

What is a medication error?



WORKSHOP: Research methods in medication errors

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The challenge



A common definition (and interpretation) of medication errors is a prerequisite for research!

The challenges we face are:

- What defines a medication error?
- How do we agree on a common definition?



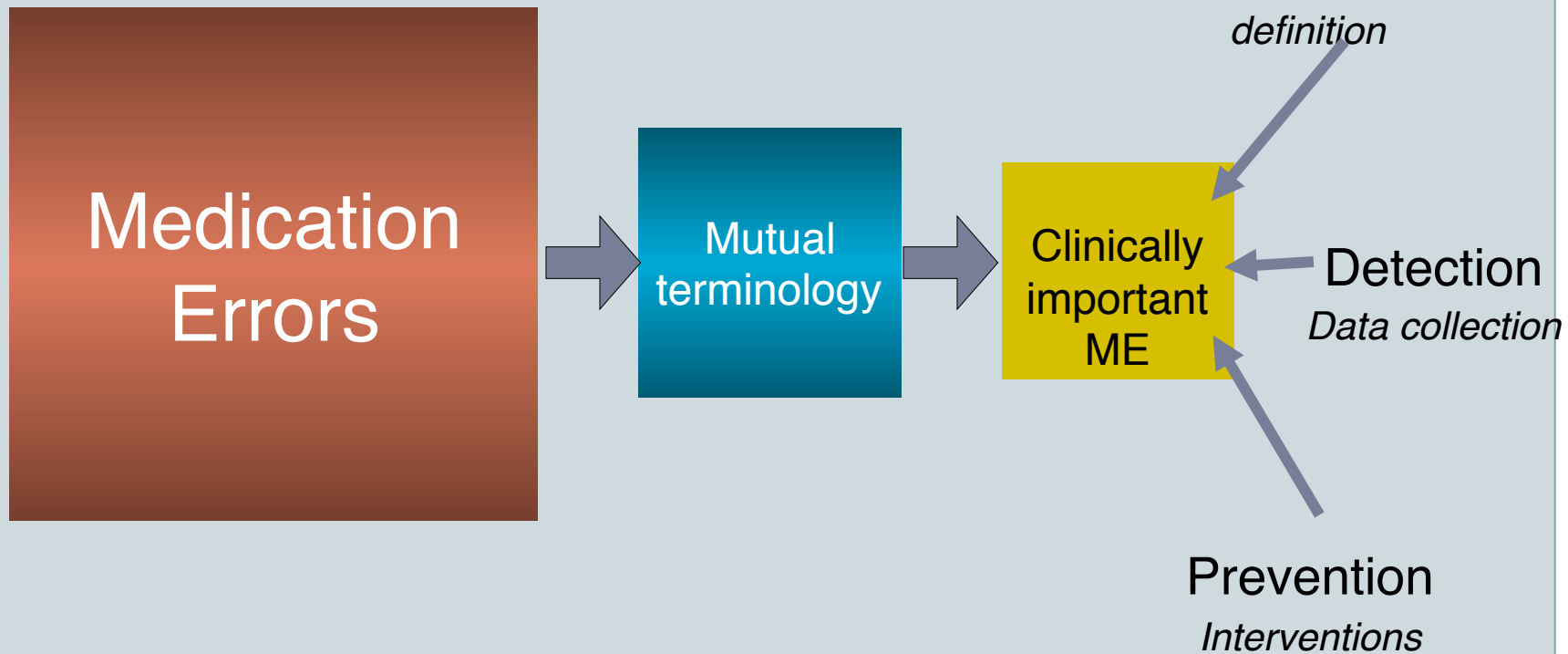
Multiplicity in terminology



- Preventable Adverse Drug Events
- Potential Adverse Drug Event
- Adverse Drug Reactions (ADR) caused by errors
- Drug-Related Problem
- Error
- Event
- Failure
- Mistake
- Deviation
- Rule violation
- Near miss

Medication errors

Need for change



How are medication errors defined?

A systematic literature review of definitions and characteristics

M. LISBY^{1,2}, L.P. NIELSEN^{2,3}, B. BROCK^{2,3} AND J. MAINZ^{4,5}

	"Error"	NCC-MERP ¹	"Failure"	"Deviation"	Other
Studies No.	15	17	5	5	3
Valid studies No.	15/15	1/17	0/5	5/5	1/3
Prevalence (%)	2-75	8	-	8-20	13

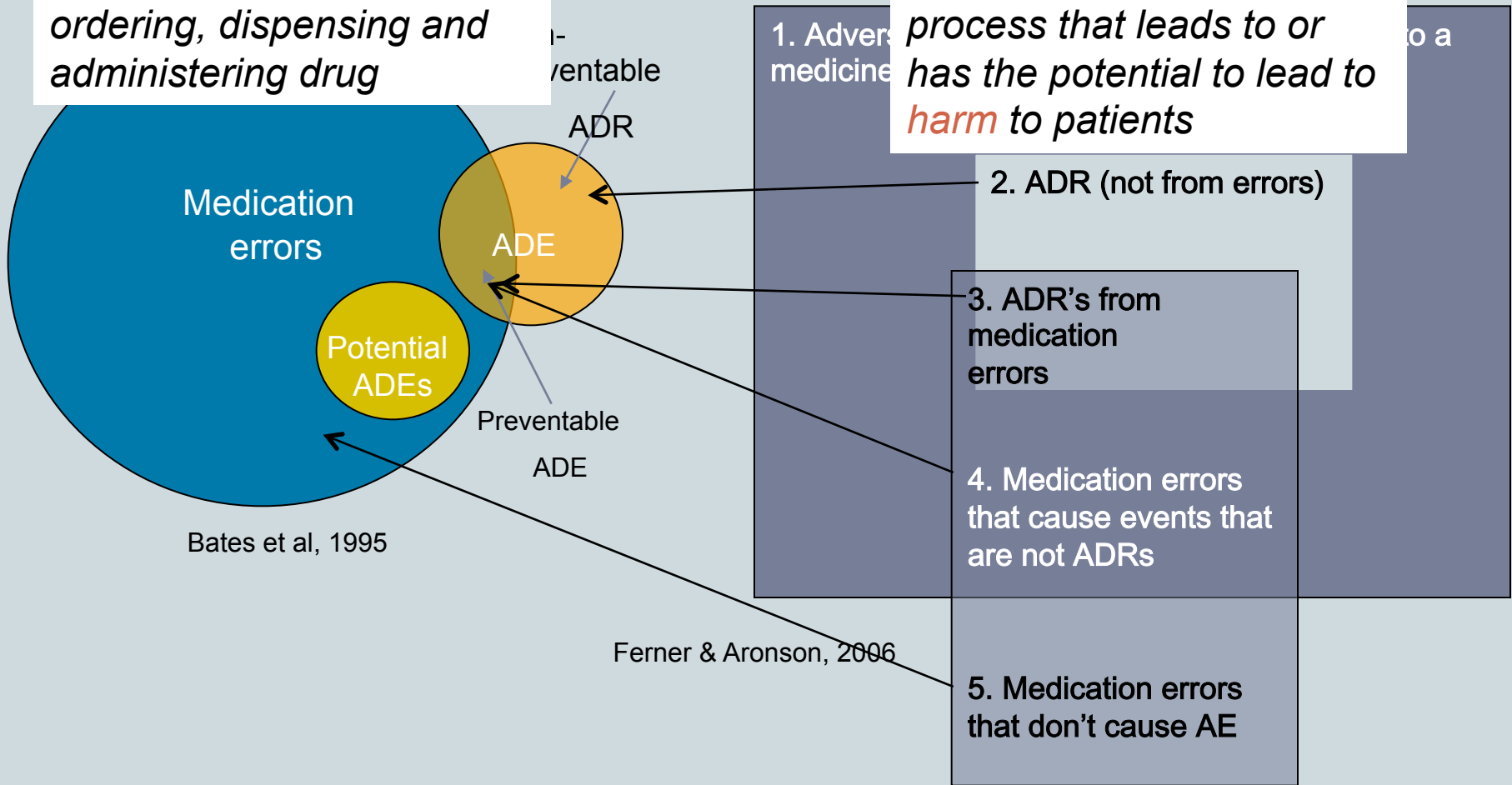
¹Any **preventable event** that may cause or lead to **inappropriate medication** use or patient **harm** while the medication is in control of the health care professional, patient or consumer. Such events may be related to professional practice, healthcare products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use." (NCC MERP)

Medication errors - context



Any error in the process of ordering, dispensing and administering drug

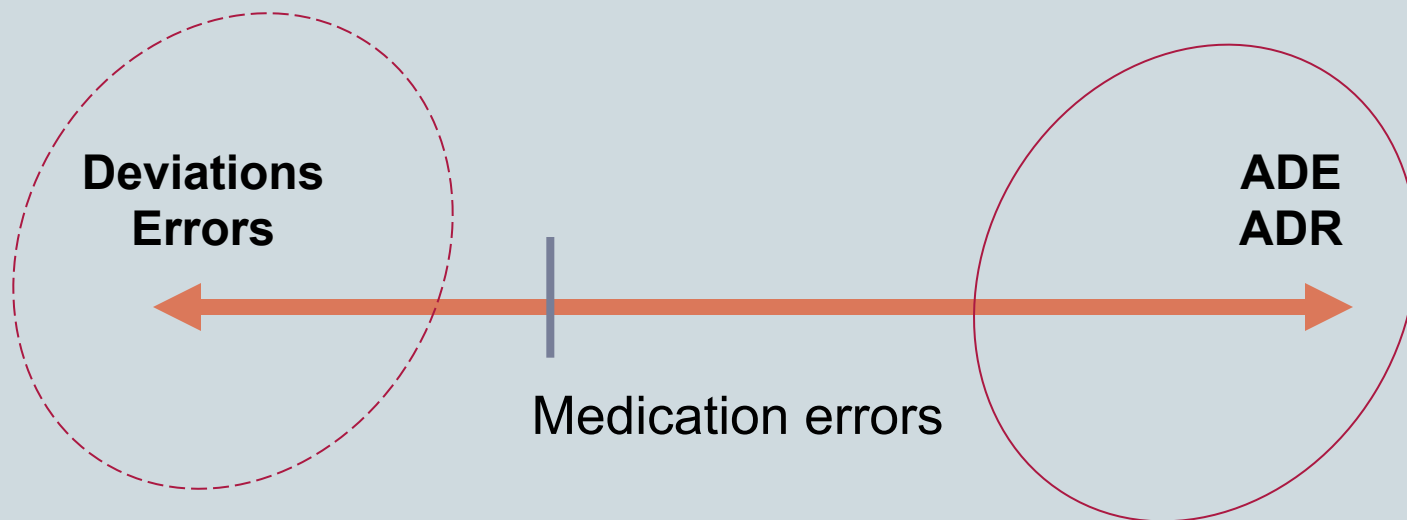
*A failure in the treatment process that leads to or has the potential to lead to **harm** to patients*



Scope

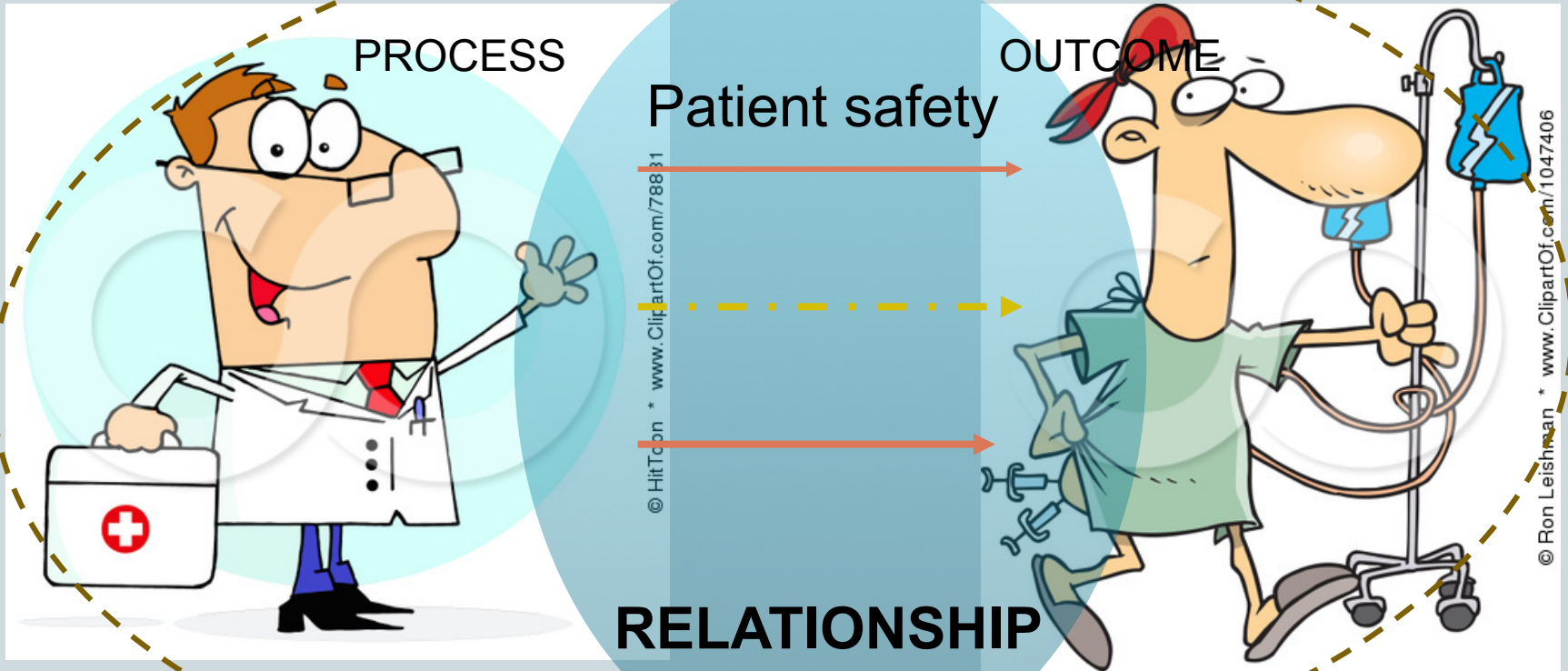


***Are all errors in the medication process
medication errors?***



Quality improvement & patient safety

Quality Improvement



How should medication errors be defined? Development and test of a definition

M Lisby, LP Nielsen, B Brock and J Mainz

Scand J Public Health published online 14 February 2012

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The online version of this article can be found at:

<http://sjp.sagepub.com/content/early/2012/02/14/1403494811435489>

Definition:

An **error** in the stages of the medication process - *ordering, transcribing, dispensing, administering and monitoring the effect* - **causing harm** or implying a **risk of harming** the patient

Application - prevalence:

Historic data (before):

- 665/1.942 (34.2%)



Application (after)

- 144/1.942 (7.4%)

RR:
78%

Does a definition matter?



Setting	Prevalence n/N (%)	Potential fatal n/N (%)
Somatic hospital <i>Lisby; Nielsen; Mainz, 2005</i>	144 / 1942 (7.4)	11 / 1942 (0.6)
Nursing home <i>Larsen, Lisby, Mainz, 2009</i> (In preparation)	83 / 1134 (7.3)	9 / 1134 (0.8)
Psychiatric hospital <i>Lykkegaard, Lisby; Mainz, 2010</i> (In preparation)	100 / 1333 (7.5)	4 / 1333 (0.3)

Questions for consideration



For an error to be a medication error should it:

- reach the patient?
- involve harm or likelihood of harming?
- directly involve processes related to medication?
- OR the quality improvement approach “include all errors”

Thanks - for your attention!

