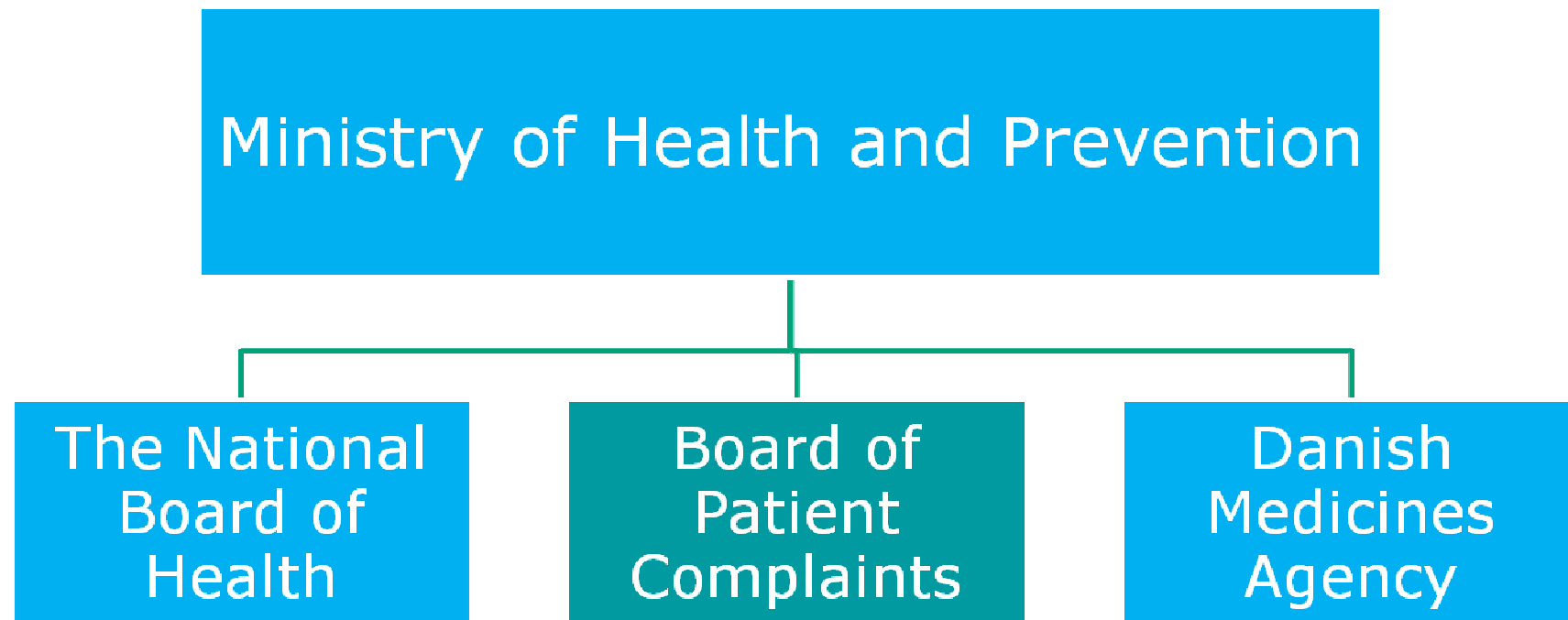




## Medication Safety

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## The Danish Authorities in Patient Safety



## On Medication Safety

- National Reporting System for Adverse Events
- Report on Risk Medication
- Binding Guidance on Prescribing and Handling of Medicine
- Focus Areas

## Act on Patient Safety in Danish Health Care System

- The Act came into force on 1st of January 2004
- Background:
  - danish and international adverse events studies
- The objective:
  - to improve patient safety in the health care system

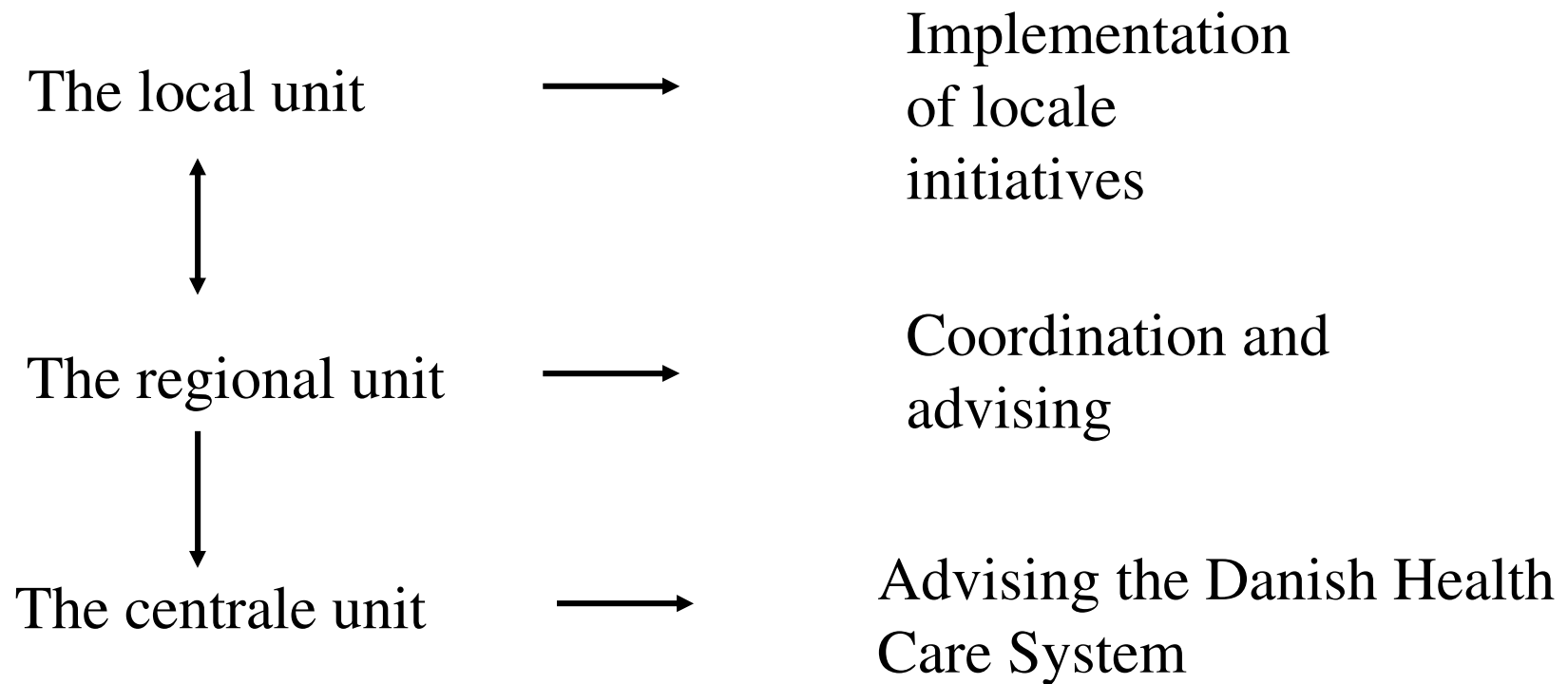
## Characterization of the reporting system

**Mandatory (hospitals)**

**Confidentiality**

**Sanction-free**

## Interaction of authorities



## Adverse events reported to the NBH in 2008

- **Total number reported: 19.866**
- **34 % (6.783) associated with medication**
- **19 % (3.757) concerned identification & communication**
- **10 % (2.087) concerned breaks in continuity**
- **12 % (2.475) concerned falls**

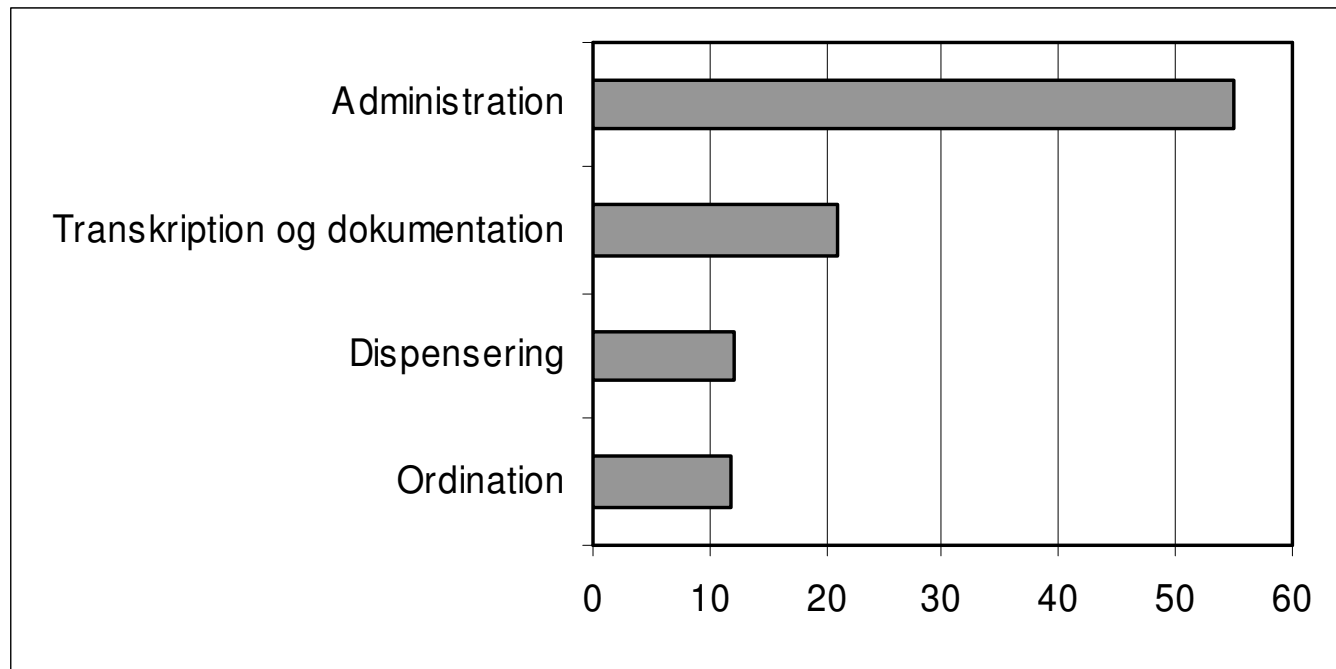
## Adverse events reported to the NBH in 2008

- 719 (4 %) concerned surgical/invasive procedures
- 159 (1 %) concerned suicide and attempted suicide
- 297 (1.5 %) anesthetic procedures
- 107 (0,5 %) cardiac arrest or unexpected death
- 3.482 (18 %) other types of event

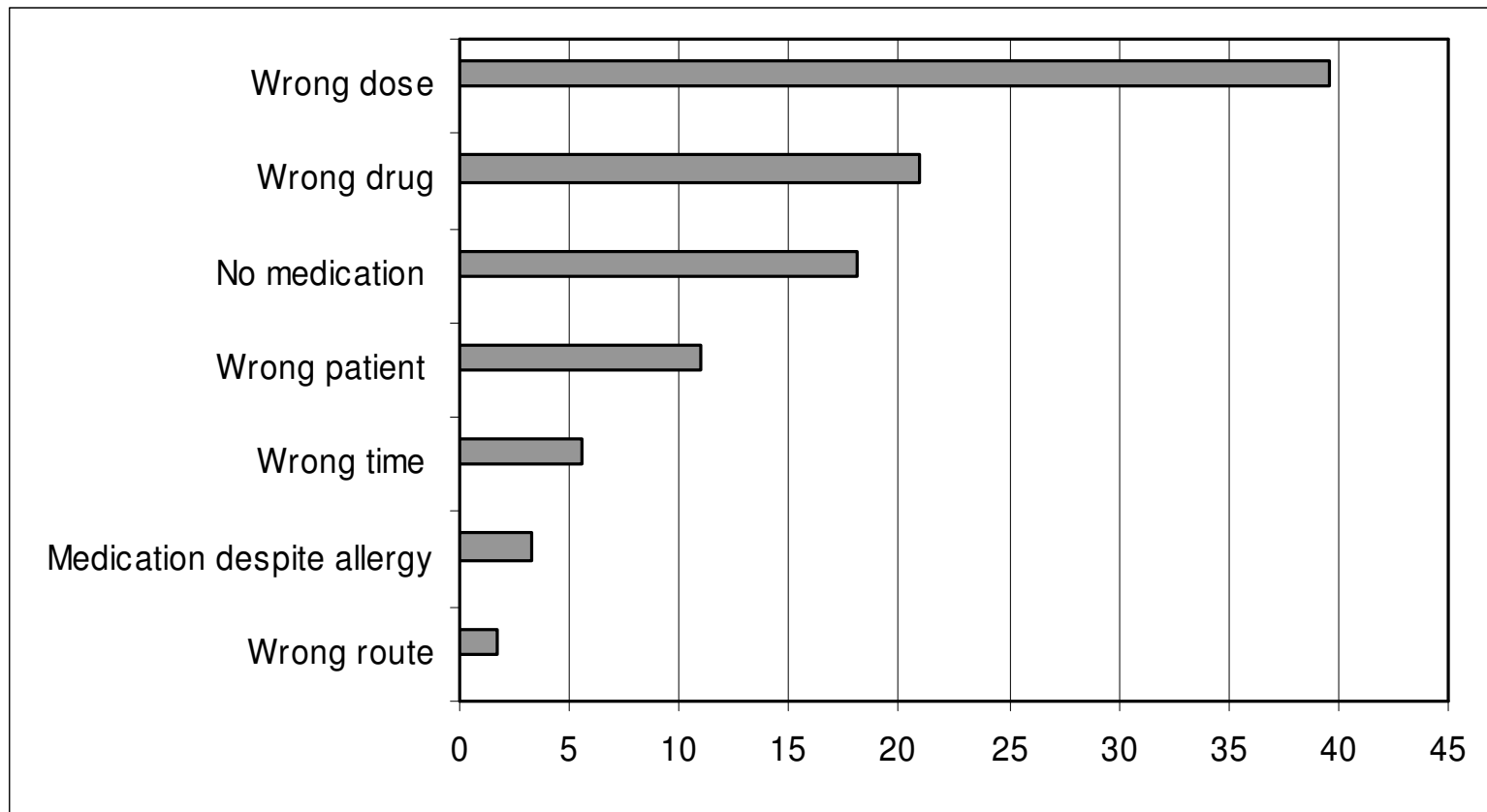
## Publications from the National Board of Health

- Categories
  - Newsletters
  - Alerts
  - Reports
  - Guidelines
  - National rules
  - Annual report

## Medication errors according to process



## Consequences



## Common contributors to Medication Error

- Unclear medical documentation
- Wrong identification of the patient
- Confusion of names and packages of the drugs
- Use of abbreviations
- Inconveniences of the EPM modules
- Mistakes of the user of the EPM modules

## Adverse events with EPM

- In about 2- 3 % of the reports concerning events associated with medication it is stated that the EPMs were involved.
- In about 50% of these reports inconveniences of the systems were reported
- In the other 50 % mistakes of the user of the system were reported

## Report on Risk Medication – 2007

- **Definition:**  
Medication resulting in factually or potentially serious adverse events
- Factually serious < 1 % of the reports
- Potentially serious 20 % of the reports

## Risk Medication

- **No different from the non-serious**
- **Many different drugs were involved**  
E.g. Cytostatica, Insulin and Antidiabetica
- **Local safety barriers!!**

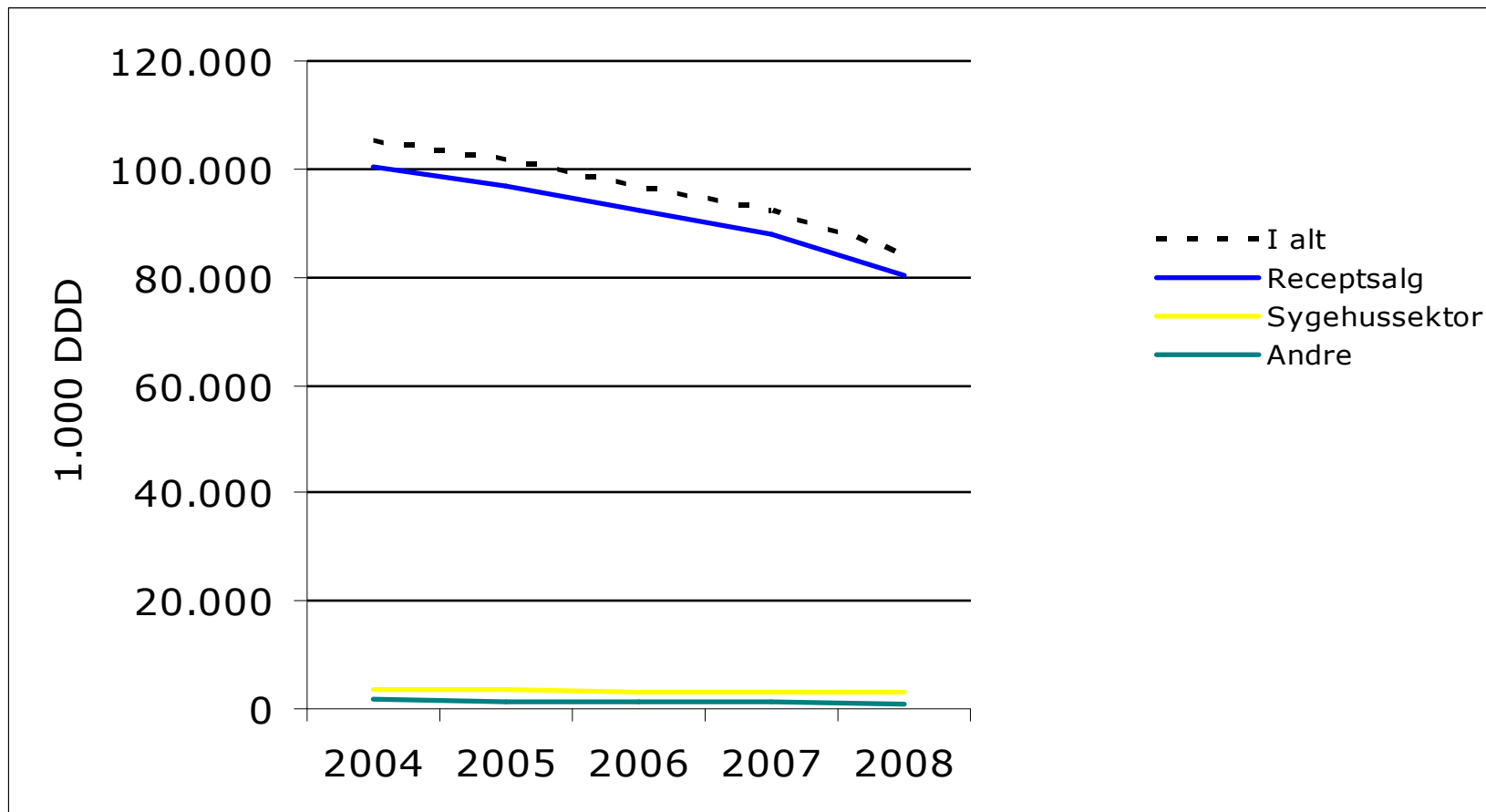
## Binding Guidance on Prescribing and Handling of Medicine

- **Responsibility**
  - Doctors Responsibility - doctors delegation
  - Health Personnel's Responsibility
  - Board's Responsibility
- **Rules for documentation**
- **Safe communication**

## Binding Guideline for Prescription of Dependence-producing drugs: Benzodiazepines

- Personal consultation – no phone prescription renewal
- As short as possible 1-2 weeks and usually not exceeding 4 weeks
- If the patient want to retain driving license only benzodiazepines with a half-life under 10 hrs

## Fall in the use off Benzodiazepines



## Use of Antipsychotic Medication

- 2006 Rapport :
  - To many patients were treated with more than to antipsychotic drugs at the same time
  - To many patients were treated with both antipsychotic drugs and benzodiazepines at the same time
- 2007 revised guideline

**Figur 1.** Totalforbrug af benzodiazepiner (N05BA, N05CD, N03AE) og benzodiazepinlignende lægemidler (N05CF) i 1.000 DDD fordelt på modtagere i år 200

## Fall in the Use of Dangerous Combinations

Antipsychotic drug and other medication within 30 days	18-34 years (N=4.498) <b>(N=5.625)</b>	35-49 years (N=8.288) <b>(N=9.636)</b>	50-64- years (N=2.151) <b>(N=8.371)</b>
Benzodiazepines	1.836 (40,8 %) <b>1.946 (34,6 %)</b>	3.943 (47,6 %) <b>4.078 (42,3 %)</b>	1.097 (51,0 %) <b>3.945 (47,1 %)</b>
Rivotril®	981 (21,8 %) <b>852 (15,1 %)</b>	1.766 (21,3 %) <b>1.755 (18,2 %)</b>	446 (20,7 %) <b>1.410 (16,8 %)</b>

## Focus Areas

- Identification
- Risk Medication
- Use of EPM
- Abbreviations
- Medication of Psychiatric Patients