PREVENTING MEDICATION ERROR THROUGH INTERPROFESSIONAL COLLABORATION AND EDUCATION

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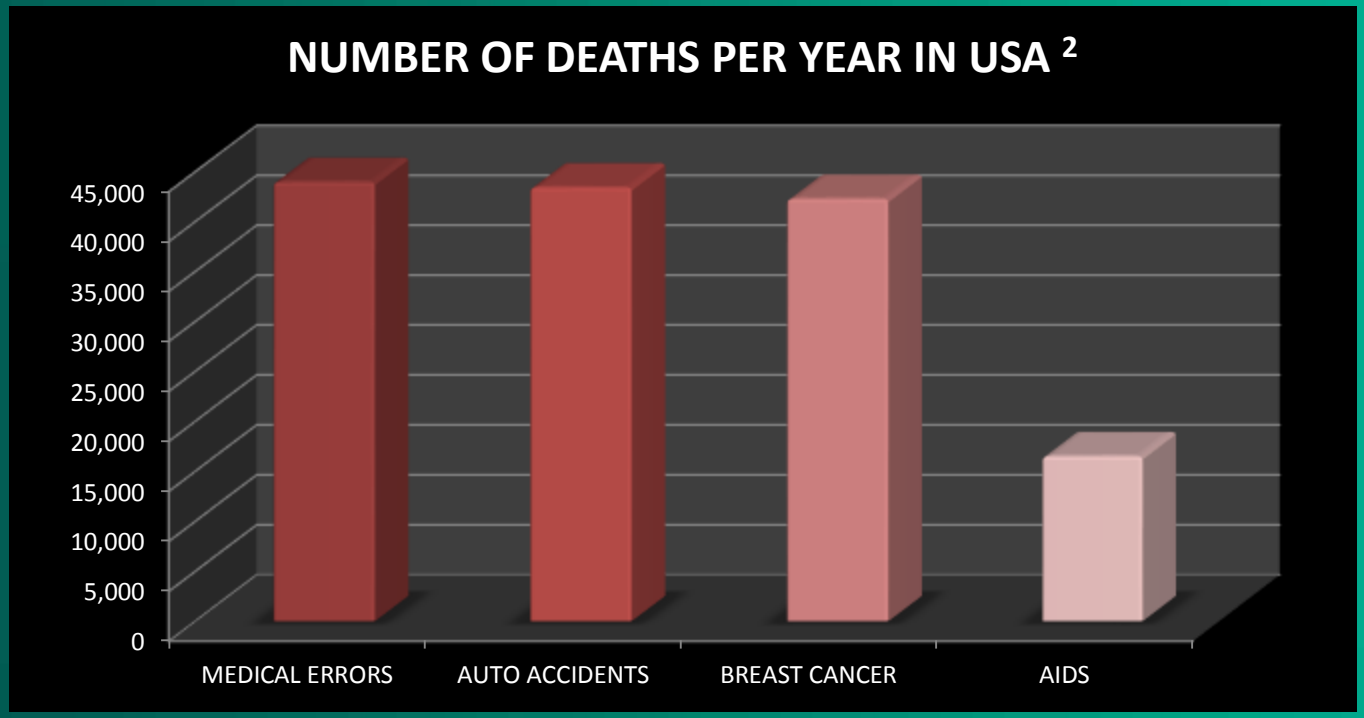
HOW HARMFUL MEDICAL ERROR CAN BE?

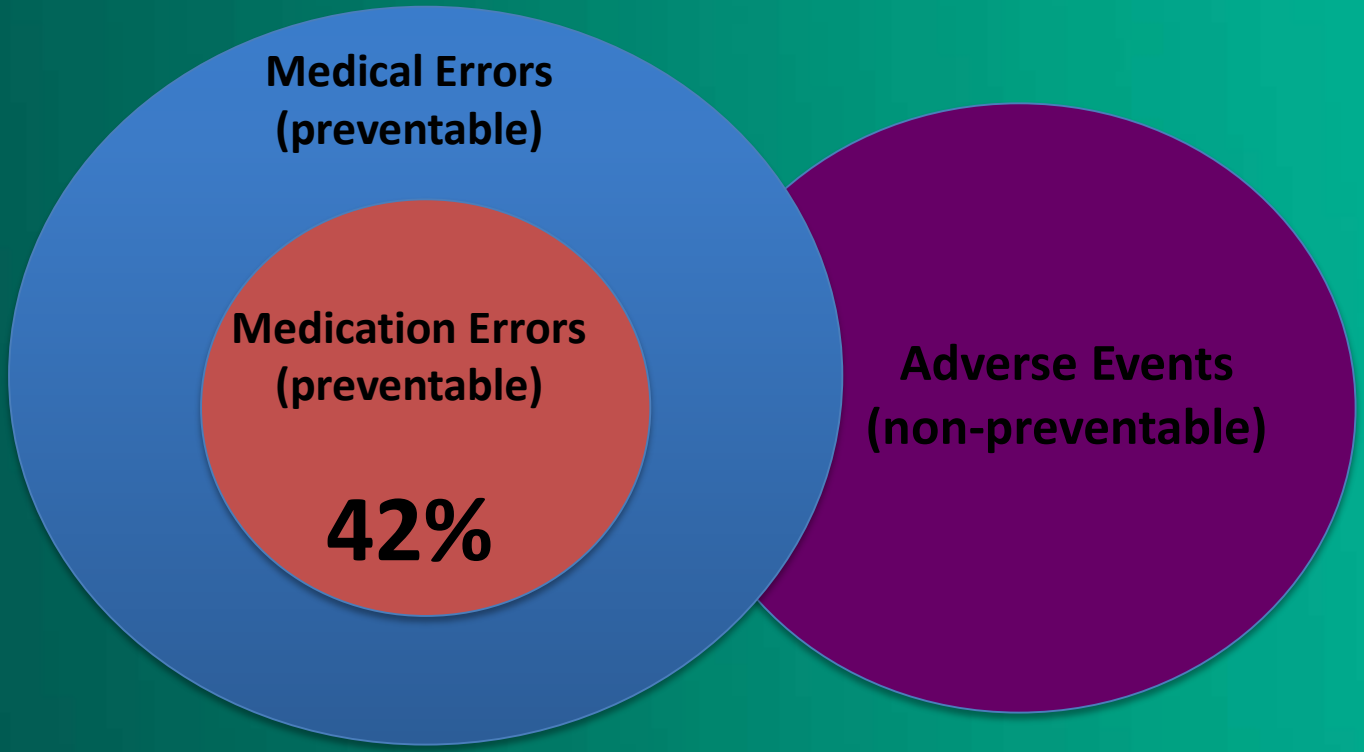


At least 210,000 deaths per year occurred due to medical errors (James, 2013)[3]

[2] Source: Institute of Medicine, 1999

[3] Journal of Patient Safety, 2013

Medication error contribute to 42% of total medical errors



Source: Department of Health and Human Services, Office of the Inspector General. Adverse Events in Hospitals: National Incidence among medicare beneficiaries, 2010

DEFINITION

- **Medication error** is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer [1]

"medication error adalah kejadian yang dapat dicegah yang dapat menyebabkan atau mengarah pada penggunaan obat yang tidak sesuai atau membahayakan pasien, sementara pengobatan berada di bawah pengawasan profesi kesehatan, pasien, atau konsumen"

[1] According to National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP)

WHEN MEDICATION ERROR MAY TAKE PLACE?

DURING PRESCRIBING

Wrong drug, drug interaction, duplication, contraindication, wrong dose, etc

DURING DISPENSING

Taking wrong meds or strength (LASA)
Errors in drug preparation

DURING TRANSCRIPTION

Misreading order or dose

DURING ADMINISTRATION

Wrong dose, time or administration route

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INDONESIAN EXPERIENCE

Out of 7,662 prescriptions from geriatric ward, 1,563 (20.4%) medication errors detected

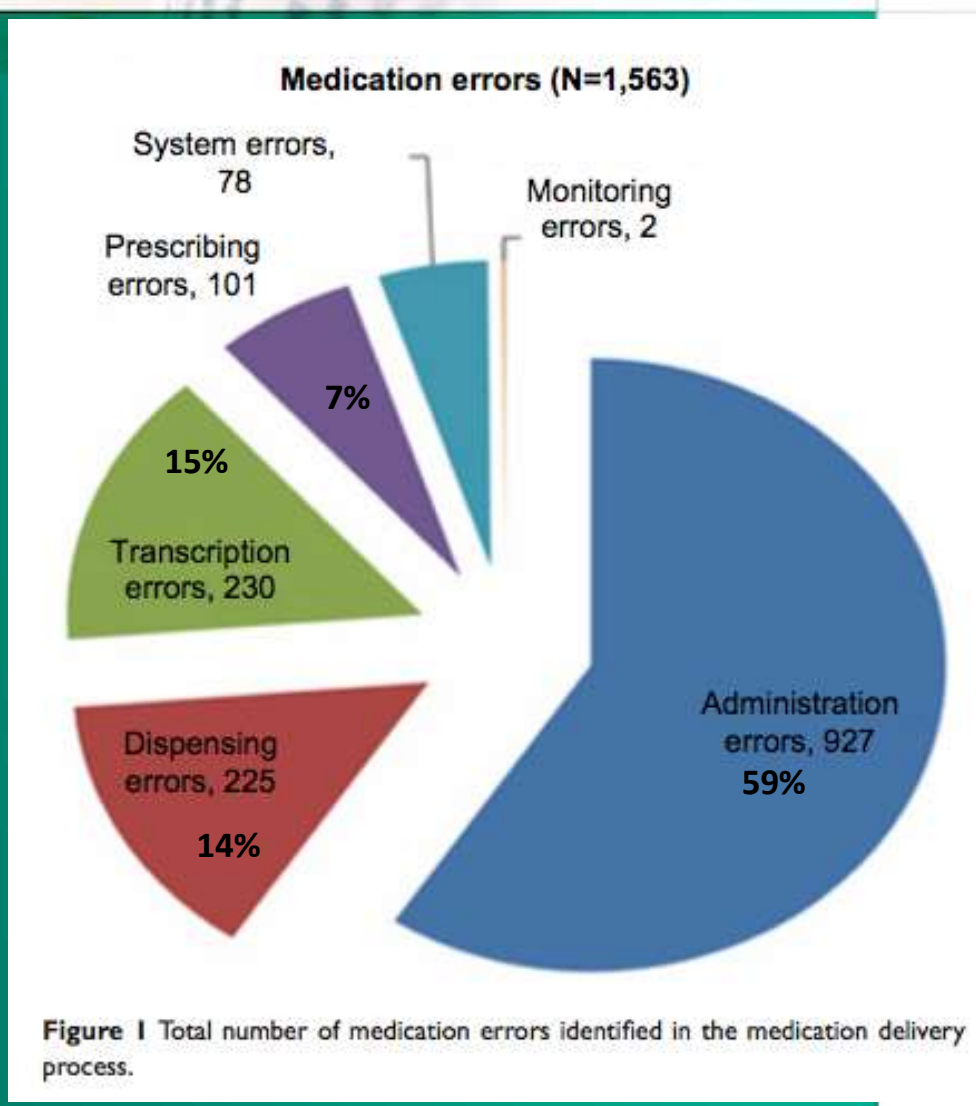

Figure 1 Total number of medication errors identified in the medication delivery process.

Source: Ernawati, DK in Therapeutics and Clinical Risk Management 2014:10 413–421

FACTORS THAT MAY CONTRIBUTE TO MEDICAL ERRORS

- Professional health providers
  - Human error, lack of communication, lack of concentration due to interruption
- Health care products (medicines)
  - Packaging and labeling → LASA
- Health care systems
  - Drug distribution, monitoring, counseling, education

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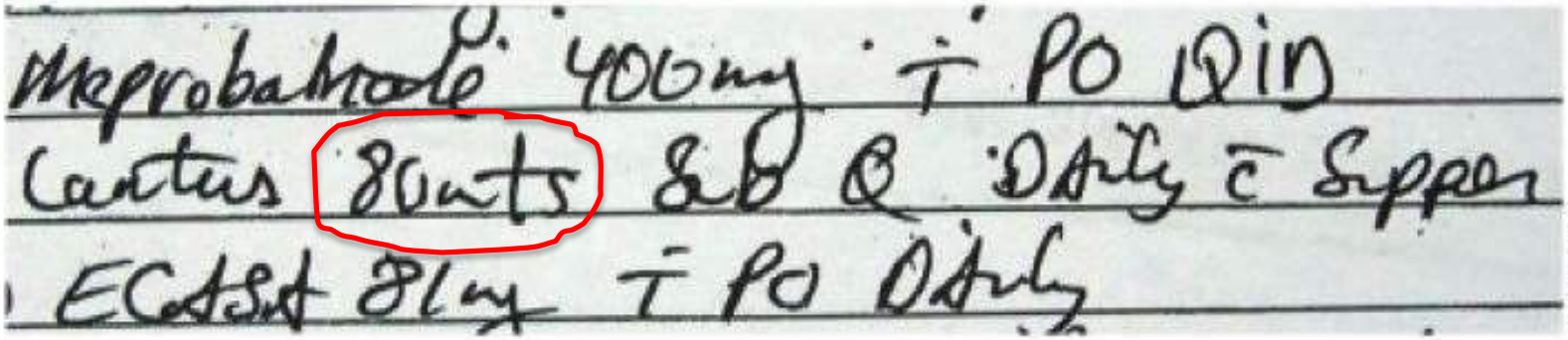
Example of transcription error

Order Written for 8 Units of Lantus Insulin
Misread as 80 Units



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TRANSCRIPTION ERROR

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Example of LASA (LOOK ALIKE SOUND ALIKE) MEDS

DISPENSING ERROR

ADMINISTRATION ERROR

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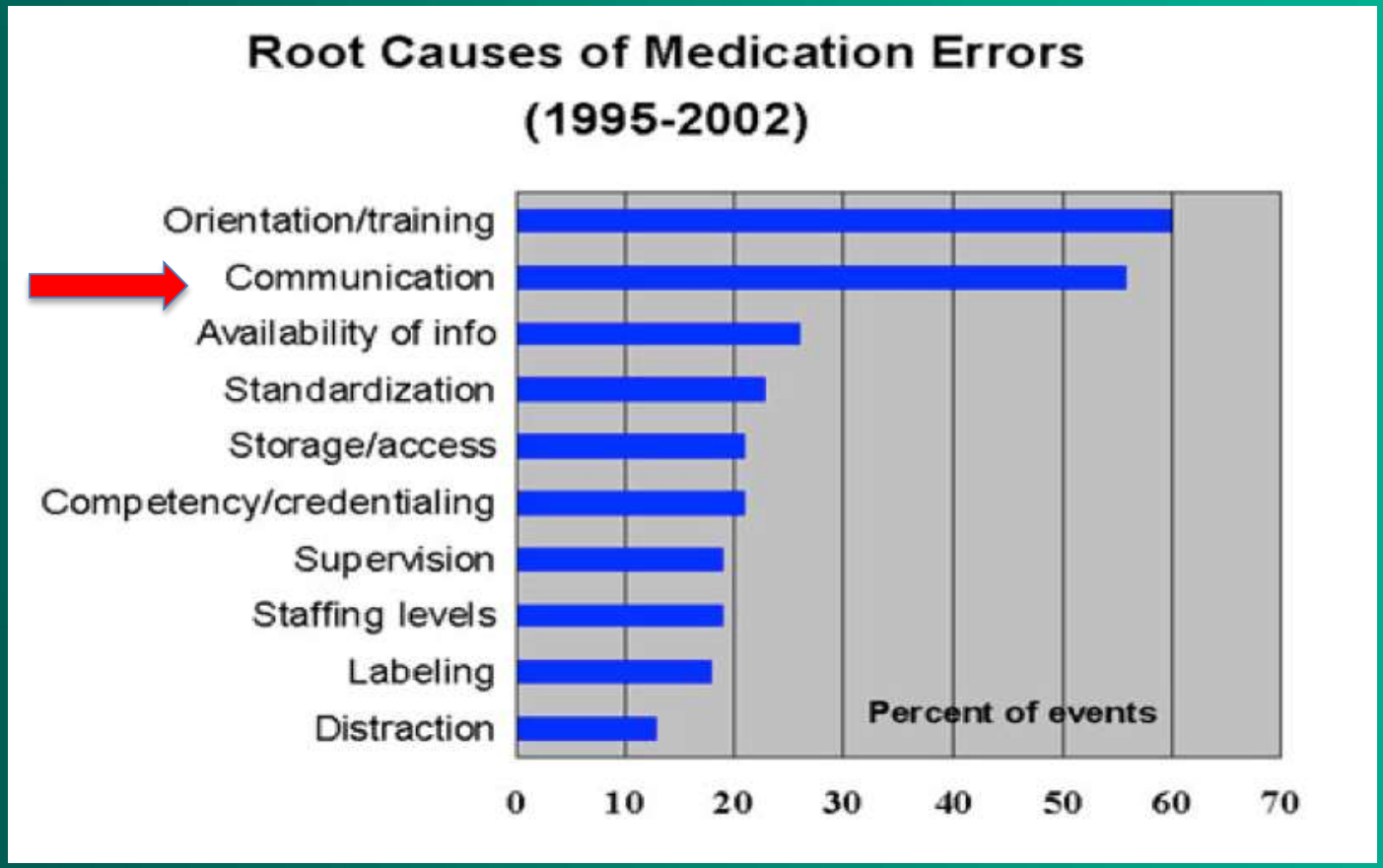
ROOT CAUSE OF MEDICATION ERROR



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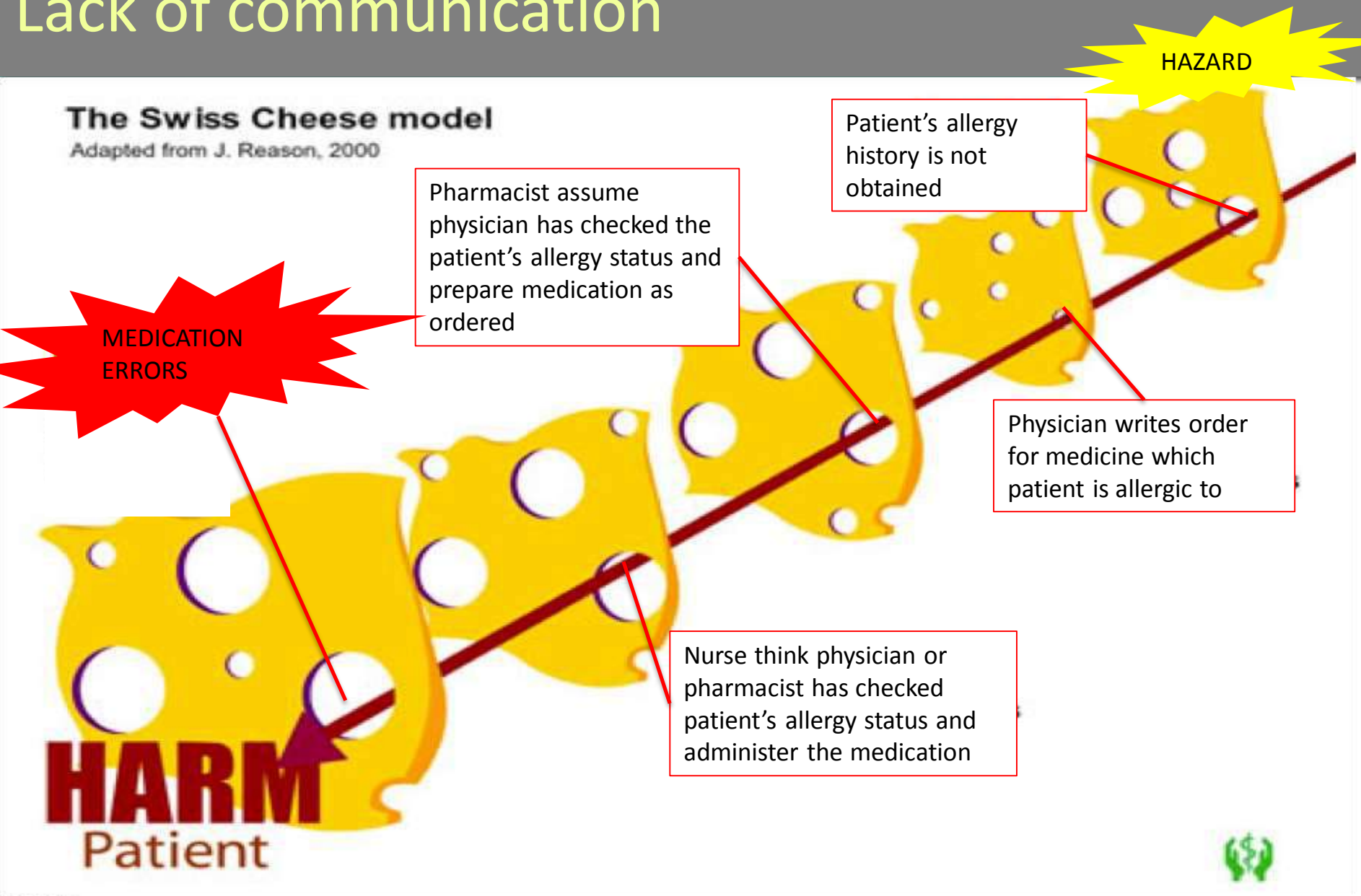
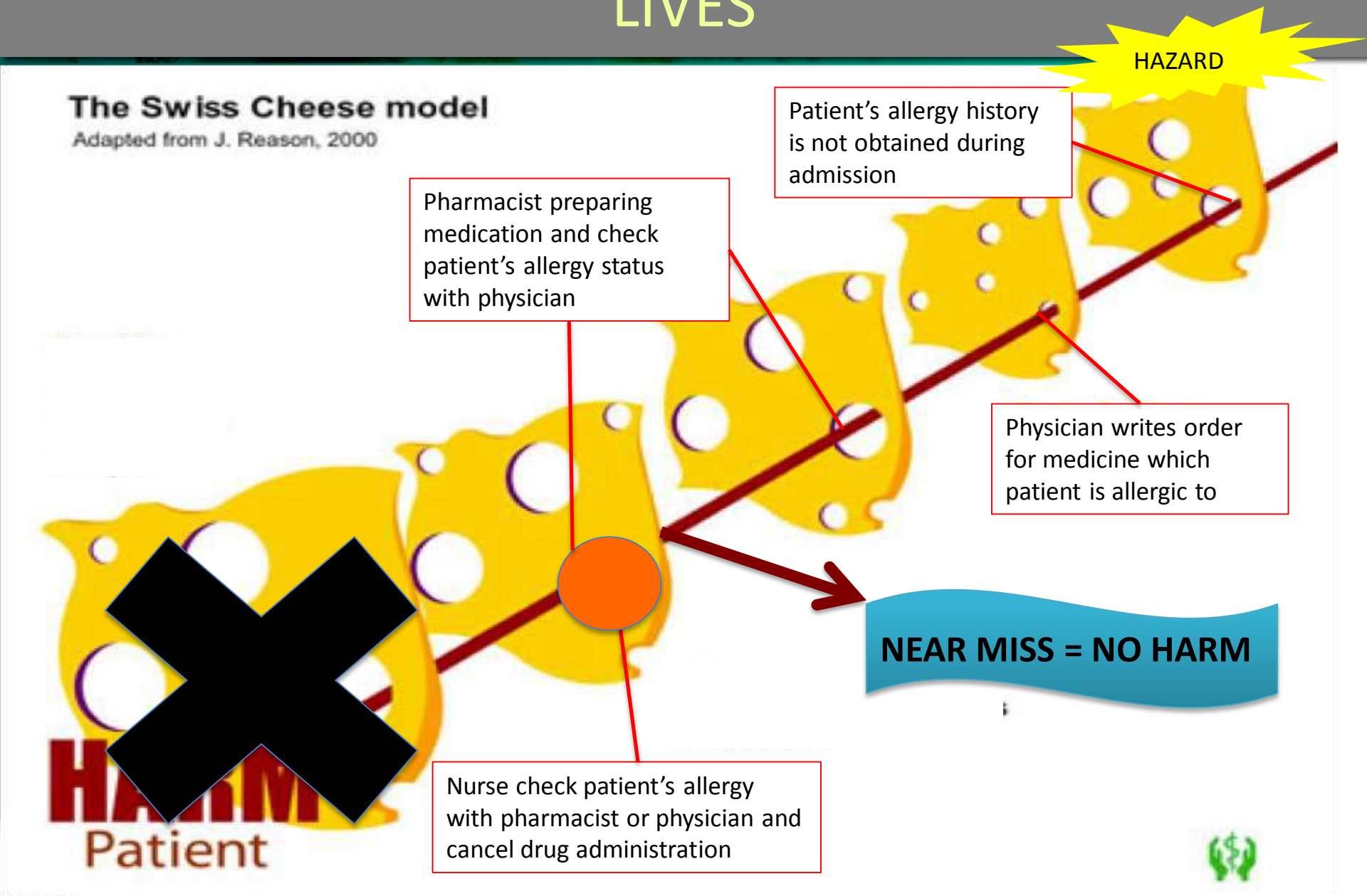
The "Swiss Cheese Model" of medication error: Lack of communication



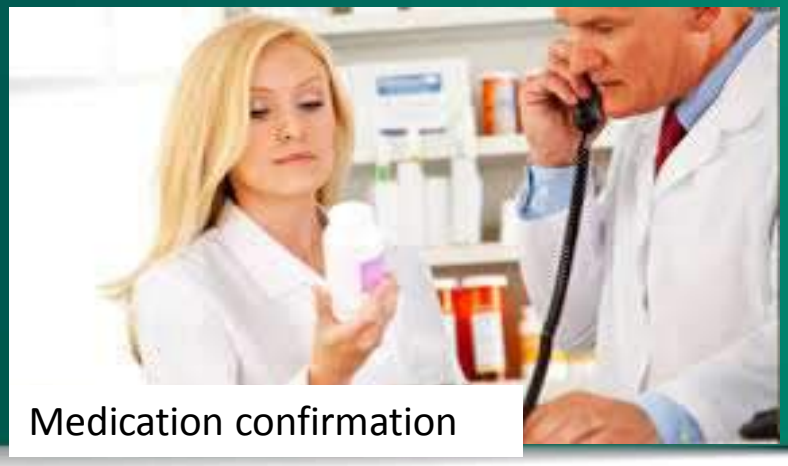
INTERPROFESSIONAL COLLABORATION DO SAVE LIVES



INTERPROFESSIONAL COLLABORATION

Case discussion

Sharing information



Medication confirmation

Double checking order and medication dose

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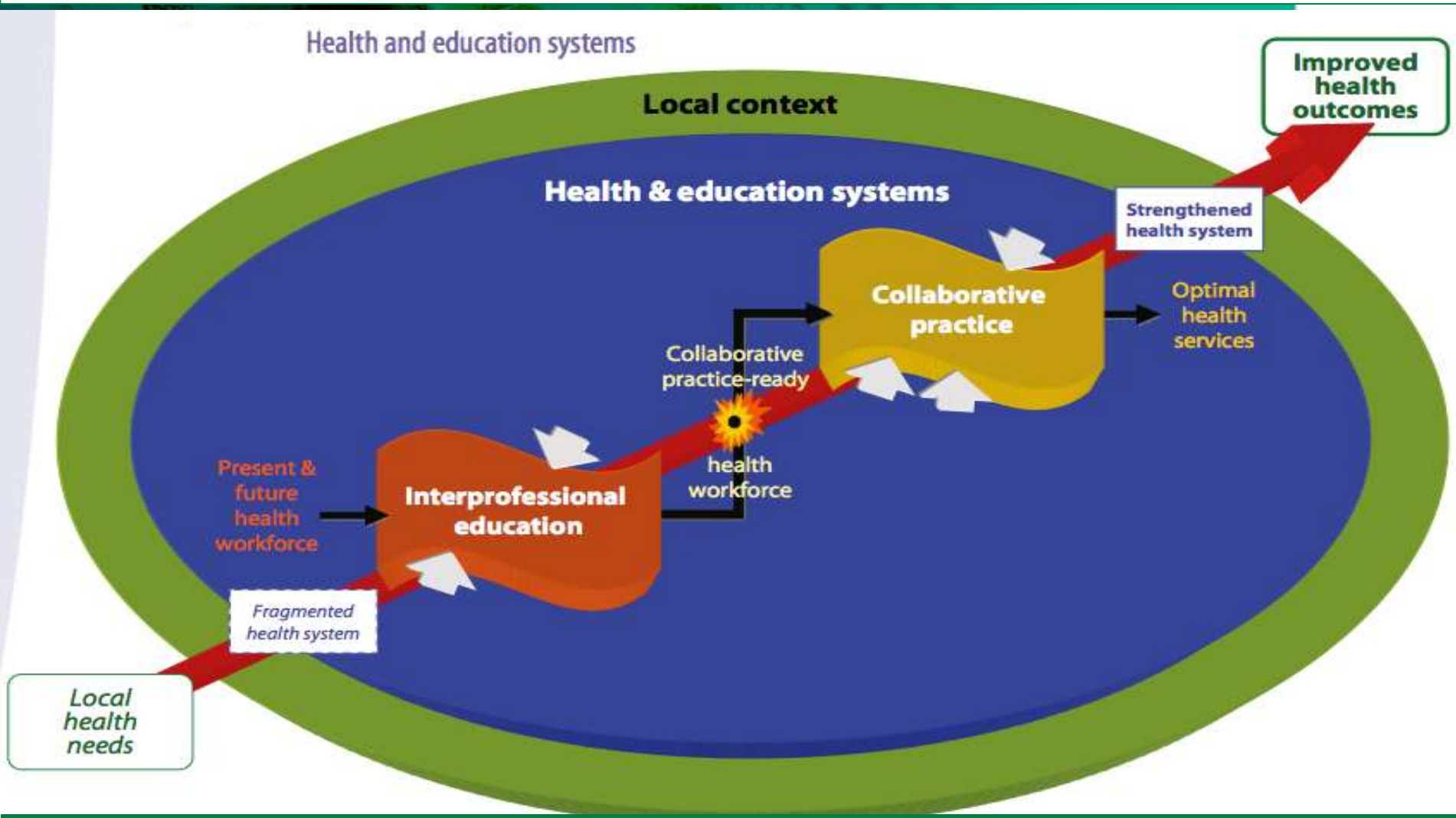
Colaborative practice improves patient safety

- Effective team communication and collaboration has significantly increased patient safety (Leonard et al, 2004)

Leonard M, Graham S, Bonacum D. The human factor: the critical importance of effective teamwork and communication in providing safe care. Qual Saf Health Care 2004;13(Suppl 1): i85–90.

Why not start earlier?



Interprofessional education is a necessary step in preparing a “collaborative practice-ready” health workforce (WHO,2010)

DEVELOPING COLLABORATIVE PRACTICE TROUGH INTERPROFESSIONAL EDUCATION

- “Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care” (CAIPE 2002).

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AIMS AND BENEFITS

- Improved quality and safety of patient care
- Greater understanding and respect for other disciplines
- Commonality of skills and knowledge between different health disciplines

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IPE IMPLEMENTATION: THE CHALLENGES

- Educators and accreditation bodies:
  - To design IPE content and practice that more tailored to the requirements of particular disciplines rather than being generic
  - To embed IPE across diverse health professional curricula and design assessment criteria

Source: Nicol, P (2013) Interprofessional education for health professional in Western Australia, University of Technology Sydney

IPE IMPLEMENTATION: THE CHALLENGES

- Professionals:
  - deficient or inaccurate knowledge of other disciplines
  - professional territorialism
  - limited evidence of the efficacy of IPE

Source: Nicol, P (2013) Interprofessional education for health professional in Western Australia, University of Technology Sydney

WHERE DO WE START?

- More information:

http://healthsciences.curtin.edu.au/faculty/ipe_about.cfm

http://www.ecu.edu.au/community/health-advancement/interprofessional-ambulatory- care-program/interprofessional-learning/ipl- through-simulation

http://units.handbooks.uwa.edu.au/units/ime d/imed8832

- Bench-marking?

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CONCLUSION

- Interprofessional collaboration is essential to minimize medication error and improve patient safety
- Early preparation for future collaborative practice necessitates IPE
- Some challenges may apply to implement IPE, gathering more information could be advantageous to find more suitable IPE models

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Patient safety is our responsibility

Keselamatan pasien adalah tanggung jawab kita bersama

THANK YOU

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