Booz & Company

Stockholm, July 4 2011

booz&co.

Lessons from reform in the Netherlands

This document is confidential and is intended solely for
the use and information of the client to whom it is addressed

booz&co.

Topics for the discussion

- The 2006 reform
  - Where were we coming from?
  - What did we do?
- What has been the impact of the reform?
- What is the way forward?

booz&co.

Holland and health care - An overview

- 16 million inhabitants
- 100 hospitals
- 16000 medical specialists
- 8000 general practitioners
- 28 insurers in 11 companies
- € 60 billion spent on health care (10% GDP)

booz&co.

Our starting point (pre 2006)

- Tradition of private initiative
  - Hospitals, nursery homes privately owned
  - Medical specialists and general practitioners mostly private entrepreneurs
- Mixed public / private insurance
  - 60% social insurance (below average income level)
  - 30% private insurance (no government interference)
  - 10% civil servants, elderly, etc.
- Growing government interference (from ± 1980 onwards)
  - Main objective: cost containment
  - Detailed price regulation, budgeting
  - National and regional planning and licensing

booz&co.

Despite some advantages the old system was under strong pressure

Old system had macro advantages and micro disadvantages

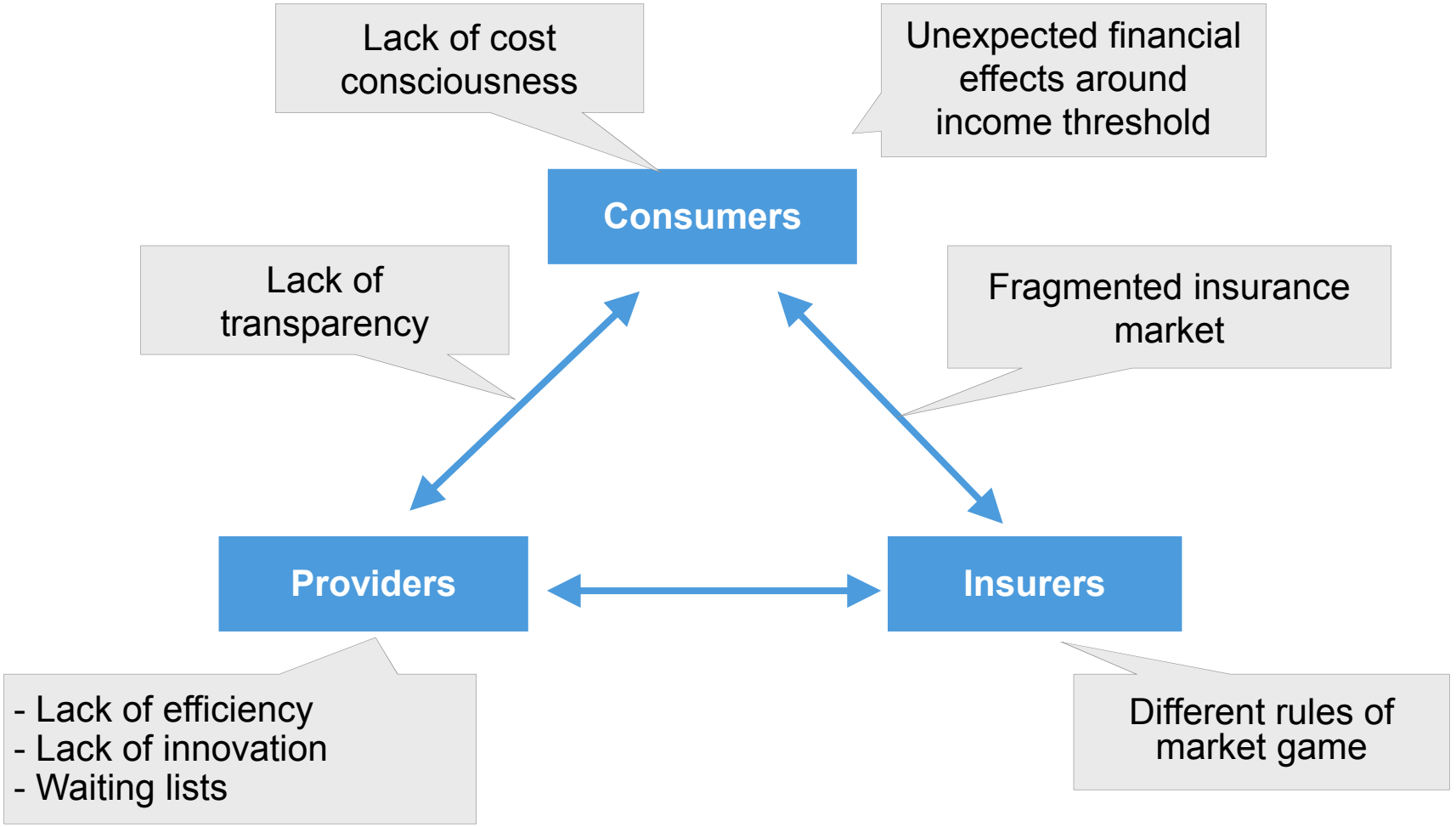
- Pros
  - Cost containment on macro (national) level
  - Policy implementation through intervening in the system
- Cons
  - Macro efficiency, micro inefficiency
  - Lack of spirit of enterprise & innovative climate
  - Rationing → waiting lists

Growing pressure on the system to change

- Growing pressure on the system
- Demographics (ageing & labour market)
- Technology developments
- Law suits

booz&co.

Fundamental problems throughout the system stressed the need for reform



booz&co.

Goals of the reform

- Reduction overall costs and increase efficiency
- Reduction of waiting lists
- More freedom of choice for consumers/the insured
- Sustainable solidarity

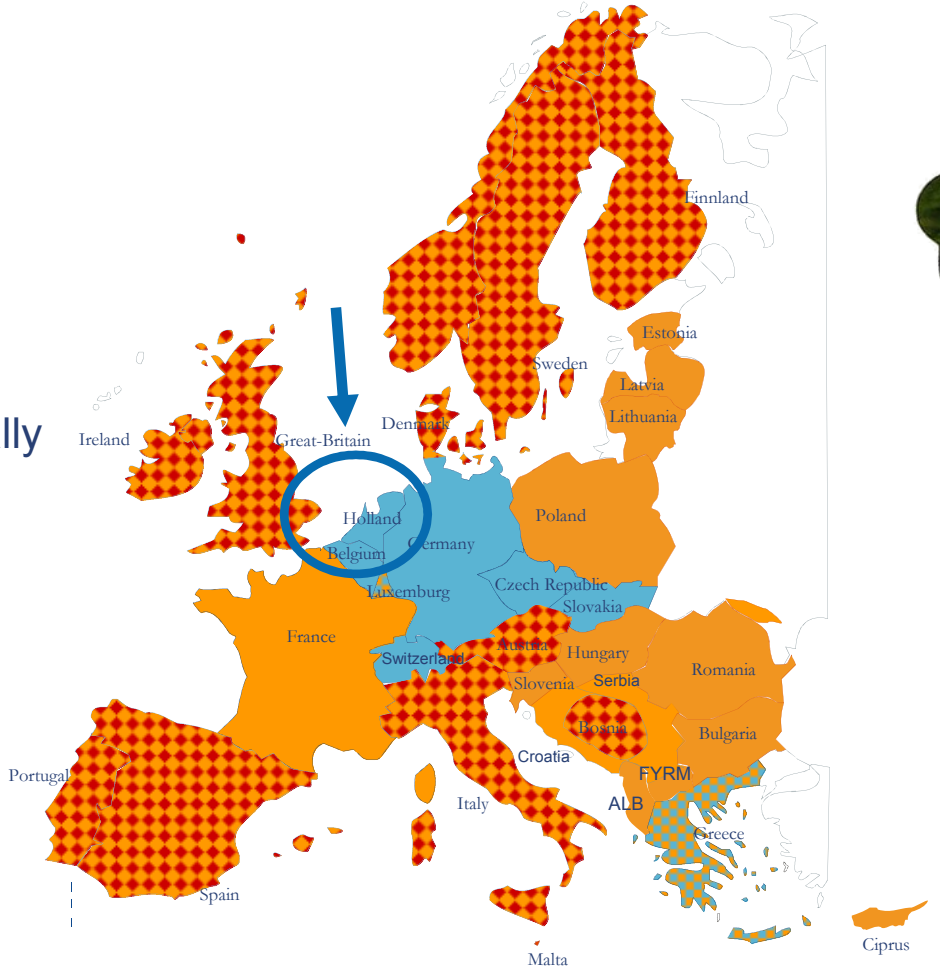
booz&co.

Key questions in the reform debate

- Who is the prudent buyer of care on behalf on the consumer?
- Yes/No competition among:
  - Providers of care?
  - Sickness funds / insurers?
- Which benefits package?
- Which premium structure?
- How to build a sustainable health care system?
  - Fair share of solidarity
  - High responsiveness to change
  - Efficiency seeking

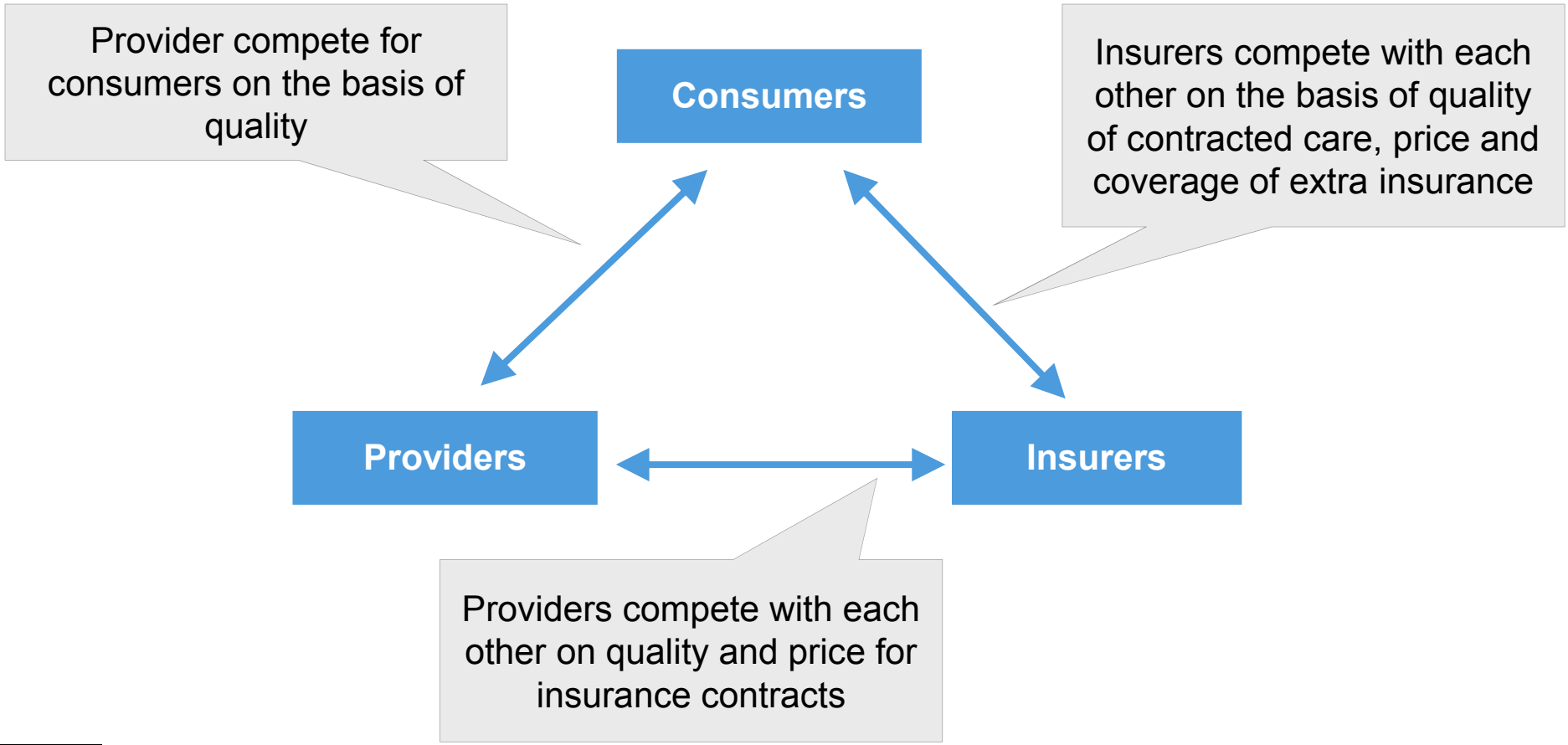
For reform, we chose a model of competing purchasers, as seen elsewhere in Europe

- Single purchaser
- Regional, but functionally single purchaser
- Non-competing multiple purchaser
- Competing purchaser



booz&co.

We envisioned competitive dynamics contributing to cost control and quality of care



booz&co.

The reform involved more than insurance alone

- **Room to move**
  - Freedom of contracting (insurer ↔ health care provider)
  - Freedom of price negotiations (2009: 34% of hospital care)
  - Freedom of capital investments (capital costs in DRG's)

- **Changed incentives & responsibilities**
  - From budgeting to output pricing / p4p
  - Insurers & providers have to compete for clients
  - Quality indicators for hospital and outpatient care
  - Increase amount of risk of insurers and providers
  - Duty of care for health insurers

- **Clear government safeguards:**
  - Accessibility (of health care delivery & insurance)
  - Affordability (of health care delivery & income related subsidy)
  - Quality (of health care delivery)
  - Health Care Inspectorate (quality of care)
  - Health Care Authority (market development, price regulation)
  - Health Insurance Board (package of entitlements, risk equalization)

booz&co.

The result: The 2006 Health Insurance act

Equity and Efficiency via managed competition

Equity

- Compulsory insurance (consumers)
- Open enrolment (insurer)
- Legally defined coverage (insurer)
- No premium differentiation (insurer)
- Submission to risk adjustment (insurer)
- Income related contribution (consumer)

Efficiency

- Compulsory deductible (consumers)
- Free to set nominal premium (insurer)
- Free to offer different policies (insurer)
- Free to offer suppl. deductible (insurer)
- Free to engage group contracts (insurer

booz&co.

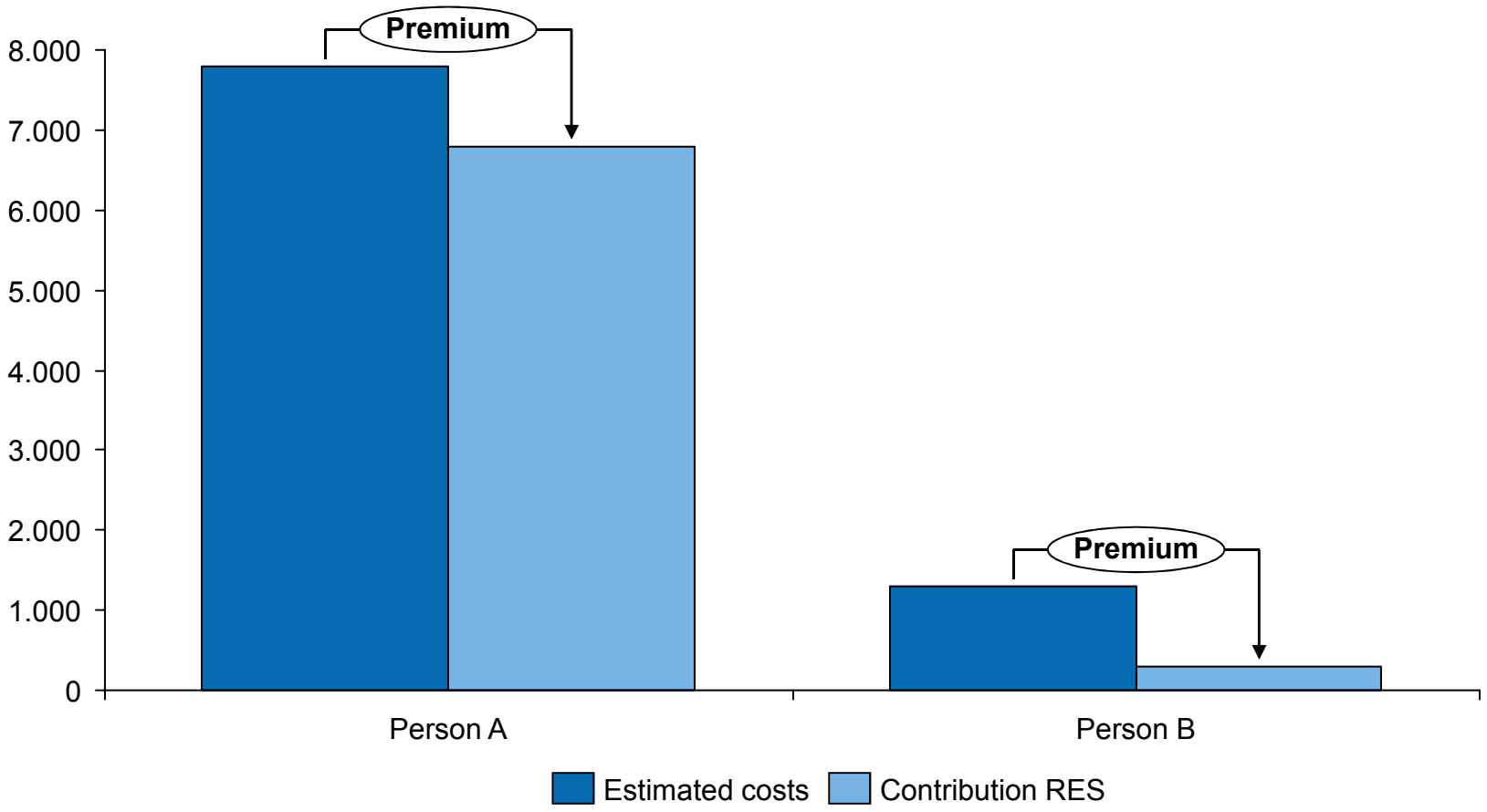
The health insurance act is the largest pillar in the overall social care system

Long term care act	Health insurance act	Supplemental insurance	Social support act
▪ LT care elderly ▪ Chronically ill ▪ Disabled ▪ LT Mentally ill	▪ General Practitioners ▪ Hospitals ▪ Drugs ▪ Equip / Trams	▪ Paramedics ▪ Dental care ▪ Alternative medicine	▪ Home care ▪ Transportation ▪ Support in participation in society
CARE	*CURE*		
~ EUR 23 B	**~ EUR 33 B**	**~ EUR 5 B**	**~ EUR 3 B**

booz&co.

The Risk Equalization System has been set in place to avoid risk selection by insurers

ILLUSTRATIVE



booz&co.

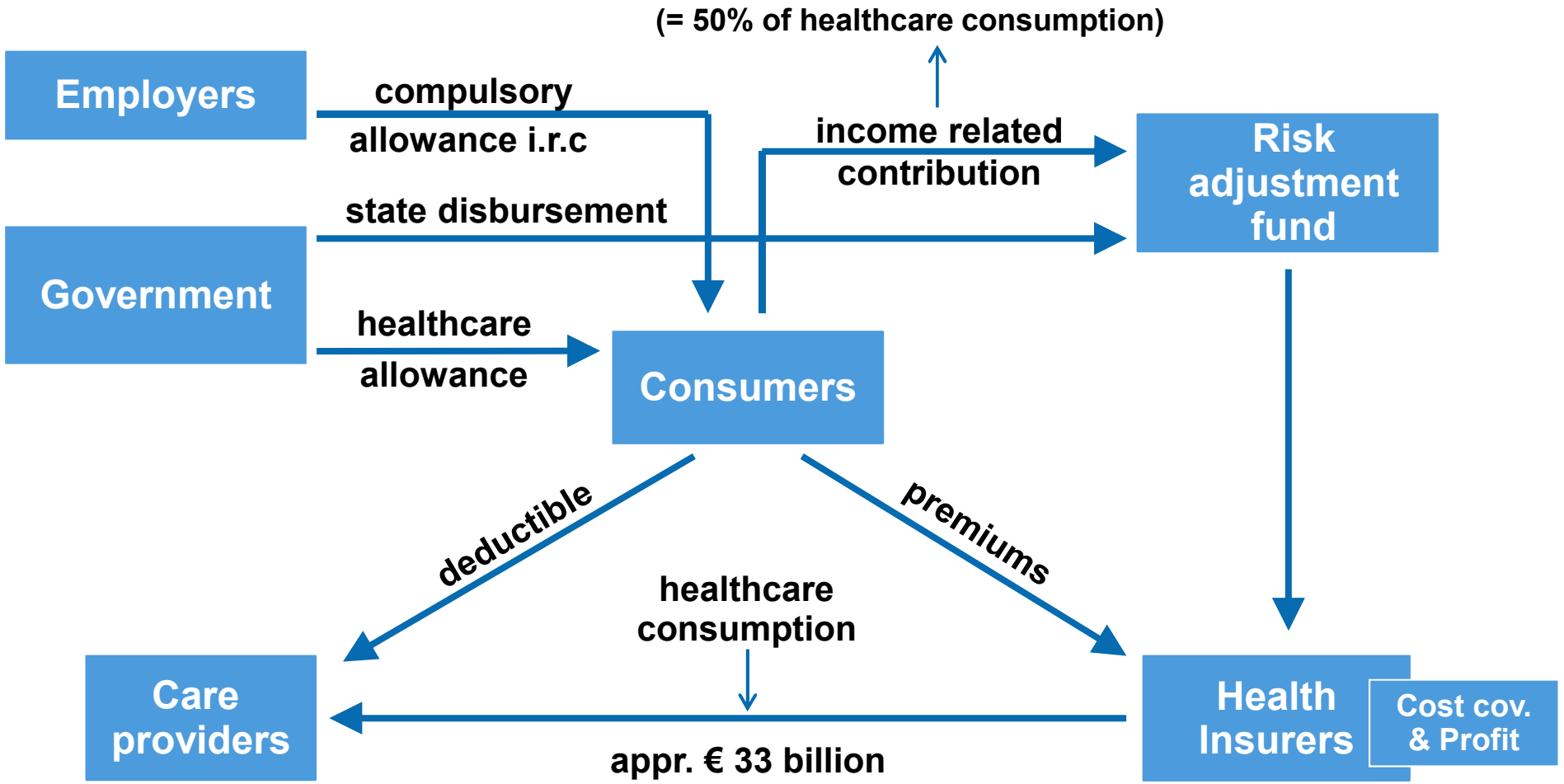
The risk equalization scheme takes multiple cost predictors into account

Example calculation EUR / year contribution to risk Equalization Scheme

Factors	Example 1	Value	Example 2	Values
▪ Age/gender	▪ 40, Woman	▪ EUR 1231	▪ 38, Man	▪ EUR 980
▪ Type income	▪ Disability allowance	▪ EUR 1003	▪ Employed	▪ -/- EUR 54
▪ SES	▪ Low	▪ EUR 83	▪ High	▪ -/- EUR 98
▪ Region	▪ Urban Area	▪ EUR 46	▪ Prosperous region	▪ -/- EUR 79
▪ Pharm cost group	▪ Diabetes Type 1	▪ EUR 33278	▪ None	▪ -/- EUR 347
▪ Diagnostic cost group	▪ None	▪ -/- EUR 113	▪ None	▪ -/- EUR 113
▪ **Total predicted cost**		▪ **EUR 5577**		▪ **EUR 289**
▪ Base premium		▪ -/-EUR 947		▪ -/- EUR 947
▪ Deductible		▪ -/- EUR 155		▪ -/- EUR 71
▪ **Contribution from risk equalization scheme**		▪ **EUR 4485**		▪ **-/- EUR 729**

booz&co.

The flow of funds



booz&co.

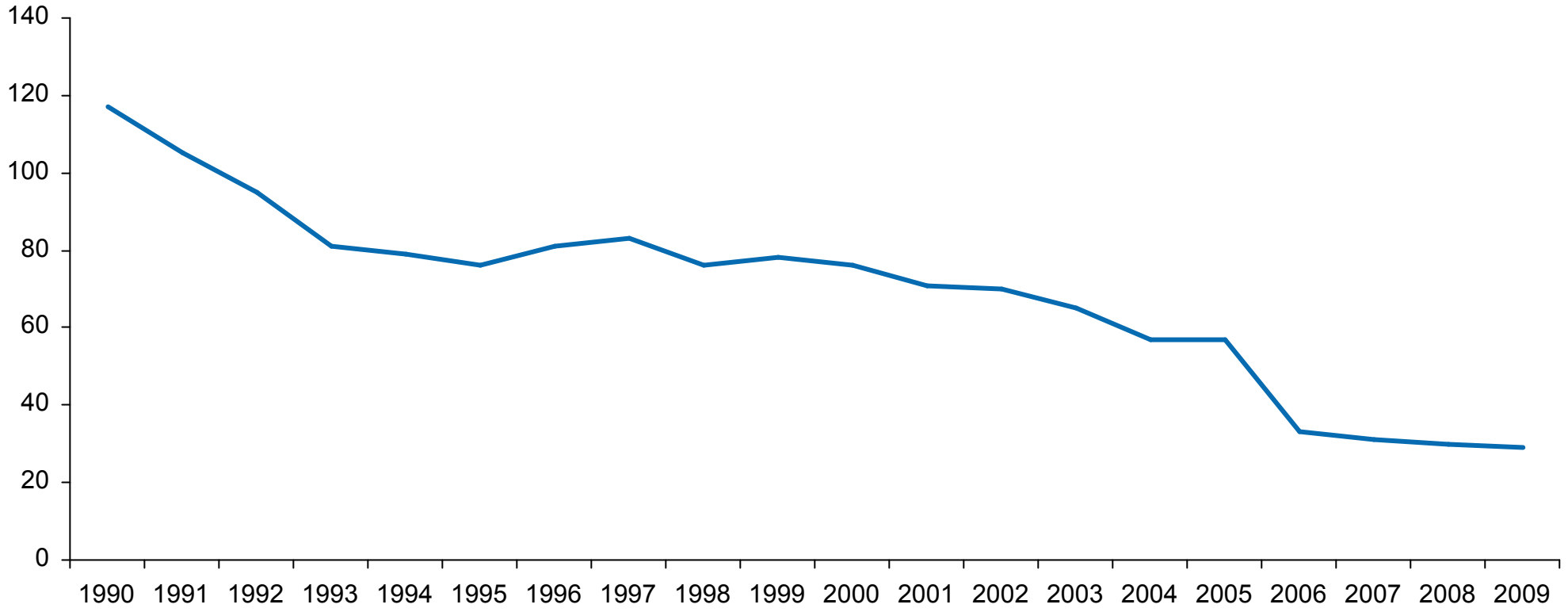
There is competition between insurers, but differentiation is still somewhat lacking

- 2006: nearly 20% switched
- 2010: app. 4.5% (“just enough”)
- Fierce competition, particularly on premium
- Cumulated losses 2006-2007 500 mln €, small earnings now.
- People satisfied with their insurer (between 7 and 8 out of 10)
- Product differentiation below desired level (modest initiatives on preferred providers)
- Four insurance companies have almost 90% of the market (“just enough”)

booz&co.

Insurers and sickness funds have been consolidating

Number of insurers and sickness funds gradually declining
1990 - 2009

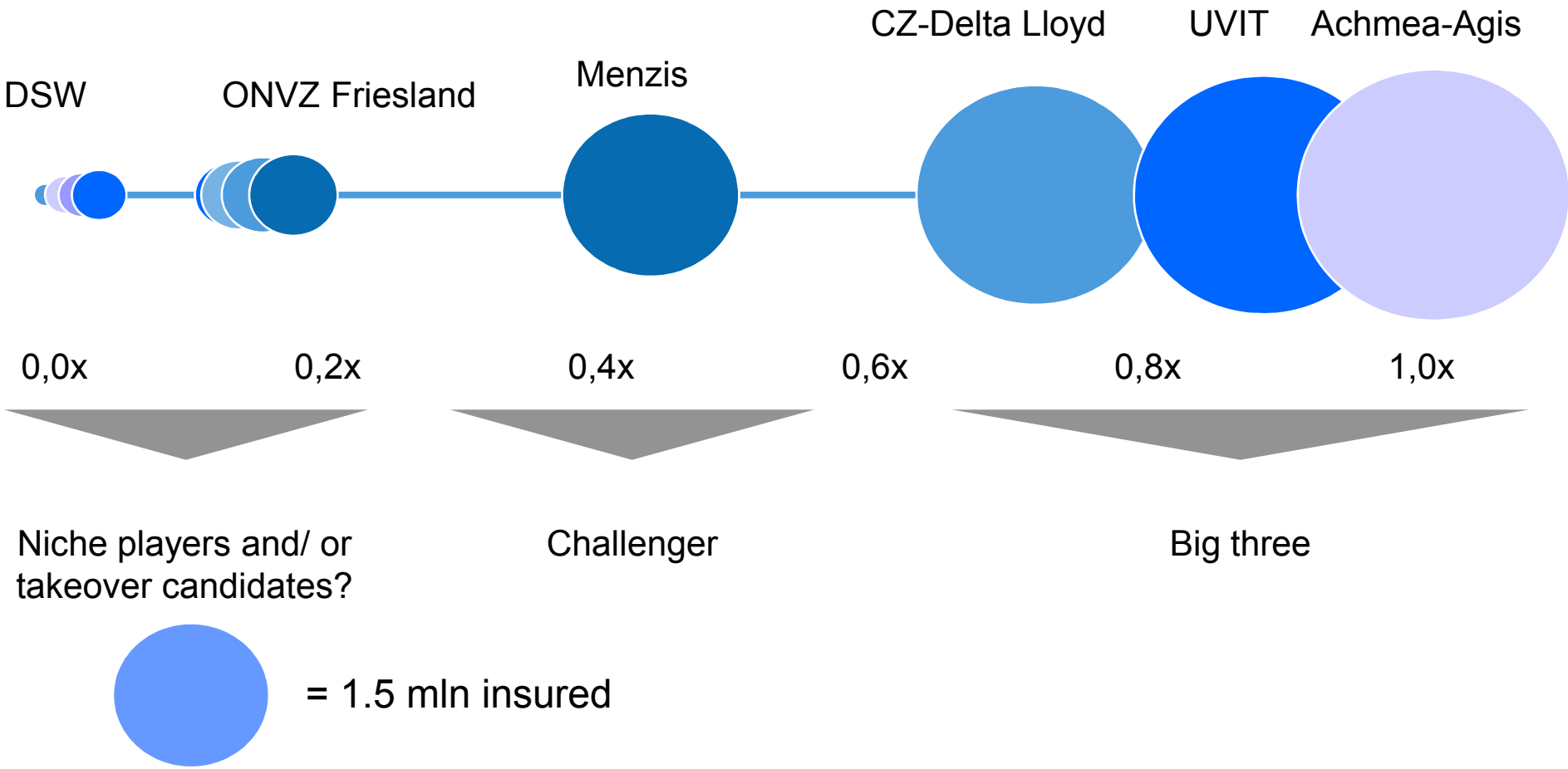


booz&co.

The current health insurance market: Big-three and one middle-size challenger

Insurers on dimension of relative market share

Market leader = 1,0x



booz&co.

Estimated and actual premium developments

Yearly premium development EIR

	2006 incl EUR 91 no claim	2007 incl EUR 91 no claim	2008	2009	2010
Estimated premiums according to national budget (without collectivity deduction)	1106	1166	1105	1124	1123
Average nominal premium paid by citizens (without collectivity deduction)	1061	1146	1094	1104	1147
Highest	1140	1224	1161	1205	1211
Lowest	964	1056	975	963	996
Bandwidth	176	168	186	242	215

booz&co.

So where are we now?

- Take off: with caution
- There is more space available than used until now
- Explanation:
- Shortcomings in incentive structure
- Government oriented self oriented
  each other oriented future oriented
- Period of incubation, trust building, management of expectations
- In order to become trusted 3rd party, insurance companies have to invest in personnel, knowledge systems, contracting skills
- Not very much between claustrophobia and agoraphobia.

booz&co.

Topics for the discussion

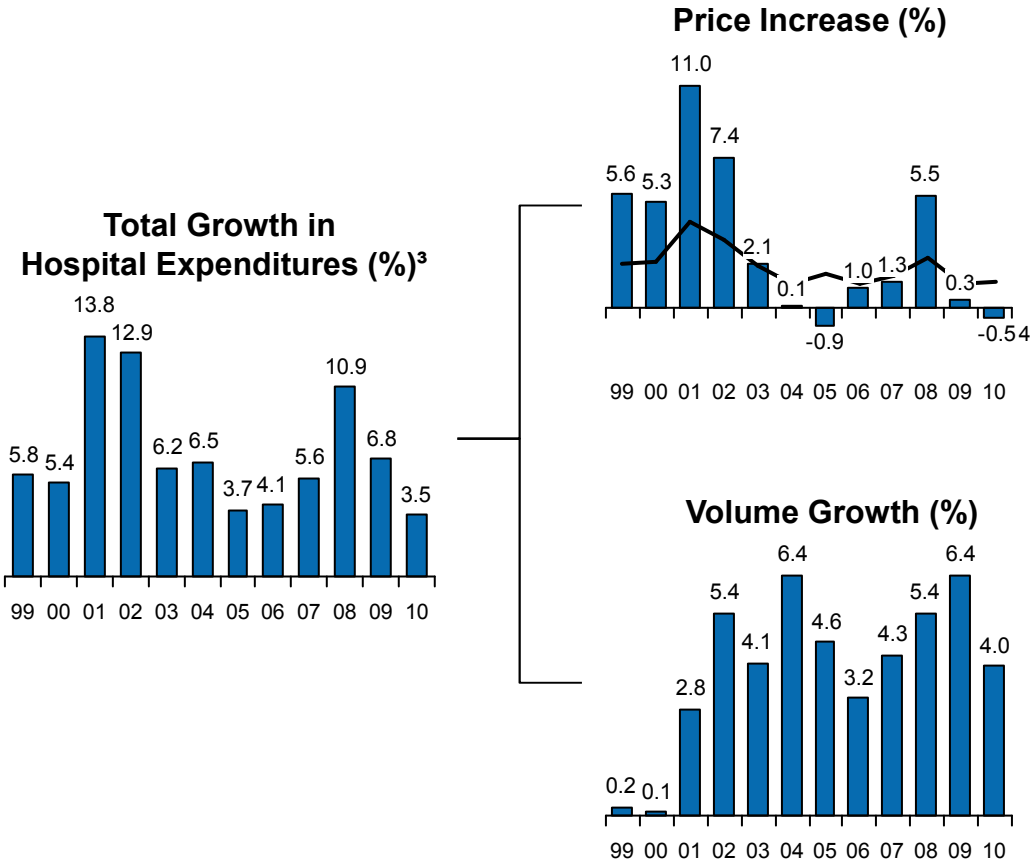
- The 2006 reform
  - Where were we coming from?
  - What did we do?
- What has been the impact of the reform?
- What is the way forward?

booz&co.

Reform in the Netherlands has been successful

Results of reform
▪ An enormous reduction in waiting list ▪ Prices corrected for inflation have decreased – More in next sheets ▪ Improved labour productivity – Strongly increased focus on efficiency ▪ Improved (perceived quality) – Improved ‘consumer experience’

After reduction of waiting lists, volume growth continue to be high



- Price increase have since 2002 been under inflation, with the exception of 2008
- Negotiations in B-segment have clearly contribute to moderate price development

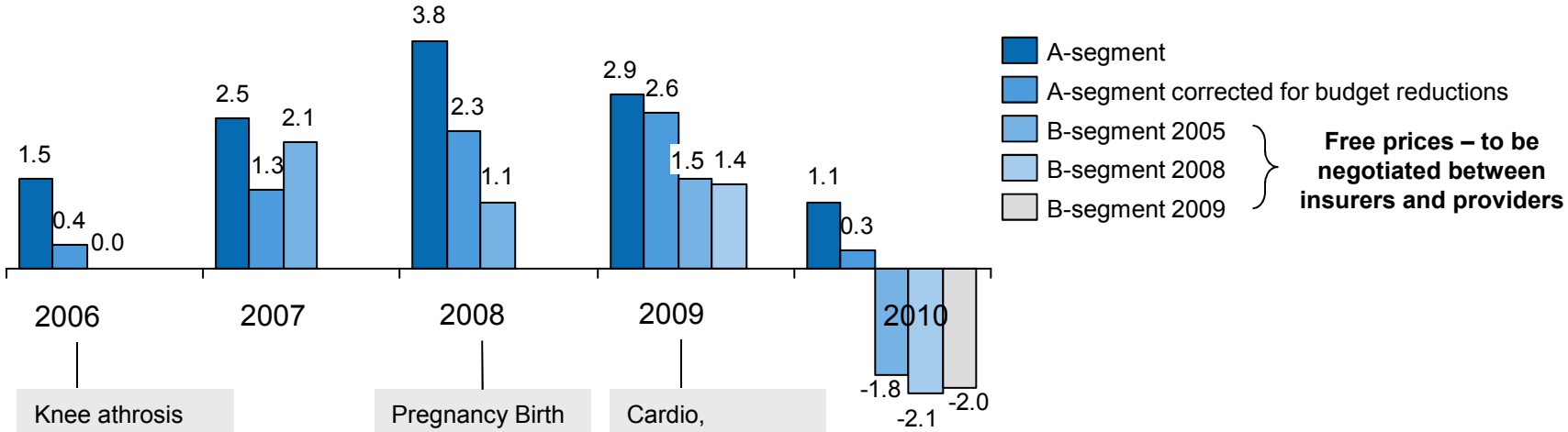
- Growth 2001-2004: reduction of wait lists (*Action plan Zorg Verzekerd)*
- Growth since 2005-2006 coincides with the Health Care Reform

(1) Consumer Price Index Inflation CBS
(2) Effect of population growth and population ageing. RIVM estimate for 2003, 2005 and 2007
(3) Hospital expenditure include day and/or night cost and include specialist health care
(4) Estimate based on "Marktscan Medisch specialistische zorg 2011"
Source: CBS Statline (Zorgrekeningen; expenditures at current and constant cost); RIVM Performance Of Dutch Health Care 2010; Stijging Zorgkosten ontrafeld, VGE, Marktscan Medisch specialistische zorg 2011, Booz & Company analysis

booz&co.

Price negotiations in the free DBC segment have clearly contributed to a moderate price development

Price development Hospital DBCs 2006-2010 (%, nominal)



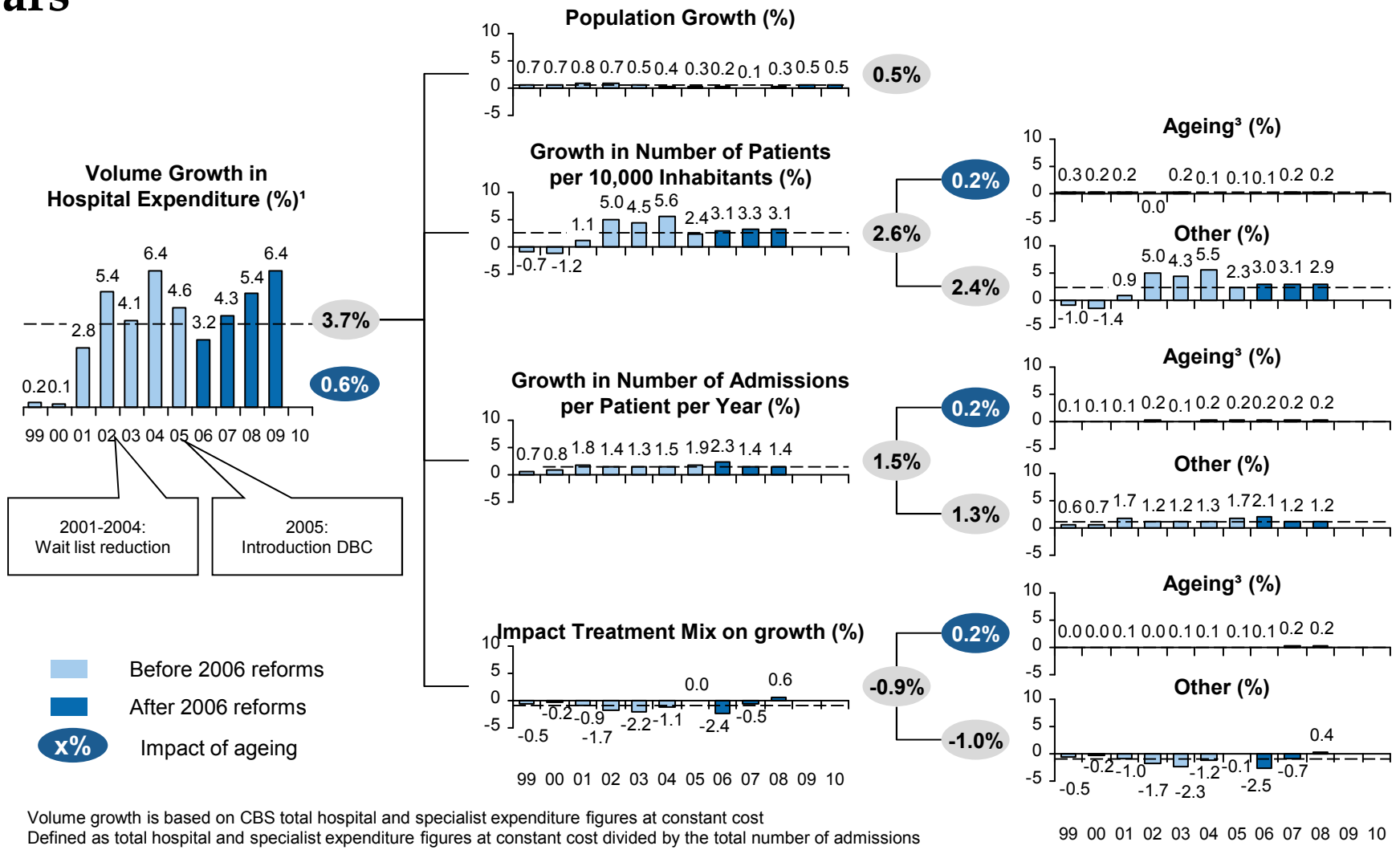
	2006	2008	2009
Main Additions to B- segment	Knee athrosis Cataract Hip atrhrosis Slipped disc Diabetes	Pregnancy Birth Cataract Pacemaker Meniscus Breast cancer	Cardio, Stroke Follow-up Cardio Skin Cancer
Share % B-segment	10%	19%	344%

2010 Price decreases are a sign of success of the 2006 Health Care Reform

Source: Marktscan Medisch Specialistische Zorg 2011, Nza. Onderhandelen over ziekenhuiszorg, Vektis 2009

booz&co.

Ageing has driven less than 1% of volume growth in recent years

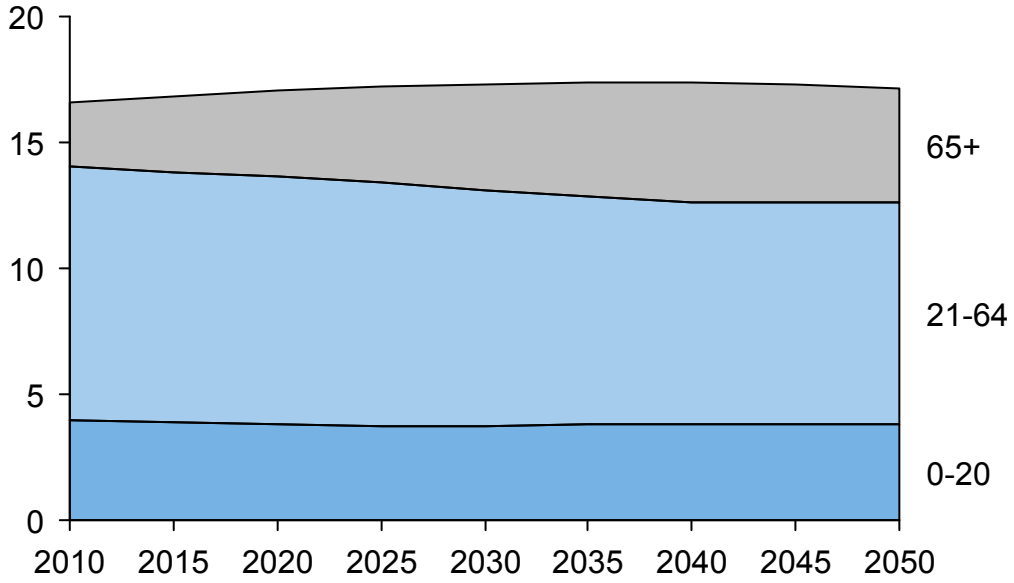


(1) Volume growth is based on CBS total hospital and specialist expenditure figures at constant cost
(2) Defined as total hospital and specialist expenditure figures at constant cost divided by the total number of admissions
(3) Isolated effect of population ageing on driver
Source: CBS Statline (Gezondheid en Welzijn); RIVM Performance Of Dutch Health Care 2010; Kosten van Ziekten 2005, Booz & Company analysis

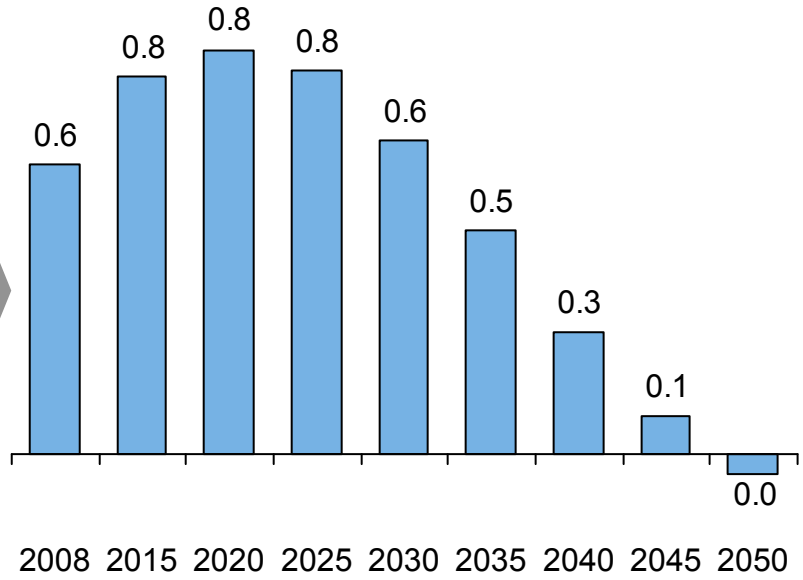
booz&co.

Impact of ageing on volume will not exceed 1%

Forecasted population ageing and growth
(in M people)



Estimated impact of ageing on yearly volume growth (%)



15.3% 19.9% 24.2% 27.1% 26.3% Share 65+ in total population

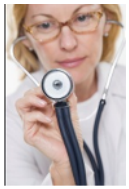
Hence, a strong need to reduce any volume growth on top of ageing

Source: United Nations , Department of Economic and Social Affairs; Booz & Company Analysis

booz&co.

Our system has created strong incentives for volume growth



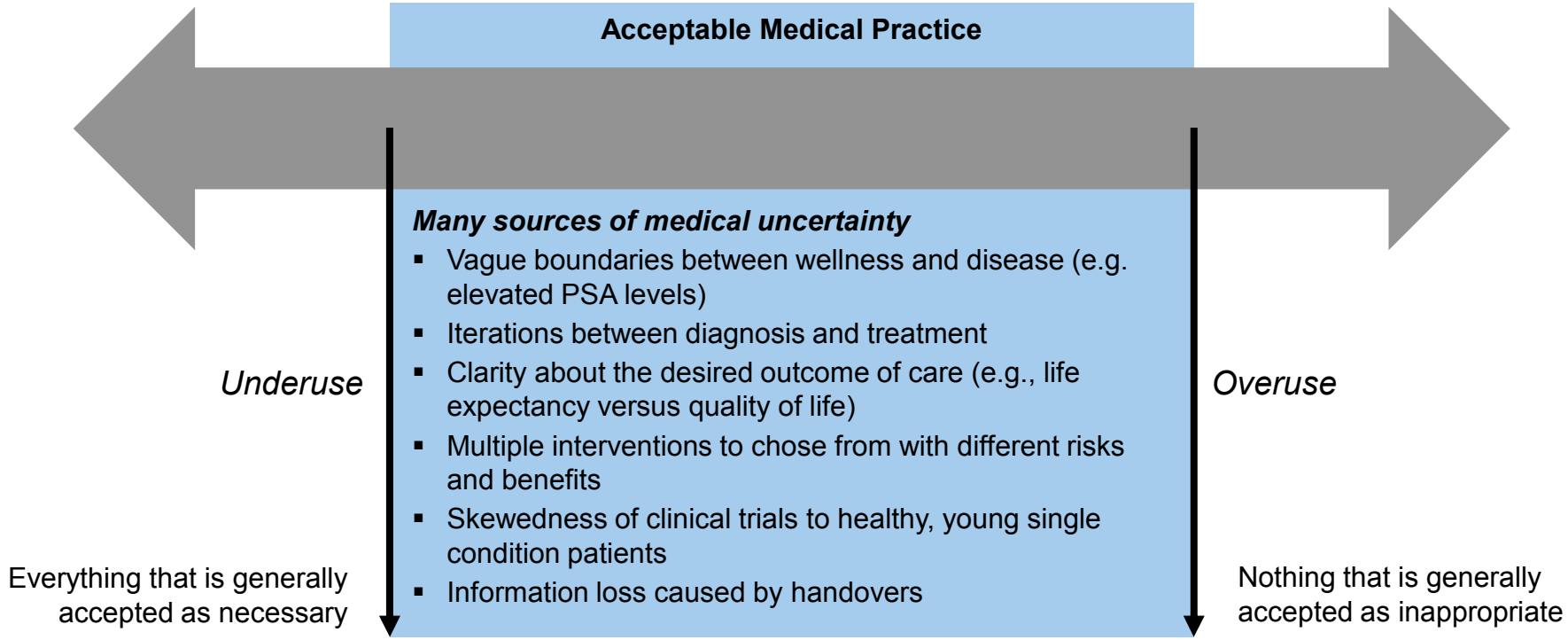



	Insurer	Hospital	Specialist	GP	Patient	Municipality
Primary Objective	▪ Price and volume control ▪ Quality	▪ Cost coverage ▪ Growth	▪ Cure the patient ▪ Maximising income / meet hospital expectations	▪ Cure the patient ▪ Get the workload done	▪ Get cured	▪ Minimise social problems
Constraint	▪ Doctor and patient decide on treatment	▪ Price agreed with insurer ▪ Fixed cost base	▪ Inflow of referrals ▪ Patient expectations that the doctor solves the problem	▪ Inflow of referrals ▪ Patient expectations that the doctor listens and takes actions	▪ Limited medical knowledge	▪ Budget
Tools	▪ Price	▪ Planning of utilisation	▪ 'Treatment menu'	▪ Referrals and treatments	▪ Access to care	▪ Allocation of the budget
Behaviour	▪ Negotiations on price ▪ Limited focus on quality and volume	▪ Fill up available resources as much as possible	▪ Quick to recommend treatment in case of uncertainty	▪ Quick to refer in case of uncertainty	▪ Pushes for something to get done ▪ Follows doctor recommendation	▪ Push for efficiency ▪ No room for extra investments that reduce volume elsewhere

booz&co.

Medical integrity only partly compensates for volume incentives

There is a large grey area that defines acceptable medical practice



Volume incentives pushes to the right, medical integrity protects from falling over

booz&co.

Volume incentives pose a huge leakage risk for efficiency improvement initiatives

Example: specialisation of hospital care

E.g. Friesland

Price (efficiency)

- Price decrease due to efficiency gains, e.g.
  - More scale for efficient logistics
  - Fewer mistakes
  - Quicker surgery due to learning effects

Quality

- Better quality due to learning effects
  - Extensive documentation in literature that experience is a key driver of quality

Volume

- More efficiency means more effective capacity, but capacity tends to fill up

booz&co.

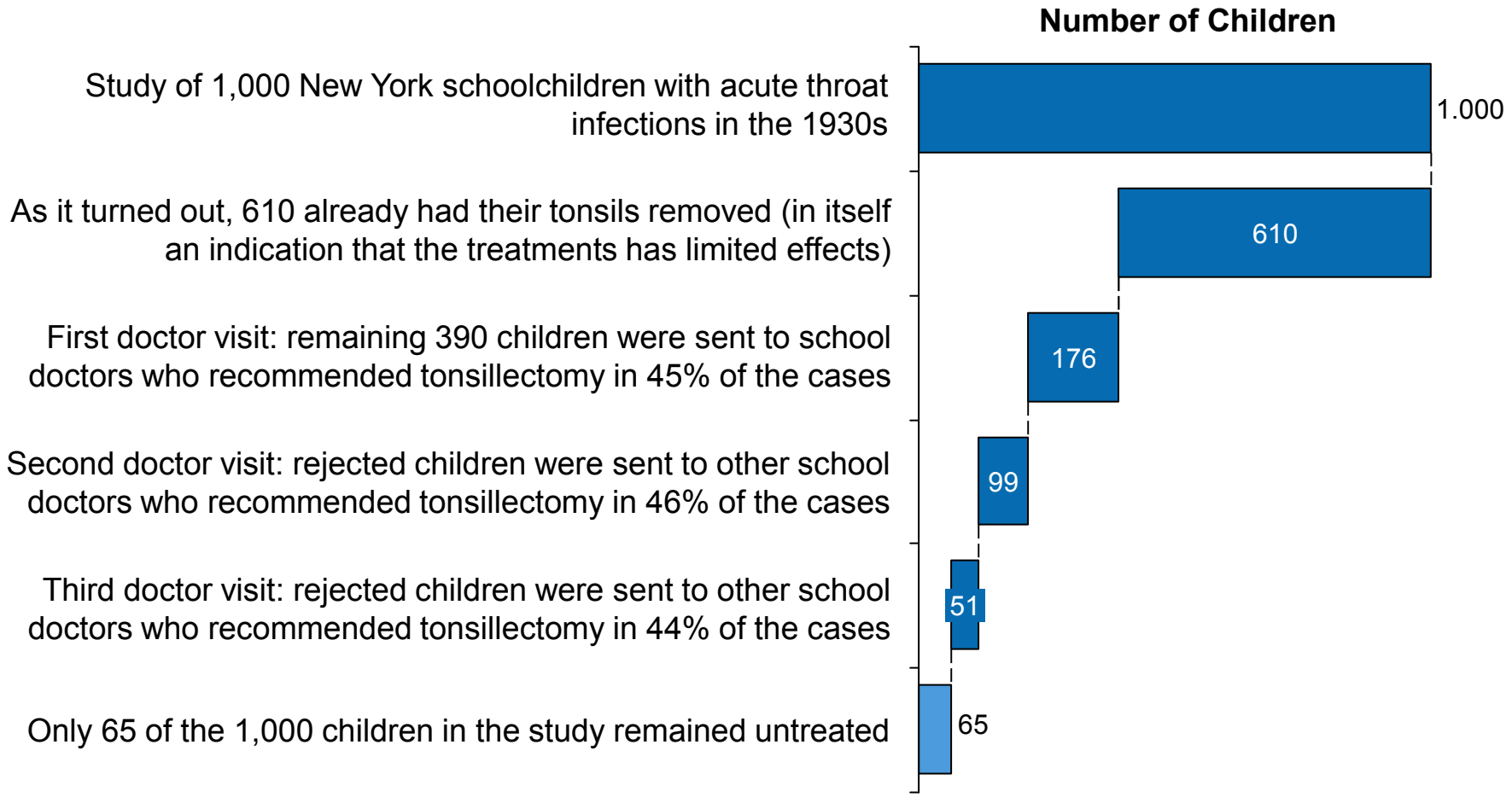
Overtreatment is present in health care

- **Large practice variations are extremely common in health care**
  - Tonsillectomy (still 7x unexplained variation between English regions), BPH, cataract etc.
  - Plexus estimate of at least € 1 Bn potential in reducing practice variation towards medical standards
  - 50-75% of English hospital admissions are in a high variation category
- **Less than half of health care is actually evidence based**
  - *'Voor meer dan de helft van de behandelingen die in het ziekenhuis plaatsvinden ontbreekt een getalsmatige onderbouwing van de effectiviteit'* – Frans Helmerhorst (hoogleraar reproductieve geneeskunde) en Rudi Westendorp (hoogleraar interne geneeskunde)
  - *'More than 50 percent of Medicare spending is used to buy "supply-sensitive". Health care – visits to physicians, diagnostic tests, and hospitalisations, mostly for patients with chronic illnesses. This has two consequences: 1) the health care system spends more money without achieving a benefit; and 2) patients are exposed to the burdens and risks of treatment* – Wennberg (2005)
- **Lots of anecdotal evidence on overtreatment in the Dutch Market. Examples:**
  - Kidney dialysis for 75+ with no improvement of life expectancy and less quality of life (€ 450 Mn)
  - 40% of unnecessary PCTA (€ 60 Mn)
  - Board pressure for volume production in hospitals
  - Prednisone and antibiotics COPD (€ 65 Mn)

booz&co.

A classic tonsillectomy study from the 1930s shows how profound the problem of overtreatment can be

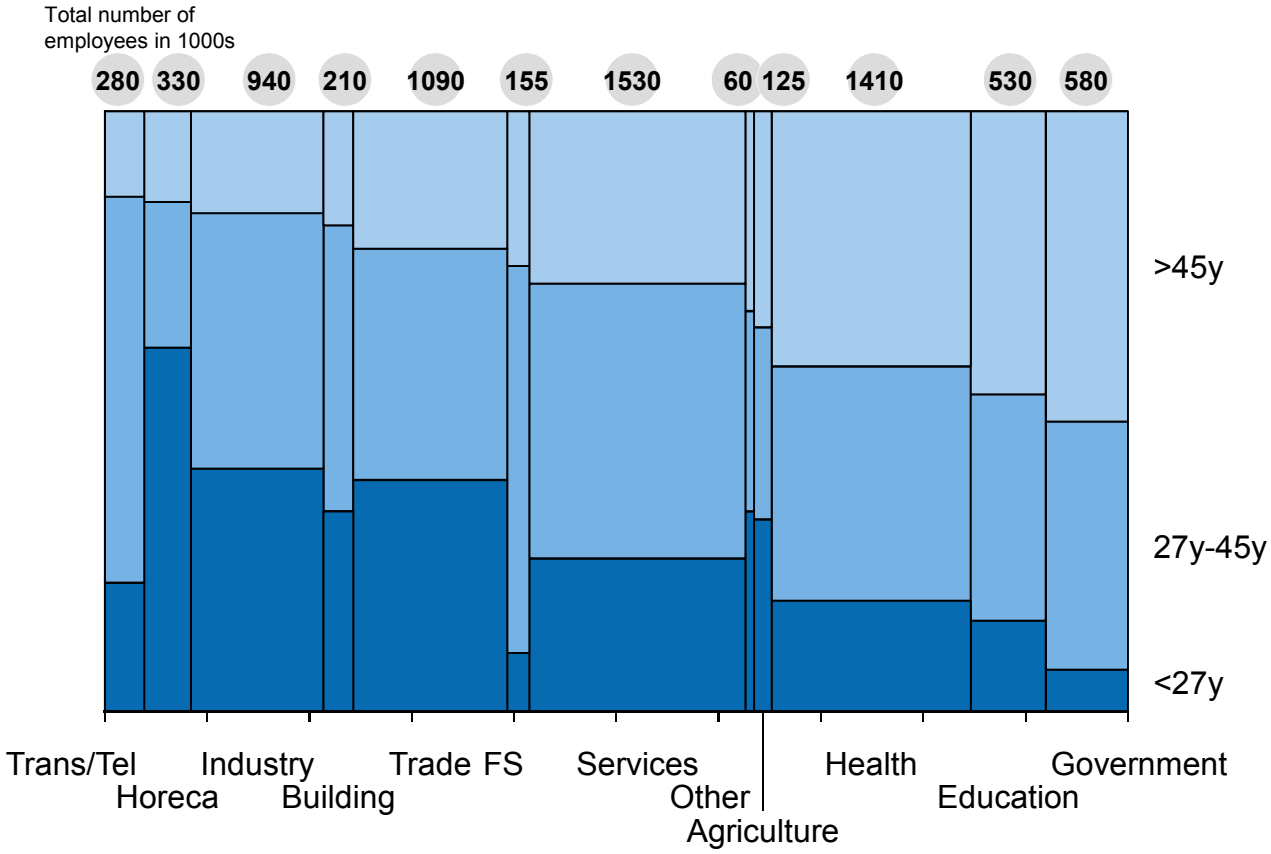
ILLUSTRATIVE



Source: Variations in Health Care. The King's fund

booz&co.

Labour scarcity will lead to sharp price increases



Scarcity can already be felt in some areas, examples:

- Hospitals are recruiting OK-assistants from India
- 13 Hospitals in Breda and Zeeland agreed on a covenant that they would not pick away each other's OK staff
- In commercial clinics, OK assistants and anaesthesia assistants earn up to 15% above highest CAO salary scale

A worst-case scenario: A sustained explosion of both volume and price

Source: Vergrijzing en krapte op de arbeidsmarkt UWV Werkbedrijf, SEO, CBS, Randstad, Raad voor de Volksgezondheid, Skipr; Booz & Company analysis

booz&co.

Micro initiatives to improve quality and reduce volume tend to have no macro benefit

	Five big hurdles	Booz Observations on the Market	Consequences
	1 **Business case**	▪ Objective is often only quality differentiation, no cost ambition. Benefit ambitions often not quantified (but *investments* are) – E.g. Care Avenue Midden Brabant, insurer support for lean initiatives hospitals, anti-smoking programs etc.	▪ Huge number of initiatives that are difficult to compare
	2 **Tangible ambition**	▪ Health policy is highly incremental ▪ No overarching ambition on what (regional) health care should look like – E.g. Care Avenue Midden Brabant	▪ No yardstick to evaluate individual initiatives, hence no apparent consistency in what happens
	3 **Buy-in**	▪ Top-down steering by the insurer meets public and professional resistance – E.g. reactions to volume channelling De Friesland, and volume requirements CZ	▪ Insurers and government are overloaded with proposals initiatives from the field
	4 **Scalability**	▪ Many initiatives depend on passionate and intrinsically motivated professionals – E.g. PoZoB	▪ Many local initiatives are not scalable
	5 **Supply reduction**	▪ Resulting behaviour from other players in the value chain is not anticipated nor mitigated	▪ Volume incentives ensure that 'freed up' supply gets filled again

booz&co.

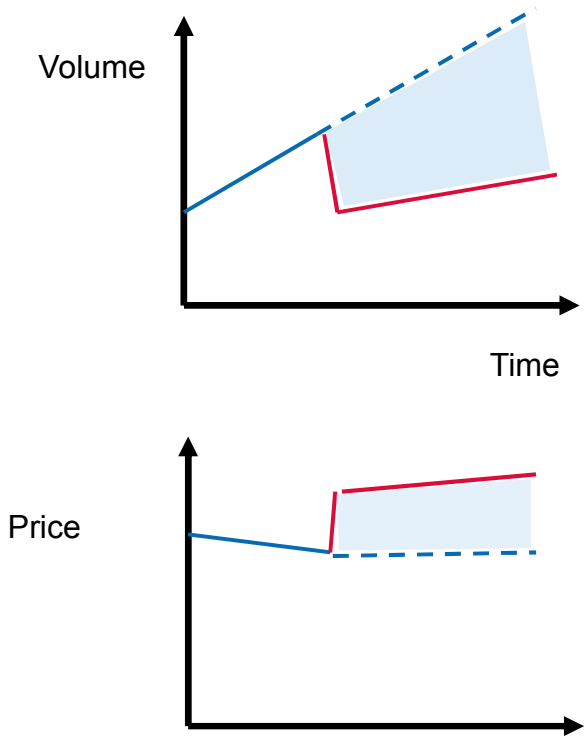
Topics for the discussion

- The 2006 reform
  - Where were we coming from?
  - What did we do?
- What has been the impact of the reform?
- What is the way forward?

booz&co.

Our vision

Objective to Control Volume with Quality Initiatives (Not Care Rationing)



Incentivised by Gain-Sharing

Need to counter the volume incentive in the system

- Income compensation
- Compensation for extra cost (e.g. admin, IT)

Need for hard – inescapable – agreements

- To eliminate leak-away effects

Benefits from gain-sharing can be used by the hospital for more quality improvement investments

Supported by a Network of Quality and Process Innovators

'Innovators' from primary care

'Innovators' from the specialists

'Differentiated' hospitals

- Focused on network care instead of volume growth

Process innovators (technology) with a clear economic case

We pay for less volume across the value chain backed up with quality initiatives

booz&co.

We envision a network approach where everybody gains from volume reduction

Partners in the Network and Their Key Motivator to Participate

booz&co.

Six key activities in realising volume control

	1 Active volume contracting and channelling	2 Pay for quality outcomes and for process innovations	3 Eliminate overuse in targeted areas	4 Facilitate patient empowerment	5 More volume to primary care instead of specialists	6 Scale-up disease management
What to do?						
How to do it?	▪ Price and volume in contracts (per DBC)	▪ Reward quality outcomes ▪ Benefit and cost sharing for field cost /volume initiatives	▪ Identify medical practice variation ▪ Stimulate reduction with transparency and rewards	▪ Offer consumers social media, generic info, and case specific info ▪ Shared decision making	▪ Incentivise first line to deal with patients ▪ Stimulate return referrals to primary care	▪ Actively manage care demand for chronic diseases
Were is the value?						
Care contracting for value – Quality	▪ More volume to the best quality providers	▪ Stimulates provider to improve quality	▪ Less overuse is higher quality	▪ Fewer medical mistakes ▪ Less process inefficiencies	▪ -	▪ Prevents complications
Care contracting for value – Volume	▪ Eliminates volume incentives ▪ Eliminates benefits leakage	▪ Stimulates provider investments in volume reduction	▪ Directly eliminates volume from the system	▪ Better informed patients on average consume less care	▪ Less overtreatment in specialist care	▪ Directly prevents demand for heavy care
Care contracting for value – Price	▪ More volume to provide with the best price	▪ Higher quality often translates in lower prices			▪ Primary care is cheaper than specialist care	