

**Geneva Forum:
Towards Global Access to Health
Geneva, 30 Aug - 1 Sept 2006**

**Redesigning Hospital Care
to meet the needs
of the community**

Plenary IV

Thursday 31 August 2006
Wim Schellekens, MD, MPH

Questions of this plenary:

Hospitals:

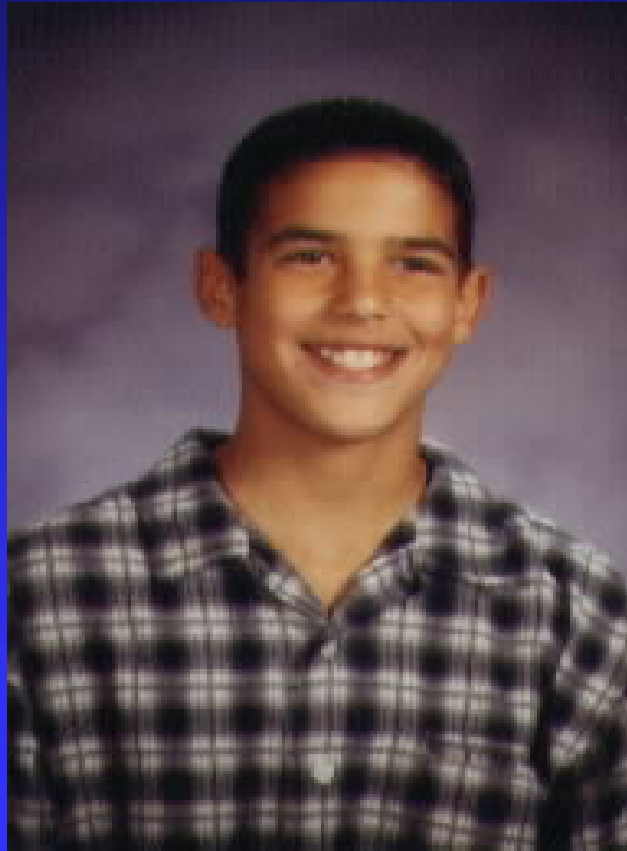
- **access to hospital care:** financial, geographical
- **how effective and safe is hospital care?**
how to do a (much) better job?
- **responsibility towards the community?**
 - power and authority of hospitals
 - competence of hospitals: professional, managerial
 - leadership attitude: will → ideas → execution

Major Biomedical Successes in Hand

- Acute Lymphoblastic Leukemia
- Coronary Heart Disease
- Acute Myocardial Infarction
- Erythroblastosis Fetalis
- Diabetes Mellitus
- Asthma
- Organ Transplantation
- Etc.

But.... There are other stories:

Justin



Acc. to Berwick, 2005⁴

Justin Micalizzi (by Dale Ann Micalizzi)

- ***“On January 15th, 2001, Justin, a healthy 11-year old boy, was taken into surgery to incise and drain a swollen ankle. He was dead by 7:55 a.m. the next morning, leaving behind two grieving and bewildered parents who desperately wanted to know why their son had died. But medical care was to fail them twice- first their son died and then no one would explain to them why.”***

Justin Micalizzi (by Dale Ann Micalizzi)

“The hospital failed us, the nurses who were his advocates failed us... the technicians ... failed us.(T)he surgeon ...failed us. The health department failed us The hospital CEO failed us Error upon accepted error killed my son and my faith in a medical system that was meant to comfort and heal. We will not let this happen to another family. The pain is unbearable.”

Acc. to Berwick, 2005

Basic Problems in Health Care

from the patient point of view

1. "The way we deliver care": profession
overuse, underuse, misuse (patient safety)
2. "The way we organize care": organisation
health care is an archipelago
access-problems, waiting times, delays
coordination problems
communication gap
collaboration ?!
3. "The way we take care" : relationship
information
co-decision making
patient-involvement ("nothing about me without me")
empathy

Healthcare in the Netherlands

• P.S. Woundinfections (CBO/RIVM, 2004)

Breastsurgery: 25%: <3%, 25%: >9%
Hipreplacement: 25%: <2%, 25%: >4%
Kneesurgery: 25%: <1%, 25%: >4%



• Bedsores (University of Maastricht, 2004)

Academic hospitals: 16,5%
Acute care hospitals: 22,3%
Nursing homes: 33,0%
Home healthcare: 18,5%

benchmark:

<5%



“To Err is Human” (Institute of Medicine)

USA, December, 1999

Patient safety: harm to patients

- 2,9%-3,7% of all admissions (VS: 33,6 million)
- from these: 8,8-13,6% †
- in USA 44000-98000 † in hospitals each year
(8rd-3th cause of death)

Translated to The Netherlands: *3000-6000 † /jr*

Confirmed in Canada, Australia, England, Denmark

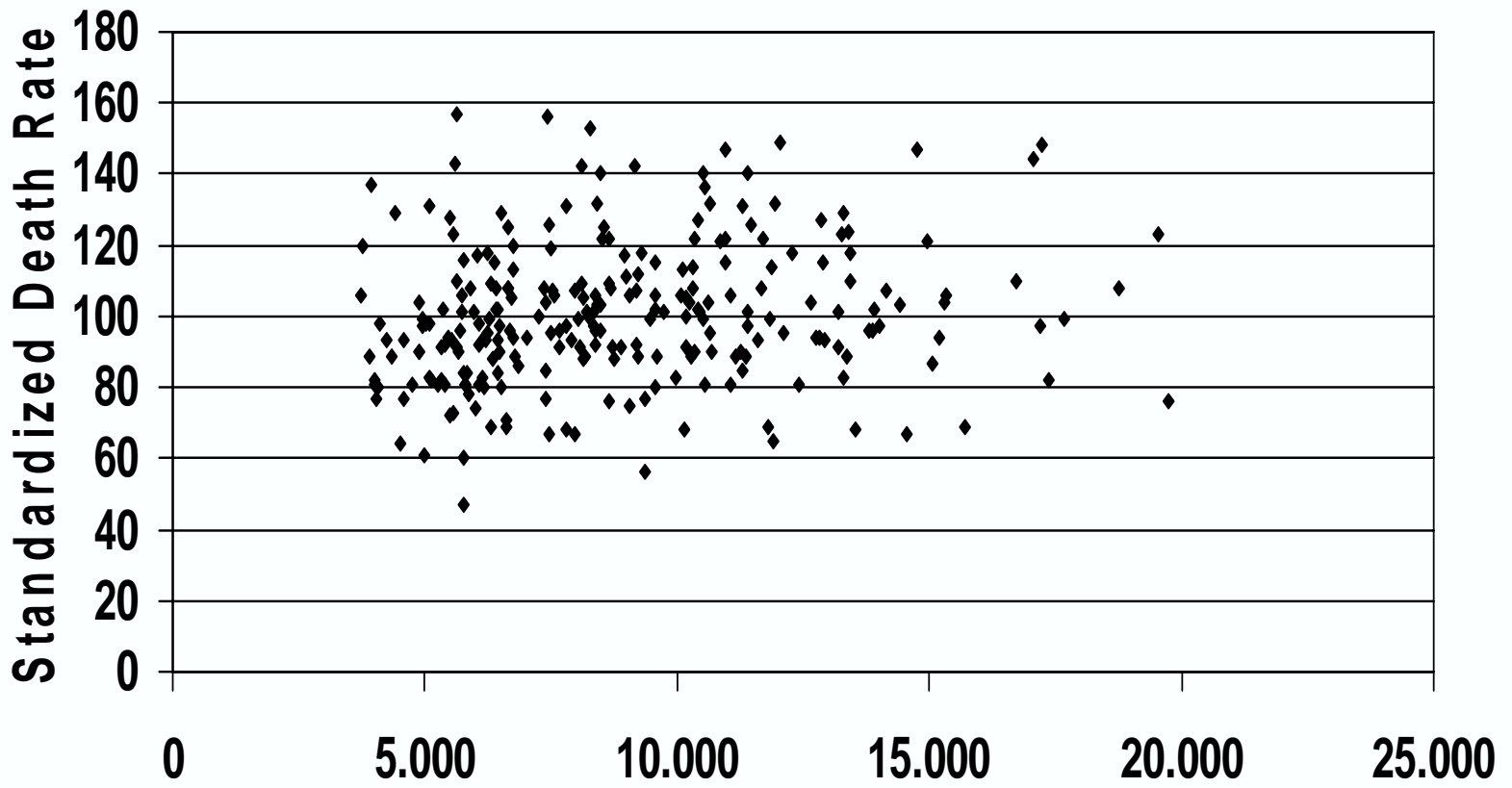
How safe is our healthcare?

Hospital Death Rate

(Standardized for Age, Sex, Race, Payer, Admission Source & Type)

vs Charge per Admission

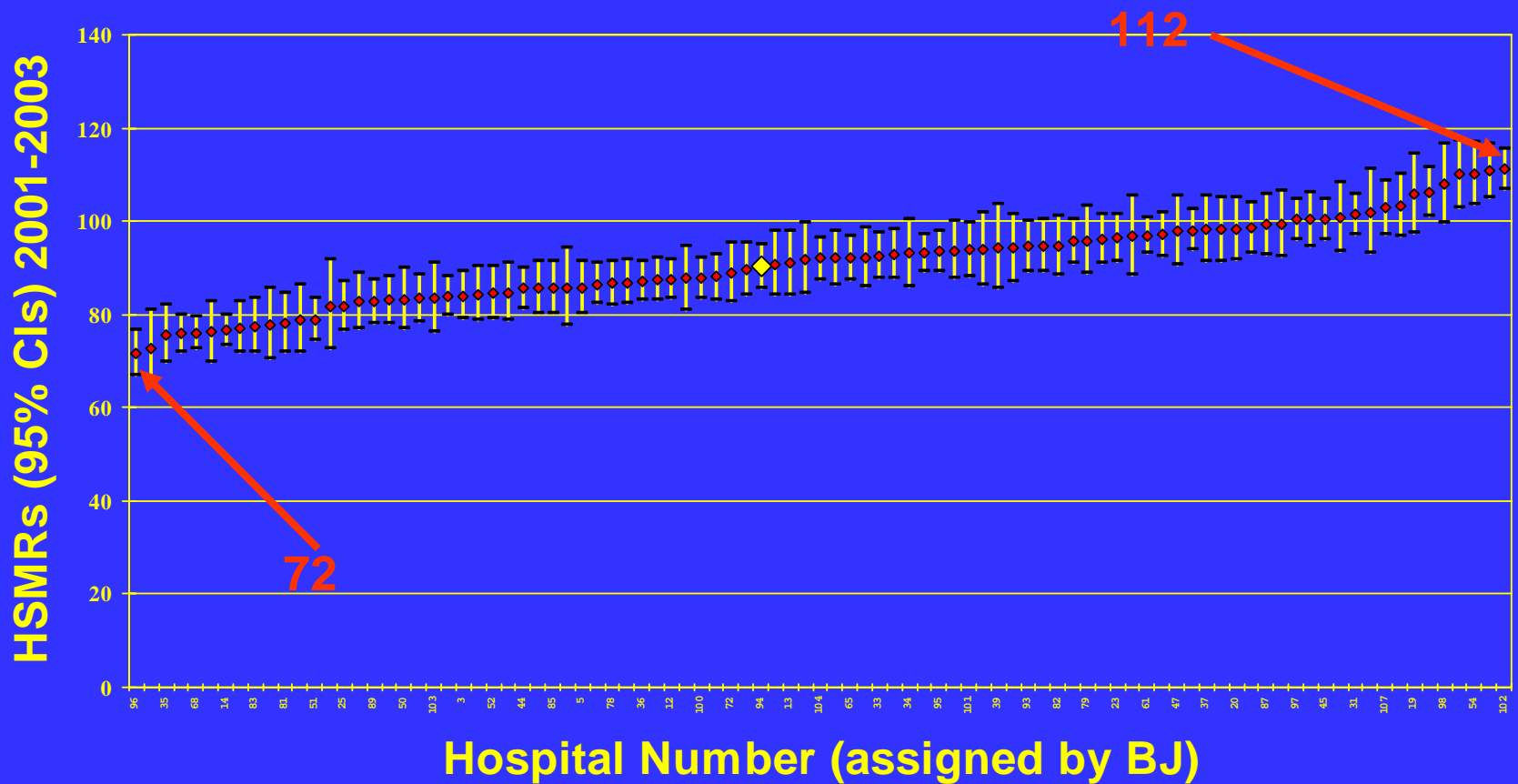
(Standardized for Age and Diagnosis) -- AHRQ 1997 Data



Sir Brian Jarman (UK) Standardized Charge (\$ per Admission)

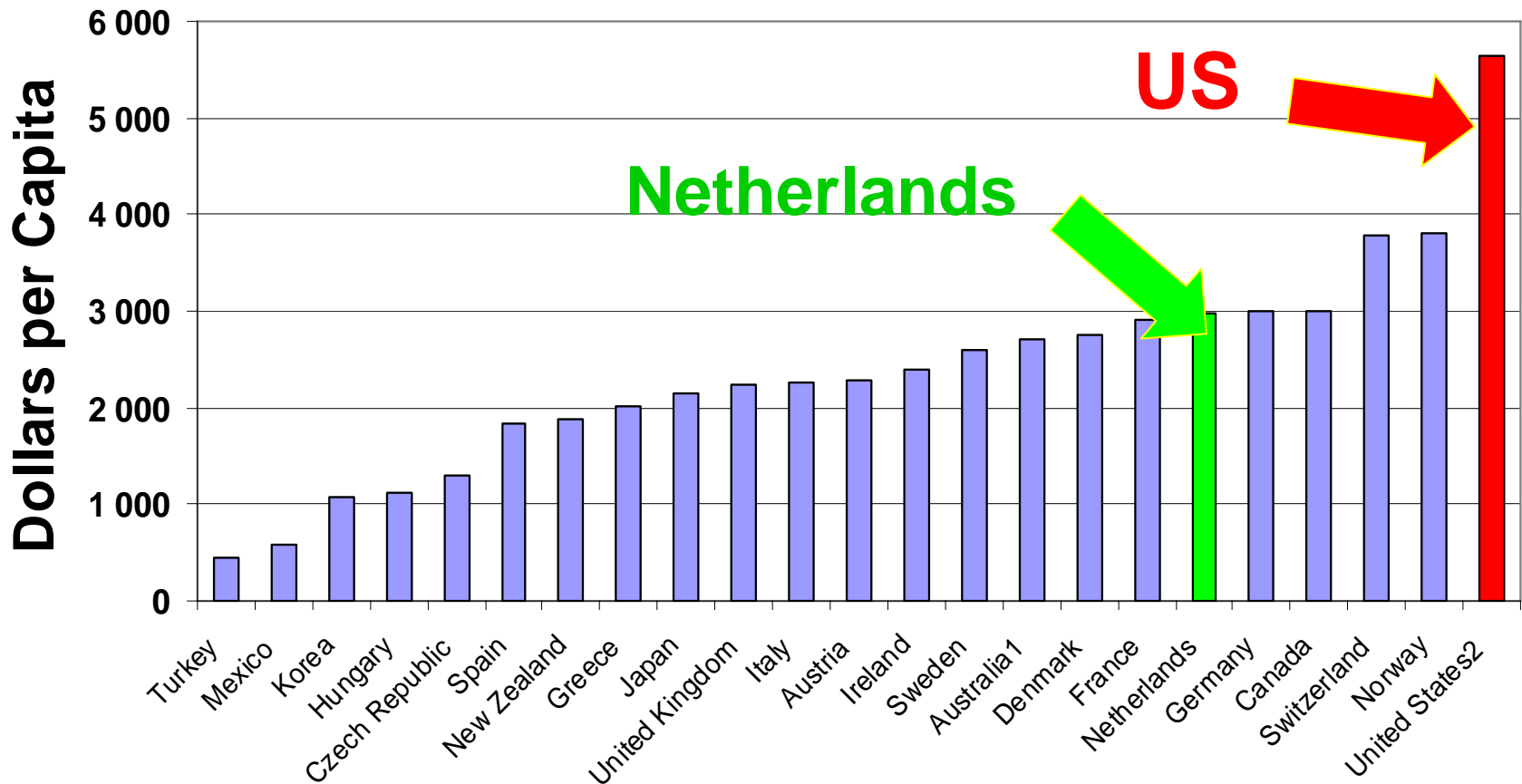
Dutch Hospital Standardised Mortality Ratios 2001-3(HSMRs)

(standardised for age, sex, urgency/readmission, LOS within 50 CCS groups leading to 80% all deaths, excluding small hospitals and those with poor data recording.)



Health Care Spending in International Perspective

Per Capita Healthcare Expenditures (OECD 2003)



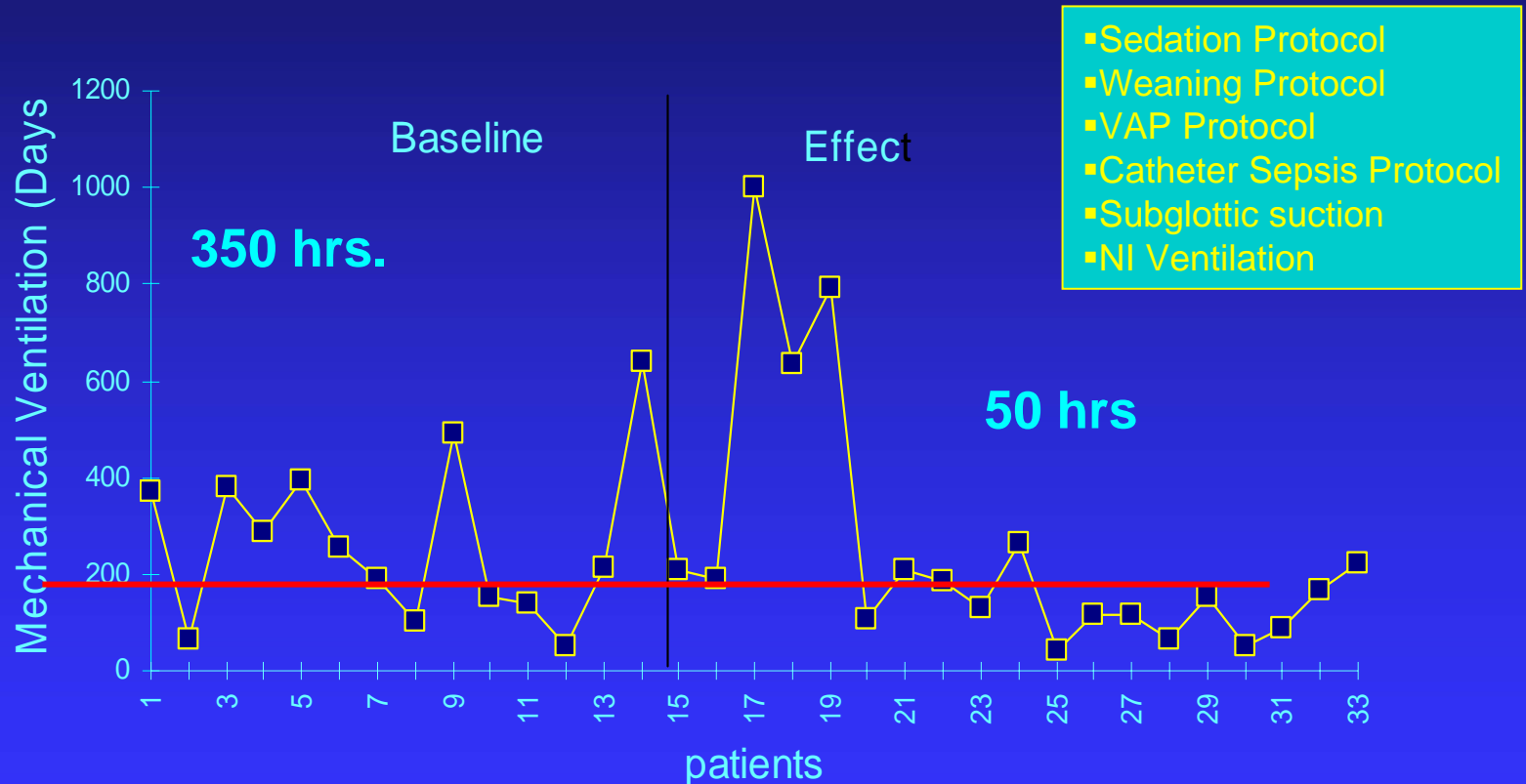
Care for patients should be:

- Safe
- Effective
- Patient-centered
- Timely
- Efficient
- Equal to all

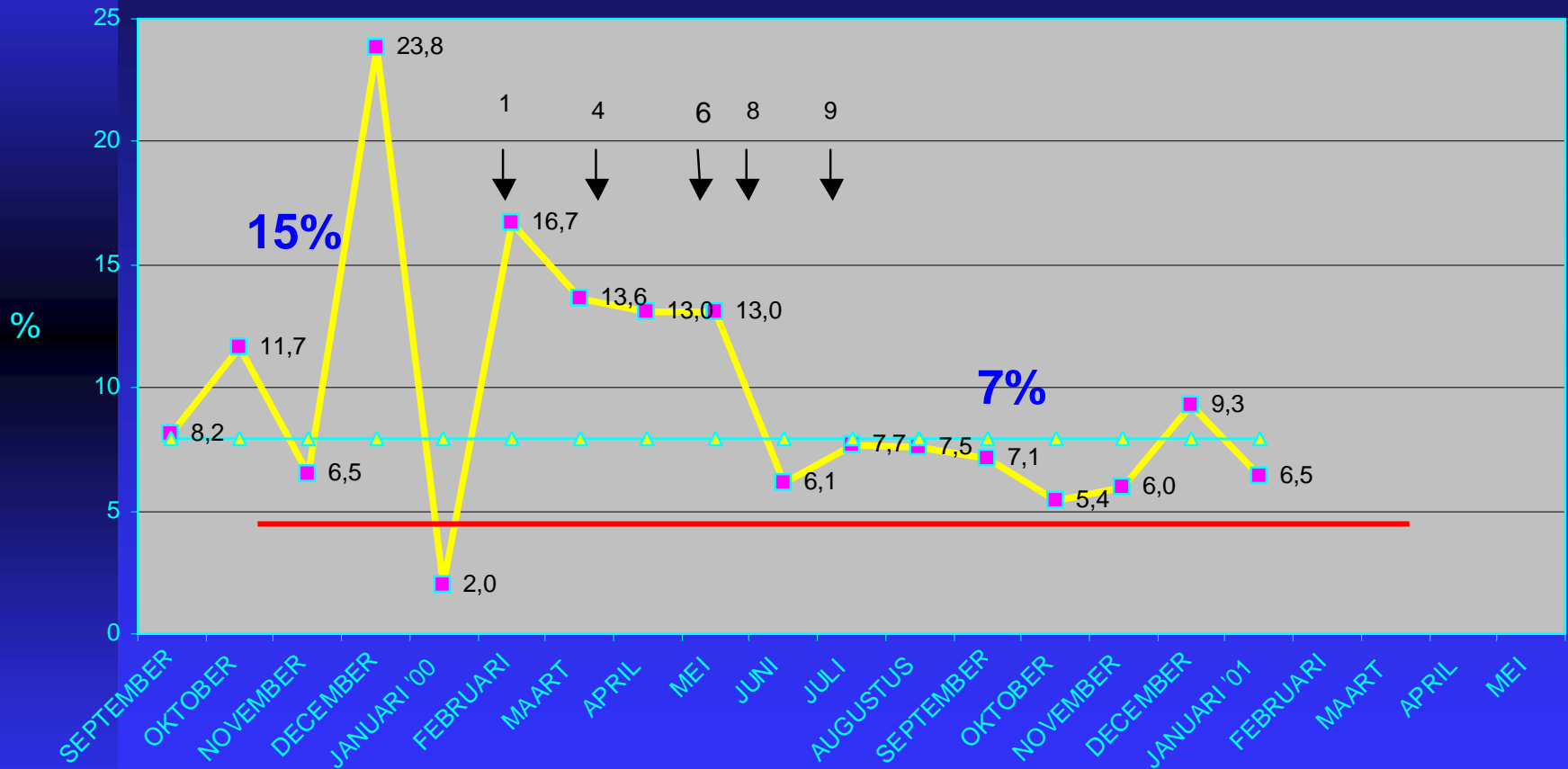
What do patients expect?

- No Needless Deaths
 - No Needless Pain or Suffering
 - No Unwanted Waits
 - No Helplessness
 - No Waste
-For Anyone

Decrease length of mechanical ventilation



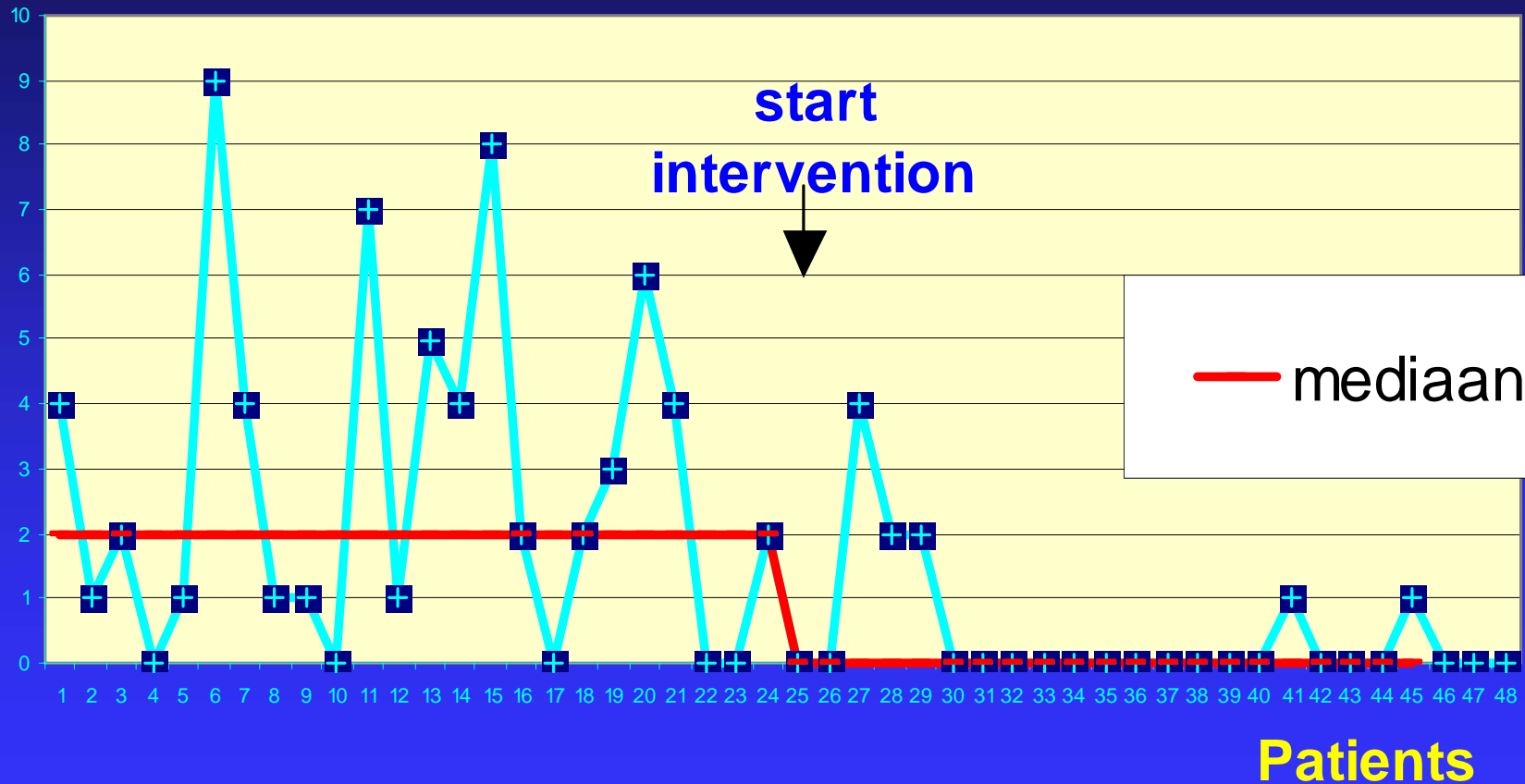
Decrease of bedsores



CBO, Breakthrough-project-IC
The Netherlands

Medication safety

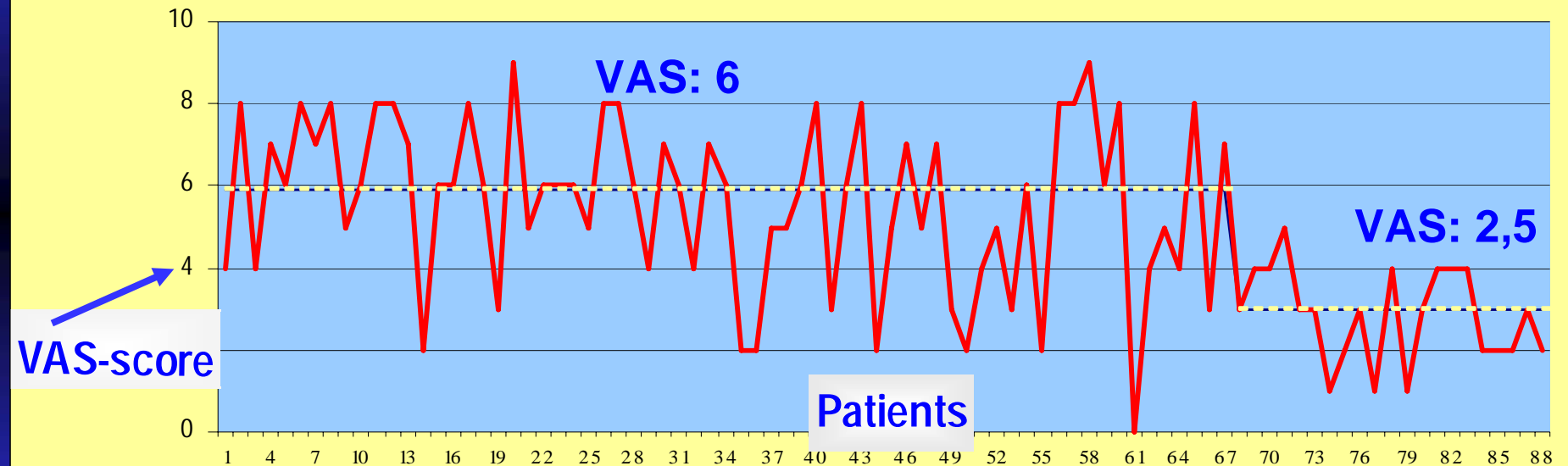
Medication errors (admission)



Reduction postoperative pain

Highest VAS score pro patient in the first 24 uur post operation

VAS measurement time:
November to may 2002



100k *lives* Campaign

SOME IS NOT A NUMBER. SOON IS NOT A TIME.

IHI, Boston

2004:

objectives in 1½ year (by 14th June 2006):

- 100.000 lives saved
- 2000 hospitals involved
- Build a reusable national infrastructure for change

See: <http://www.ihl.org/IHI/Programs/Campaign/>

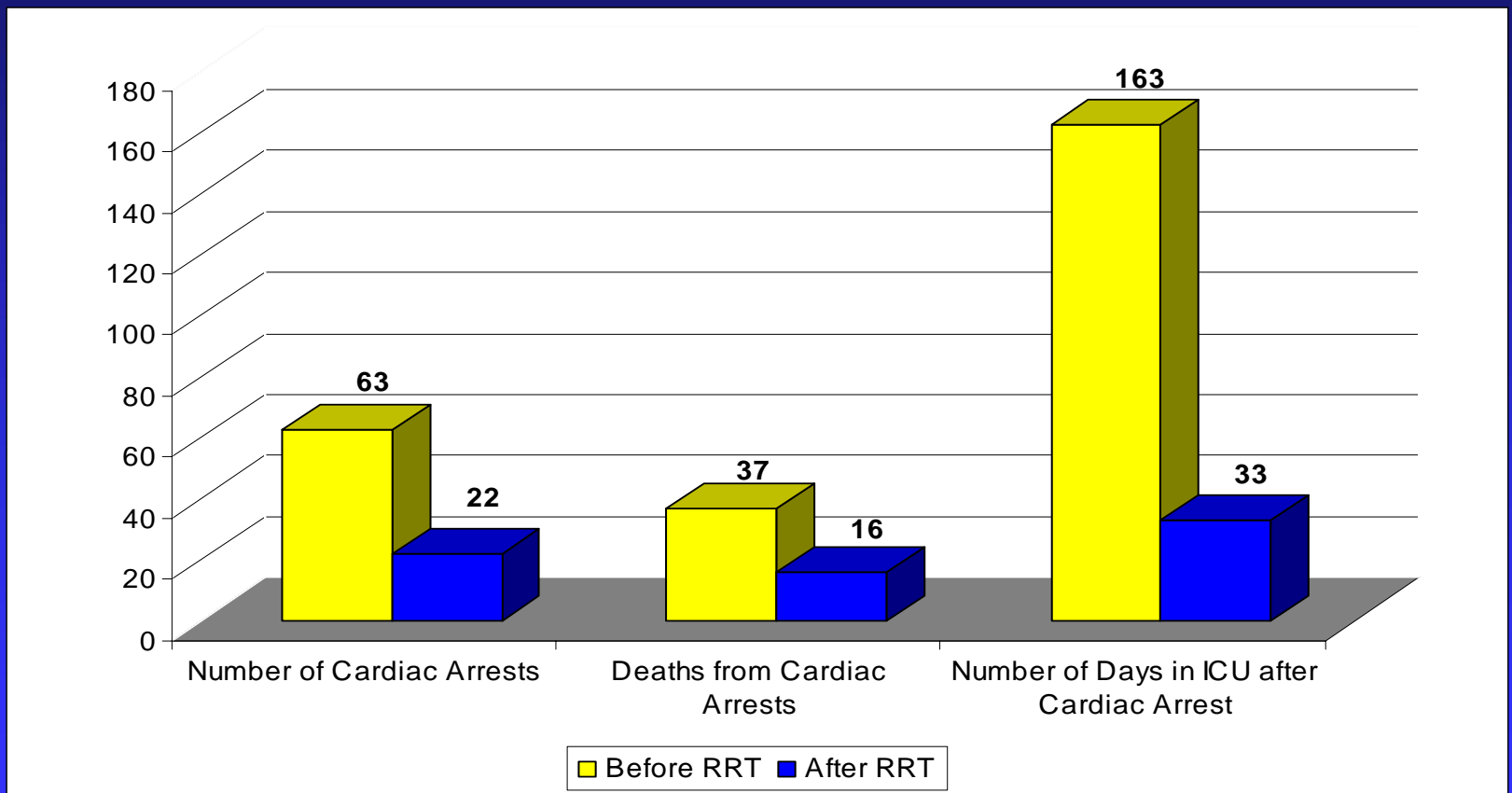
Six Changes That Save Lives

1. Deploy Rapid Response Teams
2. Deliver Reliable, Evidence-Based Care for Acute Myocardial Infarction (Heart Attacks)
3. Prevent Adverse Drug Events (ADEs)
4. Prevent Central Line Infections
5. Prevent Surgical Site Infections
6. Prevent Ventilator-Associated Pneumonia

1. Rapid Response Teams

- A Rapid Response Team may be summoned at any time by anyone in the hospital to assist in the care of a patient who appears acutely ill, before the patient has a cardiac arrest or other adverse event.
- No prior permission is required to call the Rapid Response Team.

The Dramatic Effects of Rapid Response Teams



From Bellomo R, et al. *MJA*. 2003;179:283-287.

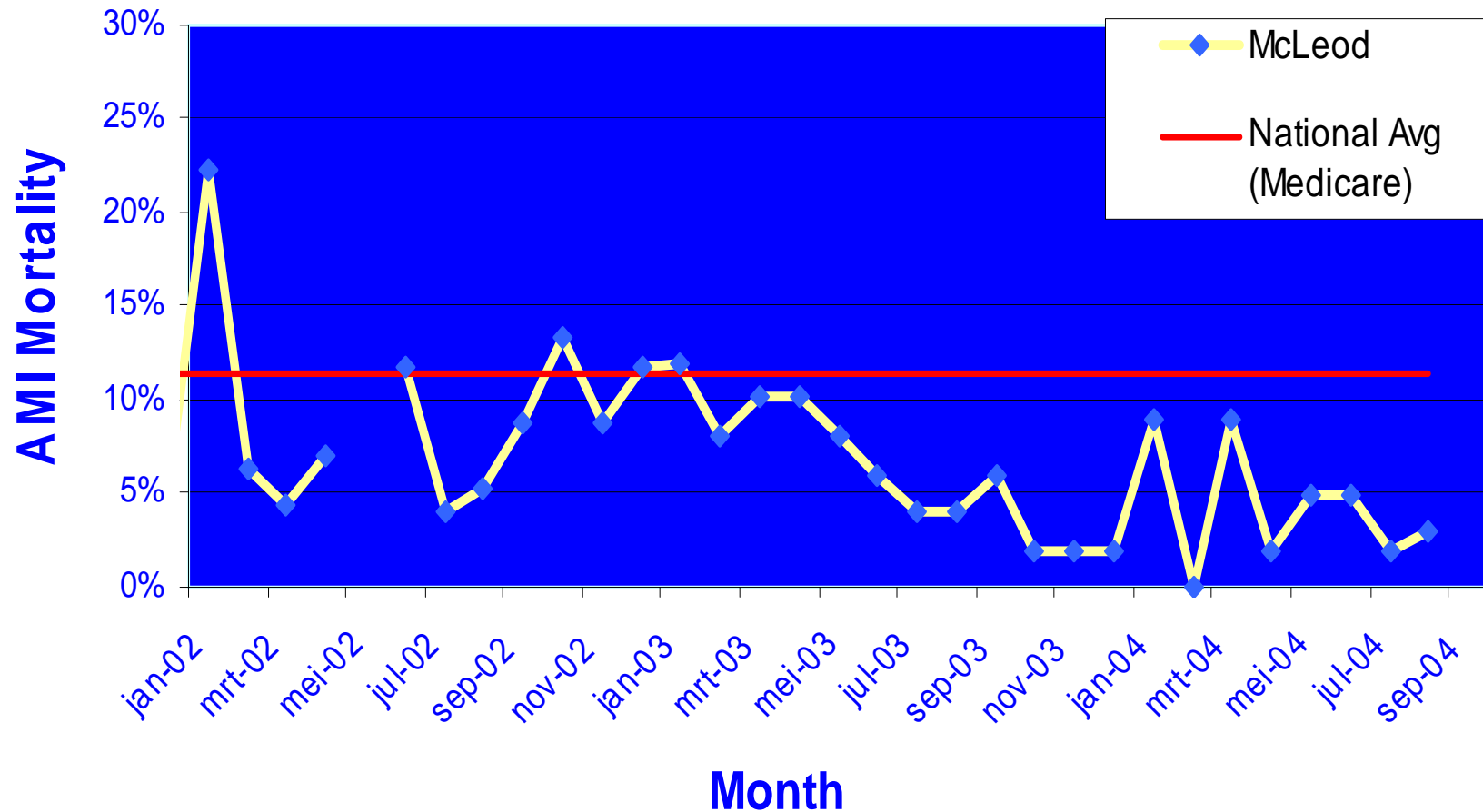
2. Reducing Acute Myocardial Infarction Mortality

- Early administration of aspirin
- Aspirin at discharge
- Early administration of a beta-blocker
- Beta-blocker at discharge
- ACE-inhibitor or angiotensin receptor blocker (ARB) at discharge (if systolic dysfunction)
- Timely reperfusion
- Smoking cessation counseling

as a bundle!

AMI Reliability: McLeod Regional Medical Center

Reduction in Mortality for Acute Myocardial Infarction

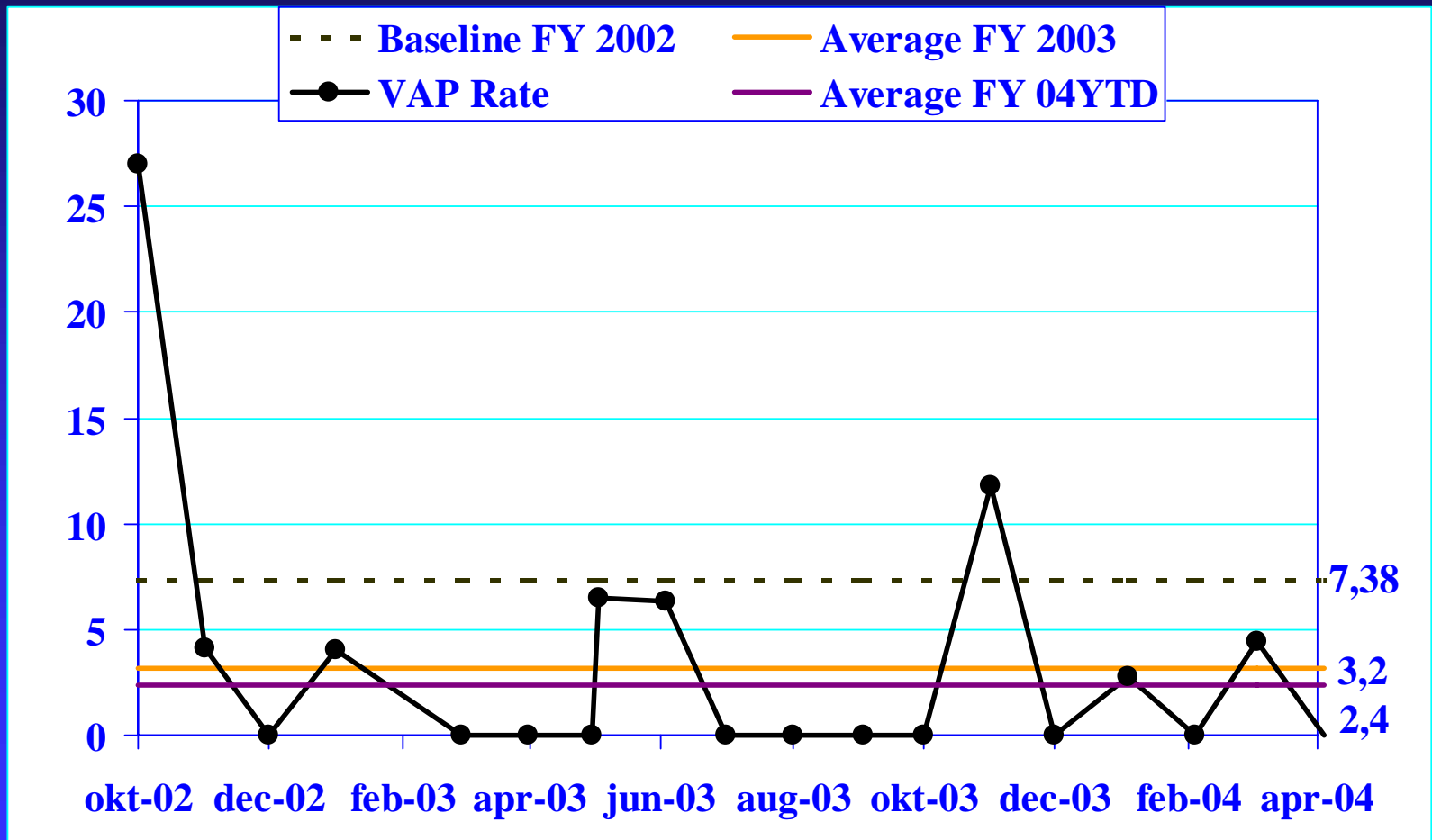


6. Preventing Ventilator Associated Pneumonia

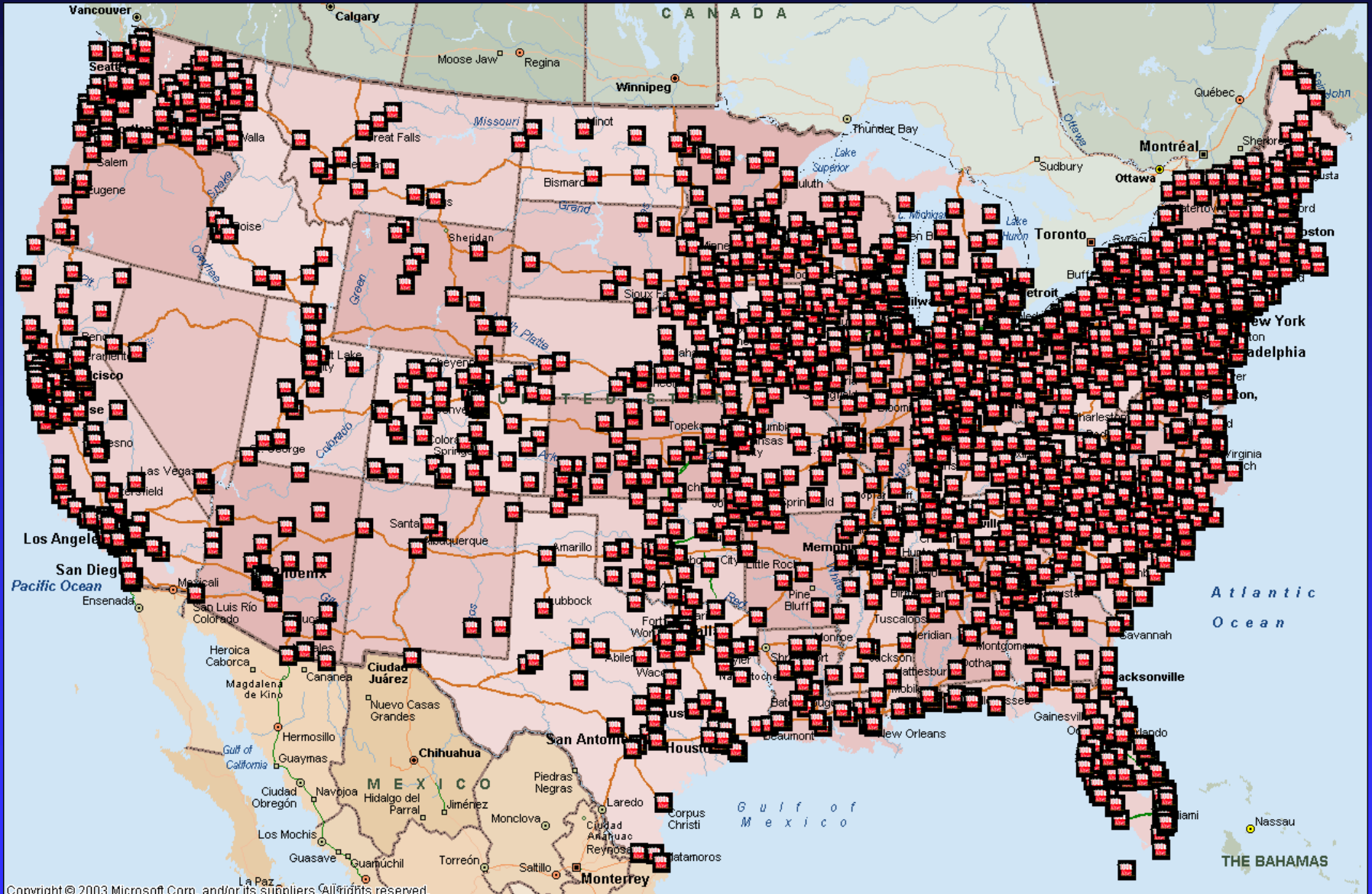
- Elevate head of the bed to 30-45 degrees
- Daily “sedation vacations”
- Daily assessment of readiness to extubate
- Peptic ulcer prophylaxis
- Deep venous thrombosis prophylaxis

as a bundle!

VAP Results: Baptist Memorial DeSoto



Campaign Participants



100k *lives* Campaign

SOME IS NOT A NUMBER. SOON IS NOT A TIME.

Results 14 June 2006:

- 122.300 lives saved
- more then 3000 hospitals in the USA involved
- *How:* - 6 simple interventions
 - nationwide support network

Leadership = change management

1. Sense of urgency:

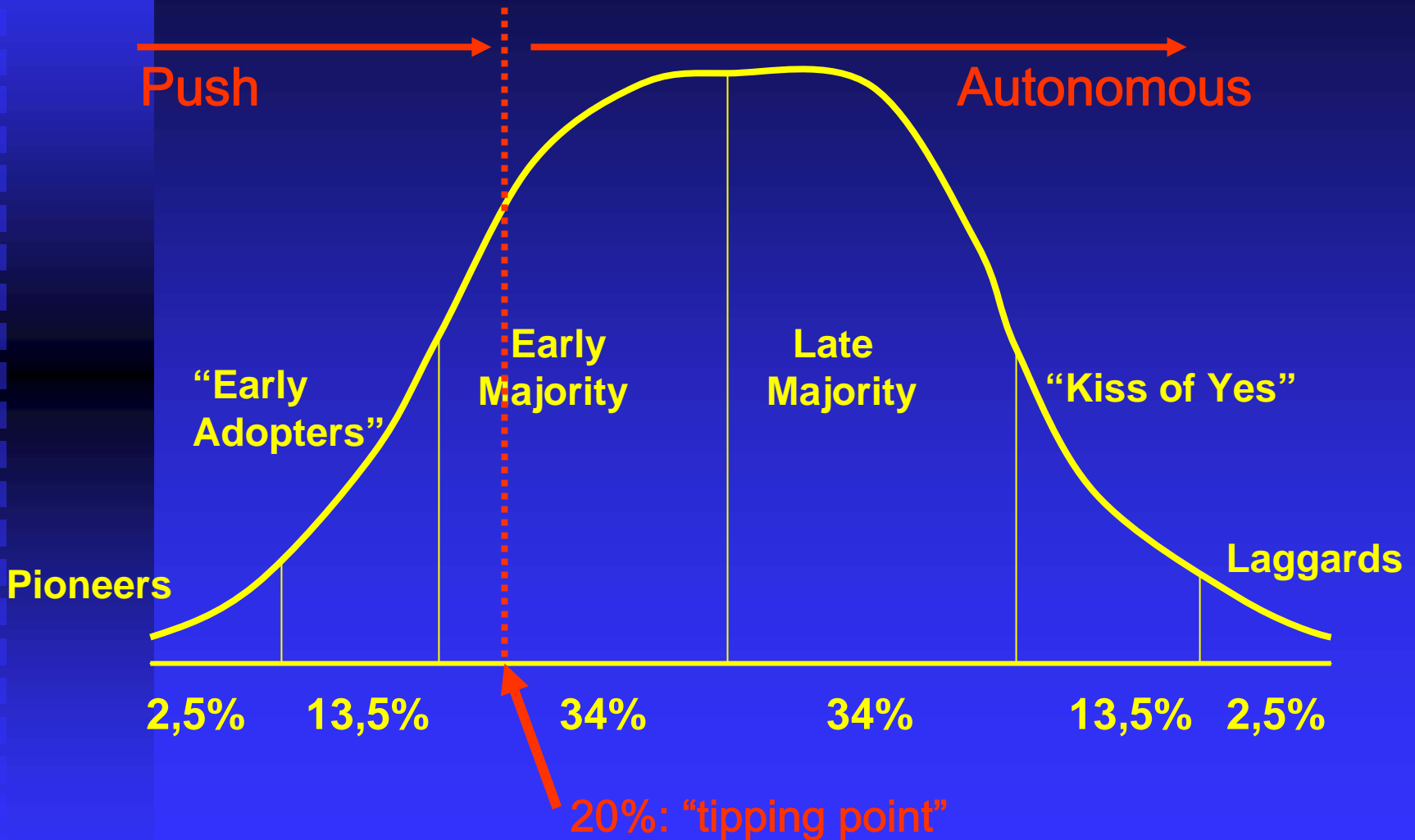
safety, effectiveness, efficiency, timeliness
patient experience
huge variation
access

2. Vision: breakthrough results are possible

3. We need a strategy

- holding the gains
- spread and diffusion
- intervention at 4 levels
- reaching out to primary and tertiary care
and public health

Spread/Diffusion of Results



Rogers: 1995
Gladwell: 2000

“Strategy 1 → 20 → 80” Schellekens, 2004

Program “*Better Faster*”

The Netherlands

Level of ambition (minister of healthcare)

*“Would it be possible
to get breakthrough results
in two priority areas (flow and safety)
in the next four years
in 20% of Dutch hospitals
(3 waves of 8 hospitals)
in such a way,
that it is no longer an option for the
80% to keep the status quo?”*

Strategy: 1 → 20 → 80

Faster Better: level of ambition

1. **Aims on patient flow:**

- ◆ **Access time outpatient clinics: less than 1 week**
- ◆ **Process time diagnosis and treatment: 40-90% less**
- ◆ **OR-productivity: 30% increase**
- ◆ **MLS: 30% less**

2. **Aims on patient safety:**

- ◆ **Post surgery woundinfections: 50% less**
- ◆ **Medication errors: 50% less**
- ◆ **Bedsore: below 5%**
- ◆ **Introduction of blame-free reporting**

3. **Leadership**

- ◆ **Quality system integrated in normal strategy and management**
- ◆ **Support systems (HRM, IT)**
- ◆ **Balanced measurement, public transparency**

Changing Health Care

Four Levels of Intervention

1. Patient-level

6 aims, patient-push

→ 2. Level of the care-process: workflow
professional x organisation → *results*
learning, no-blame culture

3. Institutional level

leadership with courage, strategy

integration, collaboration

supported by: flow-management, IT, HRM, MD
incentives

4. System-level

structure, law, financing, incentives

transparency of results and patient experiences

strategy: 1 → 20 → 80, campaigns

Reaching out

- Mission of the hospital

Example of Reinier de Graaf Hospital, Delft, The Netherlands:

1990: *“to deliver specialized care to our patients”*

1998: *“to be responsible for the care in our region”*

2010?: *“to promote health to all our citizens”*

- Integrated care: primary care, tertiary care
- Patient involvement
- Public transparency
- Public health: power, competence (professional, managerial)
 - primary prevention
 - secondary prevention
 - support (knowledge, management)
- Other countries: combined action?
 - new EU-countries,
 - underdeveloped countries

Attitude of leadership

(professional and managerial)

Leadership = change management

- Building a safer, more effective, patient-centered healthcare
- Reaching out to the community
- Global responsibility

1. Will

2. Ideas

3. Execution

***Knowing is not enough,
we must apply!***

***Willing is not enough,
we must do!***

Goethe