

CONFIDENTIAL



The elephant in the room: ethical rationalisation

July 2010

Summary Presentation Document

This material was used by Temple: Capital Investment Specialists during an oral presentation; it is not a complete record of the discussion.

Problem statement

What are the underlying causes of health cost growth,

are they likely to prevail and ...

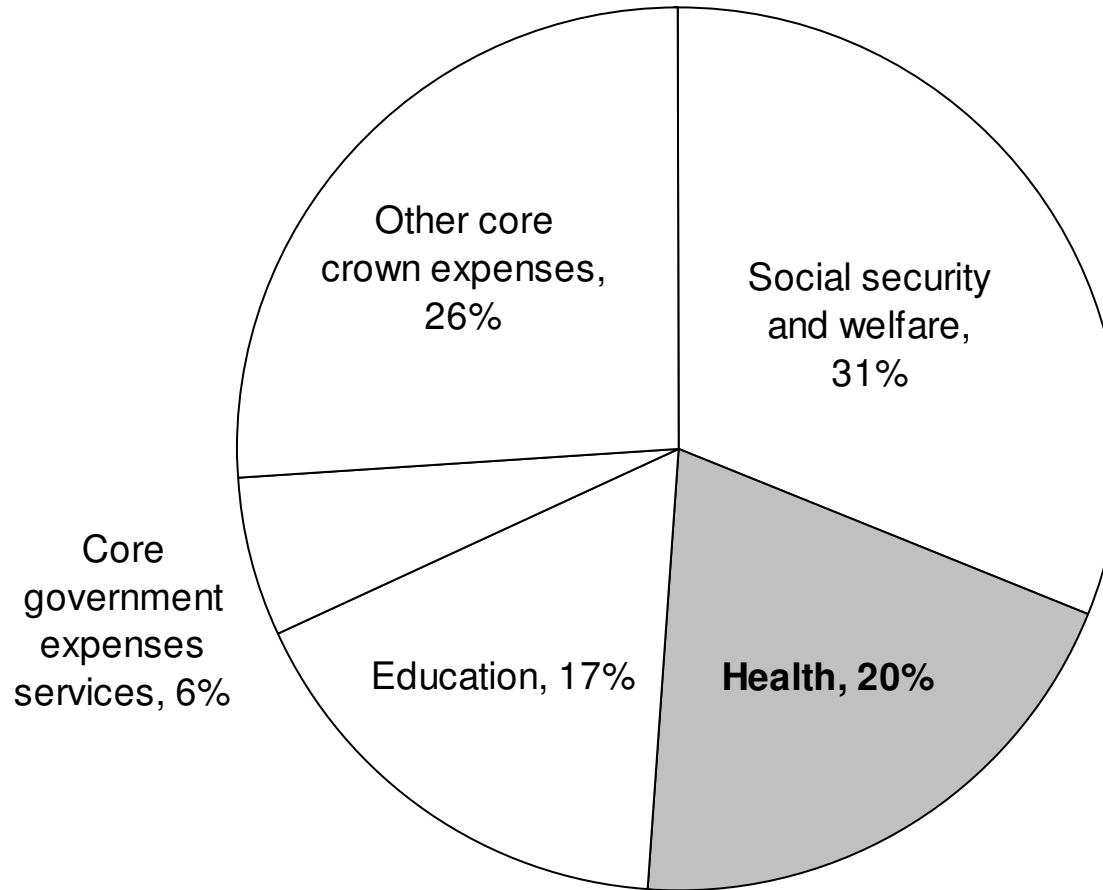
what if anything can be done to arrest this growth?

WHAT YOU SHOULD WALK AWAY FROM THIS PRESENTATION THINKING

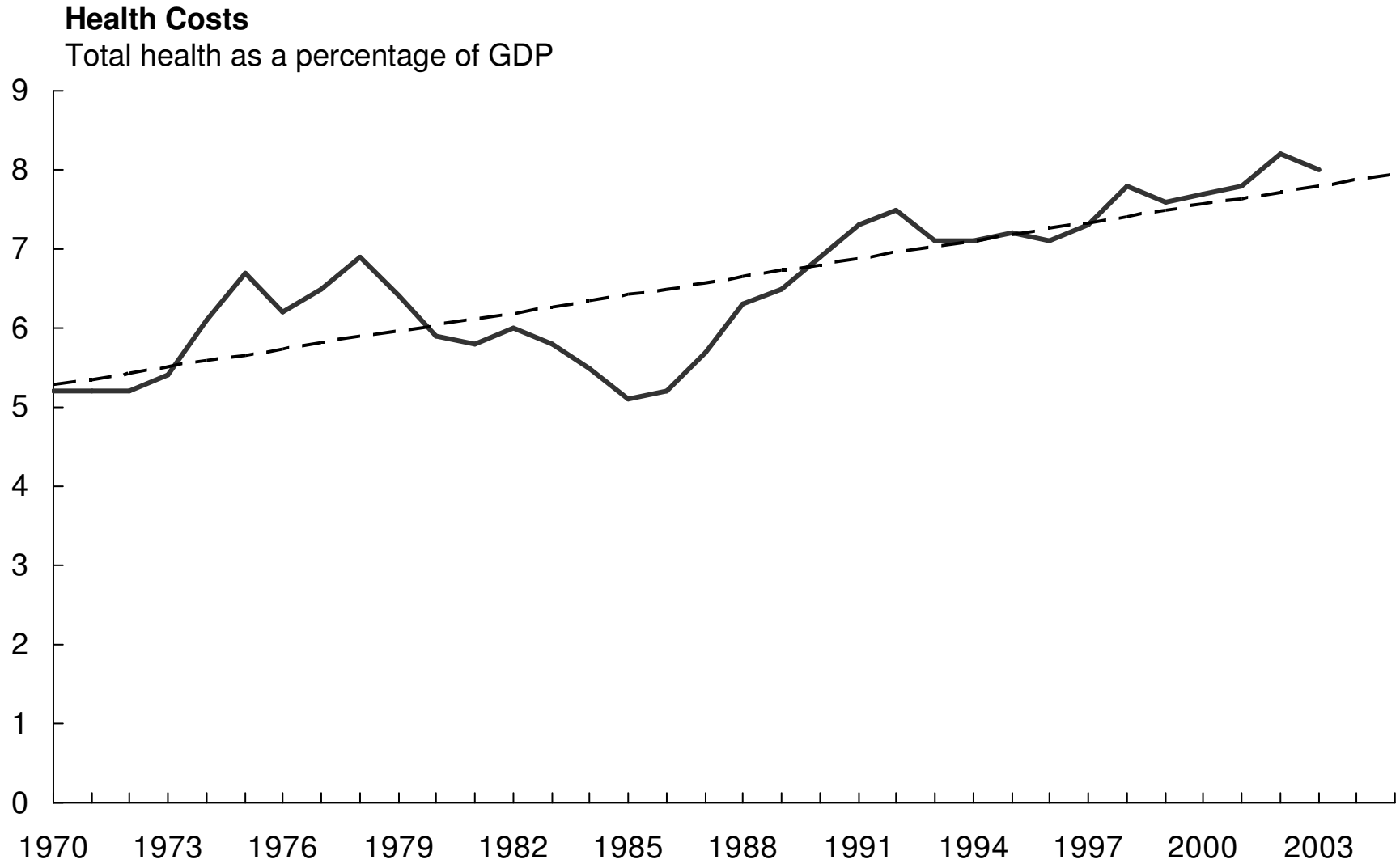
- **Takeaway One:** The health funding crisis hasn't even started – this is going to get a lot worse
- **Takeaway Two:** The initiatives on the table are inadequate. The elephant in the room is the discussion on the specifics of who gets what
- **Takeaway Three:** The government cannot and will not be the white knight. Leadership in discussing the elephant will likely come from those in this room.

HEALTH ACCOUNTS FOR ~20% GOVERNMENT EXPENSES

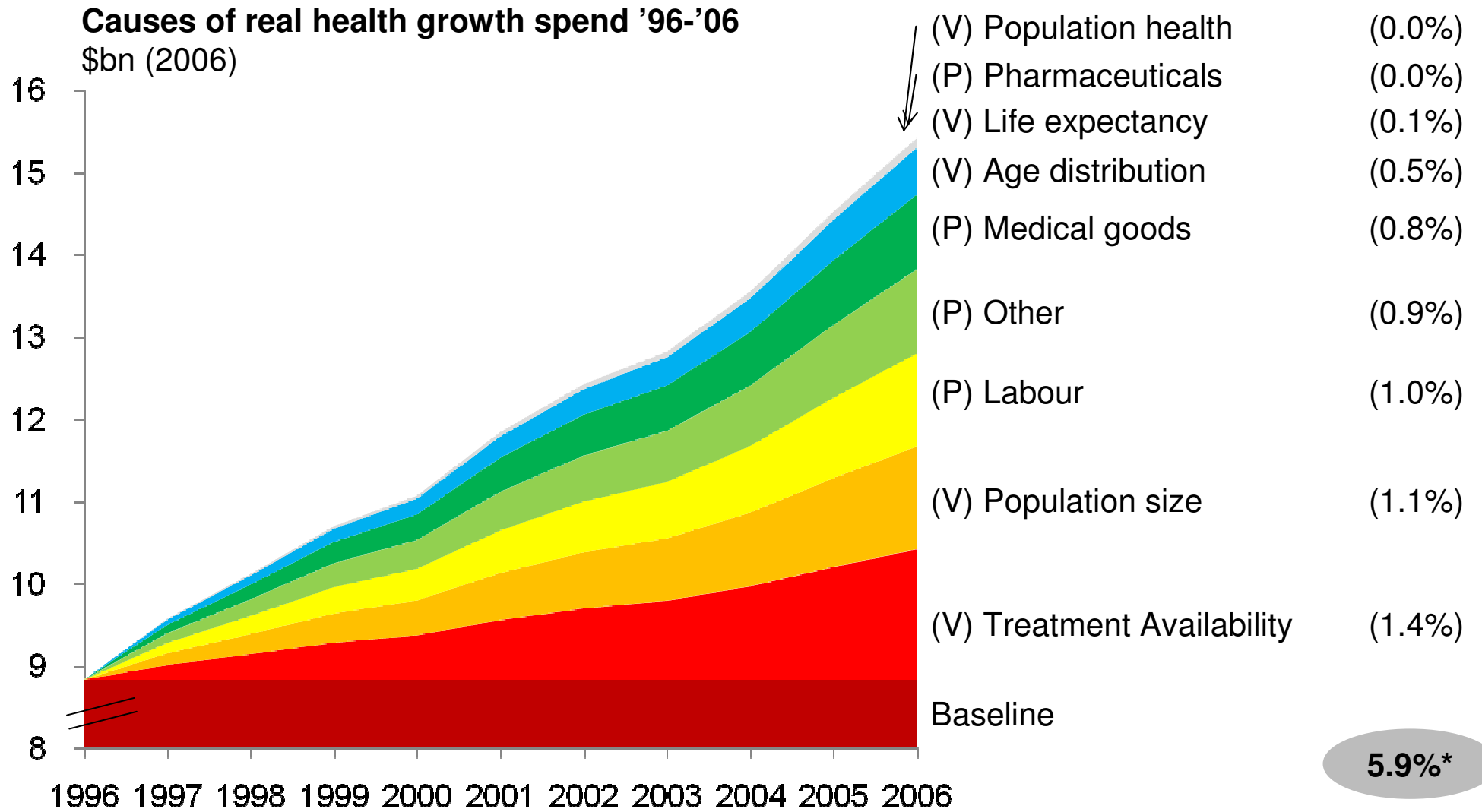
Breakdown of core government expenses (2008)
\$m (2008)



HEALTH COSTS HAVE GROWN FASTER THAN GDP FOR THE LAST QUARTER CENTURY



POPULATION GROWTH, INCREASED TREATMENT AVAILABILITY AND LABOUR COSTS ACCOUNTED FOR ~60% OF GROWTH



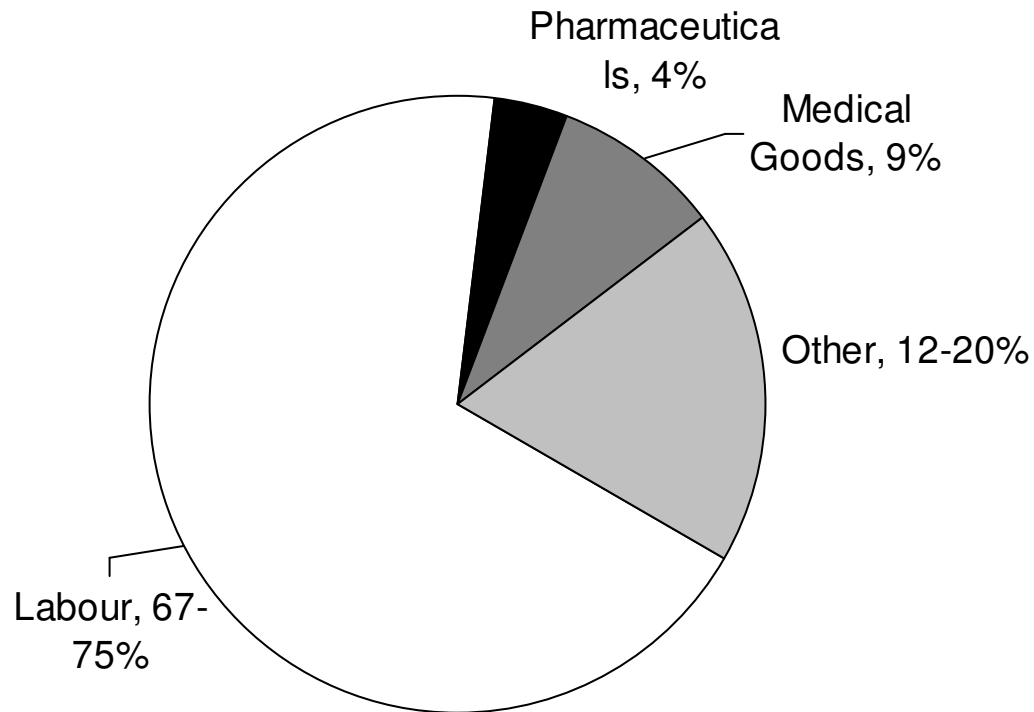
A DECLINE IN POPULATION HEALTH HASN'T DRIVEN VOLUME OF CARE PROVIDED

Proxies for Population Health Status (1996 – 2006 or nearest available)	
Measure	Status
Life expectancy (Years)	✓
Infant mortality rate (per 1,000)	✓
Maternal mortality rate (per 100,000)	No measureable trend
Disability adjusted life years lost (age standardized per 100,000)	✓
Self rated health % rating health as good, very good or excellent	✓
Source: NZHIS, NZ MoH, OECD, WHO, Statistics New Zealand	TEMPLE

LABOUR IS A LARGE COMPONENTS OF HEALTH CARE COSTS AND LABOUR PRICE GREW FASTER THAN NATIONAL AVERAGE EVERY YEAR

Cost components of healthcare in New Zealand

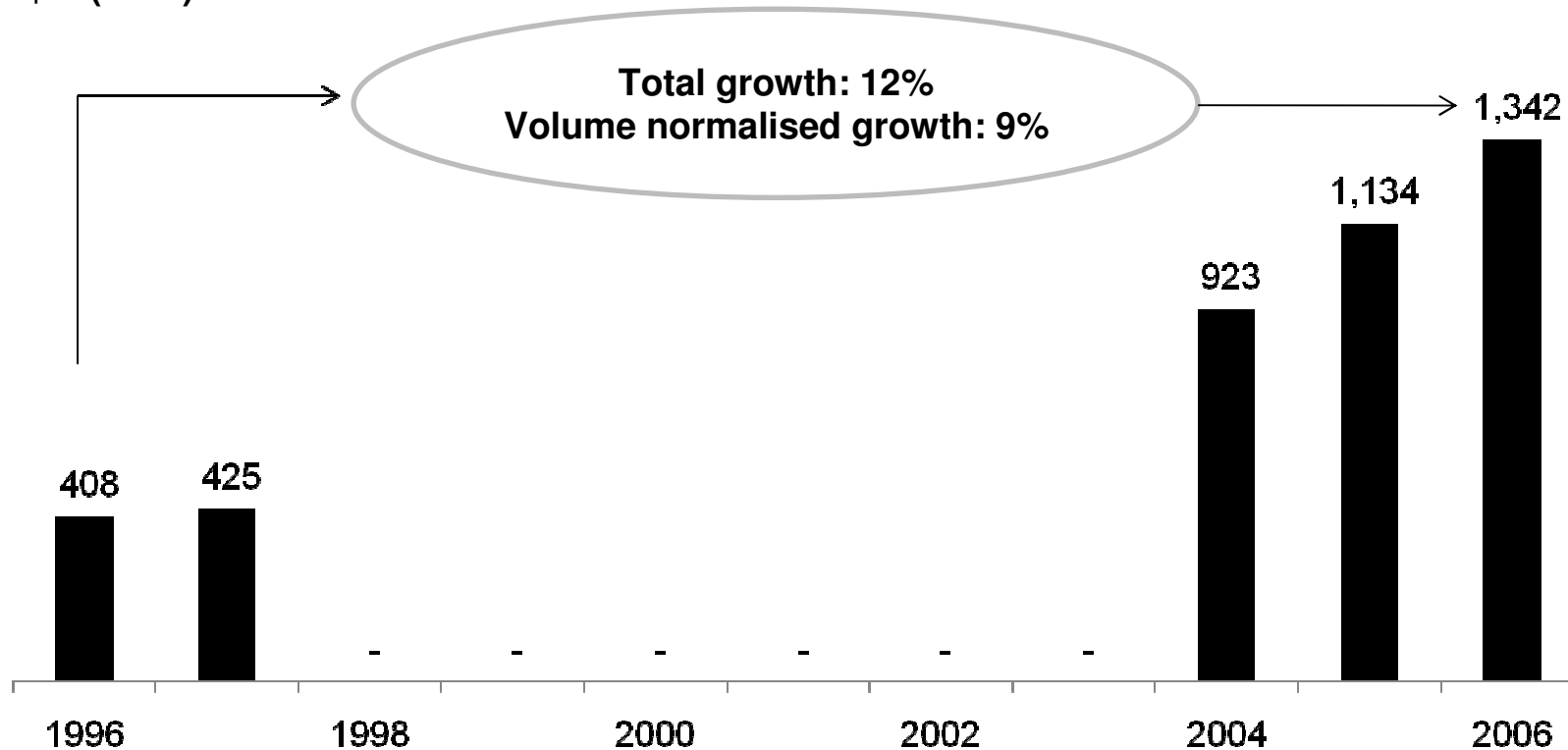
100% = \$15,433m (Public and Private, \$2006)



- Real health labour cost growth of ~1.4% CAGR
- Total real wage cost growth of ~1.2% CAGR
- **Contribution to cost growth: ~1.0%**

GROWTH IN MEDICAL GOODS ADDED 0.8% CAGR BY INCREASING THE PRICE OF CARE

Spend on Therapeutic appliances and medical durables and non-durables*
\$m (2006)



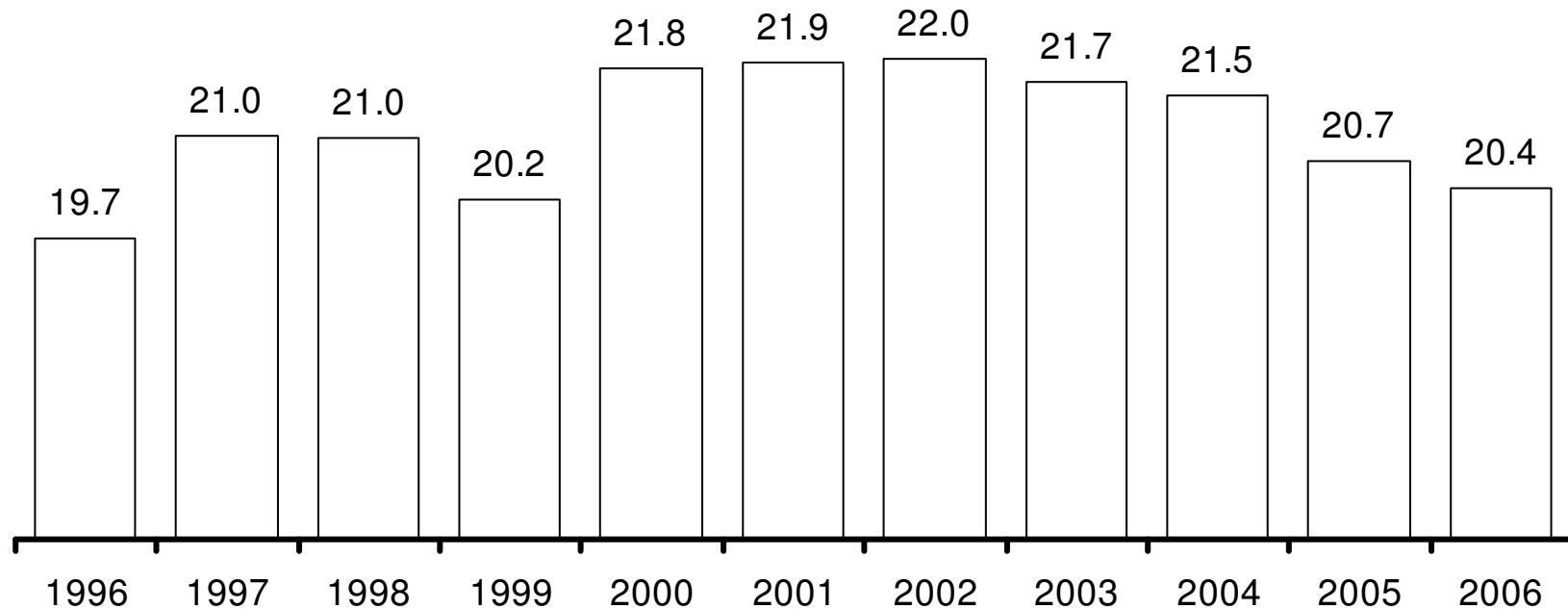
Health Outlook 2007 (OECD) commented that,

“The diffusion of modern medical technologies is one main driver of rising health expenditure across OECD countries.”

Weighted contribution to total price growth: 0.8% CAGR

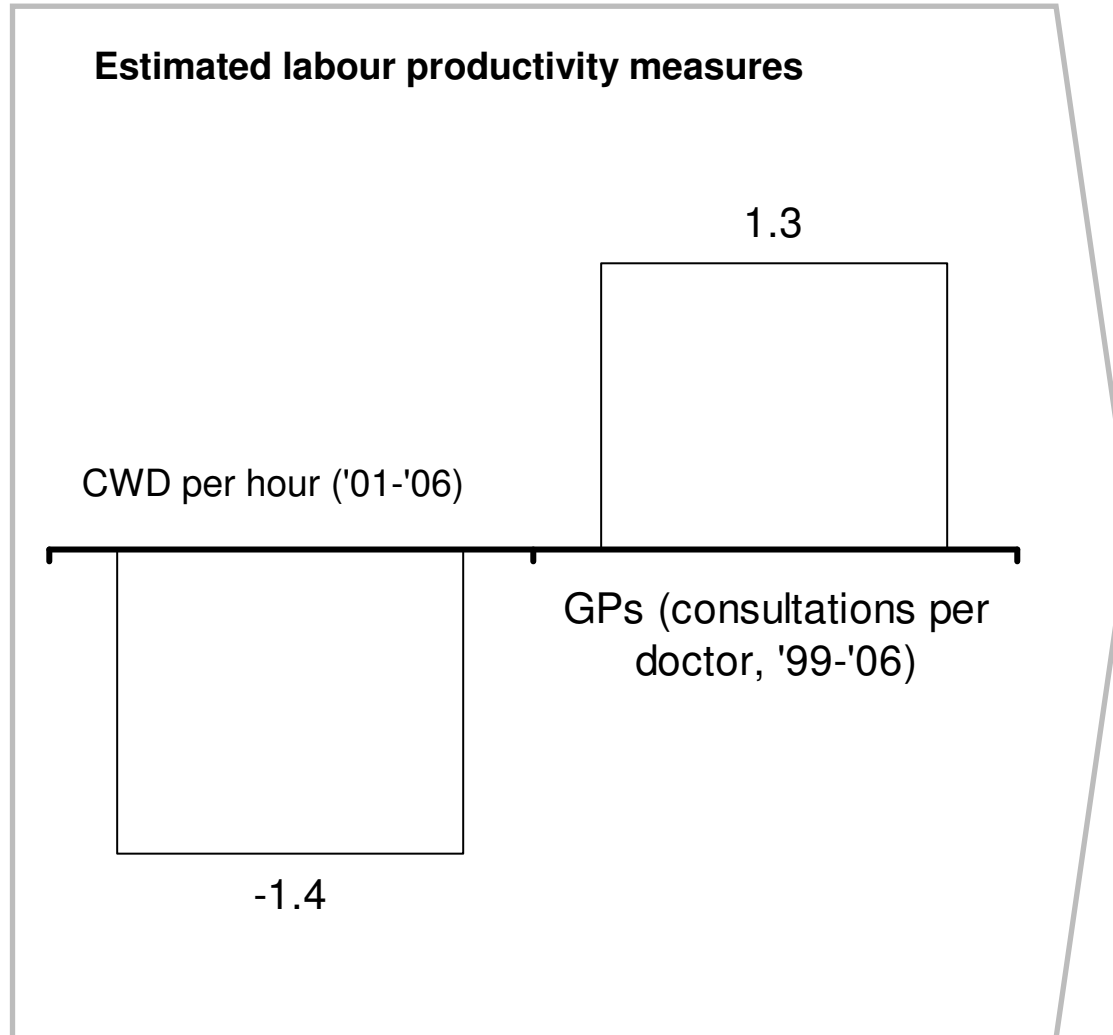
PHARMAC CONTROLLED REAL PRICE GROWTH AT NEAR ZERO

Average price per prescription
\$ (2006)



- Real cost per prescription cost growth of 0.3% CAGR
- Weighted contribution to total price growth: 0.01% CAGR

PRODUCTIVITY CHANGE OVER THIS PERIOD WAS NEGLIGIBLE



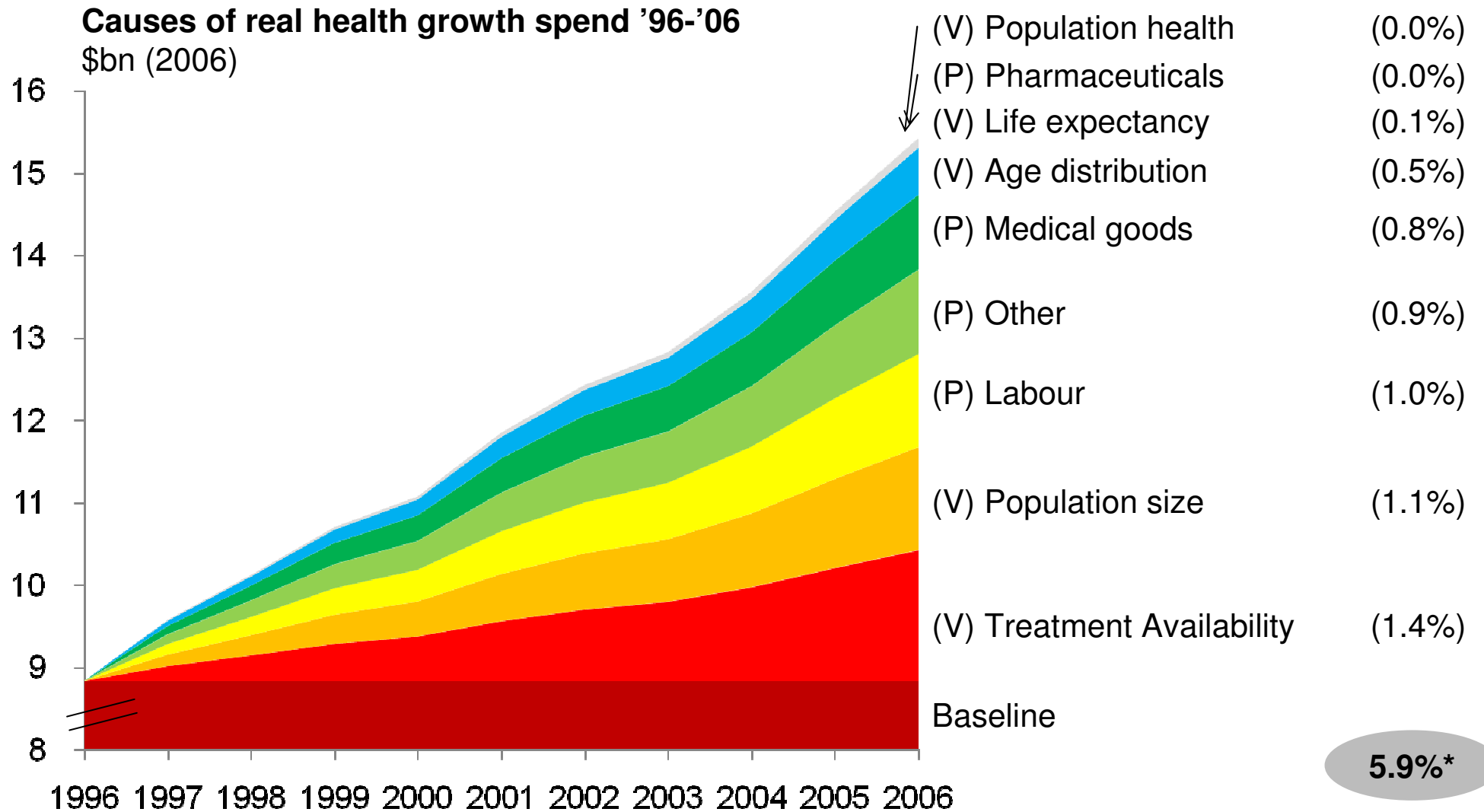
- There is no nationally agreed measure (s) of productivity in health

“A critical issue in New Zealand is developing measures of productivity (outputs per input)...”, 2009 OECD Economic Survey of New Zealand

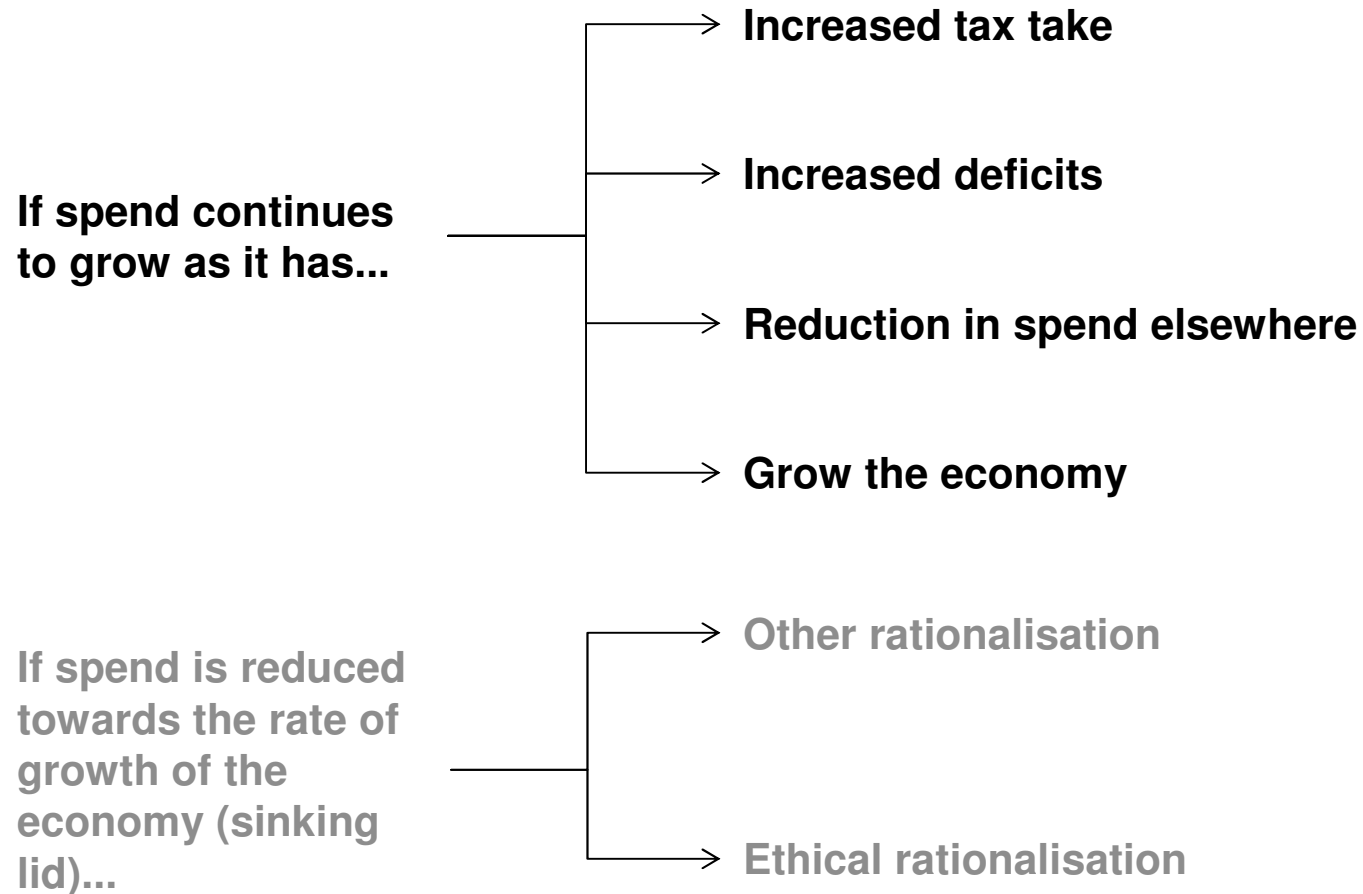
- Sector level data is variable in quality or missing
- **Implied labour productivity: 0%***

*Given increases in spending from the Labour government, no exposure to capital markets or competitive pressure in much of the health sector and low national labour productivity growth; Source: Ministry of Health, OECD Health Data

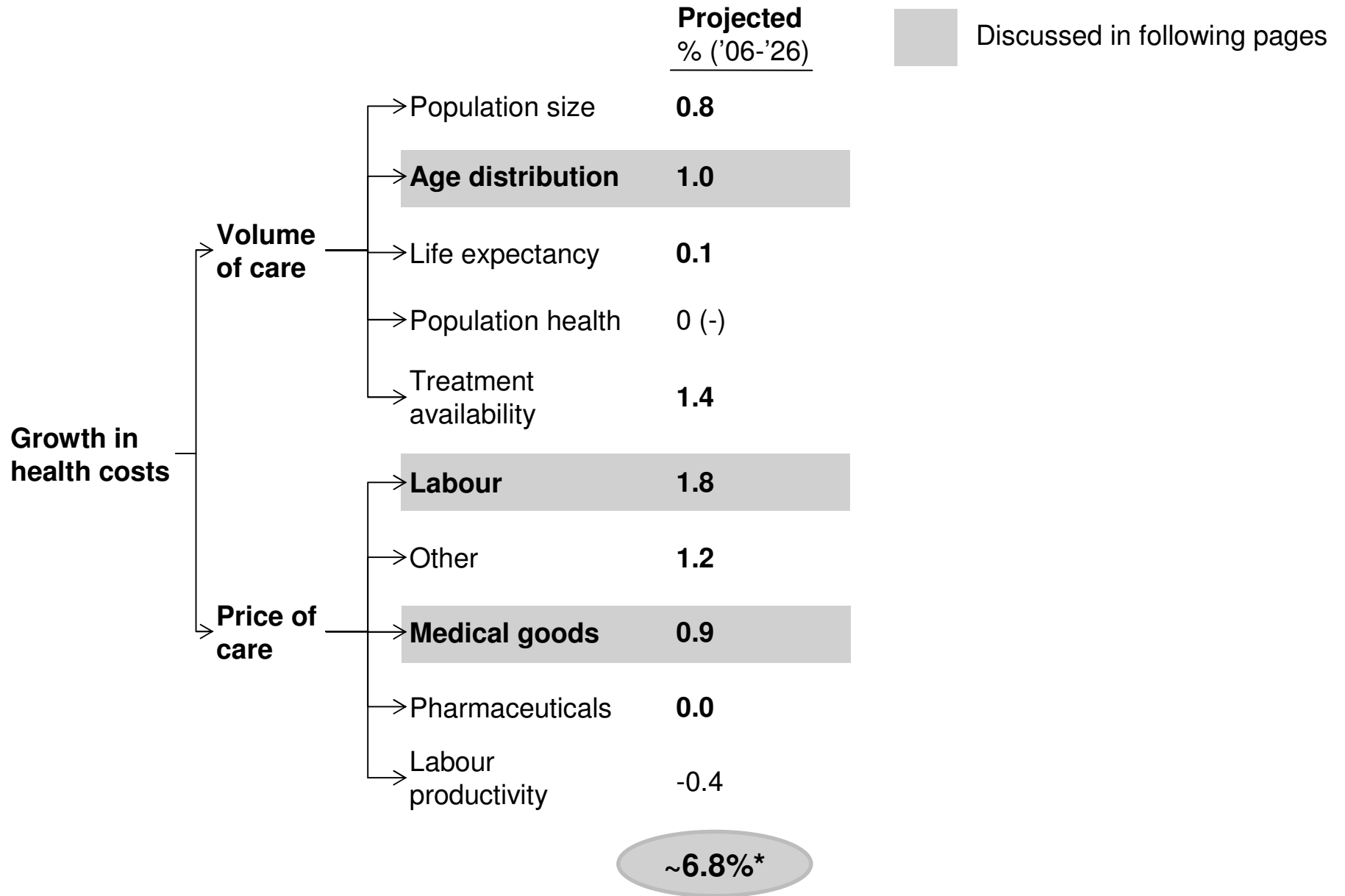
Population growth, increased Treatment Availability and Labour costs accounted for ~60% of growth '96-'06



THE IMPLICATIONS OF CONTINUATION DOWN THIS PATH ARE SIGNIFICANT

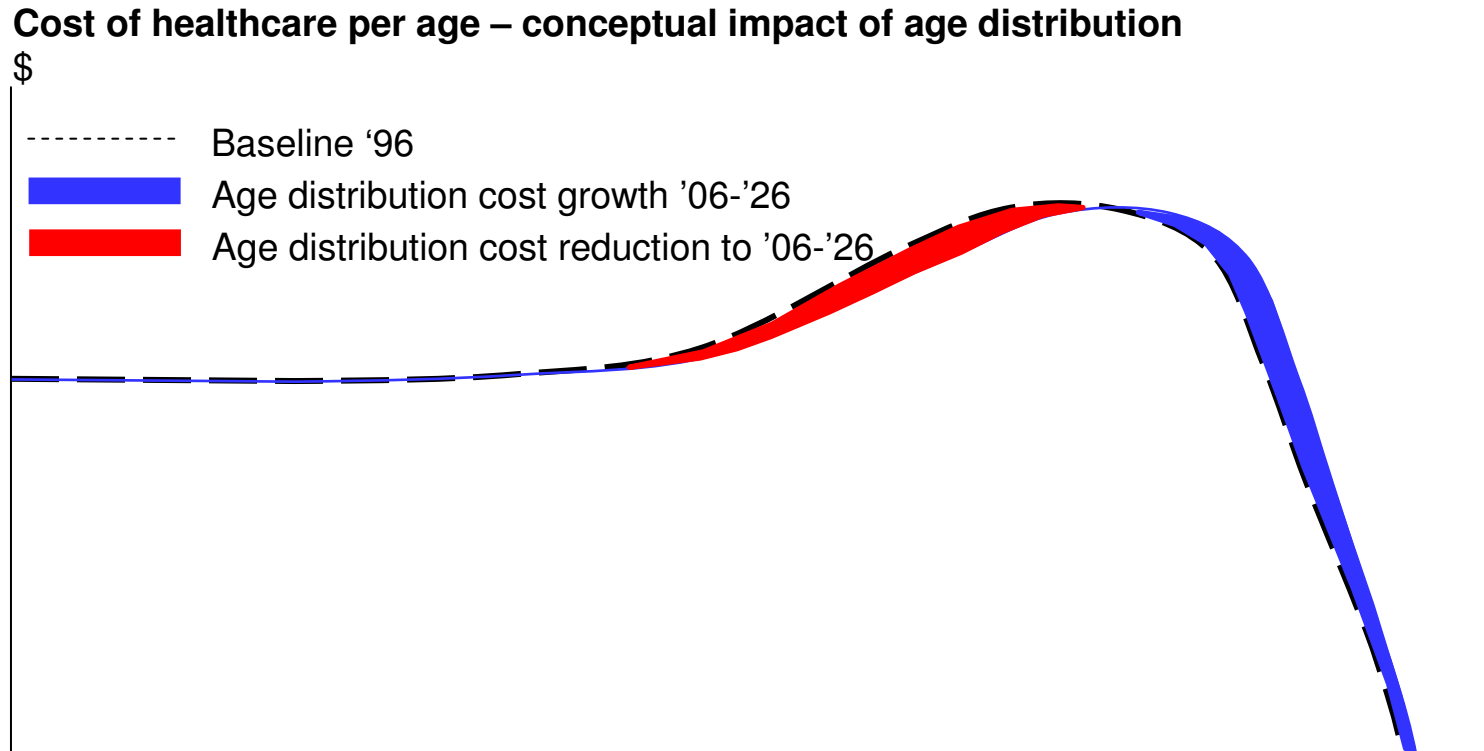


SUMMARY OF A 'CREDIBLE SCENARIO'



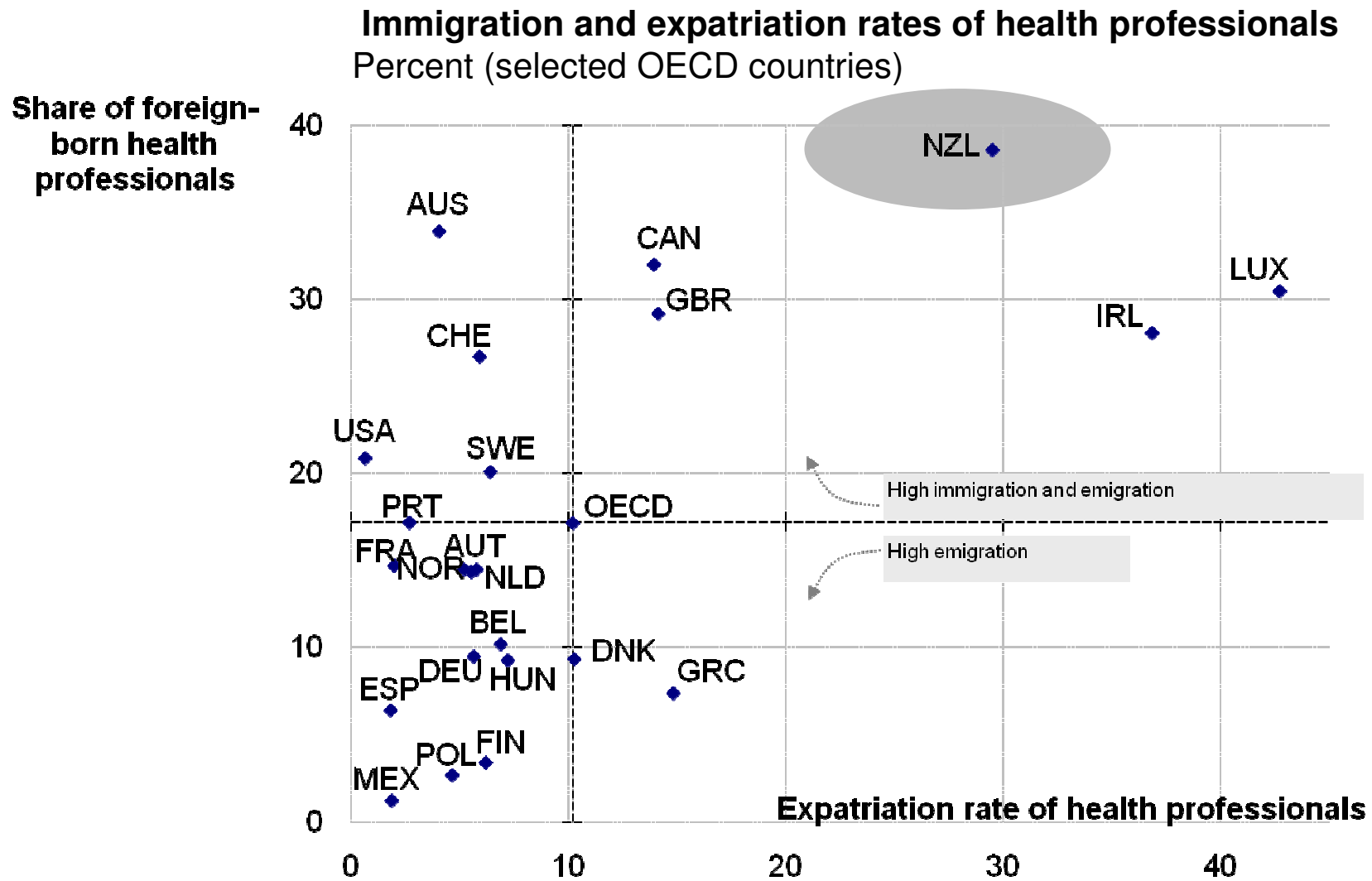
* May not add due to rounding

AGE DISTRIBUTION INCREASED HEALTH COSTS 0.5% CAGR '96-'06



- The number of 65+ people grows from 511 to 955 (Mid range series) doubling the rate of growth contribution from
- **Implied cost growth over the period: 1.0% CAGR**

NEW ZEALAND IS HEAVILY DEPENDENT ON FOREIGN HEALTH PROFESSIONALS



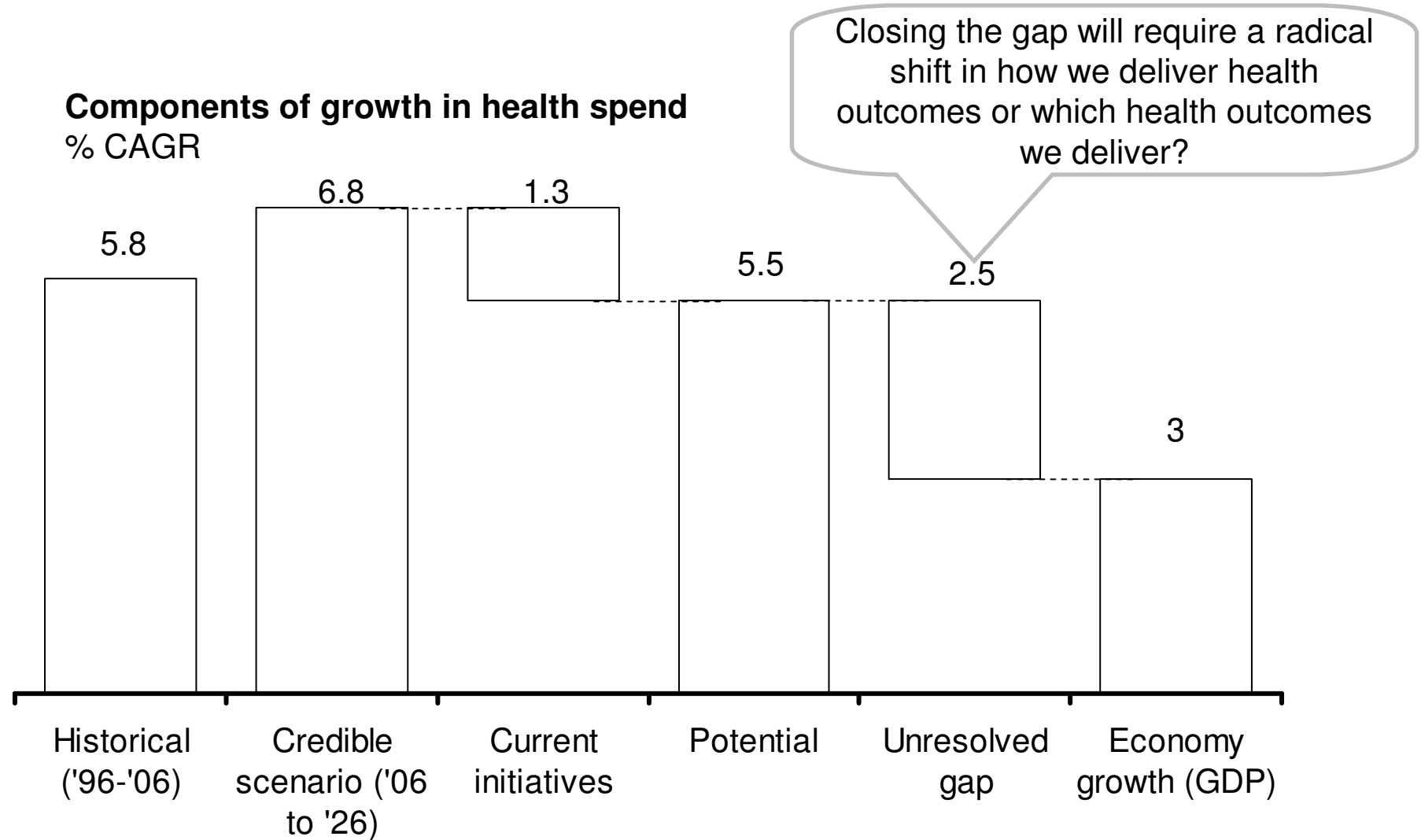
Source: OECD, note this is circa 2000 data from 2008 paper on

LABOUR COST GROWTH WILL LIKELY ACCELERATE

- **Workforce capacity issues:** the 6th (of 30) lowest number of practicing doctors per population in the OECD (2.2 per 1000 versus 3.1)
- **Dependent on foreign labour flows:** high percentage of foreign born health professionals and one of the highest rate of expatriation.
- **Global labour shortages:** A recent OECD survey of shortage estimates ranges from 0 to 20%+. All studies estimate a growing shortage of some form.
- **Global labour price growth:** A recent US study suggests a 3% CAGR rise in nursing salaries coupled with a 90% increase in graduates to 2020 would keep supply and demand in balance.

We have estimated labour growth at the average of current (2%) and that estimated above for the US (3%) to give 2.5% CAGR

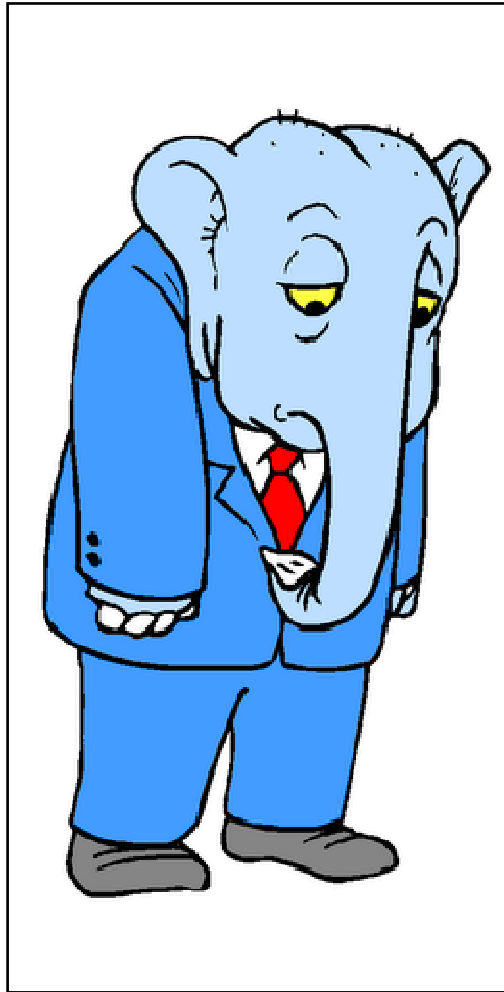
THE THINGS WE'RE DOING OR PLANNING TO DO DON'T MAKE FOR SUSTAINABLE HEALTH



WHAT YOU SHOULD WALK AWAY FROM THIS PRESENTATION THINKING

- **Takeaway One:** The health funding crisis hasn't even started – this is going to get a lot worse
- **Takeaway Two:** The initiatives on the table are inadequate. The elephant in the room is the discussion on the specifics of who gets what
- **Takeaway Three:** The government cannot and will not be the white knight. Leadership in discussing the elephant will likely come from those in this room.

THE IMPLICATIONS OF CONTINUATION DOWN THIS PATH ARE SIGNIFICANT



If spend continues to grow as it has...

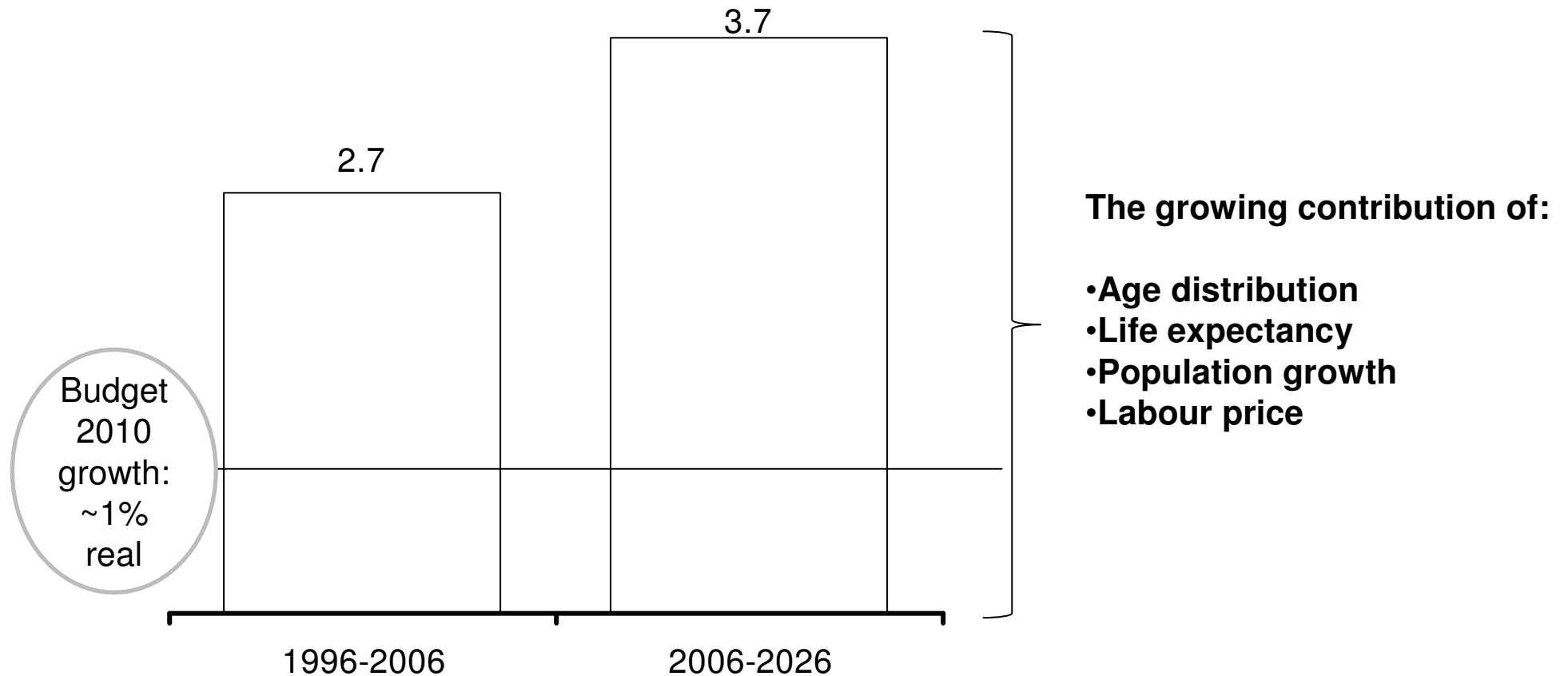
- Increased tax take
- Increased deficits
- Reduction in spend elsewhere
- Grow the economy

If spend is reduced towards the rate of growth of the economy (sinking lid)...

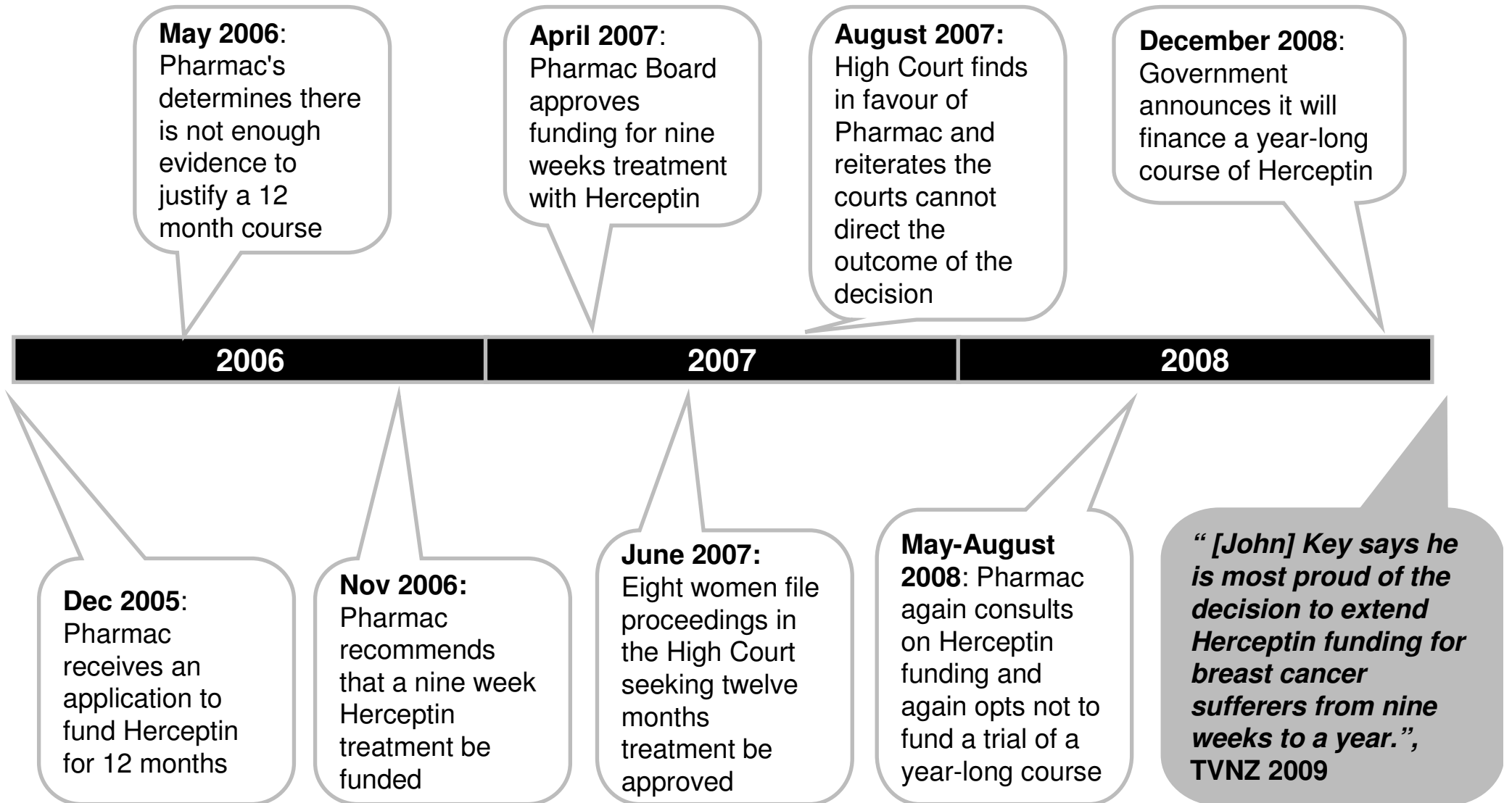
- Other rationalisation
- Ethical rationalisation

'UNSTOPPABLE' CONTRIBUTORS TO HEALTH GROWTH WILL INCREASE AND IS NOT COVERED BY CURRENT FUNDING

'Unstoppable' growth contribution
% CAGR real spend on healthcare



HERCEPTIN STORY IS AN EXAMPLE OF PR WINNING OVER SCIENCE AND ECONOMICS



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THE GOVERNMENT WON'T BE THE WHITE KNIGHT



**Different
timelines**

Three year term for politicians, long term decisions (10+ years) for the health sector

**Political
suicide**

Avoidance of 'political suicide' will make addressing the real issues hard for political leaders

**Stakeholder
complexity**

In spite of owning the budget, the complexity of the stakeholder map means a prescriptive government approach won't work

WHO IS GOING TO PUT THEIR HAND UP AND HAVE THIS CONVERSATION?



HOW CAN THIS INFORMATION BE USED TO MAKE THIS MANAGEABLE?

From...

..to

Talking of 'innovation'

Innovation leadership: Structured investment in changing the way we deliver health services.

Avoidance of critical issues

Discussion leadership: A considered national and / or local discussion on what health services can be expected

Politically driven funding allocation decisions

Clinical leadership: Long term clinical leadership largely decoupled from the political process

Expectation of leadership from the state

Consumer leadership: Leadership from those close to the shop floor including New Zealand's citizens



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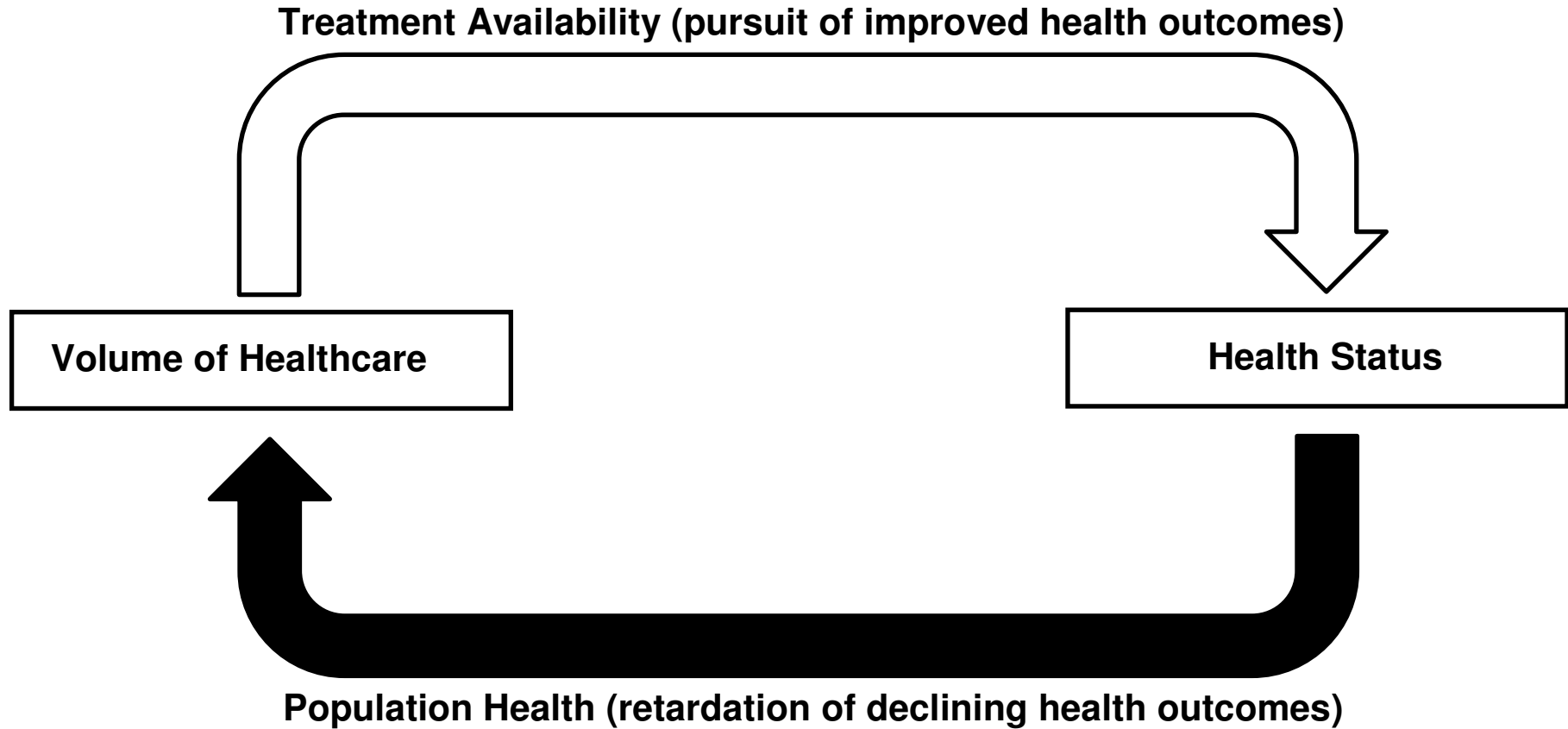
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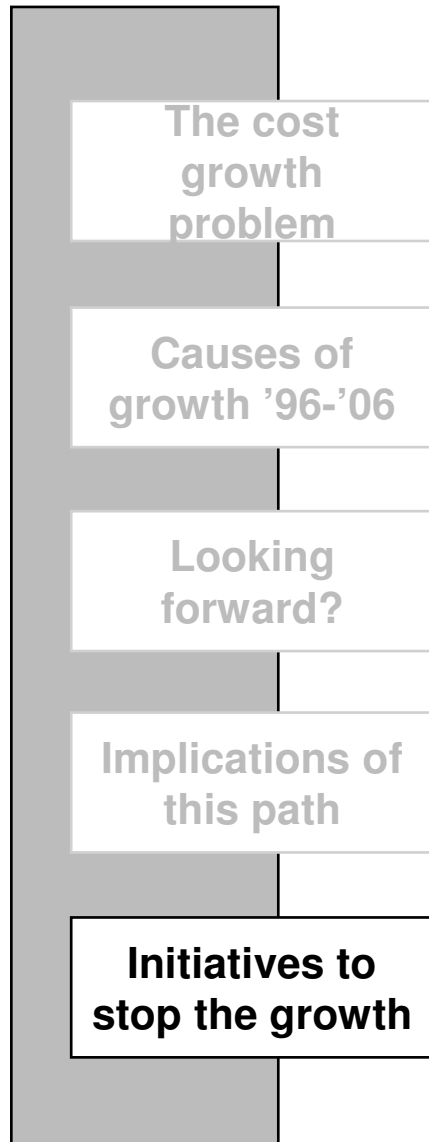
Let's talk

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IS DECLINING HEALTH STATUS DRIVING CHANGES IN THE VOLUME OF HEALTHCARE PROVIDED?

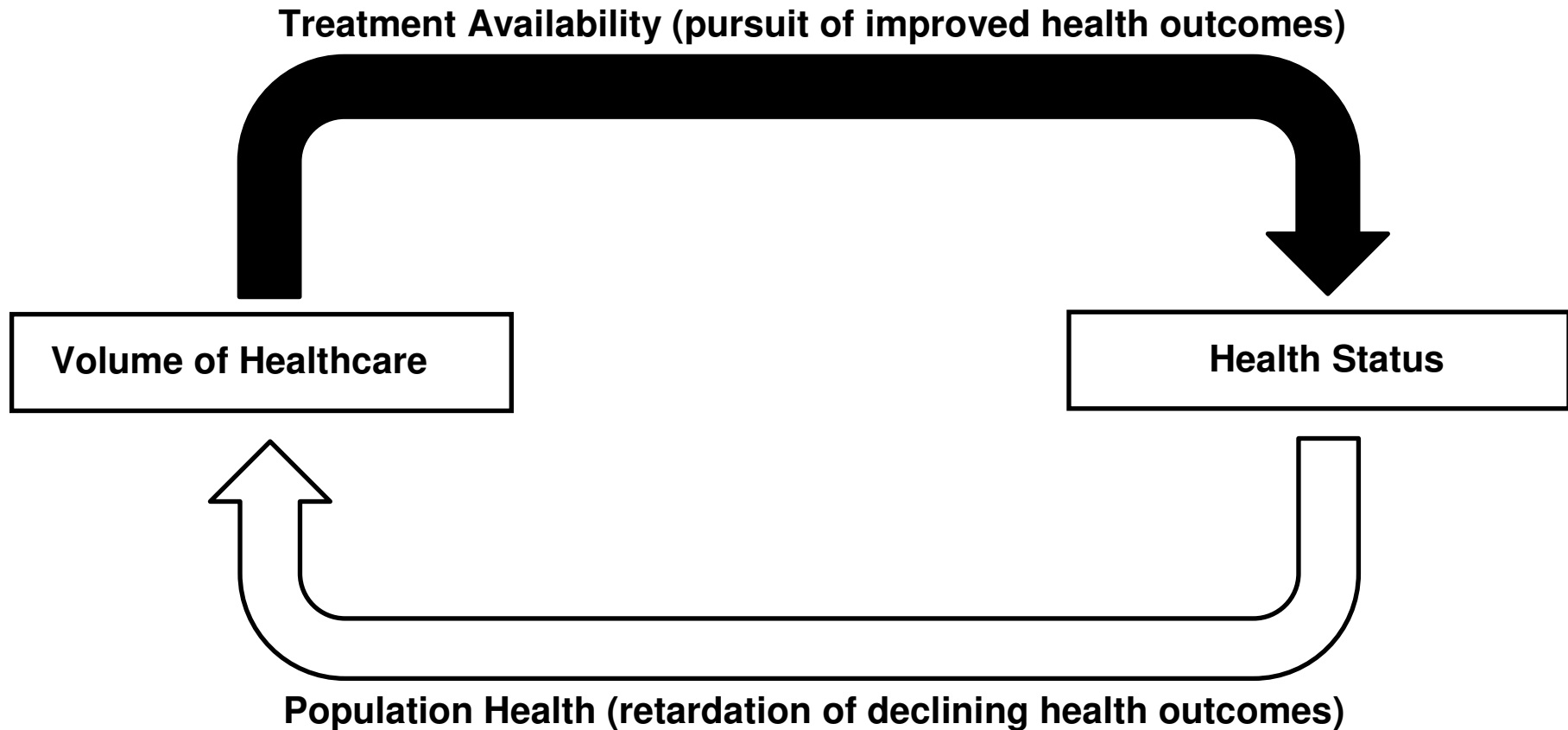


EXECUTIVE SUMMARY



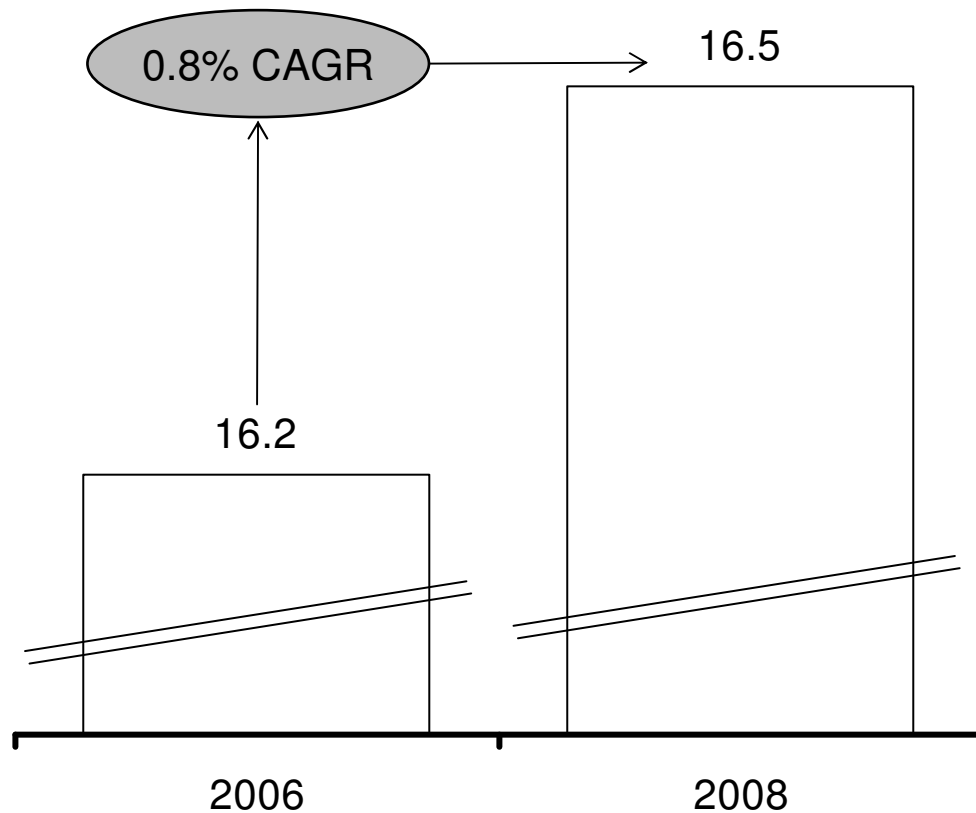
Four initiatives should be launched to halve cost growth and the Crown should commit to a \$150-300m healthcare innovation fund to close the gap

IS THE PURSUIT OF BETTER HEALTH STATUS DRIVING CHANGES IN THE VOLUME OF HEALTHCARE PROVIDED



FRONTLINE DHB STAFF PRODUCTIVITY HAS INCREASED BY 0.8% FROM 2006 TO 2008

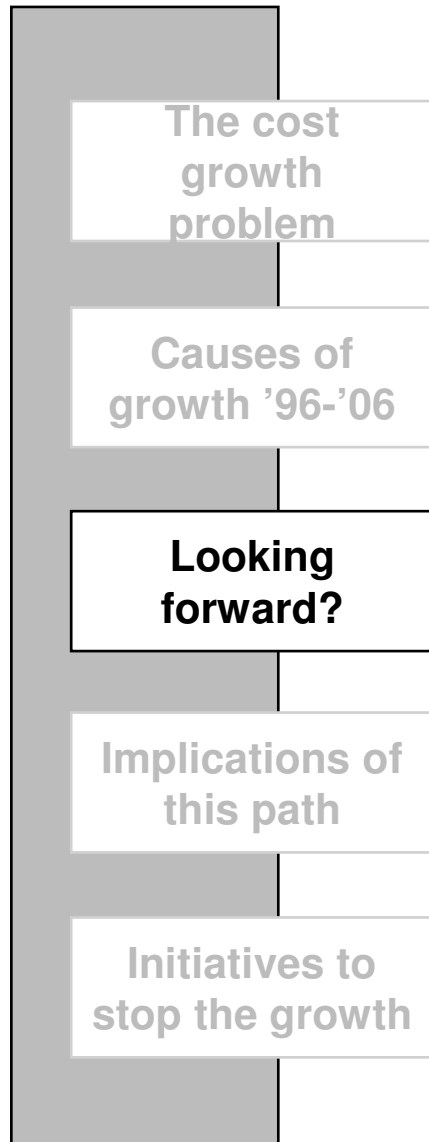
Frontline labour productivity (2006-2008)
CWD per frontline FTE



We have estimated half of historical estimate (0%) and 2006-2008 (0.8%)

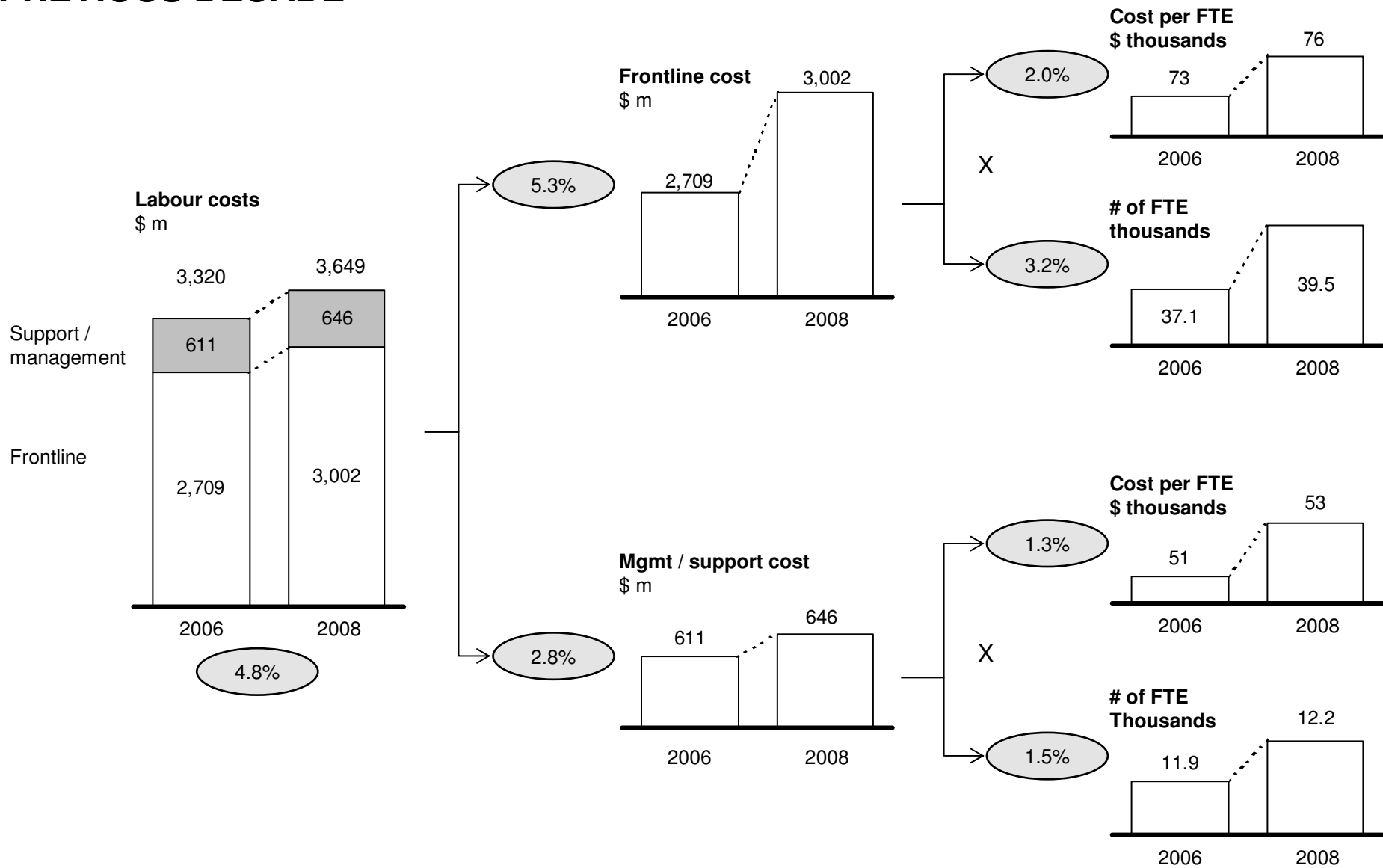
Implied productivity estimate: 0.4%

EXECUTIVE SUMMARY



If productivity alone cannot render health sustainable New Zealand must pull resources from other areas or start to more aggressively rationalise existing and emerging health options

LABOUR: FRONTLINE COST GROWTH IS ALREADY RAISING COMPARED WITH THE PREVIOUS DECADE

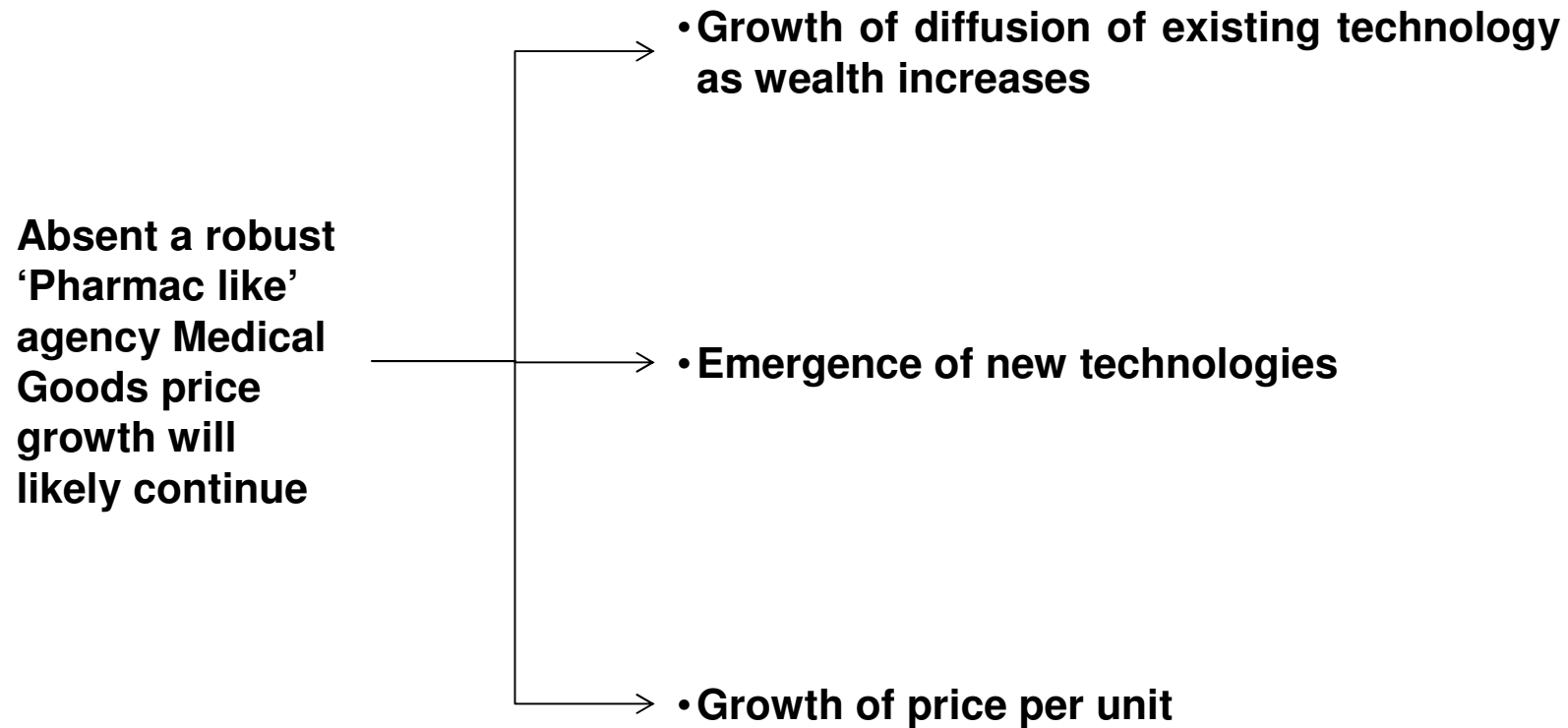


Note: \$ are real 2006, % growth are CAGR real and not additive; ** Frontline are defined as Medical, Nursing and Allied Health Personnel
 Source: Ministry of Health, Statistics New Zealand, Temple analysis

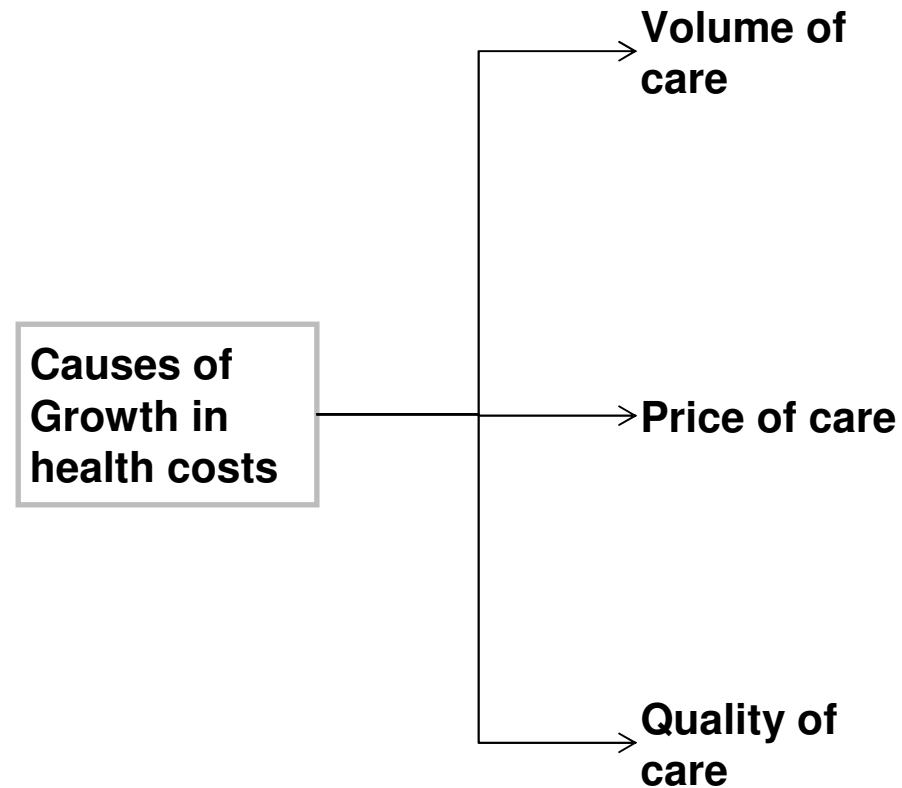
WHAT YOU SHOULD WALK AWAY FROM THIS PRESENTATION THINKING

- **Takeaway One:** The health funding crisis hasn't even started – this is going to get a lot worse
- **Takeaway Two:** The government cannot and will not be the white knight who will save the day
- **Takeaway Three:** Leadership in tackling fundamental issues in health service provision is needed from within the sector

WE CONSIDER CONTINUED COMPARABLE GROWTH OF MEDICAL GOODS COSTS LIKELY

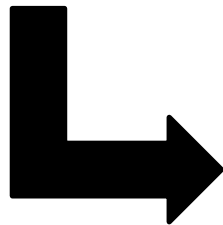
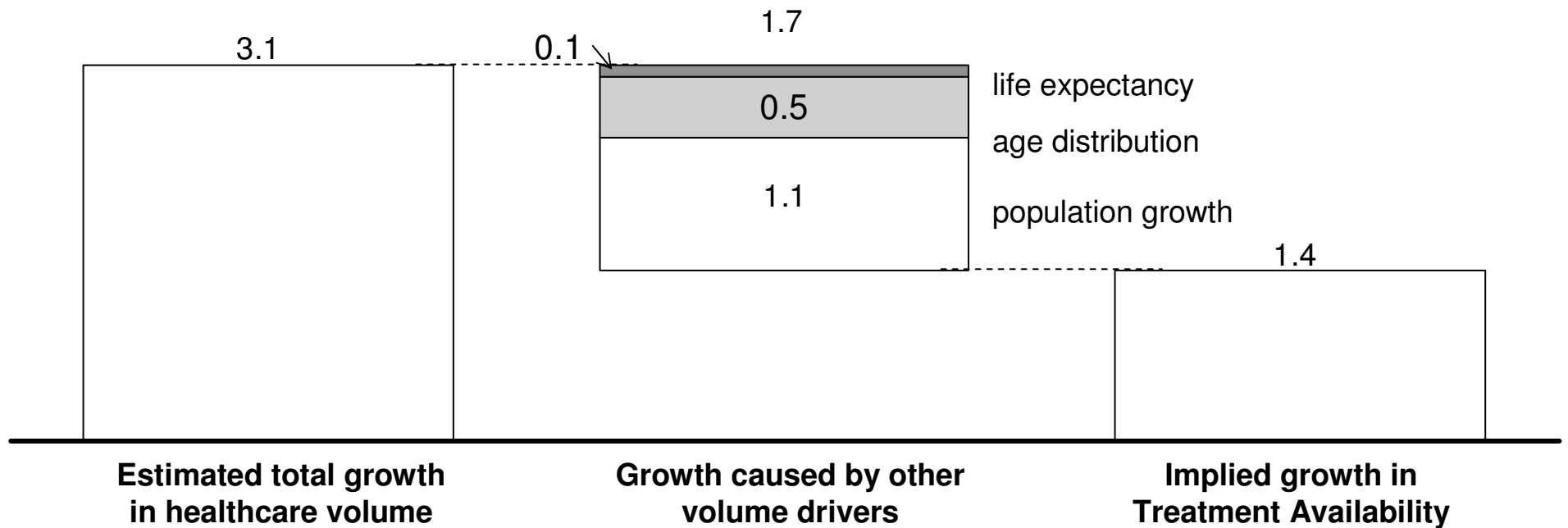


WE DEVELOPED A SIMPLE MODEL TO ANALYSE CHANGES IN HEALTHCARE



BY ELIMINATING OTHER CAUSES OF GROWTH WE CONCLUDE INCREASED TREATMENT AVAILABILITY ACCOUNTS FOR 1.4% CAGR

Breakdown of healthcare volume drivers
Percent CAGR

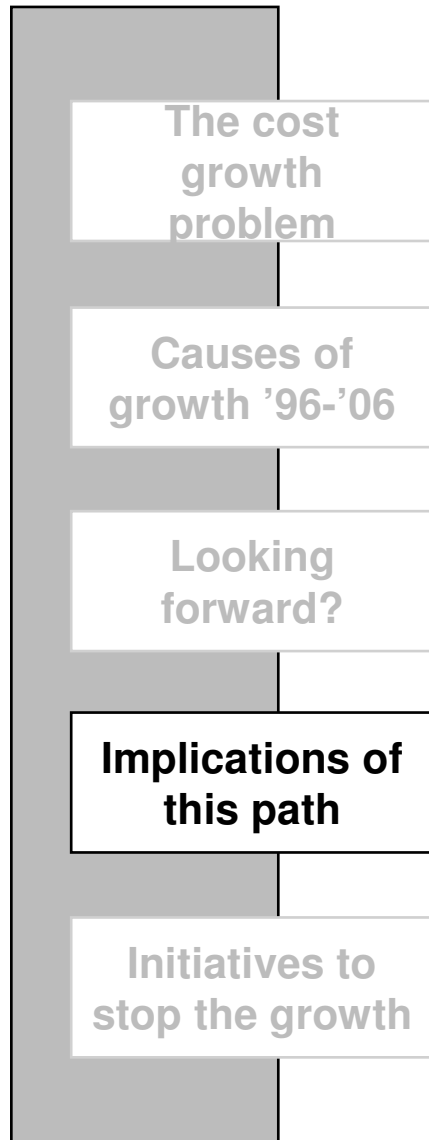


- Case Weighted Discharges (2002-2006): 2.4% CAGR.
- Total FTE/jobs/hours: ~4% CAGR.
- Prescriptions: 2.9% CAGR

Simple average: 3.1%

* Productivity over the period was static as discussed later in this paper

EXECUTIVE SUMMARY



Current government initiatives lack a high level view of the likely cost glide path and have not addressed the need to reconsider the principles of healthcare in New Zealand

**The cost
growth
problem**

**Causes of
growth '96-'06**

**Looking
forward?**

**Implications of
this path**

**Initiatives to
stop the growth**

**The cost
growth
problem**

Health is growing at 6% CAGR, double the rate of growth of the economy, and represents an unsustainable cost trajectory

Causes of
growth '96-'06

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**Causes of
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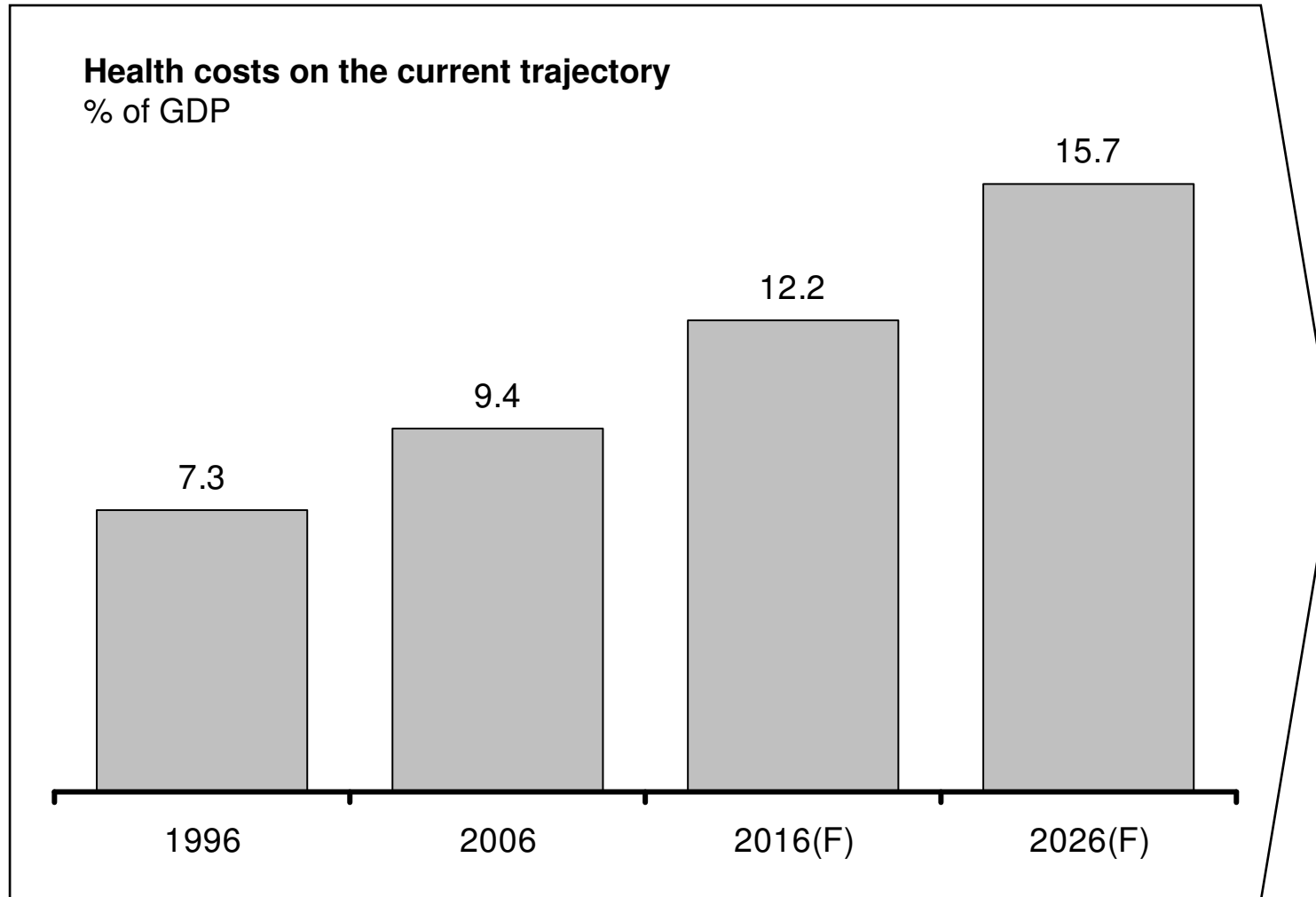
Looking
forward?

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this path

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stop the growth

Cost growth is split 50:50 between volume and price and the aging population plays a much smaller role (~10%) than is appreciated

THE GROWING BURDEN OF HEALTHCARE IN NEW ZEALAND



If health costs continue to grow at the current rate they will account for almost 16% of GDP by 2026

*1996-2006. 2007 and 2008 show similar growth rates; assumes 3.1% real GDP and 5.7% real health cost growth
Source: Statistics New Zealand, Ministry of Health, OECD, Temple analysis