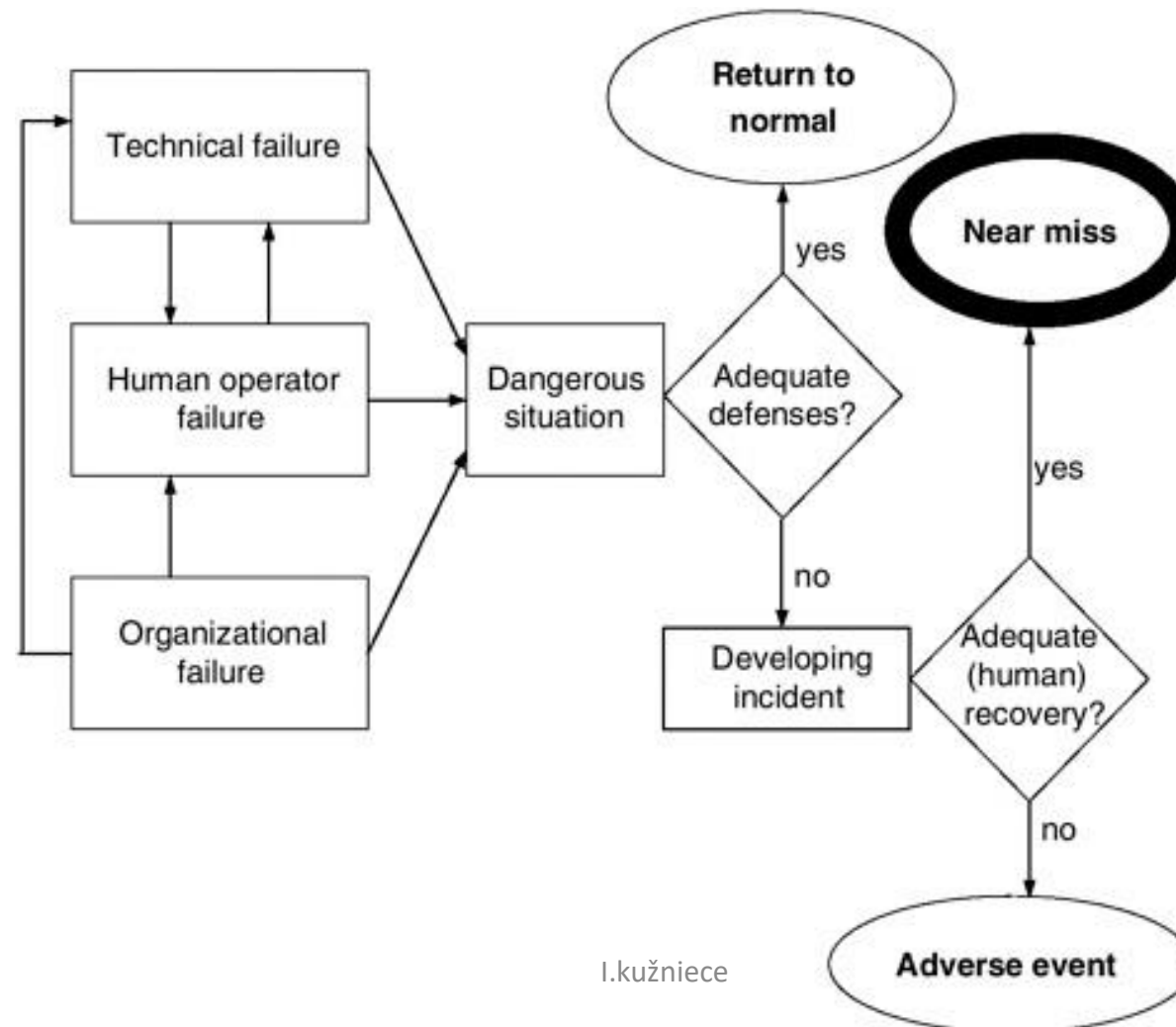
- The anesthesiologist catches the substitution before any drug is entered



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Near misses or potential adverse events... 3



The ideal goal would be zero damage?

- Early detection and prevention of patient harm in healthcare is a global health policy priority

The ideal goal would be zero damage

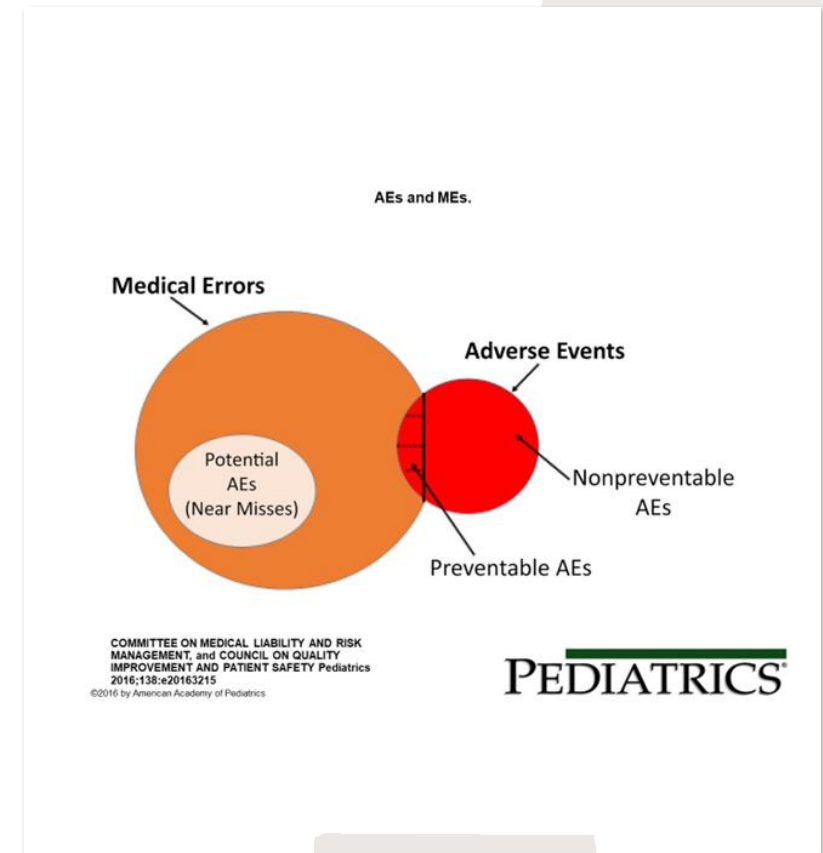
- However, this goal is not feasible because some harm cannot be avoided in clinical practice

For example, some adverse drug reactions that occur without an error in the prescription process and without the possibility of detection are less likely to be prevented.

- The preventable harm affects about one in 20 patients (6%) in medical care

about 12% of them die or become disabled

- A review of 70 studies, mainly in the US and Europe, showed that harm was mainly related to drug incidents and invasive procedures
- *Prevalence, severity, and nature of preventable patient harm across medical care settings: systematic review and meta-analysis BMJ 2019; 366*



What can/should be done

The ideal goal would be zero damage

However, this goal is not feasible because some harm cannot be avoided in clinical practice



Risk and risk management

The concept of risk combines the possibility (probability) of the occurrence of an undesirable event (accident) and the assessment of the damage (undesirable consequences) caused by this event

In health care

- High-risk process

A set of sequential actions to achieve a specific goal, the incorrect planning and (or) implementation of which may adversely affect patient safety (oncology)

- High-risk procedures

Surgical or other manipulations involving an increased risk of patient dysfunction, incapacity or death



The high risk patients

High-risk patients are patients at risk of developing a life-threatening condition during treatment and care (covid, pregnancies... ..)

- Each profile / area of activity, depending on the specifics of the patient, group of patients or the process to be analyzed, may have its own criteria for determining whether the patient or group of patients belongs to a high risk or a certain degree of risk

Proactive risk management requires answers to the following questions:

- what bad / undesirable can happen to the patient?
- if so, what are the consequences for the patient?
- what is the most dangerous thing that can happen to a particular patient, given his or her particular condition?
- what is the probability that this could happen?
- what are the possible causes, reasons, contributing factors?



Contributing factors

Contributing factor - event, related to the cause and attributable to the patient, task performance, individual, team, environment / equipment, communication, education / training, organizational role

- **Patient factors** - (complicated, severe condition, age, language ..)
- **Individual factors**: unique to the person involved in the accident (psychological, relationships at work, problems at home ..)
- **Task factors** - their purpose - to provide support in the treatment process (guidelines, procedures, their availability, understanding, applicability, updating)
- **Communication** factors written, oral, non-verbal. Info can be inefficient, confused, late





Risk identification

Meaning and identifying of high-risk patient

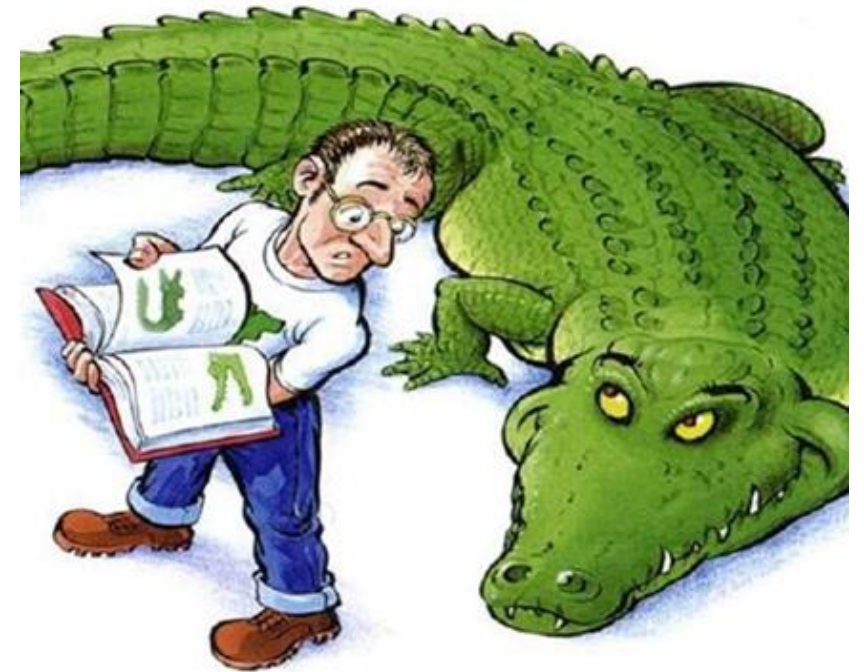
A patient who need primary, priority and emergency care and prone to critical condition

- ❖ Emergency patients
- ❖ Patients requiring resuscitative services
- ❖ Patients requiring blood and blood products
- ❖ Patients who are on life support or who are comatose
- ❖ Patients with communicable disease and/ or who are immune-suppressed
- ❖ Patients undergoing moderate and deep sedation

Assessment of high- risk patient:

- Neurological status
- Psychological and mental status
- General physical assessment.
- Assessment for suspected nutritional and functional risks

- Assessment for the risk of fall injury



Risk identification methods and various sources

id evaluate the risk



1. from external resources - these may be measures already identified by experts and risk mitigating, which have already been incorporated into regulatory documents, guidelines, recommendations, standards, protocols, etc.
2. from local adverse event / incident reporting systems
3. from audit information
4. from complaints or Medical Risk Fund, etc. requests
5. from risk assessment working groups established locally in clinical units (wards, operating theater, day care and emergency departments, etc.)
6. from consulting with employees, employee teams, interviews, reports
7. from summarizing the treatment results of the patient and / or patient groups
8. performing an assessment of the health care risks of an individual patient during the patient's outpatient visit, examination and evaluation of the patient, considering the patient's age, state of health, vital signs, chronic pathologies, co-morbidities, manipulations, drug therapy and social status, incl. sk. distance from the place of residence to the medical institution, etc.

Care and policy for high- risk patients and eliminate the risk



- Within the hospital the all-vulnerable elderly and children will be given all-necessary care needed with consideration
- If the patient's condition demands further care which is not available in our hospital, patient will be transferred to the other hospitals/facilities

While transferring the patients a staff nurse will be accompany the patient along with the caregiver.

- If the patient's condition is critical , will be escorted by a doctor and a nurse while transferring them form hospital to hospital

Staff taking care of high-risk patients must have adequate training and skills.

- The identified vulnerable patients will be always under close monitoring during their hospitalization to minimize risks of health care services

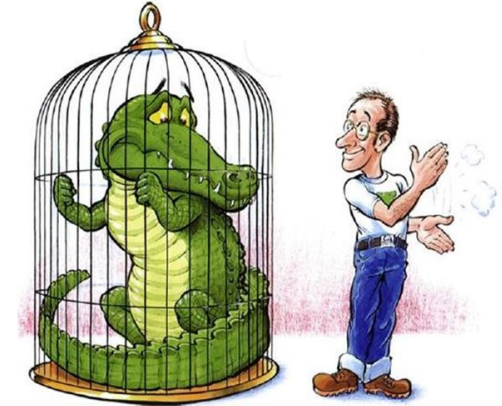
Isolate the risk

Reduce the consequences

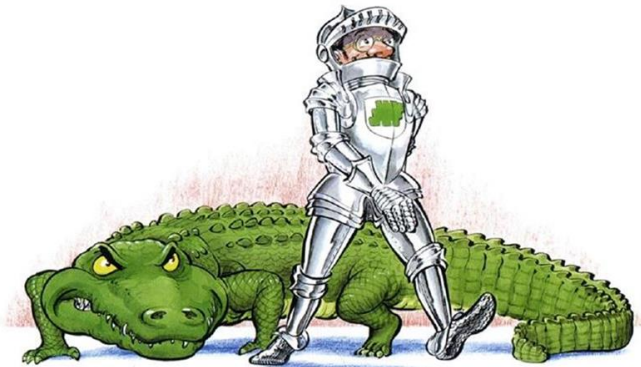
All healthcare providers will

- maintain a safe environment, related but not limited to equipment, wheelchairs, bed rails, mobility needs, fall precautions
- will encourage family involvement and support in care delivery, education and decisions as appropriate
- The discharge patient will be discharged with follow-up advise
- All documentation required for the team to work and communicate effectively in the care of high-risk patients must be maintained as per hospital documentation policy

■ Isolate the risk



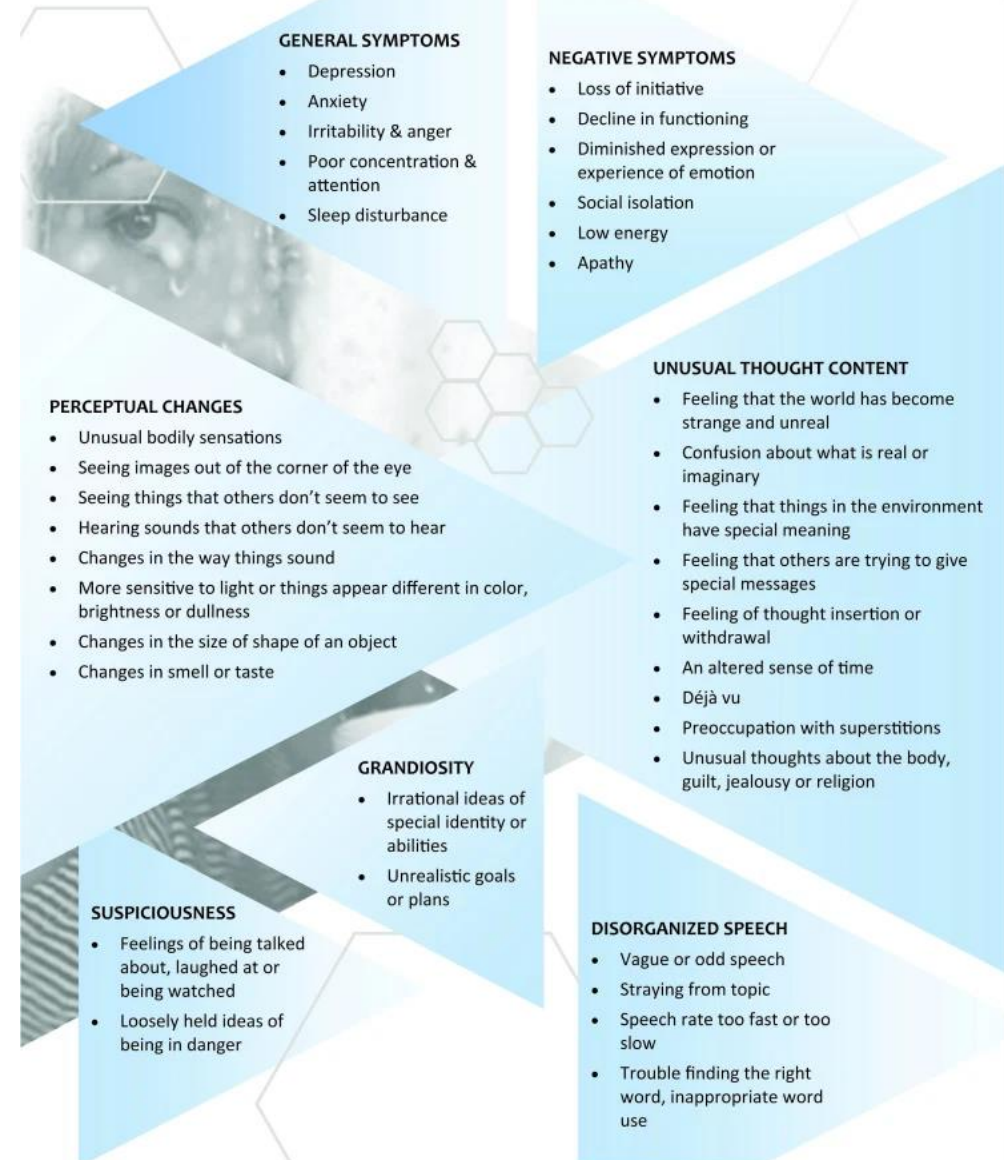
■ Reduce the consequence



Clinical High Risk in mental health

- [At Risk for Mental Illness Studies](#)
– [NAPLS Calgary](#)

CLINICAL HIGH RISK SYMPTOMS



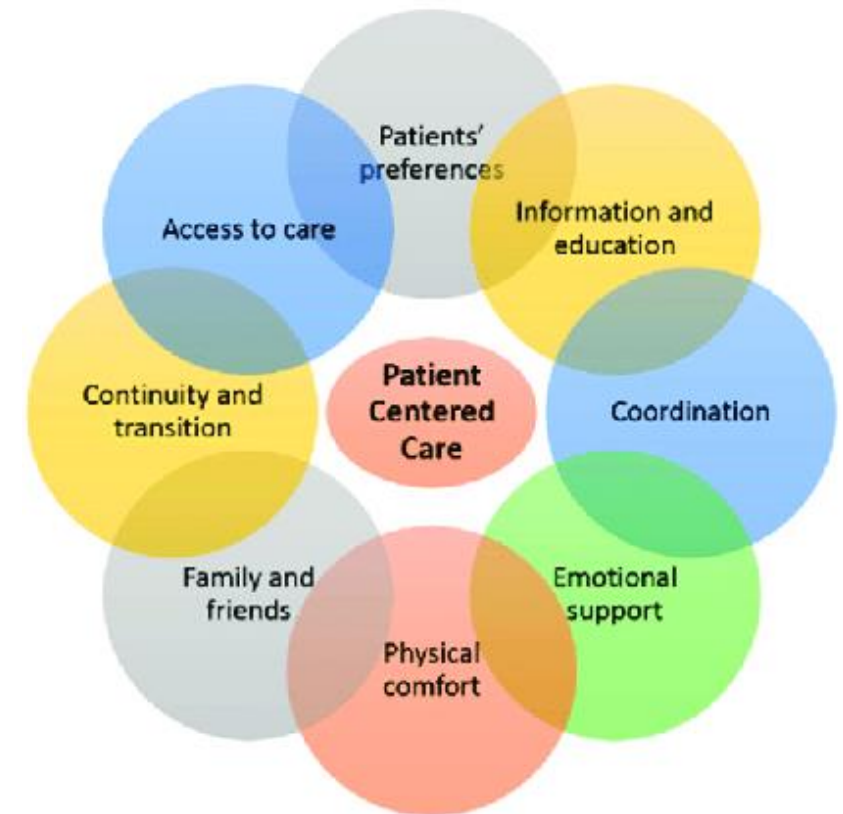
Involving people in their own care

Supporting patients to be actively involved in their own care, treatment and support can improve outcomes and experience for patients, and potentially yield efficiency savings for the system through more personalized commissioning and supporting people to stay well and manage their own conditions better

- giving them the power to manage their own health and make informed decisions about their care and treatment
- and supporting them to improve their health and give them the best opportunity to lead the life that they want

Person-centred care supports people to develop the knowledge, skills and confidence they need to more effectively manage and make informed decisions about their own health and care. It is coordinated and tailored to the needs of the individual, and healthcare professionals work collaboratively with people who use the services

<https://www.england.nhs.uk/about/>



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