NZIER Insight

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Five priorities to put the health system back on track

After years of denial that a crisis was unfolding, the moment of truth has well and truly arrived. In this NZIER Insight, we propose five priorities to get the system back on track and heading in the right direction.

The health system crisis is playing out daily everywhere from emergency departments and GP clinics across the country to the boardroom of Health New Zealand | Te Whatu Ora. Health professionals are burnt out, and New Zealanders' faith in the health system is being lost. This is a key issue the government will want to address before the next election. But will it address the underlying systemic issues or just kick the can down the road?

Costs are a key focus, but productivity is the key issue

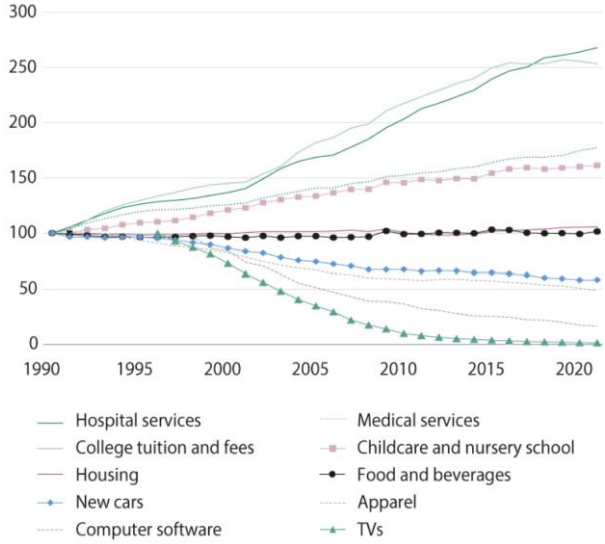
Our health system crisis – like those affecting public health systems around the world – is often characterised as a cost crisis. The cost of delivering healthcare has reached the point where it no longer appears to be affordable. Doctors cost more and more, pay equity settlements translate into huge public sector outlays and the expected cost of building and maintaining the physical infrastructure that services rely on has reached epic proportions[1] (NZIER 2024).

The current crisis was predicted by economist William Baumol, whose work starting in the 1960s described the economic outcomes of industries having different rates of labour productivity growth. He later identified health as one of a number of "stagnant" industries – labour-intensive industries with fewer opportunities for productivity gains than other sectors such as manufacturing. He argued that, because health services are nevertheless needed, health labour costs would have to keep pace with labour costs in sectors that make more significant productivity gains.

The result is rising costs for services even without any improvement in quality – a phenomenon he coined "cost disease".

Baumol explained that this is why, even though many other goods and services become more affordable over time, healthcare does not. This was compellingly shown using US data on various industries' price changes relative to the consumer price index, an updated version of which is shown in Figure 1 below.

Figure 1 Price changes of selected goods and services in the US relative to the consumer price index (1990–2020)



Source: Hartwig and Krämer 2022

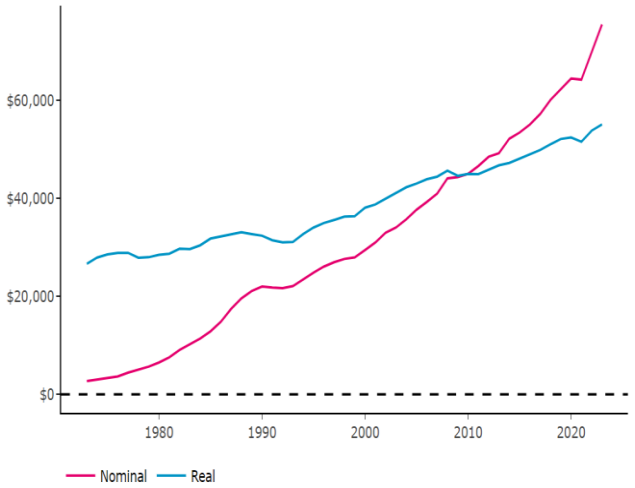
Baumol's theory predicts that health expenditure per capita and as a share of GDP will rise relentlessly, even with all else remaining constant.

[1] Our previous work on Crown-owned health infrastructure shows that, under the current approach, the health system will need $100–115 billion over the next 30 years just for hospital buildings (NZIER 2023).

A cost containment imperative?

While cost disease is inevitable, the unaffordability of healthcare is a "fiscal illusion" (Baumol 1992). As long as there is economic growth (which there is, despite short-term hiccups – see Figure 2 below), healthcare becoming a rising share of GDP should not be alarming – except to those with political reservations about "big government".

Figure 2 Real and nominal GDP per capita
New Zealand 1973–2023



Source: NZIER Data 1850 web app

Baumol identified that the eventuality of big government implied by cost disease – and the known political unacceptability of this – pushes governments into cost containment mode with the inevitable consequence of:

> *"… deterioration in the quality of the service and, ultimately, withdrawal altogether of a service that is presumably valuable to society."* (Baumol 1993)

But cost disease is not the only cost driver

Baumol's cost disease and related predictions should be concerning. Recent empirical research appears to confirm that cost disease is real (see, for example, Hartwig 2008 and Colombier 2012), but the most recent studies confirm that costs are more heavily driven by traditional demand drivers (e.g. population ageing, socioeconomic determinants of health etc.) supply-side drivers (system design features), and technological progress.

This means some growth in health expenditure is likely to be unavoidable as it is driven by productivity gains *outside* the health sector and by uncontrollable factors such as population ageing, so an increase in Vote Health is warranted to maintain services.

Equally importantly, some cost growth is driven by *choices* about social and economic conditions (especially for the worst off), system design and how the system responds to technological progress. The health sector does not lack opportunities for productivity growth, but rather it lacks *support to take opportunities* that are available[2] and has built-in barriers to achieving better outcomes at lower cost.[3]

So it's time to make some choices

We propose that an increase in Vote Health is now necessary. However, the government should resist the urge to contain costs by only addressing short-term resourcing issues – a move that would only kick the can of our creaking 20th century system down the road and reducing our ability to afford real solutions: Like spending all your money on buckets instead of fixing the leak in the roof.

We recommend investment in five key priorities based on the principle that to minimise cost growth and increase long-term sustainability[4] without compromising quality, the system needs to be efficient and flexible, and it needs to *contribute* to economic growth as well as being supported by it.

Efficient, flexible and productivity-focused system design

Efficiency means using lower-cost inputs if they can deliver the same or better results[5]. Flexibility means being able to change shape

[2] NZIER's work on productivity (NZIER 2024) indicates that even the private sector needs government support. This would include many community-based providers, even those that are for profit.

[3] For example, the case of kidney transplantation (NZIER 2021).

[4] Solutions tend not to be sustainable in the long-run unless they are simultaneously technically feasible, institutionally possible, and politically desirable (NZIER 2016).

[5] In the health sector, this is sometimes referred to as using constrained inputs more effectively.

and structure easily as needs evolve and opportunities emerge to maintain efficiency over time. Contributing to economic growth means delivering services in a way that improves the productivity of the workforce both *within* and *outside* of the health sector.

Our recommendations envisage a fundamental shift from the current high-cost, bricks and mortar, medically dominated system towards a system that prioritises a broader, more flexible workforce backed by technology and treatment options that support community-based care, all driven by decision making that reflects broader economic considerations.

The five solutions we need *now*

We recommend that the following five solutions are not only urgently needed but would improve system productivity so warrant an increase in Vote Health to achieve them.

1. Funding and resourcing a 21st century model of community-based healthcare

Primary care – the first point of contact in the health system expected to provide accessible, protective, preventive care and care coordination – has traditionally centred on general practice and care provided by GPs.

With population growth and ageing along with increasing recognition of the need for person-centred care, GPs are no longer able to play this role alone. People are struggling to access GP care, the sector is struggling to staff the traditional general practice model and it is not the most efficient way of meeting needs.

While GP clinics have struggled to meet needs within traditional service models and tight funding, NGOs across the country have been quietly driving innovation and implementing cost-effective solutions often involving high use of the non-medical workforce[6], including a wide range of regulated and non-regulated health workers.[7] The NGO sector's ability to deliver solutions for community-based care on the smell of an oily rag is proof of the potential for productivity improvement from scaling up investment in community-based health services and upskilling the community workforce, employable at a fraction of the cost of traditional primary care.

A broader workforce-based community model with alternative first-point-of-contact services[8] is particularly urgently needed to meet the growing need for home-based care, rehabilitation and needs assessment as well as to support older people to avoid aged residential care and to receive end-of-life care in their own homes. It is also critical to maximising the opportunities that new technology presents for personalised prevention and remote patient monitoring.

Central to this change is the development of micro-credentialing and career pathways that facilitate upskilling and role transition. Basic skills that allow home health workers to assess a diabetic foot or a wound and education pathways that allow pharmacists to transition to a career in general practice by building on their existing skillset are the kind of workforce innovations that strengthen sector flexibility and efficiency as well as supporting equitable access to health sector careers such as has been shown for Māori nurses (Wiapo et al. 2023) and increasing workforce productivity (Holden 2023; NHS England 2023).

2. A strong back-end to the care continuum

Acute demand has been a significant and growing driver of overall healthcare demand for many years, and shifting population demographics are a growing contributor to this problem. While emergency departments (EDs) attract much of the focus on acute demand, recent research shows that New Zealand's EDs are not crowded due to inappropriate

[6] Costa Rica's health system is lauded for this approach.

[7] The non-regulated workforce includes a wide range of occupations that are not regulated under the Health Practitioners Competence Assurance Act 2003. This does not imply a lack of professional standards. Professional bodies and a range of other legislative controls provide a suitable framework for this workforce (Ministry of Health 2014).

[8] Previous NZIER research has indicated an important role for physiotherapists and other allied health professionals (NZIER 2020, 2021).

presentations with minor ailments.[9] To the contrary, our ED utilisation rate is low by international standards with primary care largely doing an effective job of keeping people away from EDs if their needs can be met elsewhere (Jones and Jackson 2023).

The ED crowding we hear so much about is largely due to flow issues later in the care continuum. A key aspect of this is patients staying in inpatient beds longer than necessary, causing a phenomenon known as 'bed block' where admissions and transfers from ED cannot occur because there are no beds available in the wards (Jones et al. 2021). Bed block also contributes to long waits for planned surgeries and short-notice cancellations of these (Ardagh 2015).

Effective discharge planning and agreed principles are required to support timely discharge, including discharge by a broader range of staff (not just senior clinicians who are often not available).

Adequately resourced community-based discharge support teams have been shown to improve outcomes and reduce hospital stays and system costs (Parsons et al. 2018). New digital technologies enable acute care to be provided in and across more settings, bringing the broader workforce into play in reducing hospital stays (Dean et al. 2022). Aged care plays a key role in the care continuum for a growing older population, with a cost that is dwarfed by the cost of extended inpatient stays when aged care beds are unavailable.

3. A digital technology forward sector

Digital transformation is desperately needed to reduce costly, ineffective and inefficient communication barriers between services as well as between providers and patients, improve the information available to decision makers and support the adoption of technologies that enable remote patient monitoring and care by a broader generalist workforce (including self-care) (see, for example, Milani et al. 2017).

The health system has been creaking along with 2.3 percent of operating budgets on IT, of which 90 percent has been propping up outdated systems (Ministry of Health 2020). The lack of interoperability, access, security and system support for implementation of productivity-enhancing technologies is a major threat to the system. It keeps services tethered to costly and inconvenient physical infrastructure, keeps patients deteriorating in hospital beds instead of recovering at home[10] (Kruys and Wu 2023) and condemns the system to a permanent struggle against workforce shortages due to the inability to ensure adequate support and oversight for a broader workforce to deliver care safely.

A modern, fit-for-purpose digital approach to health services requires substantial upfront investment in core infrastructure as well as support for adoption of specific digital solutions and ongoing maintenance. This is not cheap, but as shown by multiple studies (see, for example, Frakt 2019), this would improve productivity and cost-effectively increase capacity to address unmet need[11]. Community based providers, including primary care, should be central to this transformation.

4. A social investment approach to support a productive workforce

Health economic theory identifies healthcare as both a consumption good that higher income increases demand for and an investment in human capital that supports the workforce to be more productive. But decisions about health services rarely take into account employment-related impacts.

[9] Although progress made on reducing inappropriate ED presentations could be lost if primary and community care continues to be underfunded.

[10] Delayed discharge from inpatient wards is associated with increased mortality, infections and depression as well as reductions in patients' mobility and daily activities (Rojas-Garcia et al. 2017).

[11] Costa Rica's "army of community health workers" (Exemplars News 2022) and "community health workers 'plus'" equipped with supportive digital technology (VanderZanden et al. 2021) is a key reason for its health system's high return on investment.

The ACC approach, which incentivises prevention, early diagnosis and rehabilitation, is an important model for a health system facing a substantial demographic shift that will result in a dependency ratio never seen before where the dominant group has high health need. Published research has identified key health issues driving absenteeism, presenteeism and dependency on sickness or disability benefits, with mental health and musculoskeletal disorders being major drivers (see, for example, Bryan et al. 2020).

For long-term sustainability, health investment should focus on short-term workforce productivity (addressing mental health and musculoskeletal issues), long-term workforce productivity (investments in better prevention and management of long-term conditions) and children's health and wellbeing, especially where it supports educational attendance and attainment and minimises long-term impacts.[12]

As a growing share of the total workforce, the health workforce also warrants investment to lift overall productivity. Community-based health workers are a key group whose upskilling and greater involvement can offer both direct and indirect productivity impacts.

5. Increased access to medicines

Medicines play a critical curative and secondary prevention role in healthcare and will increasingly play an important primary prevention role as personalised prevention becomes commonplace. Medicines for high-cost conditions such as those with high rates of hospitalisation or long-term impacts on productivity offer potential for significant returns on investment. From a decision maker's perspective, medicines also typically come (at the point of application for funding) with robust evidence of impact, reducing the risk of losses from experimentation or failed implementation of innovative services.

Pharmac holds a list of medicines called Opportunities for Investment – medicines identified through Pharmac's own processes as offering important clinical benefits and being cost-effective but that are not yet funded due to Pharmac's strict budget constraint. As of late June 2024, there were 147 items on this list, representing a veritable Christmas list of golden opportunities that require only a budget increase to unleash.

Despite the abundance of opportunities presented by medicines, NZIER's own analysis has shown that the government has reduced the pharmaceutical budget in real terms (NZIER 2022). The government should be committing to annual increases in the pharmaceutical budget to bring it closer to the OECD average of 1.4 percent of GDP from its current 0.5 percent of GDP (Shaw 2023).

A community workforce where appropriately trained professionals with increased scope of practice could make some medicines more accessible would support system flexibility, reduce the access barrier of needing to see a doctor, and reduce GP and specialist workload (such as increased pharmacist prescribing or optometrists delivering intraocular injections).

Choice is key

As Baumol worked through the implications of his theory, the "illusion" of unaffordability and implications of political concerns, he cautioned that there was real risk in choices that governments might make when faced with growing health costs and – rather befittingly for New Zealand today – warned that:

> *"… an unfortunate choice in this arena does indeed threaten to bring us an economy, in the words of the poet, 'where wealth accumulates and men decay'."* (Baumol 1993).

The government seems confident that it can deliver on its promises of economic growth. That should equally give it confidence to break through the illusion that New Zealand cannot afford to spend more on its health system.

[12] Such as expansion of community-based throat swabbing and fast access to antibiotics to prevent rheumatic fever.

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