

PATIENT SAFETY ANALYZING MEDICATION-RELATED ADVERSE EVENTS

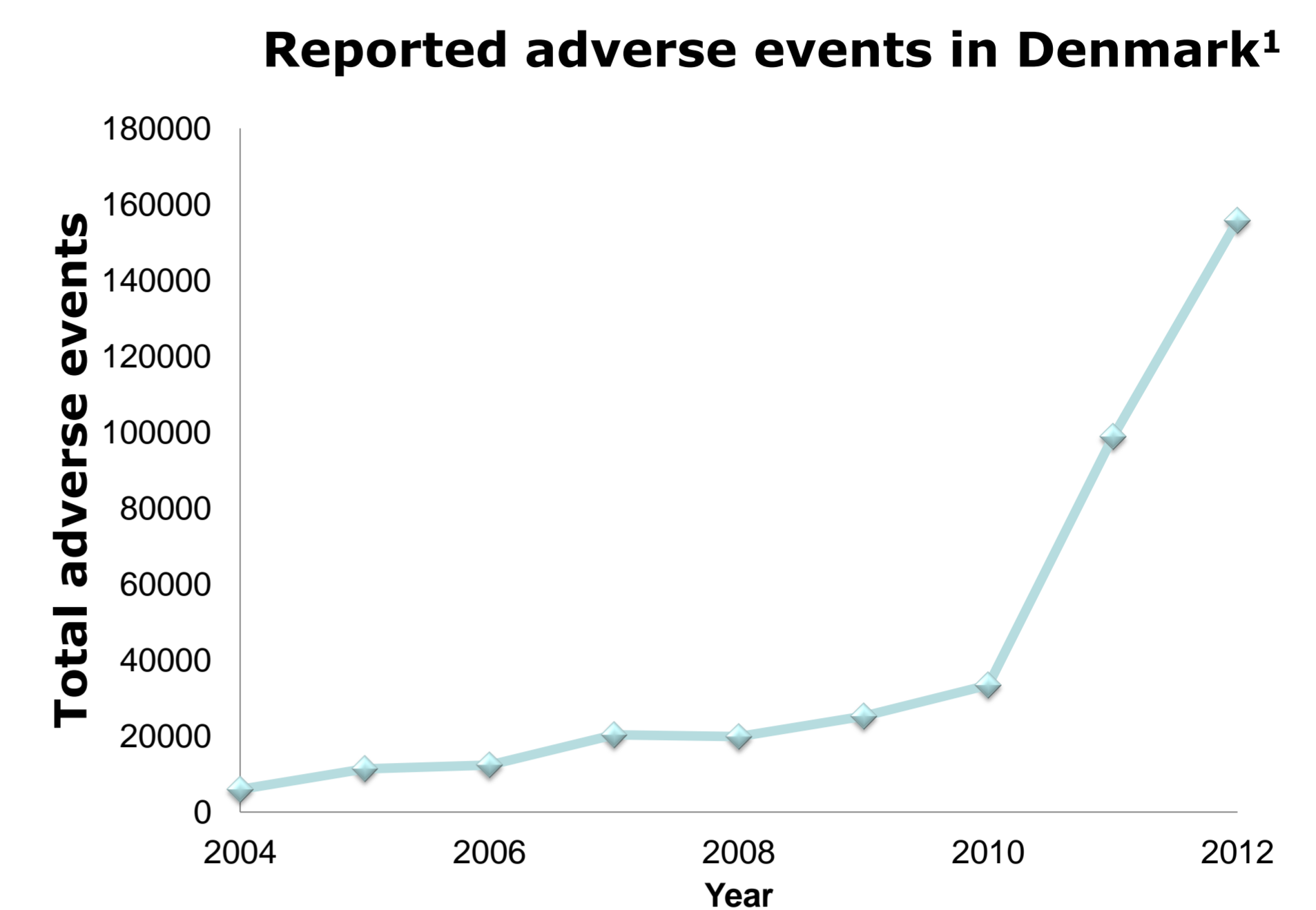
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Background

In Denmark frontline personnel are obligated to report adverse events to a national reporting system "The Danish Patient Safety Database":

- Hospital personnel since 2004
- Primary Care Sector since September 2010
- As of September 2011, it is also possible for patients and relatives to report adverse events (AE) to the database.

Medication-related AE are the most frequently reported AE¹.



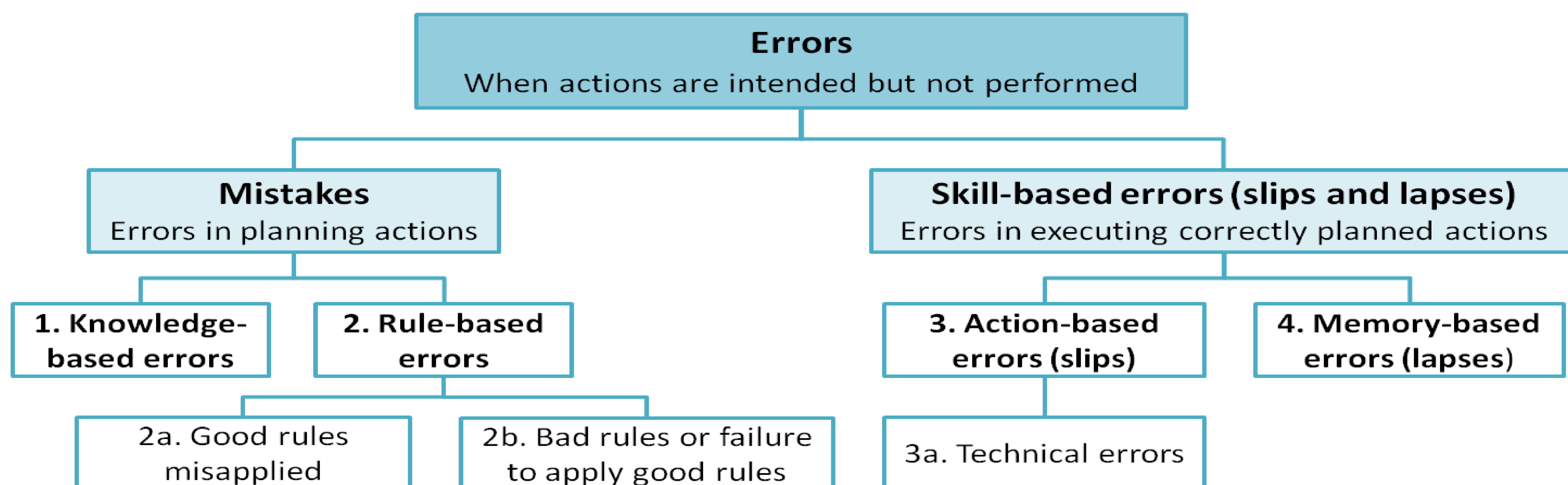
Objective

The aim was to analyze medication-related adverse events reported to "The Danish Patient Safety Database" in the hospitals in Region Zealand.

Method

The medication-related AE are categorized by the person reporting the AE using the WHO classification system available in "The Danish Patient Safety Database". The reported AE is subsequently analyzed by a clinical pharmacist.

The analysis is inspired by the classification system, proposed by Ferner & Aronson²:



Results

During the study period October 2011 – May 2012, 741 AE reports concerning events associated with medication in hospitals were filed in Region Zealand, i.e. an average of 93 events/month.

"The Danish Patient Safety Database" showed that the medication-related AE mainly categorized as prescribing (31%) and administration (29%), and some as dispensing (19%).

Results from Ferner & Aronson showed that 60% are rule-based errors, 31% action based errors, 8% knowledge based errors and 1% memory based errors.

The most frequent medication-related AEs:

- Prescription errors (9,4%)
- Wrong dose given (9,3%)
- Incongruence between data sets (8,2%)
- Lack of patient identification (7,7%)
- Prescribed medication not given (7,6%)
- Lack of medication reconciliation (7,0%)
- Wrong medication given (mix-up) (6,3%)

Discussion and conclusion:

The classification tool by Ferner & Aronson is useful in categorizing medication-related AE, and when categorized into subgroups, it can add to our knowledge about how errors may be prevented.

¹ National Agency for Patients' Rights and Complaints

² Ferner RE, Aronson JK. Clarification of Terminology in Medication Errors. Drug Safety 2006;29(11):1011-1022