



DANISH PATIENT
SAFETY AUTHORITY

The financial burden of Patient Safety Incidents and cost-effectiveness of patient safety interventions

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The financial burden of PSIs

- OECD report:
 - the financial burden coming from all categories of PSIs occurring in hospitals varies from 1,3% to 32% of public hospital spending
- EU report:
 - PSIs are responsible of 1% - 6% of all healthcare expenditures

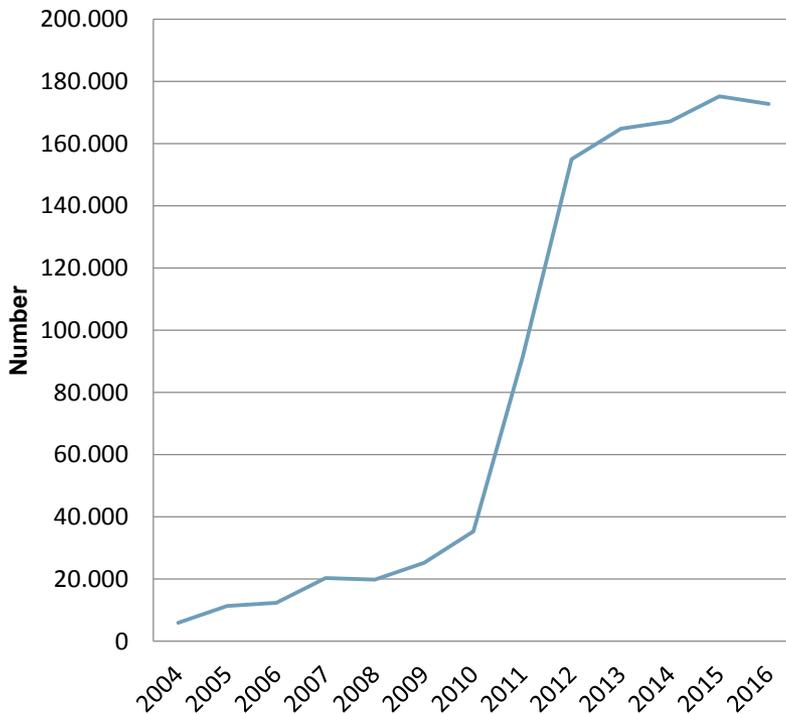
The extent of the problem

How many patients are affected by Patient Safety Incidents (PSIs)?

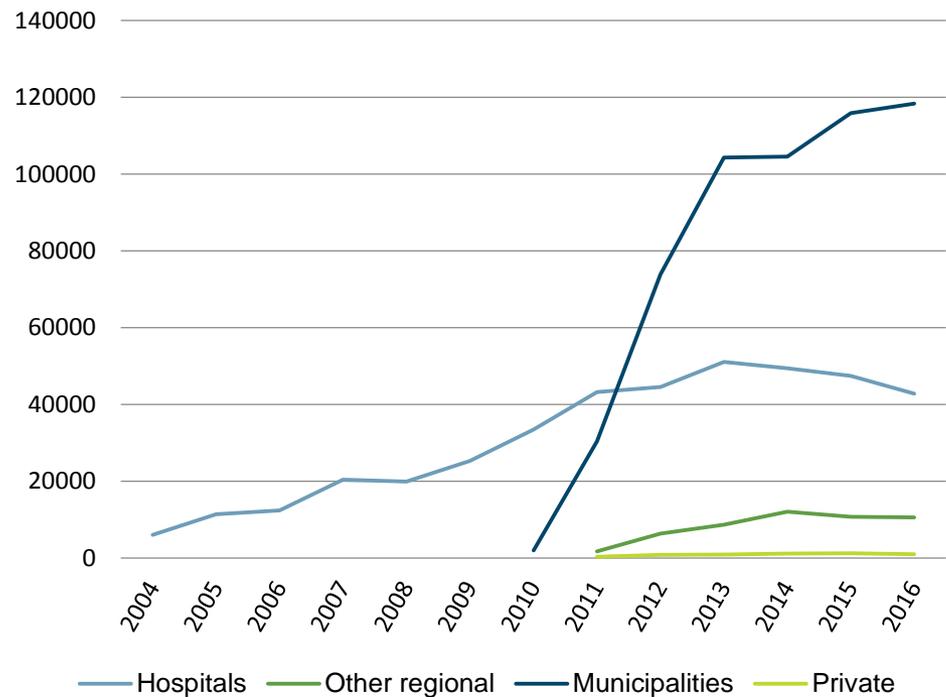
- Estimates vary
- ≈ 10 % of the hospitalized patients are harmed
- 30 – 70% of the PSIs are estimated to be preventable

The distribution of PSIs by incident location

The development of the total number of closed cases of PSIs from 2004-2016



The development of number of closed cases of PSIs from 2004-2016 (by incident location)



Frequent PSIs

- The most used category is:
 - Medication
- The second most used categories are:
 - Treatment and care
 - Test, examination and answers

Danish Patient Safety Database classification	Hospital	
	Number	Percent
Ambulances, helicopters and more	0	0
Other patient safety incident	2685	6
Treatment and care	5853	14
Blood and blood products	302	1
Gasses and air	133	0
Referral, hospitalisation/discharge and medication lists	4285	10
Infections	316	1
IT, infrastruktur, buildings and more	807	2
Surgical treatment incl. ECT, anesthesia and more	786	2
Medication incl. fluids	9896	23
Medical equipment, help supplies, x-ray and more	1278	3
Information hand over, responsibility, documentation	5936	14
Patient identification	1327	3
Patient accidents including fall and fire damage	1857	4
Pre-hospital treatment	0	0
Tests, examinations and test answers	5713	13
Self harm and suicide	345	1
Visitation and telephone consultation	1056	2
Not filled	222	1
Total	42797	100

The (potential) consequences of PSIs

For the patient...and the system

- Additional medical procedures, treatments and diagnostics
 - Incapable of working
 - Rehabilitation
 - Personal consequences
 - Admission or readmission to the hospital
 - Extension of the length of stay
- ⇒ Requires additional resources that exert a financial burden on the healthcare system

Prevention of Patient Safety Incidents

Is it cost-effective?

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OECD snapshot survey

Prevention of PSIs – Is it cost-effective?

- Expert panel chose between interventions from three categories
 - 1 System-level patient safety strategies
 - 2: Organisational and institutional level patient safety programs
 - 3: Clinical level patient safety practices

OECD snapshot survey

*Prevention of PSIs – Is it cost-effective? **INDIVIDUAL RATING***

- How would you rate the benefit of the given intervention?
 - Benefit = reducing patient harm
 - Scale: 1-5 (1=low impact on reducing patient harm, 5=high impact)
- How would you rate the costs of the given intervention?
 - Cost = impact on the aggregate healthcare budget
 - Scale: 1-5 (1=low impact on the aggregate healthcare budget, 5=high impact)
- **Clinical interventions were rated most cost-effective**

OECD snapshot survey

*Prevention of PSIs – Is it cost-effective? **PACKAGE RATING***

- List up to seven interventions that would – as a package applied across entire healthcare systems – generate the most impact per dollar invested.
- **6 of the 8 most selected interventions were from category 1**
- **2 of the 8 most selected interventions were from category 2**

Conclusion

- Many PSIs can be prevented
- Combination of system/organisation- and clinical interventions assessed as most cost-effective
- Reporting system is the groundwork of local clinical interventions
- Division of roles makes cost-effective learning and patient safety



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A photograph of two hands clasped together, overlaid with a blue tint. The hands are positioned in the center of the frame, with fingers interlaced. The background is a soft-focus, light-colored fabric, possibly a hospital gown or bedsheet.

Thank you

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