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# KICK-OFF MEETING

## for hospital and ward managers

MAP4E 16/1/KA202/23016

The project has been supported by the European Commission.

## AGENDA

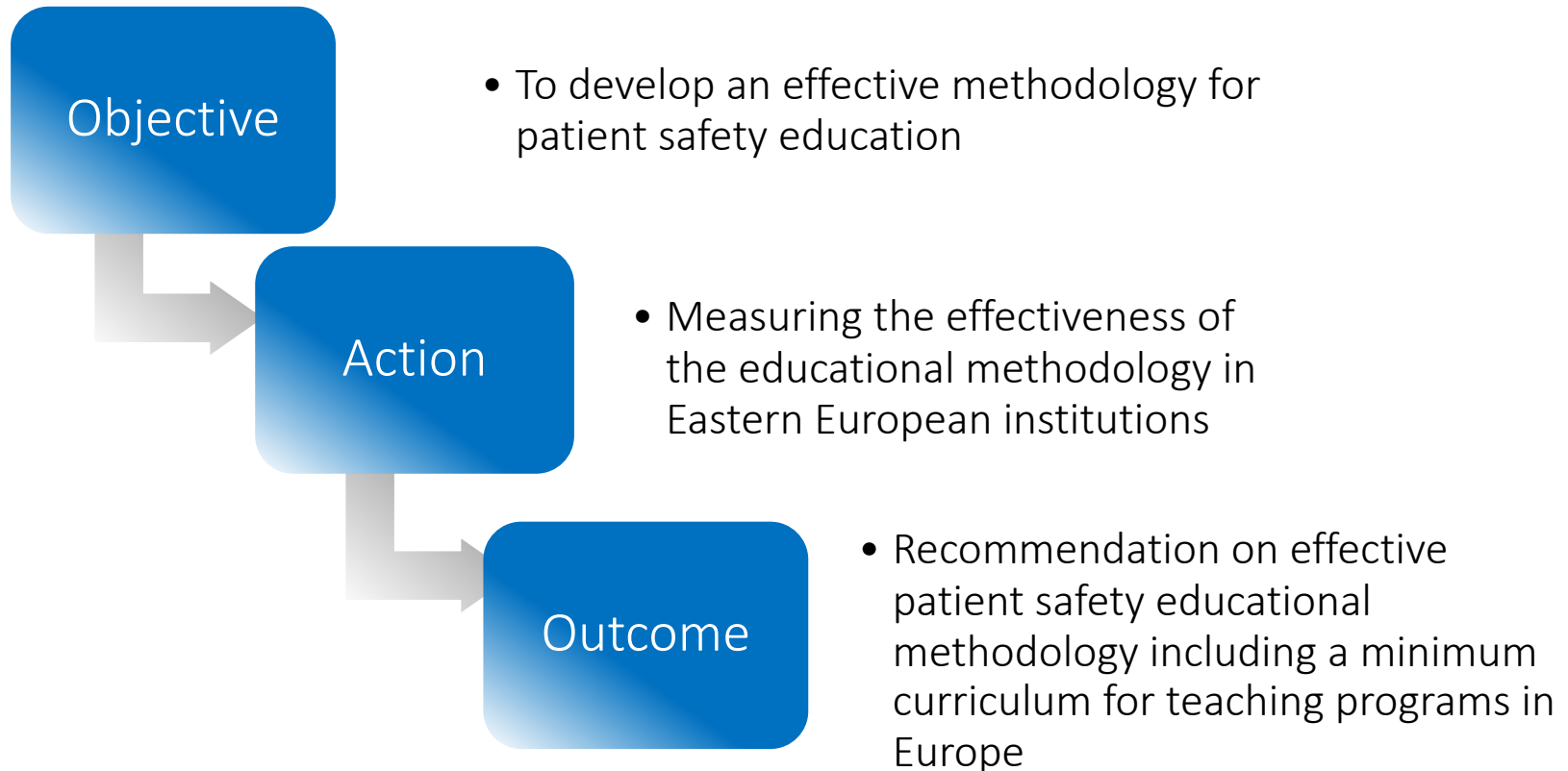
- brief presentation of the project MAP4E
- brief summary on the basics of patient safety (Introduction to patient safety)
- why a project about handover?
- description of the local training program
- benefits
- surveys before the trainings



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## Brief presentation of MAP4E

Funded by Erasmus + KA2- Cooperation for Innovation and the Exchange of Good Practices . Strategic Partnerships for vocational education and training.





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# MAP4E partners



## Hungary (HU) –

Project leader; drafting recommendation on teaching material; developing, testing and evaluating educational methodology; composing final recommendations.



## Poland (PL)–

Participation in developing and testing educational methodology; participation in evaluating results and composing final recommendations.



## Spain (ES) –

Providing professional input based on best practices and experiences in patient safety; guidance on developing educational methodology; participation in evaluating results and composing final recommendations.



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# Basic on Patient Safety



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# Quality of care dimensions



# Patient safety background



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- Code of Hammurabi (-1760?):

Medical liability

- Hipócrates (-460):

“Primum non nocere”

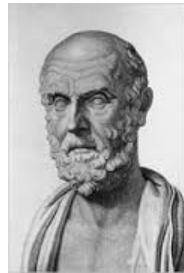
- Florenece Nightingale (1820-1910):

Measures of prevention

- Phillipp Semmelweis (1818-1865):

Hand hygiene

- Ernest Codman (1869-1940):  
Registration of errors



- Beecher and Todd (1954)

Deaths associated with anesthesia and surgery (Ann Surg; 1954)

- Anesthesia Patient Safety Foundation (1985)

”Patient safety”

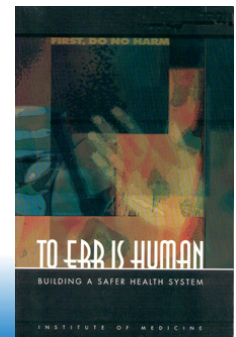
- Brennan et al: (1991)

Incidence of AE and negligence in hospitals (NEJ, 1991)

- IOM (1999):

To err is human

- System errors
- Patient safety has to be a priority
- Culture of safety







From a simple and ineffective medicine

...

...to another much more effective and complex





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# Patient safety. What are we talking about ?

- ☞ *“the reduction of risk of unnecessary harm associated with healthcare to an acceptable minimum. An acceptable minimum refers to the collective notions of given current knowledge, resources available and the context in which care was delivered weighed against the risk of non-treatment or other treatment” (WHO, ICPS, 2009)*
- ☞ *“the prevention of harm to patients.” (IOM)*
- ☞ *“the reduction and mitigation of unsafe acts within the healthcare system, as well as through the use of best practices shown to lead to optimal patient outcomes”. (Canadian Patient Safety Dictionary)*



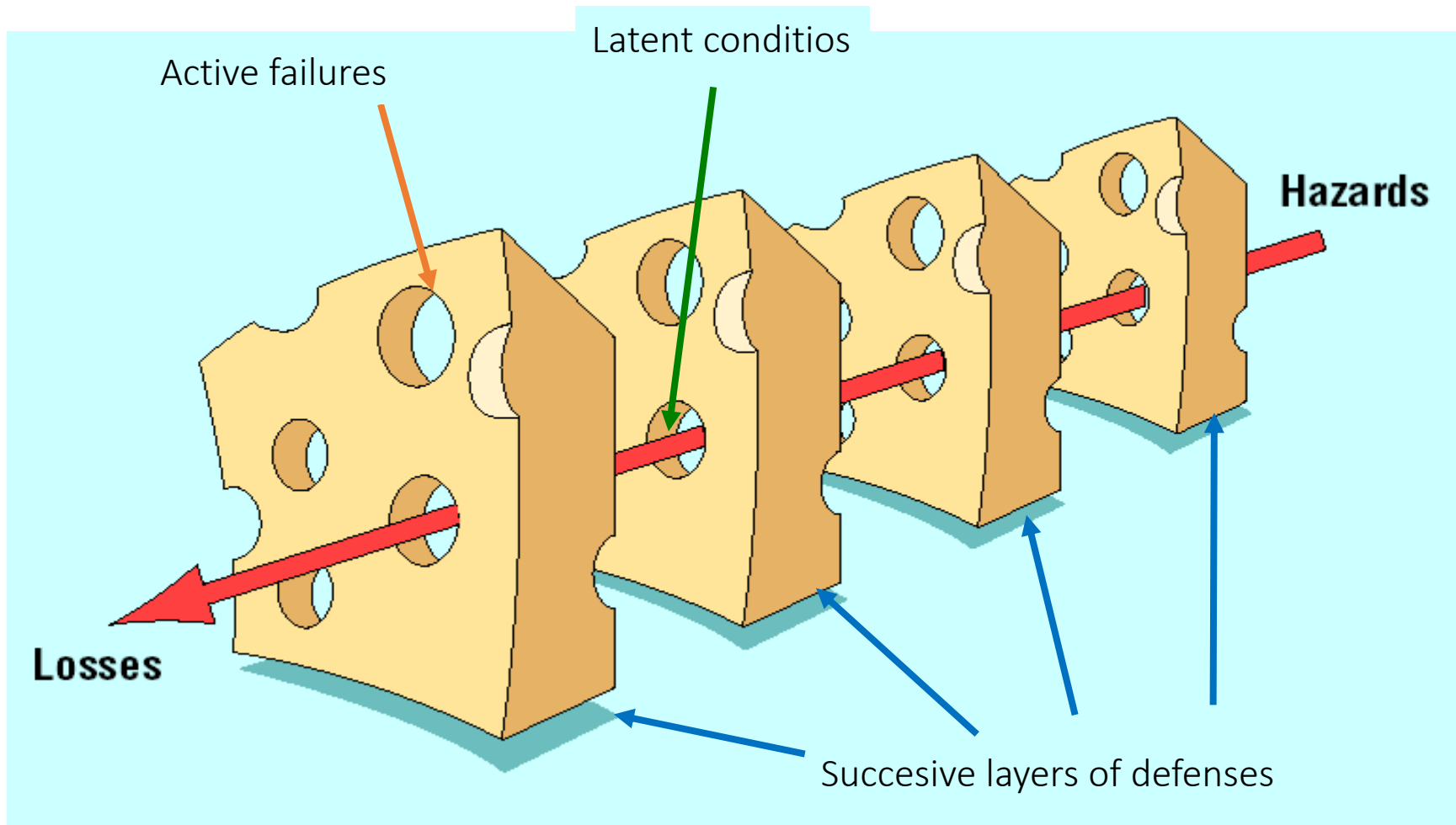
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Human beings make mistakes because the systems,  
tasks and processes they work in are poorly designed

*Lucian Leape. Harvard School of Public Health*



# Reason's Swiss Cheese Model



Source: Reason J. Human error: models and management. BMJ. 2000;320:768–70.

doi: 10.1136/bmj.320.7237.768.



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# What patient safety means?

**S**ense that clinical errors exist

**A**ctions to prevent them

**F**ollow the evidence to control them

**E**nquire into adverse events

**T**ake appropriate improvement measures

**Y**our responsibility



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# Patient Safety levels

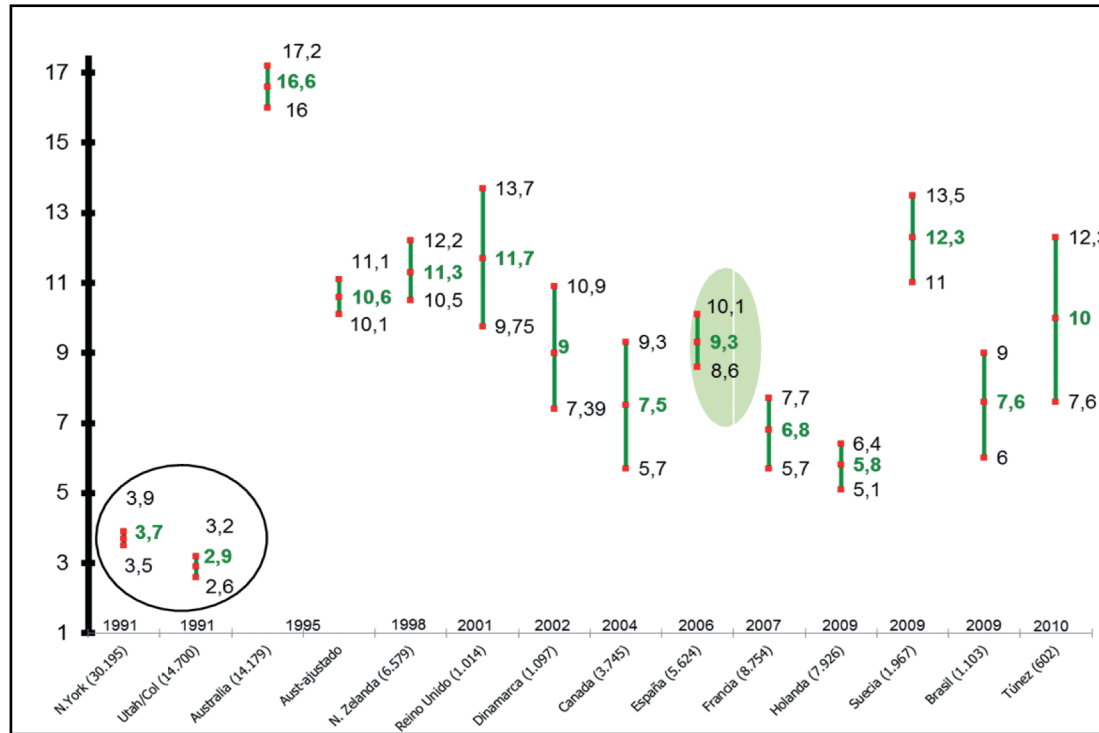


\* National Health System



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# Frequency of adverse events in hospitals: 9,2% (IC95%: 4,6-12,4%)



Source: National Patient Safety Estrategy from the Spanish's National Health System 2015-2020. MSSSI, 2015

**Error management**

### The incidence and nature of in-hospital adverse events: a systematic review

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**ABSTRACT**  
**Introduction:** Adverse events in hospitals constitute a serious problem with grave consequences. Many studies have been conducted to gain an insight into the problem, but a general overview of the data is lacking. We performed a systematic review of the literature on in-hospital adverse events.  
**Methods:** A formal search of Embase, Cochrane and Medline was performed. Studies were reviewed independently for methodology, inclusion and exclusion criteria and endpoints. Primary endpoints were incidence of in-hospital adverse events and percentage of preventable events. Secondary endpoints were adverse event outcome and subdivision by provider of care, location and type of event.  
**Results:** Eight studies including a total of 74 485 patient records were selected. The median overall incidence of in-hospital adverse events was 9.2%, with a median percentage of preventability of 43.5%. More than half (56.7%) of patients experienced no or minor disability, whereas 41% of events were fatal. Operator (59.6%) and medication-related (15.1%) events constituted the majority. We present a summary of evidence-based interventions aimed at these categories of events.  
**Conclusions:** Adverse events during hospital admission affect nearly one out of 10 patients. A substantial part of these events are preventable. Since a large proportion of the in-hospital events are operator- or drug-related, interventions aimed at preventing these events have the potential to make a substantial difference.

Adverse events (AEs) in hospitals are now widely agreed to be a serious problem, annually killing more people than breast cancer or AIDS. An AE is usually defined as an unintended injury or complication resulting in prolonged hospital stay, disability at the time of discharge or death and/or costs of preventable AEs in the USA lie between \$17 billion and \$19 billion annually.<sup>1</sup> In recent years, the focus in thinking about AEs has shifted from the person approach—blaming individuals for errors—to the systems approach. The systems approach assumes that people will make mistakes, and that the system that surrounds them should provide a safety net for those mistakes. Therefore, efforts to diminish AEs should be directed towards a particular system.<sup>2</sup> The new approach has shifted the focus of the debate on AEs from the legal consequences associated with personal responsibility, to a more constructive point of view, clearing the way for thinking about solutions.

In the aftermath of the 2001 Institute of Medicine report “To err is human,”<sup>3</sup> many large studies have been performed concerning AEs, some of them nationwide. Although many of these studies used similar methods, they report substantially different incidences. A general overview of data on in-hospital AEs is lacking.

To make the important step towards solutions, it is necessary to gain a more detailed understanding of the problem: what percentage of events is preventable, where do the majority of events happen and which type of event is the most frequent? This will enable identification of categories of AEs that are most susceptible to interventions to improve patient safety.

To gain an insight into the overall incidence, preventability, outcome and subdivision by location, provider and type of in-hospital AEs and the evidence related to relevant patient safety interventions, we conducted a systematic review of available data from the literature.

**METHODS**  
**Literature search**  
 Two authors (ENV, MAB) independently performed a formal computer-aided search of the medical databases Medline (January 1966 to February 2007), Cochrane and Embase (January 1980 to February 2007). Keywords used were “adverse events” and “preventable”. Clinical studies published in peer-reviewed journals in the English language were identified. A manual cross-reference search of the reference pages was performed to identify additional relevant articles.

**Selection**  
 In order to be able to reliably compare the data, we defined an AE as follows: an unintended injury or complication resulting in prolonged hospital stay, disability at the time of discharge or death and/or costs of preventable AEs in the USA lie between \$17 billion and \$19 billion annually.<sup>1</sup> In recent years, the focus in thinking about AEs has shifted from the person approach—blaming individuals for errors—to the systems approach. The systems approach assumes that people will make mistakes, and that the system that surrounds them should provide a safety net for those mistakes. Therefore, efforts to diminish AEs should be directed towards a particular system.<sup>2</sup> The new approach has shifted the focus of the debate on AEs from the legal consequences associated with personal responsibility, to a more

216 *Qual Saf Health Care* 2008;17(3):216–223 doi:10.1136/qshc.2007.020902

De Vries EN et al. The incidence and nature of in-hospital adverse events: a systematic review. *Quality & Safety in Health Care*. 2008;17(3):216–223.



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# Learning form other high risk industries

## Human factors and patient safety behaviours

- Leadership
- Team working
- Effective communication
- Shared awareness
- Standardizing procedures
- Learning: simulation





# WHO Patient Safety Program

2005-2006:  
Clean care is safer care

2008:  
Safe surgery safe lives

2017:  
Medication without harm

2010:  
Antimicrobial resistance



## Actions

- Patient for patient safety
- Reporting & learning system
- Patient safety solution
- High 5's
- Research
- Education and training
- Knowledge & management

<http://www.who.int/patientsafety/>

# Good practices recommended

<p>AHRQ Evidence for PSP (2013)</p>	<p>NQF PSP for better healthcare (2010)</p>	<p>JC National PS goals (2014)</p>	<p>WHO Nine patient safety solutions (2007)</p>
<p><b>HAI</b>s</p> <ul style="list-style-type: none"> <li>•Hand hygiene</li> <li>•CLABSI, VAP</li> <li>•CAUTI</li> </ul> <p><b>MEDICATION</b></p> <ul style="list-style-type: none"> <li>•High risk medications</li> <li>•Medication reconciliation</li> <li>•NO dangerous abbreviations</li> </ul> <p><b>SURGERY</b></p> <p><b>OTHER</b></p> <ul style="list-style-type: none"> <li>•PU, Falls, Patient safety culture</li> <li>•Handover</li> </ul>	<p><b>HAI</b>s</p> <ul style="list-style-type: none"> <li>•Hand hygiene</li> <li>•CLABSI, CAUTI, VAP</li> <li>•SSI, MDRO</li> </ul> <p>•<b>MEDICATION</b></p> <ul style="list-style-type: none"> <li>•High risk medications</li> </ul> <p><b>SURGERY</b></p> <p><b>OTHER</b></p> <ul style="list-style-type: none"> <li>•PU, Falls</li> <li>•Culture</li> <li>•Handover</li> </ul>	<p><b>HAI</b>s</p> <ul style="list-style-type: none"> <li>•Hand hygiene</li> <li>•CLABSI, CAUTI</li> <li>•SSI</li> </ul> <p><b>MEDICATION</b></p> <ul style="list-style-type: none"> <li>•Medication reconciliation</li> </ul> <p><b>SURGERY</b></p> <p><b>OTHER</b></p> <ul style="list-style-type: none"> <li>•Patient Identification</li> </ul> <p>•Handover</p>	<p><b>HAI</b>s</p> <ul style="list-style-type: none"> <li>•Hand hygiene</li> </ul> <p><b>MEDICATION</b></p> <ul style="list-style-type: none"> <li>•High risk medications</li> <li>•Medication reconciliation</li> <li>•“Look alike, sounds alike”</li> </ul> <p><b>SURGERY</b></p> <p><b>OTHER</b></p> <ul style="list-style-type: none"> <li>•Patient Identification</li> </ul> <p>•Handover</p>



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Emerging threats for  
patient safety

**Watch out!**

- Increase in multimorbidity: complex cases
- Increasingly complex care: multidisciplinary teams
- Budget constraints
- Antimicrobial resistance: to do 'more with less'

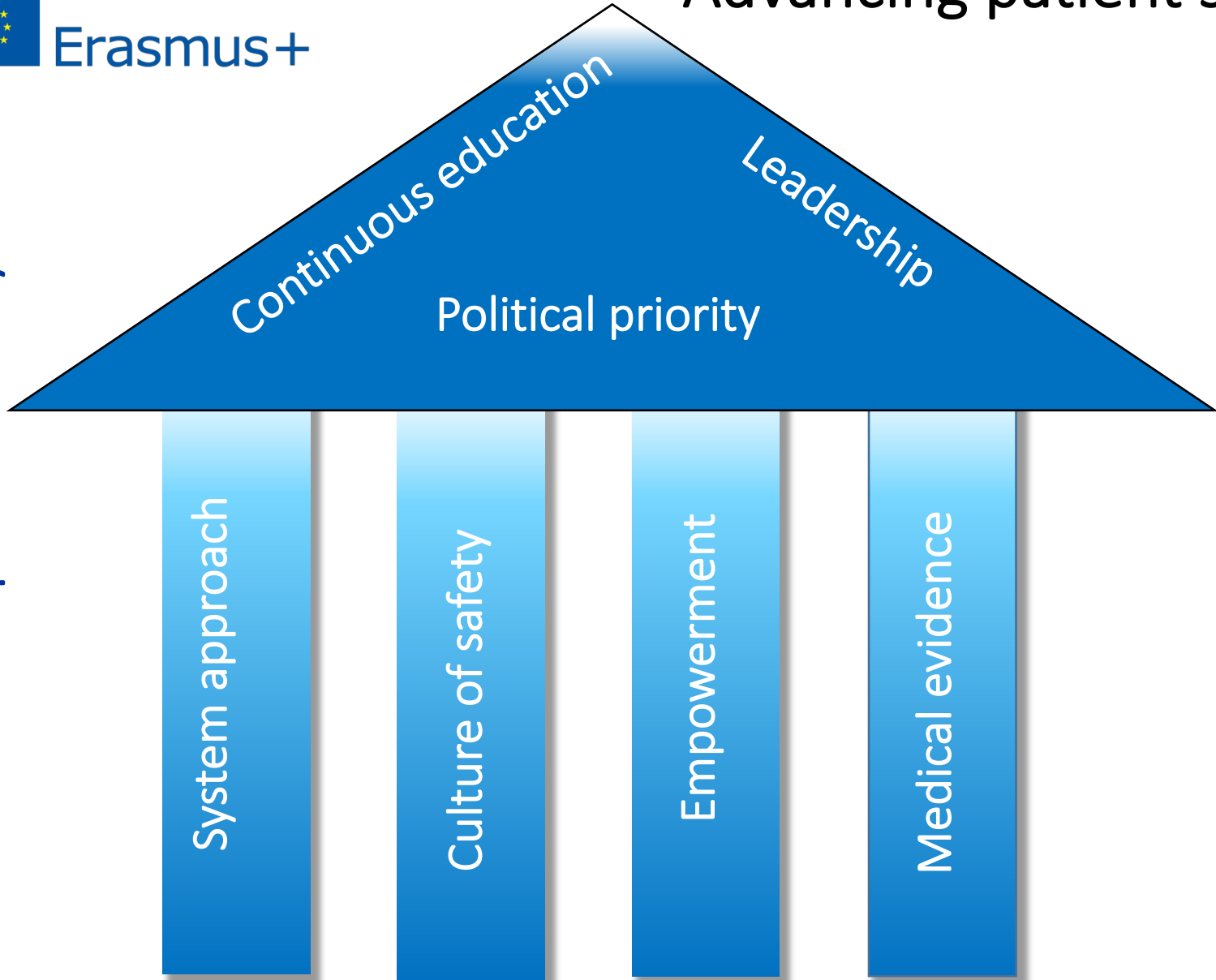




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# Advancing patient safety

Pillars of patient safety





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Why a project about handover



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## Severe adverse events: background

- communication errors are found very often
- most of them are connected to handover processes
- It is the basis for transferring care of patients across shifts and across care settings
- critical for maintaining continuity and safety of patient care
- inadequate practice of handover can lead to unnecessary readmissions, medication errors, diagnostic follow-up errors and physical harms
- significant extra costs for the hospitals



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# Handover

## What are we talking about?



- “..the process of passing patient-specific information from one caregiver to another, from one team of caregivers to the next, or from caregiver to the patient and family for the purpose of ensuring patient care continuity and safety.” WHO
- The transfer of information (along with authority and responsibility) during transitions in care; to include an opportunity to ask questions, clarify, and confirm (AHRQ-TeamSTEPPS)
- ‘the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis.’ (Australian Medical Association in their ‘Safe Handover: Safe Patients’ guideline. AMA, 2006)



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# Communication Challenges

- Language barrier
- Distractions
- Physical proximity
- Personalities
- Workload
- Varying communication styles
- Conflict
- Lack of information verification
- Shift change





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# Handover (or Hand-off)

Where patient care handover occurs?



Admission  
in primary  
care



Physician  
sign-out to  
a covering  
physician



Nursing  
change of  
shift



Transfer  
between  
units or  
facilities



Discharge  
of the  
patient  
back  
home/other  
facility

← Across the continuum of care →



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## Identifiable risks in Handover

- Breakdown in communication
- Frequency of interruptions
- Lack of space
- Time constraints
- Handover during the weekend

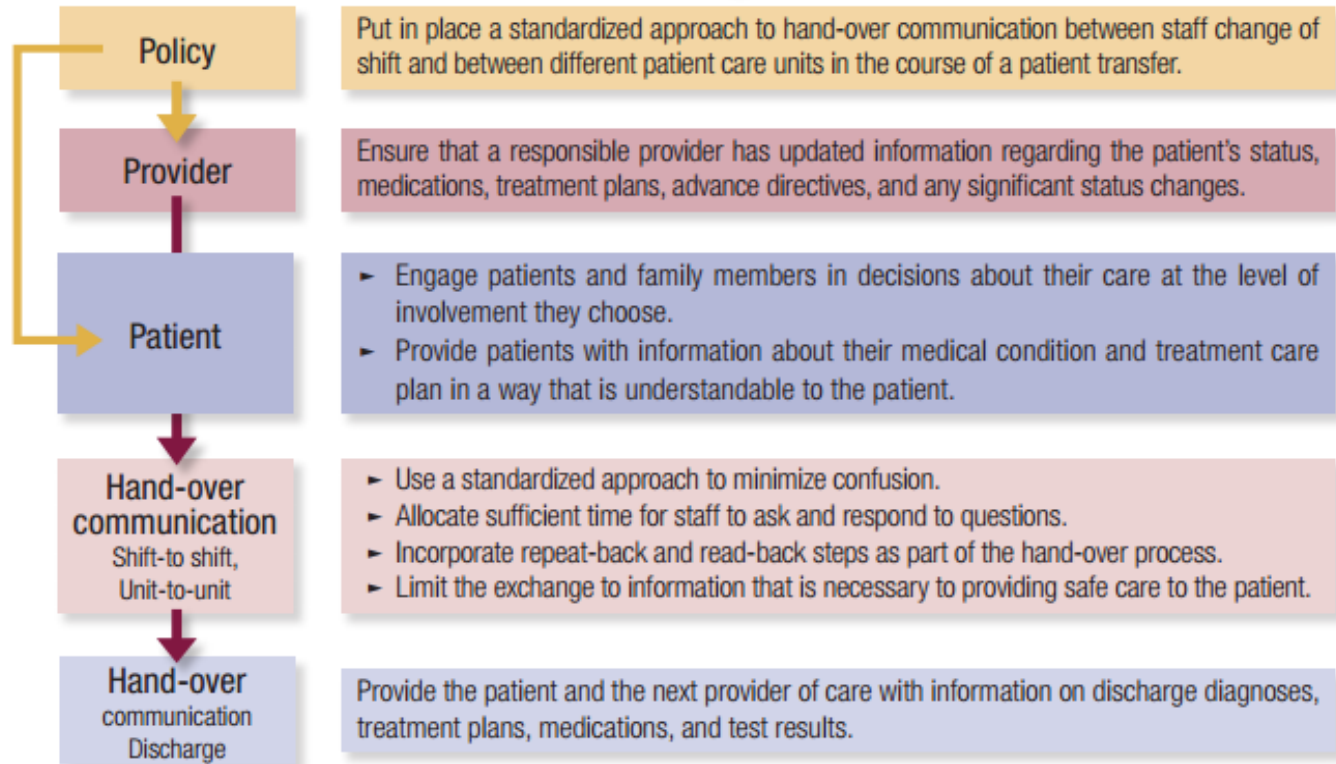
- Incomplete or omitted information
- Irrelevant information and repetition
- Speculation
- Non-compliance

- The information needs to be provided in a prioritized, clear, concise and chronological manner.
- Information should contain
  - patient care plan,
  - treatment,
  - current condition and a
  - any recent or anticipated changes.



# Components that make a good Handover

## EXAMPLE OF Communication During Patient Hand-Over



*This example is not necessarily appropriate for all health-care settings.*



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## Local training program

- Target population: choosing the Wards to participate in the training
- Duration of the training program
- Organization of the training program at the hospital



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## Benefits



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## Benefits

For the professionals and the organization:

- to take part in an international project
- a participation certificate from the Semmelweis University
- to improve the handover processes of the hospital
- to publish their results, and good-practices they have worked out.

For the coordination:

- to collaborate with the Semmelweis University in a research project including participation certificate



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## Surveys before the trainings



- The MAP4E survey is based on AHRQ Hospital Survey on Patient Safety Culture
- Description of the survey
- Results feed-back to the Hospital board and Hospital coordinator



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## Survey on handover safety

- Description of the survey developed by MAP4E handover project
- Results feed-back to the Hospital board and Hospital coordinator



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# Questions?



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The project has been supported by the European Commission.