



**SIP**

Societal Impact of Pain

**2017**

**Structured Cooperation  
between Health Care  
Systems tackling the  
societal impact of pain!**

- **Monique Steegers, MD, PhD, FIPP, jPL, AssProf**
- **Registrar of the World Institute of Pain**
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Pain as health care indicator -  
national survey and secondary  
data analysis

Malta June 8th 2017

# Disclosure Statement of conflict of interest in the context of the subject of this presentation

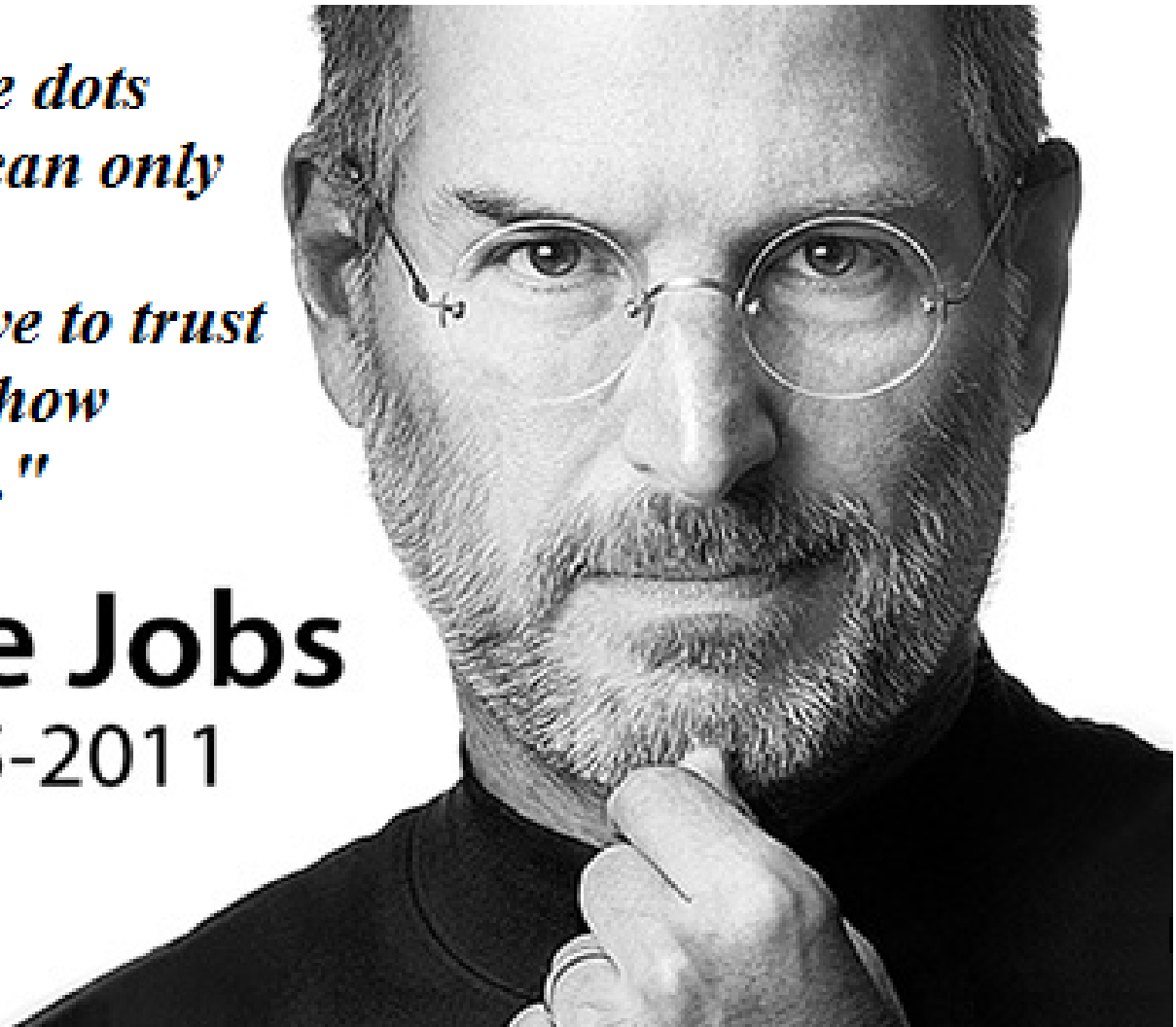


**Within the past 12 months, I or my spouse/partner have had following financial interest/arrangement(s) or affiliation(s)**

- **Support for travel** YES
- **Honoraria for lectures** NO
- **Honoraria for advisory board activities** NO
- **Participation in clinical trials** NO
- **Research funding** NO
- **Financial shares and options** NO

*"You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future."*

**Steve Jobs**  
1955-2011



# Adverse events and potentially preventable deaths in Dutch hospitals: results of a retrospective patient record review study

M ZEGERS,<sup>1</sup> M C DE BRUIJNE,<sup>2</sup> C WAGNER,<sup>1,2</sup> L H F HOONHOUT,<sup>2</sup> R WAAIJMAN,<sup>2</sup> M SMITS,<sup>1</sup> F A G HOUT,<sup>2</sup> L ZWAAN,<sup>2</sup> I CHRISTIAANS-DINGELHOFF,<sup>2</sup> D R M TIMMERMANS,<sup>2</sup> P P GROENEWEGEN,<sup>1</sup> G VAN DER WAL<sup>2</sup>

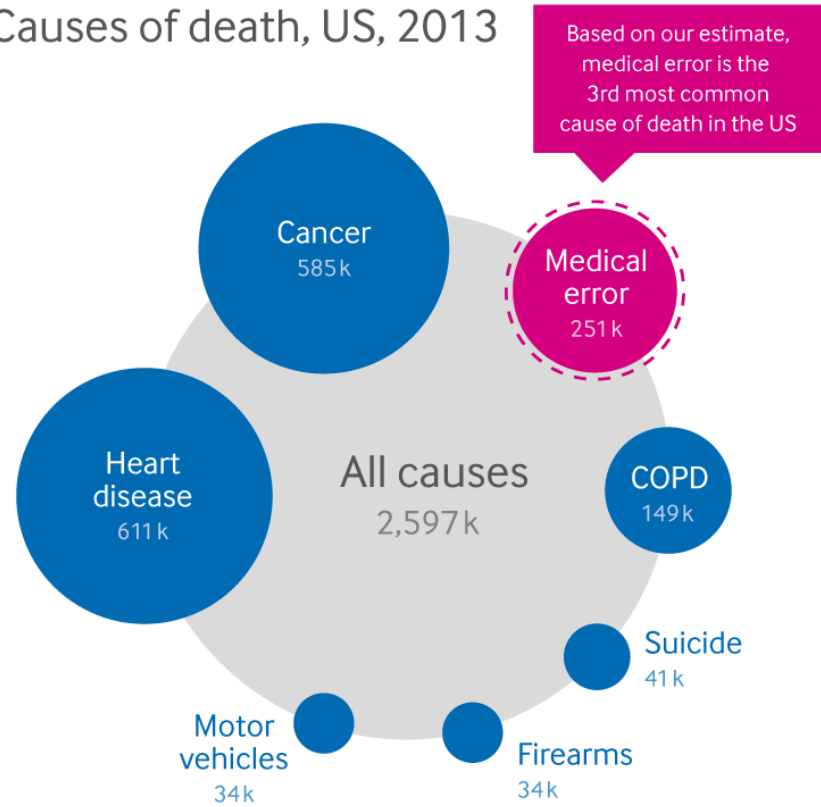
<sup>1</sup> NIVEL, Netherlands Institute for Health Services Research, Utrecht, the Netherlands;

<sup>2</sup> EMGO Institute, VU University Medical Centre, Amsterdam, the Netherlands

Correspondence to: M Zegers, NIVEL, Netherlands Institute for Health Services Research, PO Box 1568, 3500 BN Utrecht, the Netherlands; [m.zegers@nivel.nl](mailto:m.zegers@nivel.nl)

Qual Saf Health Care 2009;18:4 297

# Causes of death, US, 2013



However, we're not even counting this - medical error is not recorded on US death certificates

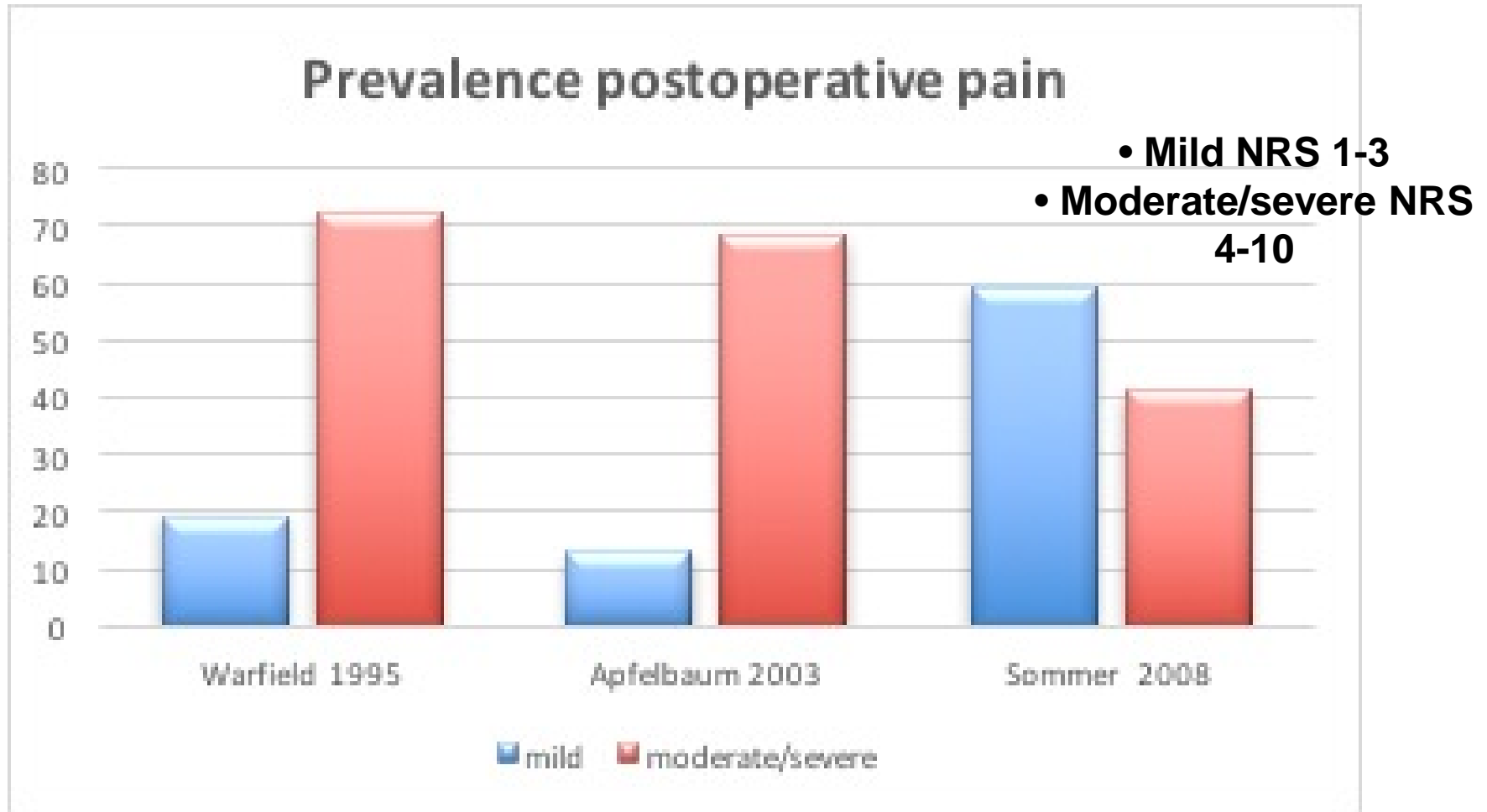
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Data source: [http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64\\_02.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf)

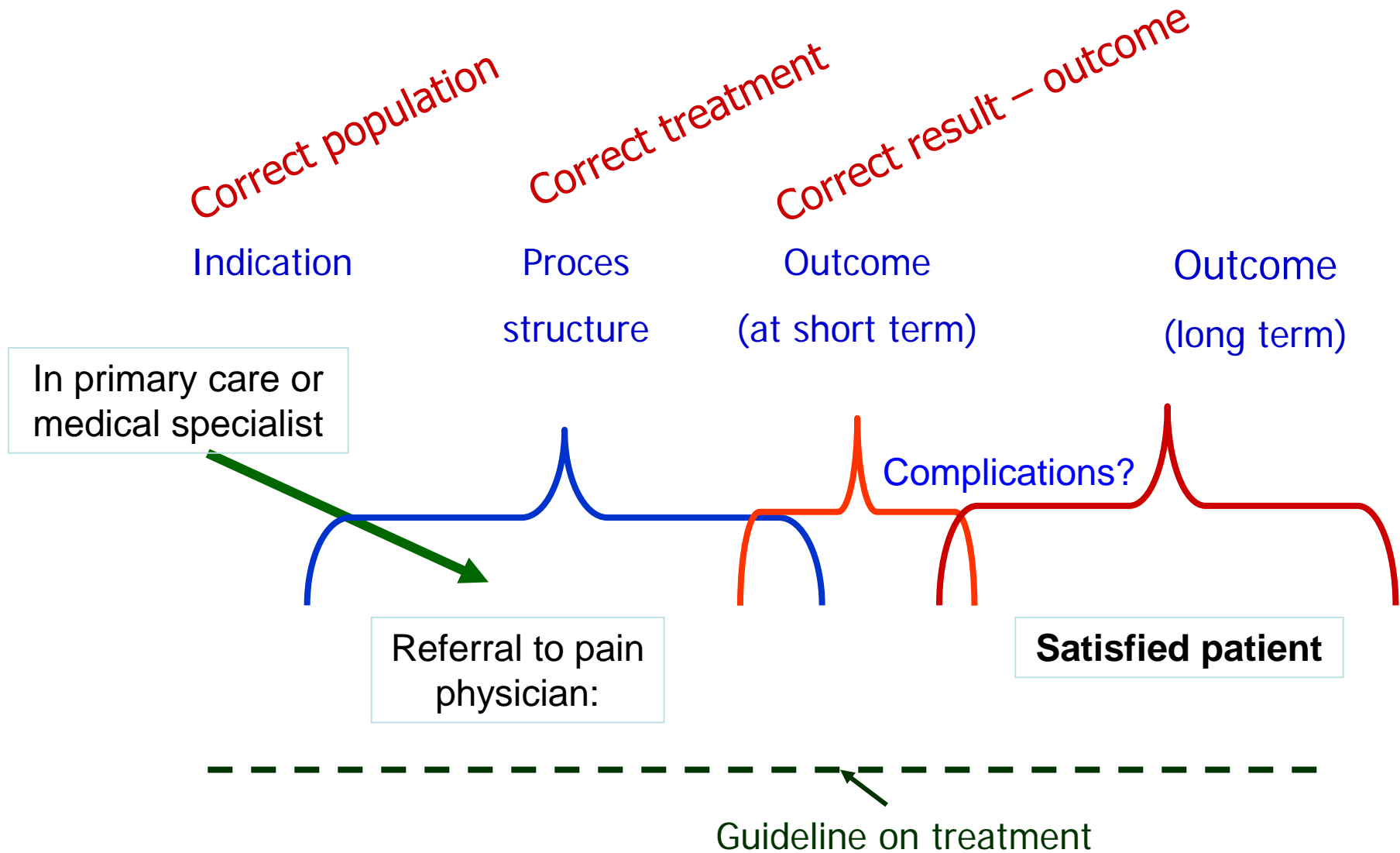
[BMJ](#). 2016 May 3;353:i2139. doi: 10.1136/bmj.i2139.  
**Medical error-the third leading cause of death in the US.**  
[Makary MA](#)<sup>1</sup>, [Daniel M](#)<sup>2</sup>.

# Prevalence of Postoperative Pain



- [Anesthesiology](#). 1995 Nov;83(5):1090-4. **Acute pain management. Programs in U.S. hospitals and experiences and attitudes among U.S. adults.** [Warfield CA<sup>1</sup>](#), [Kahn CH](#).
- [Anesth Analg](#). 2003 Aug;97(2):534-40, table of contents. **Postoperative pain experience: results from a national survey suggest postoperative pain continues to be undermanaged.** [Apfelbaum JL<sup>1</sup>](#), [Chen C](#), [Mehta SS](#), [Gan TJ](#).
- [Eur J Anaesthesiol](#). 2008 Apr;25(4):267-74. Epub 2007 Dec 6. **The prevalence of postoperative pain in a sample of 1490 surgical inpatients.**  
[Sommer M<sup>1</sup>](#), [de Rijke JM](#), [van Kleef M](#), [Kessels AG](#), [Peters ML](#), [Geurts JW](#), [Gramke HF](#), [Marcus MA](#).

# What do we want to measure?



# Dutch National Patient Safety Program (VMS Veiligheidsprogramma)



## **Structure indicator**

- Protocol for pain
- Educational program for pain
- Acute pain service

## **Process indicator**

- % of pain score measurements in all hospitalized patients

## **Outcome indicator**

- The same as the inspectorate



Process indicator=

The percentage of standardized pain score measurements in postoperative patients

Outcome indicator=

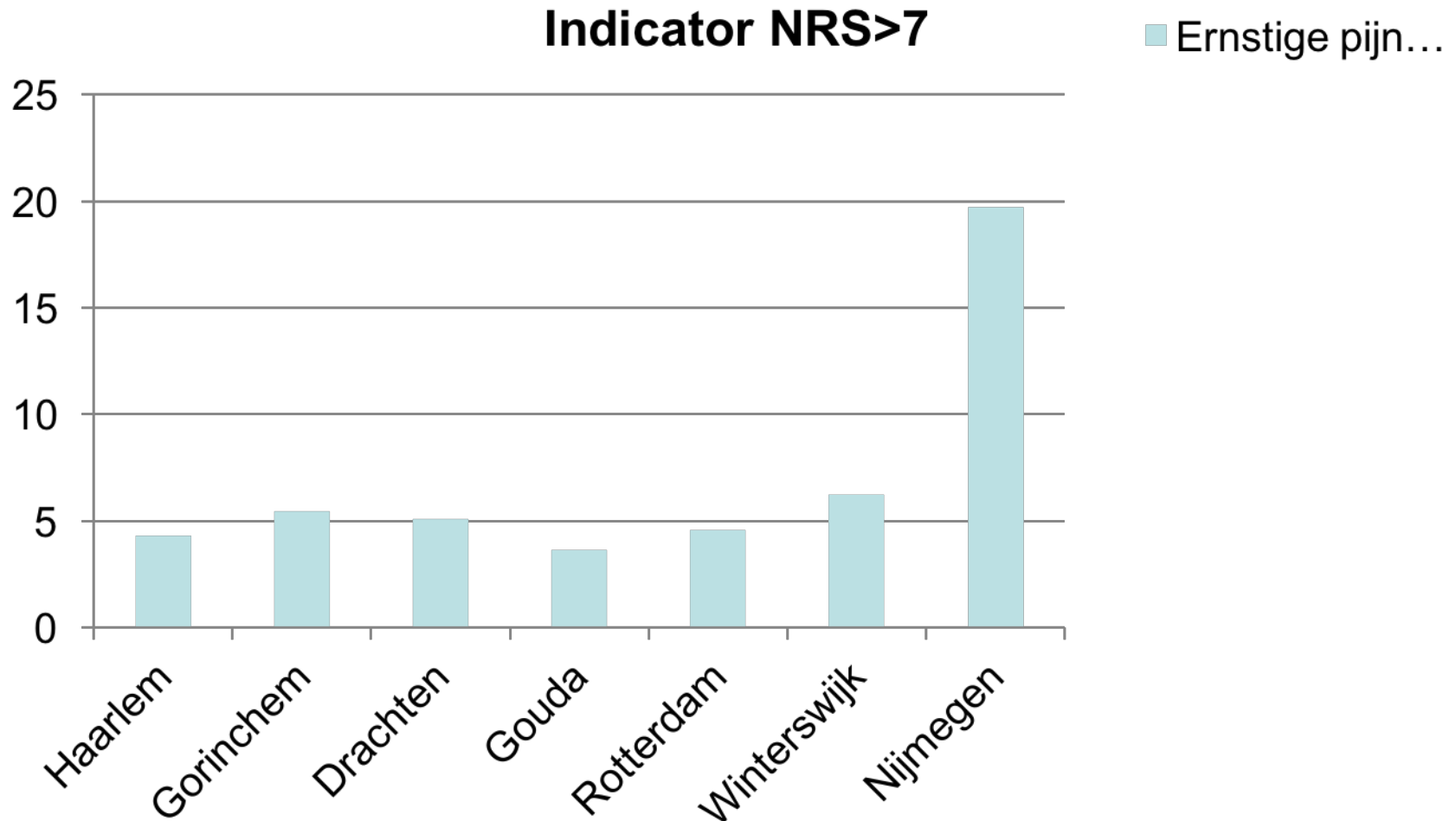
The percentage of patients with a pain score above 7 in the first 72 hours after the operation



**AD** **ZIEKENHUIS**  
**TOP 100**



# Percentage NRS >7 serious pain (outcome indicator)



# Postoperative pain assessment in hospitalised patients: National survey and secondary data analysis

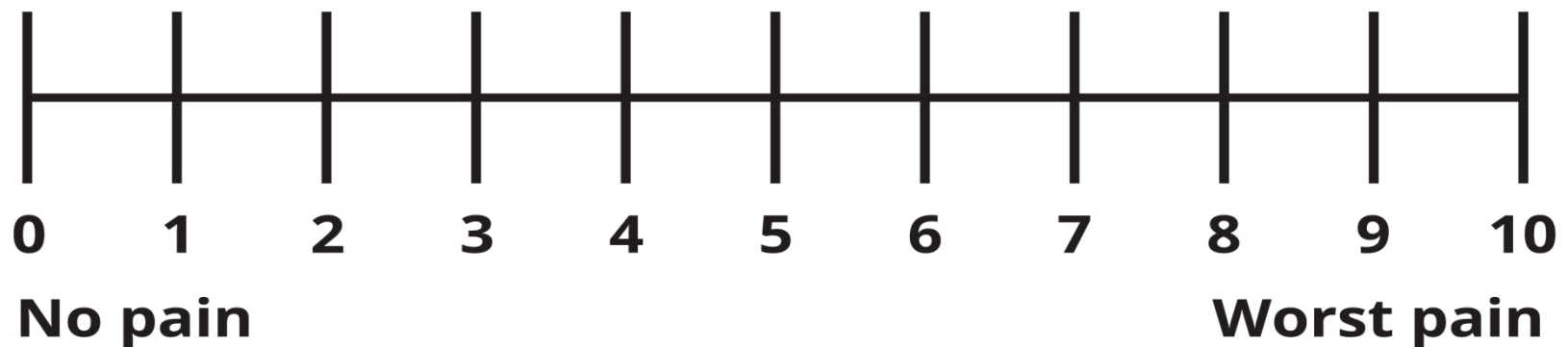
**3895 patiënt records from 16 hospitals  
(=process indicator)**

- 12% measured 3 times a day
- 53% once a day

[Hoogervorst-Schilp J](#)<sup>1</sup>, [van Boekel RL](#)<sup>2</sup>, [de Blok C](#)<sup>3</sup>, [Stegers MA](#)<sup>4</sup>, [Spreeuwenberg P](#)<sup>5</sup>,  
[Wagner C](#)<sup>6</sup>.

[Int J Nurs Stud.](#) 2016 Sep 4;63:124-131. [Epub ahead of print]

# Point 1: How do you measure?



**Rate your pain or pain relief from 0-10**

# Point 2: Wich moment do you measure?

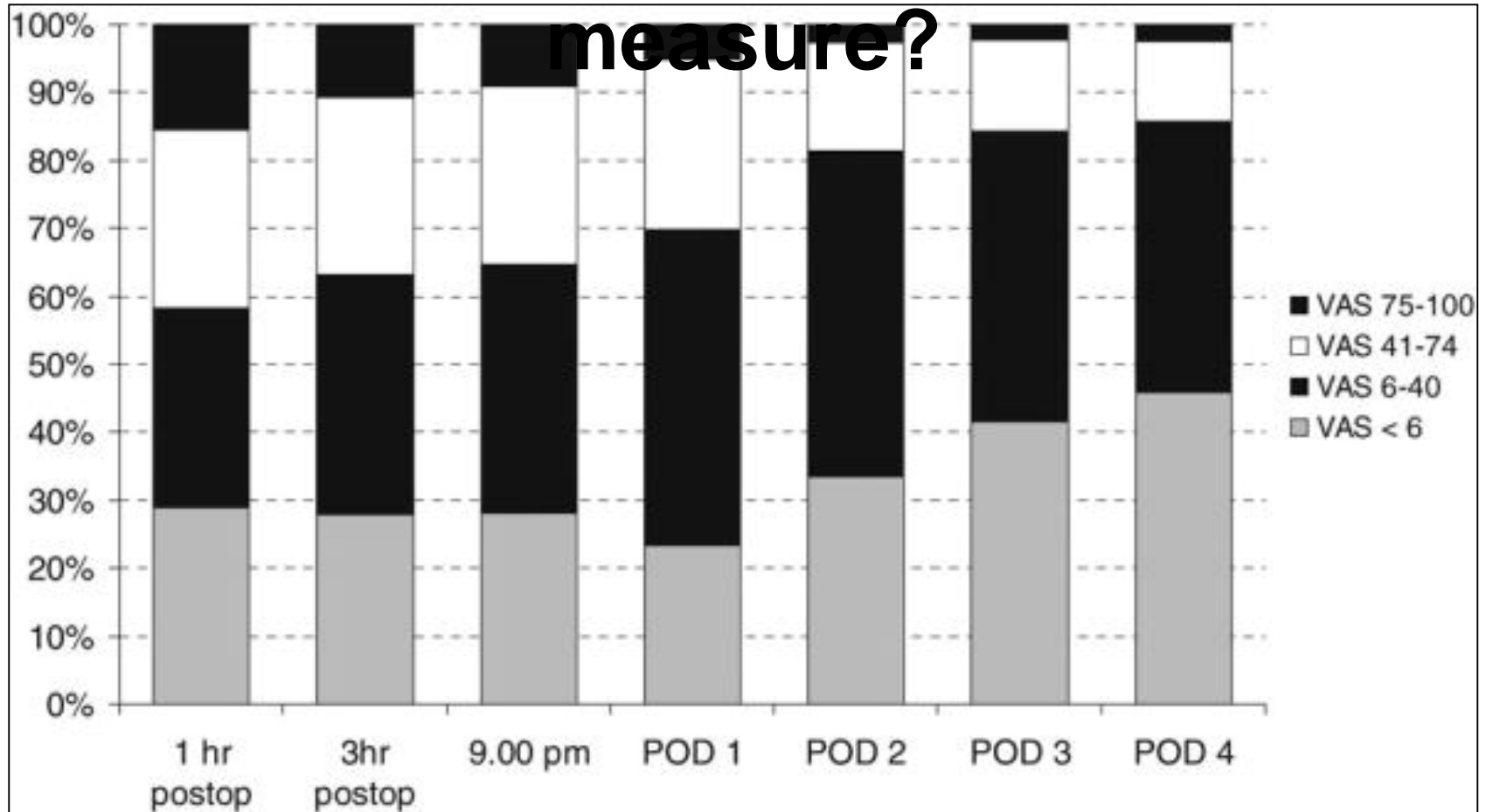


Figure 1. Distribution of pain at rest (visual analogue scale) on the day of surgery (1 and 3 h postoperatively and at 9.00p.m.) and mean pain on postoperative days (PODs) 1-4.

**The prevalence of postoperative pain in a sample of 1490 surgical inpatients.**  
 Sommer, M; de Rijke, J; van Kleef, M; Kessels, A; Peters, M; Geurts, J; Gramke, H-F; Marcus, M  
 European Journal of Anaesthesiology. 25(4):267&hyphen;274, April 2008.

# Point 3: Measuring , in rest or with movement?

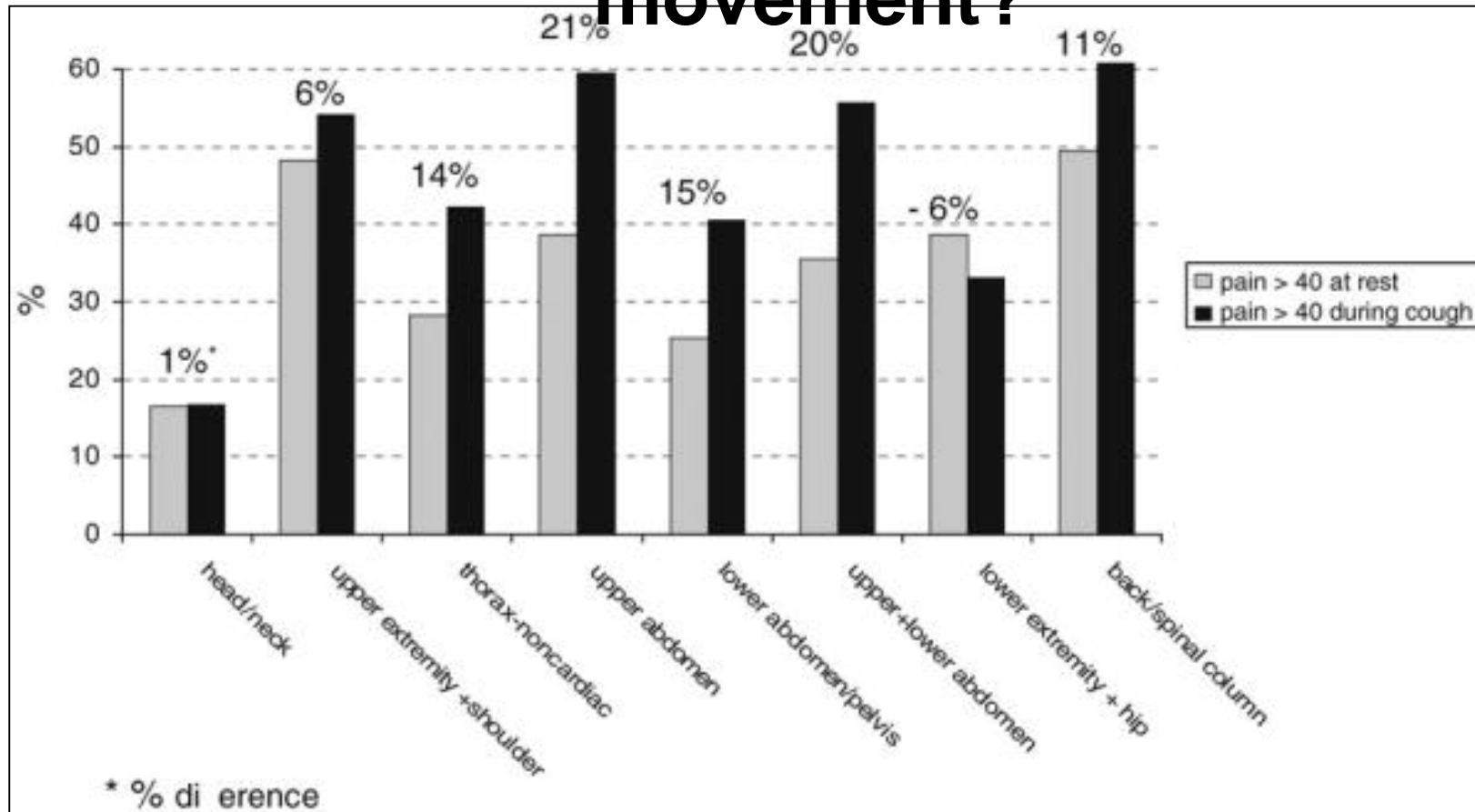


Figure 2. Distribution of patients with a mean pain at rest of >40 (visual analogue scale, VAS) and mean pain during coughing of >40 (VAS) on postoperative day 1 in relation with anatomical site.

### The prevalence of postoperative pain in a sample of 1490 surgical inpatients.

Sommer, M; de Rijke, J; van Kleef, M; Kessels, A; Peters, M; Geurts, J; Gramke, H-F; Marcus, M  
European Journal of Anaesthesiology. 25(4):267&hyphen;274, April 2008.

Connecting and disconnecting the dots

**> Compliance to measurement of pain is not as high as hospitals claim**

**> Standardization is important, how , which moment and when to measure?**



- Measurement is important for improving quality of care!
- Standardize what you want to measure
- Which indicators reliably measure quality of pain care?
- Quality indicators are important to improve pain care for internal use and for benchmarking with other hospitals
- Quality indicators in the Netherlands collected by the health care Inspectorate are public and not that reliable<sup>1</sup>, these indicators are debatable in the use of pain care improvement

1. Postoperative pain assessment in hospitalised patients: National survey and secondary data analysis, [Hoogervorst-Schilp J<sup>1</sup>](#), [van Boekel RL<sup>2</sup>](#), [de Blok C<sup>3</sup>](#), [Steegers MA<sup>4</sup>](#), [Spreeuwenberg P<sup>5</sup>](#), [Wagner C<sup>6</sup>](#). [Int J Nurs Stud.](#) 2016 Sep 4;63:124-131. [Epub ahead of print]

Proposal

Every year

## European week of uniform pain measurement

### ✓ Postoperative pain (short term)

NRS rest and movement

Functioning  
acceptable

### ✓ Chronic postoperative pain in the patients who were operated 6 months before (long term)

Bent u ook  
benieuwd hoe  
pijngevoelig  
u bent?

**Pijn**

Doe dan nu mee!  
Groot  
Nationaal  
Onderzoek

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