

# Industry insights

**Westpac**

**Institutional  
Bank**

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## Healthcare & Social Support Services

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# Summary

The healthcare and social support services sector is growing rapidly. Public expectations of the sector will continue to outstrip available funds.

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One writer estimated that by 2010, total global medical knowledge was doubling every 3.5 years. The expectation of the public is that if a treatment option exists, it should be available. The World Bank estimates that health spending per capita in New Zealand has quadrupled in less than 20 years in nominal terms. The bulk of this spending is provided by the public healthcare sector.

The funding shortfall is no more acute than in healthcare for senior citizens. Unattractive returns on investment for rest home operators have seen the number of care beds provided grow at a fraction of the rate needed for the ageing population. And as people live longer due to advances in treatment of physical challenges, the need for dementia care is surging.

Changes in structure and funding approaches would benefit the system, as advances in medical knowledge, surgical techniques and medicines are lengthening lives, and exponentially increasing the costs of providing healthcare.

## Recent performance of the sector

The healthcare and social support services sector is one of the biggest in New Zealand. It employs one in 11 workers, or around 200,000 full-time equivalents (FTEs).

Employment has grown by 60,000 FTEs in the last 14 years, and at a much faster rate than New Zealand's employment overall. This growth is both the cause and effect of the explosion in the number of older people, who generally require more medical treatment, and the increasingly large number of specialist treatments available.

## More questions than answers

We spoke to a wide range of Healthcare and social support services sector leaders, including District Health Boards (DHBs), Primary Healthcare Organisations (PHOs), local GPs, private hospitals, mental healthcare providers, aged care providers, and central government agencies. A number of clear challenges as well as potential answers to these challenges emerged from these discussions.

The dominant message was that New Zealanders will need to moderate their expectations of what the healthcare system can and cannot provide given the limited funding resources and near limitless range of medical intervention options. At the same time, there are a number of specific actions that were recommended that could at least partially offset these funding constraints.

- **Review the number of DHBs and PHOs:** The economic, financial and governance arguments for fewer DHBs and PHOs are hard to counter. There are currently 20 DHBs and 32 PHOs serving a national population of just 4.6 million. Fewer DHBs and PHOs would reduce repetitive administrative costs, help retain and spread specialist staff costs, encourage a higher average quality of governance, and allow IT system standardisation, which would improve healthcare outcomes.
- **Moderate the requirements needed to practise as a specialist:** Balance has been lost between ensuring specialists are sufficiently qualified to practise safely and restricting supply of specialists such that the cost of their services is kept unnecessarily high. This has huge funding implications and is increasing waiting lists, especially in government hospitals.
- **Increase the focus on prevention:** The current focus of funding and treatment on acute illness and injury must shift further toward a focus on chronic and preventative healthcare. Health professionals should be seen as "case managers" for individuals. Far closer coordination is required between the Ministry of Health, DHBs, the Ministry of Social Development (including Child Youth and Family and its successor), the Ministry of Education, the Department of Corrections, NGOs and other sectors including the food industry, engineering, manufacturing, ICT, and iwi.
- **Implement more means-testing for healthcare:** The current system has a perverse outcome whereby many of those who already enjoy a relatively good quality of health are more likely to access publicly-funded healthcare because they can afford the co-payments. A switch toward means-testing healthcare access is already happening to some extent by stealth. Long waiting lists at government hospitals are encouraging those who can to get private medical insurance, but the looming funding shortfall would increasingly require a formalised means-testing approach to healthcare.
- **Increase use of technology that helps patients make better decisions:** Access to medical records via health portals would allow patients to access their records to remind themselves of the doctor's conclusions or medicine regimens, which would likely mean they would comply better with medical advice, improving health outcomes.
- **Increase the rest home subsidy:** Because not enough rest home beds are being built, the elderly are often being placed in hospital care, which typically costs three to four times what a rest home bed costs to operate. It may be far more effective to increase rest home care subsidies to those who need them by a significant figure to keep hospital beds free for those who need them most.

**David Norman**  
Industry Economist

# Introducing a complex sector

- The healthcare and social support services sector is large and complex, covering all levels of clinical care plus social and community-based health and social support services.
- The sector employs one in 11 FTEs, and has grown sharply in employment and value added terms in recent years.
- This growth is the result of the increased societal focus on health, the advances in healthcare science, and an ageing population.
- With the growth in senior care really just beginning, and longer lifespans facilitated by healthcare advancements, we expect the role of the healthcare and social support services sector to continue to grow.

This report uses a number of data sources including Statistics New Zealand ANZSIC data to show changes in the sector. Using ANZSIC classification codes, we split the healthcare and social support services sector into the following categories:

- **Hospitals**, whether public or private
- **General practitioners** (GPs) and **specialists** operating primarily outside the hospital environment

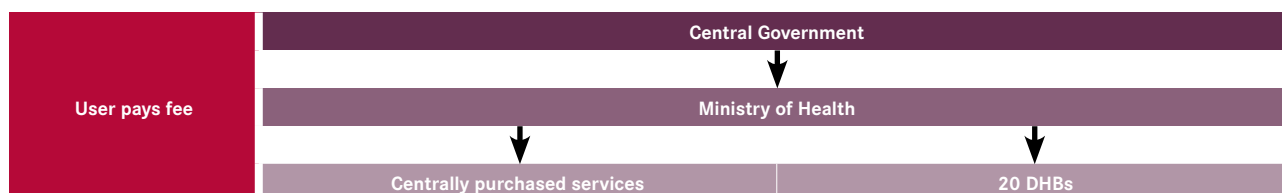
- **Allied healthcare services**, which includes ambulance services, dentists, physiotherapists, pathologists, dietitians, occupational therapists, speech and audiologists
- **Senior care services**, which predominantly relate to residential care for over-65s, typically retirement villages, and rest homes both private and public
- **Non-governmental organisations** (NGOs) and **social support services**, which include children's homes, hospices, counselling services, and disability assistance services.

But this is just one of many ways to classify the sector. Other approaches that can be taken include dividing the sector up by level of care or by how it is funded. The graphic below is a simplistic representation of how the sector fits together from three perspectives: funding, levels of clinical care, and types of business units (the ANZSIC categorisation).

From a levels of care or clinical perspective, there are four components:

- **Primary healthcare:** services provided by the front line medical professional – typically a GP, nurse, or allied health service provider such as a physiotherapist or dietitian.
- **Secondary healthcare:** services provided primarily by specialists, but also by some who operate in primary care, such as dietitians or physiotherapists.

## Funding of the health system



## Components of the health system

	Primary	Secondary	Tertiary	NGOs & social support services
	32 PHOs			
GPs				
Allied healthcare				
Disability support services				
Specialists				
Hospitals				
Hospices				
Rest homes				
Retirement villages				
Mental health services				
Counselling services				

- **Tertiary healthcare:** Typically in-patient care in a medical facility with advanced equipment for surgery or investigation, usually a hospital, but can also include palliative care.
- **Social support services:** These services may not be clinical in form, but are part of the healthcare and social support services sector, and include many services provided by NGOs.

It is also important to understand the funding and governance context in New Zealand, to appreciate the nuances of its strengths and weaknesses:

- The **Central government** determines its level of funding for healthcare and social support services (with most of the services covered in this report from Vote Health, totalling around \$16.1 billion in 2016/17)
- The **Ministry of Health** is responsible for setting health policy and priorities and allocating funds to District Health Boards

(DHBs) and to **centrally purchased health services** directly delivered rather than provided through DHBs.

- **DHBs** are geographically based providers of healthcare and social support services. There are currently 20 in New Zealand, or one for every 240,000 on average, a point of contention that was raised by many interviewees we spoke to.
- **Primary Healthcare Organisations (PHOs)** are the main conduit for delivering primary healthcare (mostly GP) services across New Zealand. PHOs are funded by DHBs and currently number 32, down from 36 a few years ago. This implies that some DHBs fund more than one PHO. There is one PHO for every 150,000 New Zealanders on average.
- In many cases, the **user pays** a share of the costs of health services, whether directly (such as at a GP visit) or via a private health insurance scheme.



The sector is growing strongly. This growth is the result of the increased societal focus on health, the advances in healthcare science, and an ageing population.

# Taking the pulse

- The healthcare and social support services sector is one of the biggest in New Zealand. It employs one in 11 workers, or around 200,000 full-time equivalents (FTEs). Employment has grown by 60,000 FTEs in the last 14 years.
- This growth has been in large part to meet the explosion in the number of older people, who generally require more medical treatment, and to cater to the increasingly large number of specialist treatments available.
- Productivity in the sector is low, but this is a function of the number of lower-skilled workers providing caregiver services in aged care facilities and at NGOs.
- The sector is still relatively fragmented in terms of numbers of business units (or “front doors”), but this is expected to change with the move toward larger all-under-one-roof facilities.

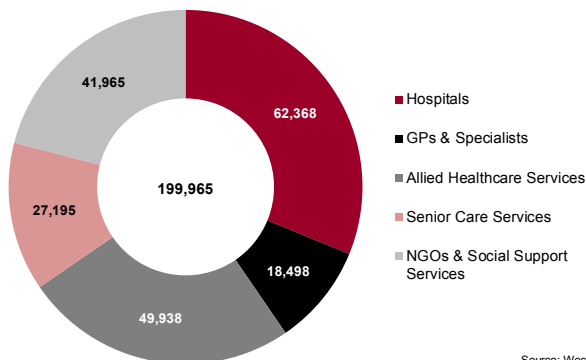
## Growing strongly

The healthcare and social support services sector is large and growing. As of 2014, it employed 200,000 full-time equivalent workers (FTEs), or around one in every 11 FTEs in New Zealand.

Over the last 14 years, the sector has grown by 44%, or 60,000 FTEs, making it one of the fastest growing in New Zealand. Employment across the New Zealand economy grew a mere 26% over the same period.

In other words, from an employment perspective the healthcare sector is seeing a rate of growth far faster than the economy as a whole. This is the result of the increase in focus on health, the advances in healthcare science, and an ageing population, all of which have required an increase in total personnel employed in healthcare.

**Healthcare and Social Support Service employment (FTEs), 2014**



Source: Westpac

Somewhat surprisingly, given the rate of growth in the number of over-65s (a topic we cover in detail in Diagnosis Three), employment in senior care services has grown only 24%, about the same rate as national employment growth. One possible reason for this is the marked increase in the typical size of retirement villages and rest home facilities as larger players have come to dominate newbuild projects, realising economies of scale not previously possible. This may have reduced the rate of employment growth required.

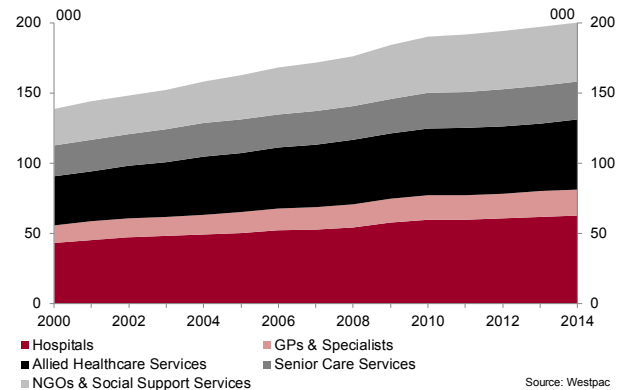
Instead, the biggest gains have been in NGOs and social support services (61%), GPs and specialists (46%) and hospitals (46%). This highlights both the growing importance of new ways of providing healthcare, as well as the focus on clinical healthcare at the primary, secondary and tertiary levels.

## Labour productivity

Growth in GDP generated by the healthcare and social support services sector has been stronger than employment growth, indicating some productivity gains. By 2014, the sector accounted for 6.6% of total GDP, up from 5.6% in 2000. At a sub-sector level, the strongest productivity gains have been in hospitals, up 21% in the 14 years to 2014, followed by senior care services, which supports the view earlier that senior care services are becoming more efficient as they scale up.

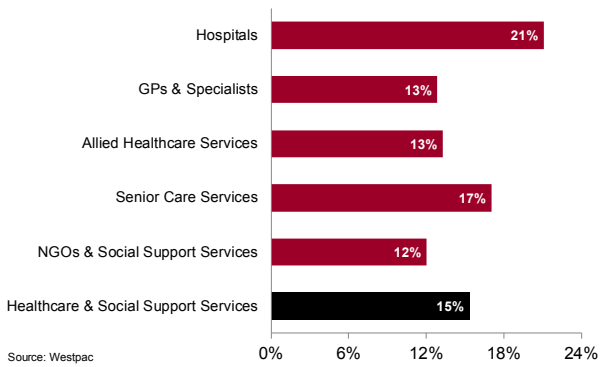
Labour productivity by sub-sector in the healthcare and social support services sector spans a wide range. It varies from the low-productivity senior care, and NGOs and social support services sub-sectors, where many people earn minimum wage, to much higher levels of productivity among GPs, specialists and allied healthcare services. Hospitals, which also tend to have a large number of lower productivity roles, also have a lower average labour productivity. It may be surprising to some that productivity in a sector known for its specialist skills and salaries is as low as the data suggests, but this is a function of the mix of employment skill levels within the sector.

**Healthcare and Social Support Service employment (FTEs), 2000 to 2014**

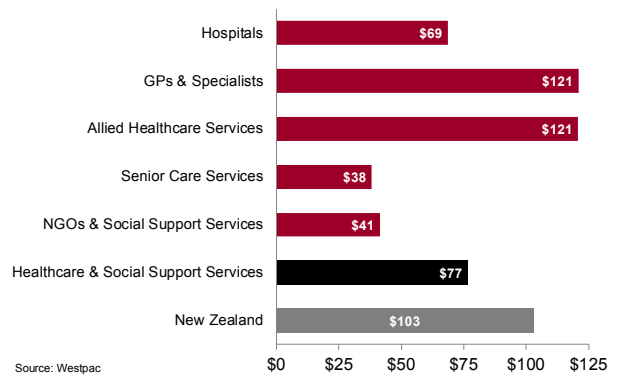


Source: Westpac

### Healthcare and Social Support Service labour productivity growth, 2000 to 2014



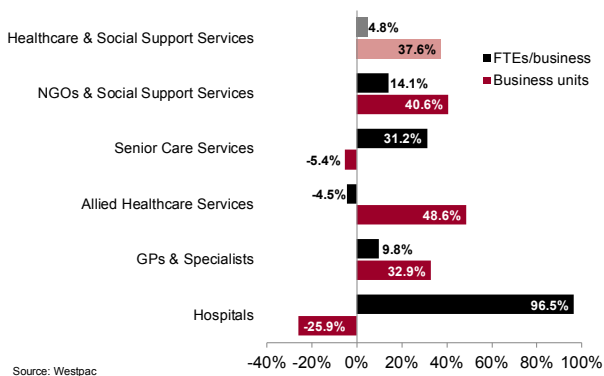
### Healthcare and Social Support Service value added per FTE (2015\$000)



### Business size growth

A further consideration is what has happened to the average size of business units operating in the sector in recent years. One of the points we discuss in this report is the structure of the sector. Many believe it is too fragmented at the DHB, PHO and individual practice level. Market changes have already been pointing toward a larger average business size.

### Changes in business units and FTEs/business, 2000 to 2014



Overall, the number of businesses (perhaps better understood as “front doors”) has grown by nearly 40% in 14 years, only a little slower than employment growth. As a result, the average size of businesses, measured as FTEs per business, has grown around 5%.

But changes across sub-sectors have been far more pronounced. The number of hospitals recorded has fallen by a quarter, while employment per business has doubled. On average, there are now almost 300 FTEs per hospital. Sharp growth in the number of front doors providing allied health services means the average business size in that sub-sector has actually fallen.

In conclusion, other than in the hospital sub-sector, consolidation of services has been relatively mild, which may pose significant challenges in an environment of needing to maximise efficiencies to continue to provide the level of services New Zealanders expect. We turn to this detail in Diagnoses One and Two.

# Diagnosis One: Dislocated funding and expectations

- Funding for healthcare is limited, which means it is impossible for the healthcare system to provide the full range of treatments the public may expect.
- Although treatments tend to fall in cost over time, the sheer growth in medical knowledge means the options for treatments are almost endless, at a price.
- The current structure of the healthcare system and public expectations of the healthcare system are in part responsible for the funding gap.
- Dramatic changes in expectations, structure, means-testing and a preventative healthcare focus are all parts of a solution to better match funding and expectations.

## Reasons for the funding shortfall

Advances in knowledge, surgical techniques and medicines are lengthening lives, and exponentially increasing the costs of providing healthcare. The expectation of the public is that if a treatment option exists, it should be available to them. But funding is not unlimited.

There are several reasons for the mismatch between public expectations and the funding shortfall. There are limited financial resources and an almost limitless range of possible medical interventions.

### What is possible and what we can afford

One writer estimated that by 2010, total global medical knowledge was doubling every 3.5 years, down from every 50 years in 1950.<sup>1</sup> This growth in the options for treating various illnesses and injuries carries a cost.

Growth in spending per person per year cannot continue unabated. The World Bank estimates that spending per capita on healthcare has almost quadrupled in New Zealand in nominal terms since 1996. The portion spent by the government (public spend) has remained largely stable, rising from 77% to 82%.

In other words, while technology makes many treatments possible (see also Diagnosis Four), the cost of adding years to the average lifespan is exponential. For instance, the costs of increasing the average lifespan from 75 to 80 rather than from 70 to 75 are much greater. This creates a conundrum of wanting to provide the best healthcare options available, and what a largely publicly-funded healthcare system can afford.

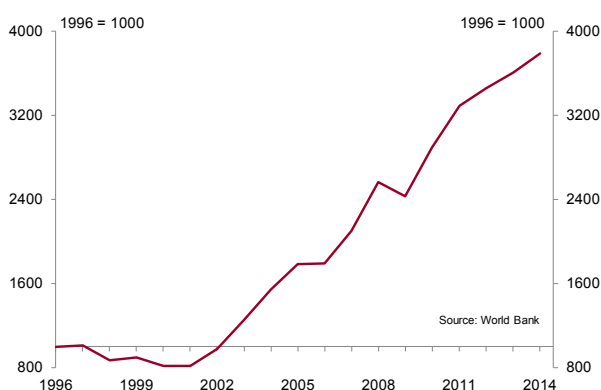
Over time, the prices of treatments usually fall. The classic example is aspirin, now a household staple. Prices for aspirin in the United States fell around 60% in 45 years in real terms. But these days, drugs being used are often for complex medical conditions such as HIV or heart disease. Similarly, new diagnostic tools are expensive to use. More health problems are manageable or treatable, but at a price. And in the case of manageable conditions, management is required for longer as people live with the condition for longer.

### DHB structure and the capitation model

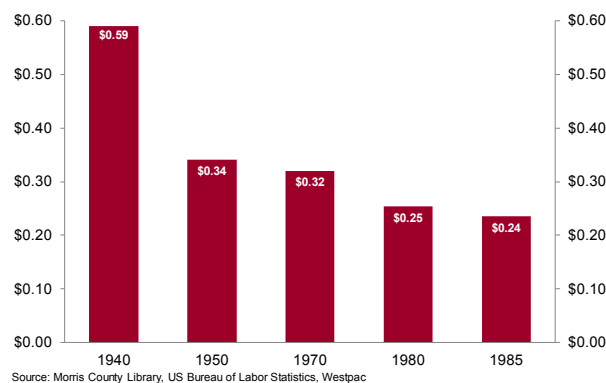
Diagnosis Two deals with the significant problem of how the health system is structured in New Zealand. But structure and funding challenges are interlinked.

First, industry sources pointed out that one impact of a highly fractured health system (20 DHBs, 32 PHOs) is a lot of repetitive administrative functions. The average share of DHB funding spent on administrative functions was estimated at around 10%. Across approximately \$13 billion in Vote Health allocations each year, that equates to \$1.3 billion spent on administration and support

Health spending per capita in New Zealand, nominal



Change in US aspirin prices (100 tablets), 1940 prices



<sup>1</sup> Densen, P. (2011). *Challenges and opportunities facing medical education*. Transactions of the American Clinical and Climatological Association, vol. 122, 2011.

services, rather than frontline care. Fewer DHBs would likely yield more funding for frontline services.

Second, industry sources also suggested that DHB governance capability is mixed, leading to varying levels of efficiency in use of funding across DHBs. Because of the nature of the Board structure – a mix of elected and Ministry of Health-appointed officials – governance and financial management skills vary widely across Board members and DHBs.

Third, some industry sources felt that the capitation model, which awards funding to DHBs based broadly on the number of people in their jurisdiction, could stifle innovation. PHOs and their general practices are paid according to the number of people enrolled, not the number of times a provider sees patients, nor by efforts to prevent patients needing to see the doctor in the first place through preventative interventions. One commented that medical professionals need to see themselves more as “case managers” with the goal being to minimise the number of doctor’s visits required through more efficient and earlier health support.

This approach toward minimising health needs was not always supported by the capitation model. Sometimes success (such as reducing the number of doctor visits required, or better achievement of Ministry of Health targets on emergency room wait times or immunisation for instance) had the potential to see budget allocations switched to poorer performing DHBs.

The capitation model attempts to account for the fact that population demographics vary around the country. DHBs with a larger share of older people get more funding, for instance, on the assumption that older people need more healthcare. But some parts of the country with younger average populations like Gisborne, Northland or Auckland would argue that part of the reason their average age is younger is because many residents are not living to an age at which the DHB receives extra funding. If residents die in their 50s or 60s, there is arguably a stronger case for more funding there to raise lifespans to a level commensurate with other parts of the country.

Fourth, the capitation model may also not be the best way to fund the way healthcare services will be provided in future, making greater use of tele-services, virtual practices and the like. New models of healthcare provision are already being trialled in the UK, for instance, where most patient consultations are via a smart phone app, with unlimited GP consultations for a set monthly fee.

#### Mixed mandates for care

The current funding model also creates differences in levels of care provision between accident-related injuries and non-accident related injuries and illnesses on the other. The Accident Compensation Corporation (ACC) has a mandate to effectively restore someone who is injured back to a pre-injury state. Non-accident related healthcare is based on a “minimum viable product”. In other words, it broadly considers the most appropriate course of action to balance cost to the system and benefit to the patient.

ACC’s focus is on limiting its long-term liabilities due to the fact that it is required to provide life-long support to an injured individual if necessary, while the majority of healthcare provided by DHBs is focused on healthcare bang from budget. This means that the costs per patient for accident-related injuries had the potential to be much higher than for other patients. Expectations or funding would likely need to be moderated if the current ACC model was to continue, as advances in medicine made the

requirement to return patients to their pre-injury state possible in more cases, but at rapidly increasing cost.

#### Other factors affecting costs

Other factors that industry sources highlighted that have seen costs rise sharply include:

- **Infrastructure costs are growing.** This relates both to the equipment required, as well as building construction and maintenance costs. With construction costs growing faster than inflation overall, the burden on DHBs, where many medical facilities are up for major overhauls, is significant.
- **The medical workforce is highly mobile and unionised.** It is relatively easy for medical workers to move to where they can receive higher pay, whether that be in a different DHB or overseas. There are parts of the country where medical staff appear to prefer working than others, which means higher salaries have to be offered to keep staff in certain DHBs. Medical staff also have strong collective bargaining power, which has seen staff costs rise faster than overall inflation in most DHBs in recent years.

### Managing the funding gap

Healthcare funding will always be limited. Greater efficiency will only meet part of the shortfall. Structural and legal changes may be required as part of a suite of ways to reduce the funding gap.

Some industry sources felt that there was little appreciation of the economic benefits of a healthier population, and that funding at present did not reflect the wider benefits. Some felt that better health was not valued as an investment rather than an expense.

One way to deal with the funding shortfall was to massively increase funding. This could come through a tax increase, or through diverting large amounts of funding from other public services, but these options are unlikely to be favoured by the public. A more likely mix of partial solutions, identified in our discussions with industry leaders, is set out below.

#### Manage expectations

Several industry sources felt that the realities of limited funds and a rapidly growing number of (costly) ways to extend life and improve quality of life need to be better understood by the public.

For instance, greater understanding was needed that people who chose to live in rural environments were unlikely to have the same level of access to healthcare that urban communities might, despite technology advances making virtual medical consultations viable.

As the biggest spending on healthcare tended to be in the first year and last few years of life, some industry sources felt it was necessary to broach the unpleasant topic of needing to ration healthcare services beyond a certain age. They felt that expectations of treatment at an advanced age needed to be moderated, and that the focus needed to be on quality of care instead.

#### Spend on prevention

To better match funding and healthcare outcomes, industry sources believed the current focus of funding and treatment, which was on acute illness and injury, would need to shift further toward a focus on chronic and preventative healthcare. This would require a mind-set of health professionals being case managers for individuals rather than focusing on patients who present



with particular symptoms. Some DHBs are doing this already – identifying high-needs patients and working to prevent hospital visits by working with the patient to improve living conditions, eating habits and so on, achieving significant cost savings. With the wealth of data available on individual patients and associated costs, more targeted interventions are a lot more feasible than even just a few years ago.

#### Means-test healthcare provision

Changes in how healthcare is funded will almost certainly need to occur. Some industry sources pointed out that the current system has a perverse outcome whereby many of those who already enjoy a relatively good quality of health are more likely to access publicly-funded healthcare because they can afford the co-payments. Some of the poorest people, meanwhile, cannot access healthcare to the same extent, or feel forced to present at emergency departments where treatment may be free.

Some industry sources felt this switch toward means-testing healthcare access was already happening to some extent by stealth. Long waiting lists at government hospitals were encouraging those who could to get private medical insurance to do so, effectively paying for the privilege of being seen sooner rather than after several months of waiting.

#### Coordinate the wider system

Industry sources highlighted the fact that, partly to meet the challenges of limited funding for healthcare, greater integration of healthcare with other government services is required. While this concept has been in the public consciousness for many years, implementation has been more limited.

A focus on preventative healthcare requires a coordinated approach across agencies including the Ministry of Health, DHBs, the Ministry of Social Development (including Child Youth and Family and its successor), the Ministry of Education, the Department of Corrections, and NGOs.

The healthcare system also needs to develop a closer working relationship with other sectors that can help develop lower-

cost ways of improving healthcare, such as the food industry, engineering, manufacturing, ICT, and iwi.

A focus on keeping people out of hospital, through better local primary and secondary healthcare services (as discussed in Diagnosis Two), in-home services (especially for senior citizens) and through a coordinated preventative approach is likely to reduce costs.

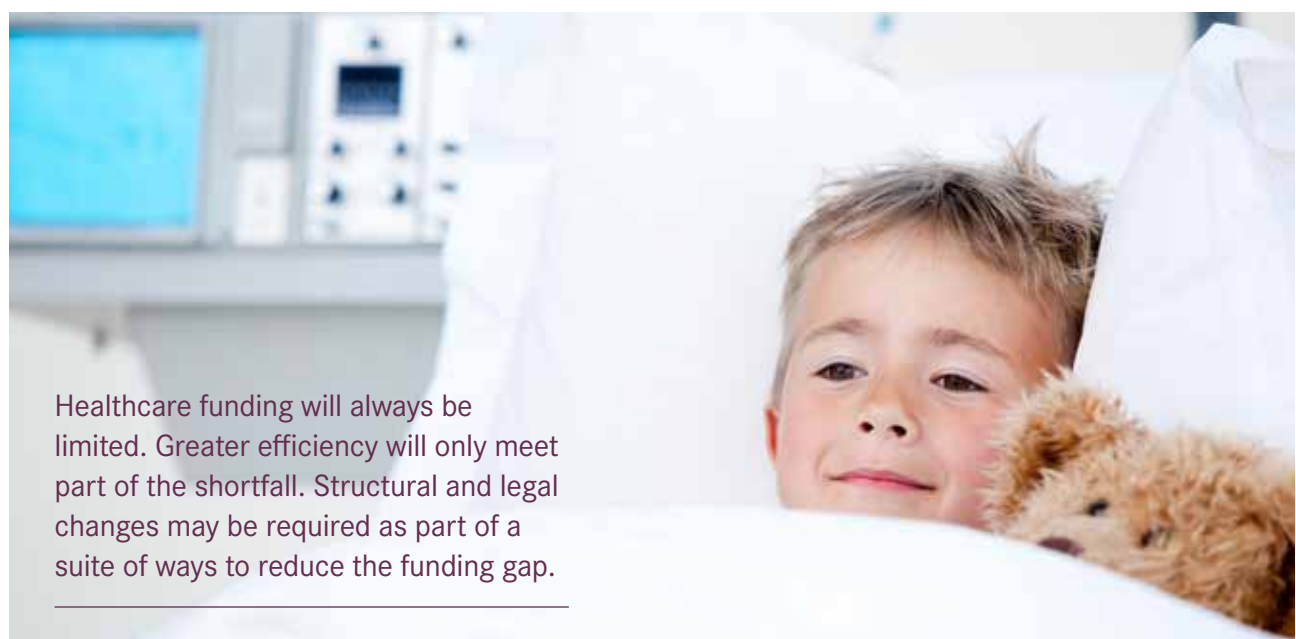
#### Focus on client and outcomes

Some of the targets set by the Ministry of Health that DHBs need to achieve are a good step toward an outcomes focus although some industry sources thought more systematic metrics were possible. Overwhelmingly, however, sources believed ACC, the DHBs and the Ministry of Health need to be more outcomes focused. This goes back to the structure of the healthcare system in many ways; determining which provider (public or private) will best restore this patient to good health (or ensure they don't need expensive health services in the first place) fastest and cheapest.

The sector needed to be more client-focused, as had been seen in other parts of the economy. Examples listed were travel and banking– where the focus had been on the use of technology and other tools to make access and efficiency of service a priority for clients. The emergence of “big data” – a wealth of information about individual people in the health system – makes it possible to structure the healthcare system and funding such that funding could follow individual people rather than being allocated through a lump-sum payment.

#### Delegate services to local level

Significant potential exists for services previously provided by higher-qualified medical professionals to be provided by other staff. There is work that was previously done by nurses that could be done by technicians, that was done by GPs that could be done by nurses, and that was done by specialists that could be done by GPs. One example was the removal of certain skin defects, which was traditionally done by a specialist, but which could be done by the local GP. This frees up specialists to focus on more advanced challenges, and speeds up service for the patient and lowers costs.



Healthcare funding will always be limited. Greater efficiency will only meet part of the shortfall. Structural and legal changes may be required as part of a suite of ways to reduce the funding gap.

# Diagnosis Two: A sub-optimal structure

- New Zealand has a large number of DHBs and PHOs, given it's population. There would likely be benefits from a reduced number of DHBs, including freeing up more funding for frontline services, easier access to specialist care, and faster transfer of medical information between health providers.
- At the local level, a move toward larger providers of services is evident, including Integrated Family Health Centres (IFHCs). This may reduce the number of local GP services, but may bring other services into communities and out of hospitals.
- Industry sources highlighted how a restricted supply of specialists through the college system, and limited competition in providing public healthcare was keeping prices higher than they needed to be, creating funding challenges.

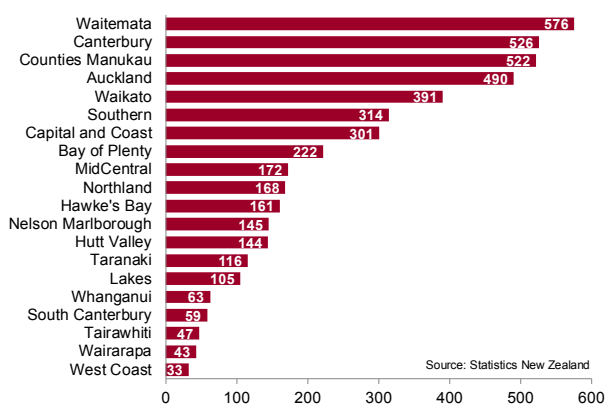
- More DHBs mean more repetitive administration and support roles and less money for frontline services despite some efforts by the sector to consolidate certain backroom functions in recent years. Estimates are that around 10% of the DHB budget is spent on support functions (\$1.3 billion a year).
- Smaller DHBs often struggle to recruit and keep specialist staff. A larger DHB catchment area would allow specialists greater choice in where they live, while still being used across the DHB. Specialist staff could conduct clinics / surgery in harder to reach areas on a regular basis while reducing the "holding costs" for specialists in areas where demand was limited.
- A smaller number of DHBs can encourage a higher average quality of governance across DHB Boards as the number of people with specialist governance skills required will be smaller.
- Greater standardisation of IT systems could improve health outcomes. For instance, different DHBs use different IT systems for recording patient data, and data cannot be accessed across DHBs when patients move between them. Attempts to standardise data systems have been unsuccessful so far due to the number of DHBs.

## The number of DHBs and PHOs

Industry sources were almost unanimous in suggesting that New Zealand has too many DHBs. Those who did not actively state that they thought there were too many DHBs did not offer a view that the number should remain as it is or increase.

DHBs in New Zealand have between 33,000 and 580,000 residents. Detractors point to the fact that the United Kingdom has effectively one health system, or that major cities in Australia, with populations similar to New Zealand's total population, have one government health system. They argue that there is a strong case for a single health authority in New Zealand.

### Population by DHB (000)



For reasons explained below, one health authority may not be the best solution. Still, the economic, financial and governance arguments in favour of fewer DHBs are hard to counter.

A further argument is that with the rise of technology, including virtual consultations, the value of a regionally based health authority is weaker than in the past.

What the "correct" number of DHBs should be is debateable, but is undoubtedly far fewer than at present. Some industry sources suggested that a minimum DHB size is probably over 300,000 people. The best number of DHBs is likely between four and nine.

At the same time, the importance of maintaining competitive and innovative tension in the public healthcare sector was raised more than once by industry sources. Rather than one national healthcare authority, sources believed a small number of DHBs would encourage innovation and specialisation across DHBs that could have benefits for the system as a whole.

Industry sources also believed that competition among PHOs should remain in place. While 32 PHOs was once again likely to be too many, access to more than one PHO within each DHB jurisdiction would encourage competitive innovation among PHOs at the local level. To have this level of competition, PHOs need to be able to cover more than just one current DHB area, as some are now doing.

## Consolidation or community healthcare provision?

Two often-divergent trends have emerged at the local level of primary and secondary healthcare provision. On the one hand, there is a trend toward larger all-under-one-roof facilities. On the other, there is a push for more services to be delivered in local communities.

Several industry sources mentioned the move toward IFHCs. These community facilities offer nurse, GP, specialist and allied

healthcare services such as physiotherapy under one roof. A number of these facilities have been built in recent years. The idea is to get people away from hospitals, which should focus on tertiary care, and into provision of a range of healthcare services at the local level.

Partly as a result, however, there has been much weaker growth in GP businesses (“front doors”) than of other primary and secondary healthcare services. There is a risk that the move toward consolidating services into larger multi-service facilities will suck resources out of smaller towns, which may lose access to GP services, for instance. As it is, some industry sources commented that many older GPs were struggling to find people to buy their businesses, as the administrative costs and responsibilities of running a practice made larger practices where GPs could be employees more attractive to younger GPs.

Government, either through directly funded services or through DHBs, also appears to be moving toward fewer, larger providers of community, mental health and other support services for both accident and non-accident healthcare. This makes sense from the perspective of administering contracts, but may require significant consolidation, especially in the social support services sub-sector.

### Greater competition in service provision

Industry sources had several concerns about competition or the lack thereof in provision of healthcare and social support services, and about differing standards set for public and privately contracted providers of these services.

One of the chief concerns was the cost of specialist care in New Zealand relative to many other countries, and the incentives specialists had to work in private healthcare rather than public healthcare, which exacerbated the problem. Some laid the blame at the door of the specialist colleges, which set the standards required before a specialist could practice in New Zealand.

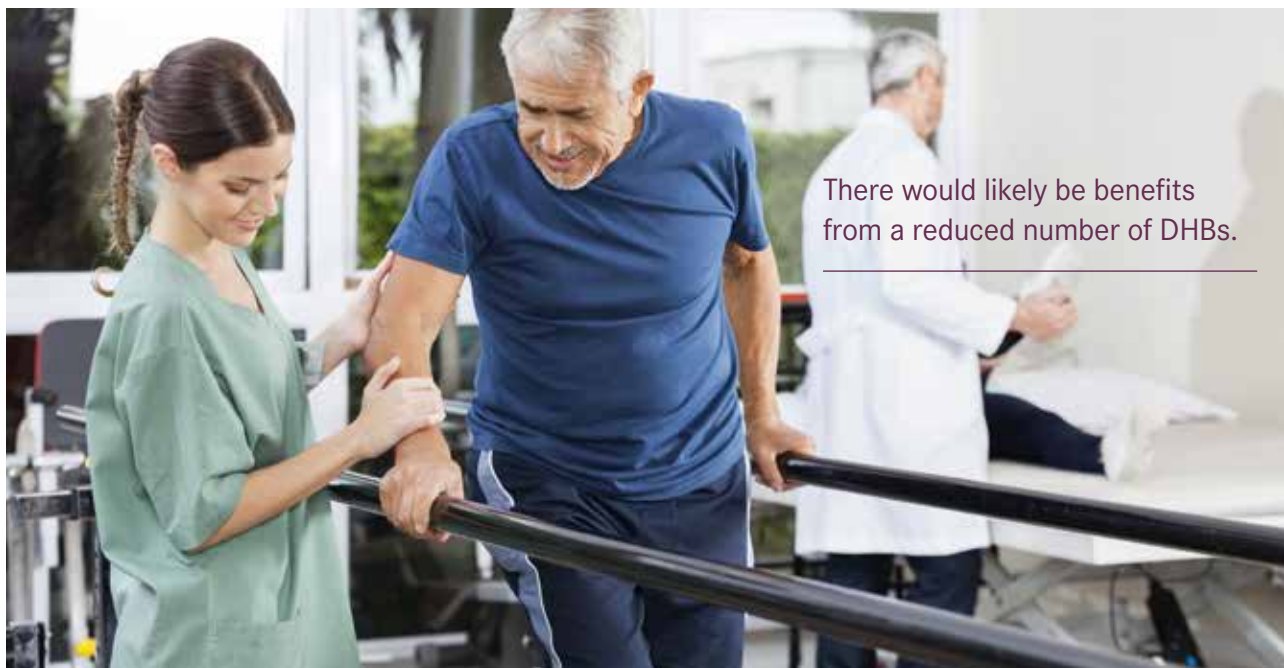
While acknowledging the importance of ensuring standards

were sufficient to keep patients safe, there was concern that colleges acted as gatekeepers to limit the supply of specialists in New Zealand. This all but guaranteed that those who made it through the process earned high salaries. This monopolistic supply (increasingly requiring a fellowship on top of other qualifications) was having such an effect that some thought New Zealand now had an oversupply of GPs. Many people went part way toward becoming specialist before dropping out because the requirements had just become too restrictive, even though they were capable of practising at specialist level. There were immediate impacts on public healthcare provision due to cost pressures and time delays, yet the DHBs we spoke to appeared to believe there was no way around this hurdle.

At the same time as reducing the number of DHBs and PHOs, some industry sources stated that it was important to standardise performance metrics across public and private providers of publicly-funded healthcare services, and to welcome more competition. The view was that the certification and auditing burden placed on many NGOs contracted to provide services for the public healthcare system was not replicated in services provided by public sector employees. Several examples were provided (some in confidence) that showed how NGOs in some cases achieved better outcomes on key metrics than the public sector services.

Some industry sources recommended that more services currently provided by the public sector could be opened up to competition (while still being administered by the Ministry or DHB). An example is in-home assistance for the elderly. In some cases, the elderly person already gets to choose from more than one service provider. This puts control back in the person’s hands, and encourages innovation and better service by the provider because their commercial success depends on it.

Examples of service provision at a lower cost by private sector providers were also given by industry sources. One was scans, which could cost half as much to undertake in private hospitals, but there was no incentive for those hospitals to offer those services at a rate below what government hospitals could provide them.



There would likely be benefits from a reduced number of DHBs.

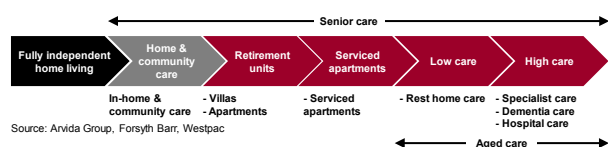
# Diagnosis Three: Aged care deficiency

- The number of people aged over 65 is expected to double in the next 25 years, to 1.29 million.
- Advances in healthcare have meant people are living longer although the health costs per person have spiralled as a result. Mental healthcare advances have not been as great.
- An older population and an increasing number of people with dementia means a massive rise in rest home and dementia care beds is needed.
- We are not providing for this increase, in large part because of profitability challenges in the sector, and a crisis in provision of care is looming.

## The continuum of senior care

A number of different terms are used to describe the care provided to older people, whether in their own homes, in a retirement village, rest home or hospital. For the purposes of this study, we use the term “senior care” to capture all the social support and residential healthcare services provided to older people, typically over-65s, whether in their own homes or after moving out of their homes into specialist senior citizens or assisted living facilities.

### Continuum of living arrangements

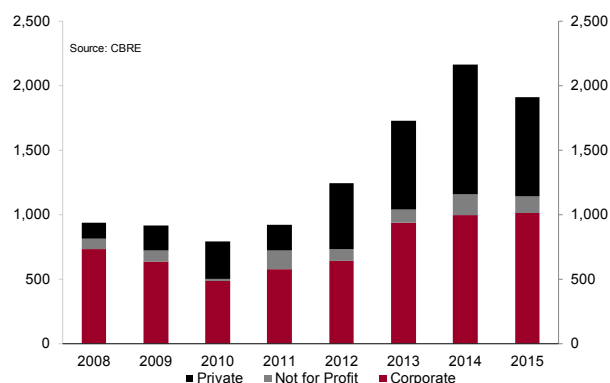


Levels of care vary across stages of life. From fully independent living in their own homes, people often begin to receive some sort of in-home care. This can be in the form of “household management assistance” – cleaning, mowing the lawns and so on. But increasingly, in-home support is becoming more healthcare focused – providing for the physical health needs of older people in their own homes.

Industry sources agreed that the government’s focus is on keeping people in their own homes for as long as possible, which is a popular approach, and is also more cost effective for government as the costs of residential care are much higher.

Privately-operated retirement villages, which typically consist of villas, apartments and/or serviced apartments, are what New Zealanders who can afford this type of arrangement are increasingly choosing. These units are built almost entirely by corporate or independent private sector players, with less than 8% of all units built in the last eight years delivered by not-for-profit organisations.

### Construction of retirement village units by year



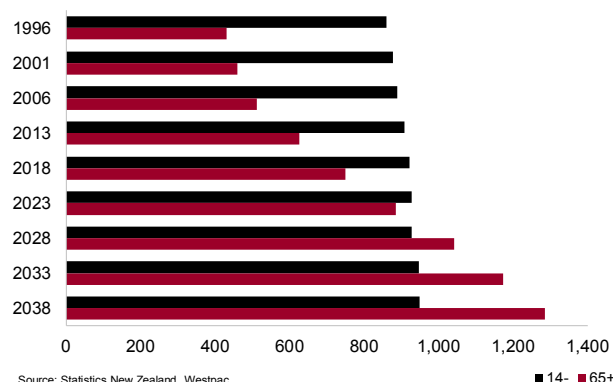
Rest homes are where senior citizens can receive basic ongoing healthcare support – registered nurses and caregivers provide care, as well as doctor’s visits. On average, older people spend between three months and two years in a rest home. Industry sources estimated that between one-third and half of all New Zealanders pass away in a rest home.

A smaller proportion pass away in hospital care which, along with dementia care, is at the highest end of the care spectrum.

### Demand for aged care is surging

New Zealand, like most countries, has an ageing population. Advances in medical science, food and water quality are enabling people to live longer.

### New Zealand residents aged under 15 and over 64 (000)



Between 1996 and 2013, the proportion of New Zealand residents aged over 65 rose from 11.5% to 14.1%. But over the next 25 years, that proportion is expected to rise to 23.4%, while the proportion of under-15s is expected to fall to 17.3%.

In absolute terms, the change is even more stark. The number of under-15s is expected to increase by just 40,000 from its 2013 total by 2038. The number of over-65s will double to 1.29 million.

The ability to extend life is due to immense breakthroughs in medical science, but it carries with it massive challenges of its own, some of which have already been touched upon:

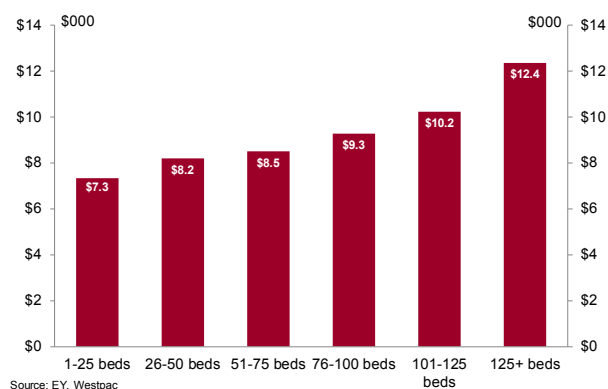
- Longer life is made possible by medical technology advances that are often very expensive. The marginal cost to the healthcare system of each additional year of life is significant.
- The longer lifespans that many are experiencing at times leads to loneliness and isolation in the community, especially in the over-75 age group, where people may have lost a partner and are physically less mobile.
- Advances in healthcare have not been balanced across all age-related challenges. Most importantly, breakthroughs in mental health disabilities, primarily dementia, have been more limited. As a result, an increasing number of older people may be physically strong, but require specialist dementia care.
- By age 85, most people are relatively dependent on some form of assistance, whether in-home or in a senior citizen community of some sort. The biggest growth in demand for senior care is in rest home and dementia care catering for this demographic. Grant Thornton estimated in 2010 that 12,000 to 20,000 extra rest home and dementia care beds would be required by 2026, or up to an extra 1,250 beds a year.
- Specialist care such as that provided by dementia care facilities or hospitals is expensive, once again creating funding challenges.

## The rest home and dementia care gap is glaring

New Zealand is not building nearly enough rest home type facilities to meet demand. One major reason for this is that stand-alone rest home care is not profitable, which means the private sector is not filling this gap. Neither is the public sector. The number of senior care facilities actually fell between 2000 and 2014 as many smaller rest homes closed due to profitability challenges.

Work by EY indicates that, across all residential care facilities, size matters to profitability. Returns steadily increase with scale, with large facilities (over 125 beds), appearing to be far more profitable than smaller scale facilities. Data by service type indicates that rest home care is far less profitable than hospital or dementia care.

EBITDAR<sup>2</sup> per bed by facility size



Industry leaders estimated that the minimum size of rest home needed to be financially viable is now more than 50 beds.

A number of reasons are cited for this lack of rest home profitability.

Firstly, the government limit on rest home fees is too low. Industry sources estimate that around two-thirds of rest home residents receive a means-tested subsidy of some sort from government (partial through to total subsidy). But the government caps the weekly rate for a set of standardised services (the “maximum contribution”), currently ranging between around \$884 and \$972 depending on where in New Zealand the services are provided. This equates to fees of up to \$139 a day to cover all basic care costs for the individual including accommodation, food, and nursing support.

Secondly, extra medical costs are often borne by the rest home. The agreement with the government has limits on what government or the rest home pays toward medical expenses. One example cited by industry leaders was expensive dressings for wounds or injuries, where the rest home had to cover a significant portion of the cost of the dressings out of its roughly \$1,000 a week total fee.

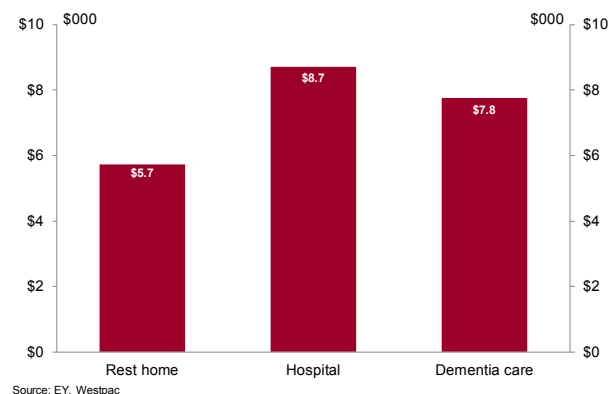
Thirdly, construction and land cost have increased rapidly. Construction costs particularly in major centres like Auckland, have risen at a rate much higher than overall prices as measured by the Consumers Price Index (CPI). This made building new rest homes, given the typical returns achieved by the sector, far less attractive. Further, in many parts of the country, land prices are growing sharply. Again, this means the cost per bed delivered is much higher and alternative uses may be more attractive. Land may yield better returns if developed into higher-density houses for instance.

Fourthly, there is an increasing administrative burden. More time is spent on auditing, certification and completing checklists to confirm things like whether rubbish bins have been cleaned or wheelchair tyre pressure has been checked. This adds cost and/or reduces time and funding for frontline services.

## The implications are substantial

Too few rest homes are being built for the massive rise in demand. Almost all development is by private developers in conjunction with larger retirement village complexes. But these developments

EBITDAR per bed by service type



<sup>2</sup> Earnings before interest, taxes, depreciation, amortization, and restructuring or rent costs

are only expected to provide 40% of the rest home and dementia care beds needed.

One major implication of too few rest home beds being supplied is inappropriate use of hospital care. Often, when rest home beds are not available, the alternative is a stay in hospital, to ensure access to nursing care. But hospital care is estimated to cost between triple and six times as much per day as the fee paid for rest home care, usually at the expense of the taxpayer. Aged care industry leaders argue that increasing the fees they receive from government by even 25-35% would make them more profitable while also freeing up more expensive hospital beds for those who really need that level of care. But across the thousands of rest home residents that need to be accommodated each year, this would be a significant additional cost to the government.

A second implication is that the current stock of rest home facilities is ageing, with little replacement. It is estimated that more than half of rest home, dementia and hospital care facilities are at least 25 years old. This means that facilities are likely to have higher maintenance costs, and may not provide the expected level of facilities (e.g. double glazed windows) expected in a modern facility.

Thirdly, funding limits mean a staffing crisis is emerging. At the current maximum contribution, rest homes are struggling to pay registered nurses and caregivers adequately. Many are reliant on migrant workers who are prepared to work at lower pay rates. As the trend toward more high-need support in the rest home environment occurs, staff will need to be increasingly trained, which requires a higher pay scale.

Fourthly, the funding model may put rest home beds where they are not needed. On the one hand, because smaller rest homes do not have the scale to make a reasonable return, there is a risk that many smaller towns in New Zealand will not sustain a local rest home. This may mean a long drive up the road for family members to visit their elderly relative. It may also mean the person in rest home care is moved not only from the family home they know, but potentially also out of a town that is familiar to them.

On the other hand, more expensive parts of the country may be under-served by rest home facilities. More peripheral parts of a district, where land may be cheaper, may be more viable for new rest homes, while major towns may have land prices that are too expensive. For instance, Dunedin, which is New Zealand's largest city by geographic area, has vast more distant areas that may have much more affordable land available, and where the maximum contribution rate is the same as in the city.

## Managing the rest home shortfall

In summary, the challenge of a shortfall in rest home and dementia care is only being partially overcome, and a crisis is looming. Maximum contributions are too low for many independent rest homes to be profitable (reflected in the reduction in independent rest homes). And falling home ownership rates may mean that fewer senior citizens have the financial wherewithal to fund their own rest home stay through the sale of their family home in future, creating further financial burdens on government.

There are moves afoot to limit the size of this gap, but these efforts together are likely insufficient.

First, several industry sources said the government remains committed to "ageing in place", whereby it is trying to keep people in their own homes for as long as possible by providing in-home assistance. This policy is popular in that it keeps the person needing care in a familiar environment as long as possible, while also limiting the costs to the government of providing care.

However, in-home assistance creates other challenges in terms of isolation and loneliness, and often only puts off rest home care (or hospital care if no rest home beds are available). And with people living longer, the skill level required for in-home assistance is rising. Where previously this was largely limited to household management skills, the focus is increasingly on basic level medical assistance.

## The challenge of a shortfall in rest home and dementia care is only being partially overcome, and a crisis is looming.

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Second, private retirement village developers are providing rest home beds. Few, if any, government or NGO rest homes are being built. The private sector is expected to provide around 40% of the rest home beds needed over the next 10 years. These rest homes are almost always as part of a larger retirement village complex. This allows retirement village operators to sell the "continuum of care" concept; care is provided from independent living in villas and apartments through to rest home, hospital and increasingly dementia care.

These larger retirement villages have the scale and alternative revenue streams to remain profitable. Most of their profits come through occupation right agreements, whereby residents moving into villas or apartments agree that up to 25-30% of the fee they pay to occupy the dwelling will pass to the village operator when they move out. Capital gains on the property also accrue to the operator. While operators may or may not make a return on the co-located rest home, the continuum of care is essential to attracting residents.

Third, to make construction and maintenance of rest homes financially viable, many rest homes are innovating to offer a range of premium services. These are services offered over and above what is included in the level of service the government requires of all providers. It has been reported that rest home residents often pay between \$6 and \$20 a day for extra services such as ensuite bathrooms, larger rooms, pay-TV, entertainment, or massage and physiotherapy options.<sup>3</sup> This can result in additional revenue of up to \$14,600 over a two-year rest-home stay.

Fourth, providers are also designing care facilities to be more flexible. This allows them to use the facilities in different ways through what is termed "swing beds", allowing use as hospital or dementia care beds rather than as rest home beds.

However, it is clear that all of these actions are only part solutions, and that a significant shortfall of rest home and dementia care is inevitable unless further drastic action is taken.

<sup>3</sup> See <http://www.stuff.co.nz/business/money/69112545/Rest-home-stay-can-cost-over-80-000>

# Diagnosis Four: Technology's beating heart

- Medical technology is making it easier for medical staff and individuals to access their own medical records.
- At the same time, technology is allowing for more prevention of health difficulties, faster diagnosis, and more advanced treatment of injuries and illness.
- These advances come at significant financial cost, however, creating a gap between what science can do and public expectations of the healthcare system.

Medical technology is changing rapidly. As already highlighted, medical knowledge is estimated to double every few years. The ways in which technology is changing what we can do to save and improve quality of lives are many. Key developments in knowledge and capability are expected to advance further over the next five years.

## Health portals for sharing and accessing medical records

Access to medical records in New Zealand is difficult. The multiple-DHB system discussed previously has resulted in a number of incompatible data storage systems. Requests for data to be shared by a patient's previous DHB with their current one after a move often require the manual filling out and transmission of forms from one DHB to the other.

Organisations in the US are already using medical record-sharing software so those receiving medical care across the country and their medical professionals can access their records. Health portals encourage better outcomes in a number of ways:

- They save time in giving medical professionals immediate access to patient records.
- Patients can repeatedly access their records to remind themselves of the doctor's conclusions or medicine regimens.
- Medical staff are encouraged to record patient information more accurately and comprehensively as patients will have access to the information as a matter of course. This will reduce medical errors.
- Patients feel they have better control over their own medical future.

Health portals are already being developed in New Zealand. The failure of DHBs to agree a common data storage system across New Zealand will remain a hindrance, but PHOs are now looking at options for joining health portals directly.

## Technology to aid prevention

The growth in sales of personal fitness trackers is seen by some

industry sources as another step toward the individual taking greater personal control of their health outcomes. The rise of the Internet of Things, which is increasing the number of monitors placed in physical locations and in electronics from tablets and mobile phones to fridges and TVs, will allow closer monitoring of people's health. This may allow earlier intervention to prevent illness or injury, or to limit its extent.

The sequencing of the human genome, first completed in 2003, will increasingly allow individuals genetically predisposed to particular health risks to take action to mitigate those risks. For instance, individuals can now have their genome individually evaluated for a range of possible risks. Access to this technology is still in relative infancy, but is likely to improve in quality and accessibility in the next several years.

## Technology to aid diagnosis and advice

For several years, medical professionals have been able to get further advice from other medical professionals via video-conferencing. This is expected to increase, but is likely to move into the realm of individual patients receiving medical advice via video-uplink.

Access to faster on-the-spot diagnosis through portable, less costly blood-test and other diagnostic testing equipment will make faster diagnosis increasingly possible. This carries a cost for upfront equipment purchase, but may prevent patients or blood samples having to be transferred to major centres for diagnosis, which will save money.

One industry source we spoke to estimated that being able to do more diagnostic testing on-site at the local medical centre had saved \$50,000 in the first year of operation, split across the government, the medical centre and the patient.

## Technology to aid treatment

A number of technological advances will continue to change how treatment of illnesses and injuries is delivered. These include:

- Increased use of robotics for surgery, allowing smaller incisions and more precise work
- More 3D printing of prostheses
- More synthetic biology, whereby entire DNA sequences can be assembled artificially, with the aim of developing medical treatments for various diseases
- Decreased workload for traditional stand-alone pharmacies through the use of packing robotics. Anecdotal evidence suggests that robotic packing capabilities reduce packing times by up to 80% and that these robots, while still expensive, will pay for themselves within a couple of years.<sup>4</sup>

<sup>4</sup> See for instance <http://www.pharmacytoday.co.nz/in-print/2014/october-2014/october-2014/the-future-is-here-with-robots-in-pharmacy.aspx>

# Primary and secondary care: GPs, specialists and allied healthcare

- There has been strong growth in the number of specialists in New Zealand, despite suggestions by industry sources that there are not enough, suggesting demand for secondary-level services have grown most strongly over the last 14 years.
- The sector is characterised by strong returns on equity but still faces several challenges.
- The GP workforce in particular is ageing, and there is a dearth of people looking to take over ownership of existing practices.

## Growth, performance and representation

As pointed out in the section introducing the healthcare and social support services sector, there is an overlap of specialists into hospitals and the like, blurring the lines between secondary and tertiary care.<sup>5</sup> But for the purpose of this analysis, we define primary and secondary care as consisting mostly of GPs, specialists and allied healthcare workers, together employing around 68,400 FTEs, a figure not dissimilar to the total employed in tertiary healthcare, if that is confined to hospital care.

Overall, the sub-sector has seen employment rise 43% since 2000, while value added is up 62%. Meanwhile, the number of business units has also risen about 42%. This suggests that the number of workers per “front door” is largely unchanged while value added per business is up about 14%.

But growth across the primary and secondary care sub-sector has been quite mixed in recent years. There has been much slower growth in pathology and diagnostics employment, for instance,

with the number of businesses growing sharply, implying a fall in average business size. At the other end of the spectrum, the number of specialists has almost doubled. Yet the overall message is the same: there has been strong growth in primary and secondary care business activity since 2000.

New Zealand’s state-run healthcare relies upon a capitation system, whereby District Health Boards (and by extension GPs and specialists) are funded according to the number of people residing in their geographic area. Theoretically, this should create a “fair” system leading to similar health outcomes across regions, and funding for a sufficient number of medical staff across regions.

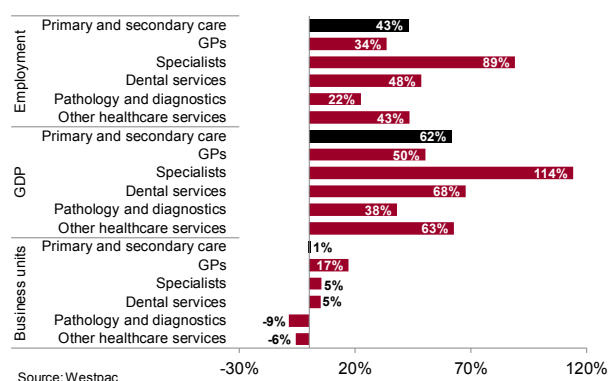
In reality, there are some significant differences in the number of primary and secondary healthcare workers per 1,000 population. The Bay of Plenty (17.8); Nelson, Marlborough and the West Coast; and Wellington have a higher number of GPs, specialists and allied healthcare workers per 1,000 residents. Gisborne and the Hawke’s Bay (13.5); Otago; and Southland are under-represented given the size of their populations. The national average is 15.4.

This statistic on its own does not indicate that different regions are offering a better or worse health service, but it does potentially point to the challenge of attracting medical personnel to certain parts of the country, a point discussed in Diagnosis Two.

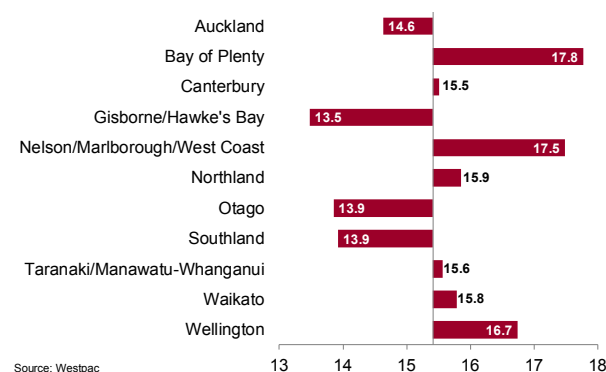
## Benchmarking

Businesses can monitor their own commercial performance against that of other businesses in their sub-sector by considering averages across key indicators. Where possible, this report provides the most recent available information on a number of key commercial ratios for each sub-sector.

### Primary and secondary care, changes in key measures, 2000 to 2014



### Primary and secondary healthcare workers per 1,000 population

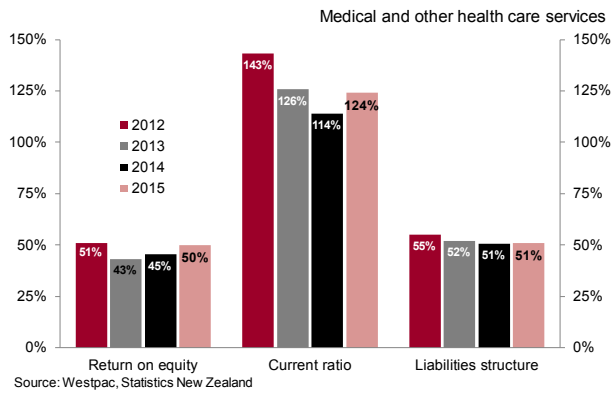


<sup>5</sup> Technically, for the purposes of the employment data used here, workers who split their work across the private and public sectors should only be counted once, in the sector in which they do most of their work.



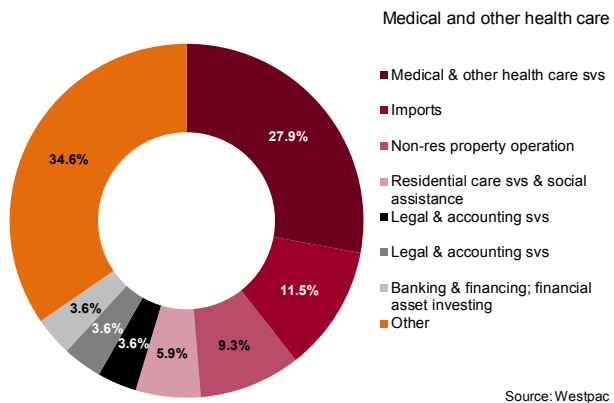
The three indicators are return on equity, current ratio (current assets divided by current liabilities), and liabilities structure (share of total liabilities provided by shareholder or owners' equity).

### Key commercial indicators



Returns on equity in the primary and secondary healthcare sub-sector tend to be high. The main input into these businesses is the skill of the medical professionals involved, rather than capital

### Where inputs come from



(operations and more sophisticated investigation still tends to be done at hospitals). Returns on equity have thus hovered at around 50% in recent years, one of the highest across all measured parts of the economy.

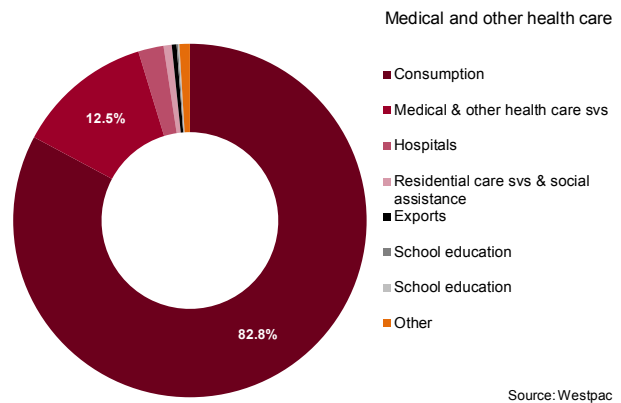
Current ratios also remain strong, indicating that, on average, businesses in primary and secondary healthcare are strongly capable of meeting their short-term liabilities with assets available. The liabilities structure has remained largely unchanged in recent years, with a little over 50% of total assets held by shareholders.

### Inputs and outputs

The primary and secondary healthcare sub-sector draws its inputs largely from within its own sub-sector and from a range of business services although imports also play an important role. This means the impact of growth in the primary and secondary healthcare sub-sector is more limited across industries.

Five-sixths of output are consumed directly by consumers of medical services in New Zealand. The link between primary and secondary healthcare and the rest of the healthcare and social support services sector is evident from the fact that much of the remainder of primary and secondary healthcare outputs feed into the sub-sector itself and into hospitals.

### Where outputs go



# Tertiary care: Hospitals

- The number of hospitals recorded in New Zealand has fallen by a quarter over the last 14 years, and average employment per hospital has doubled.
- Access to hospital-level care is particularly limited in Southland and on the East Coast, with large geographic areas and a relatively low population density.
- Private hospitals have emerged as profitable businesses, with higher returns on equity and solid liquidity.
- Hospitals face the increasing challenge of being used for rest home and dementia care as insufficient rest homes are being built, and in the case of public hospitals, a challenge in finding sufficient specialist staff.

## Growth, performance and representation

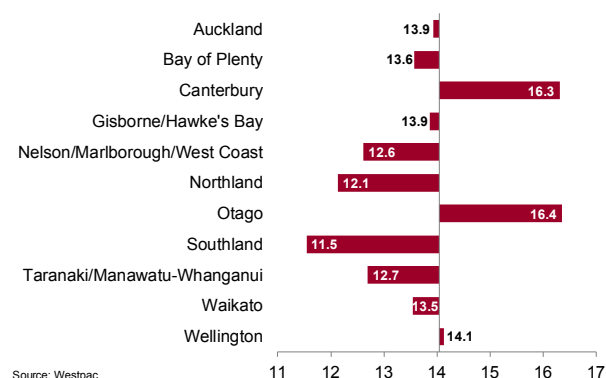
There has been a sharp decline in the number of business units (“front doors”) operating as hospitals in the last 14 years. A fall of 26% has seen the number of hospitals plummet by 74 facilities since 2000.

Yet employment is up nearly 50%, and value added by hospitals has increased 76%. This means that overall, modern hospital facilities are bigger and far more productive than the facilities of 14 years ago.

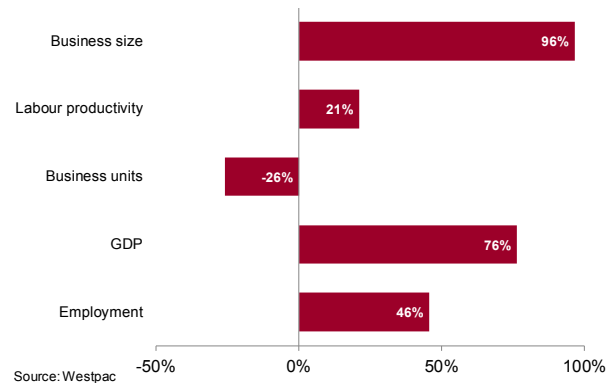
But tertiary healthcare services vary in scale by geographic location. In terms of hospital workers per 1,000 residents, Canterbury and Otago lead the way, with a little over 16. Yet in Southland, there are fewer than 12 hospital workers per 1,000 population. The national average is 14.0.

With the large geographic area that Southland covers, the region also has the largest surface area per hospital, at 3,900 km<sup>2</sup>. Meanwhile Auckland, with a small geographic area and a large population, has one hospital for every 101 km<sup>2</sup> of its area.

### Tertiary healthcare workers per 1,000 population



### Hospitals, changes in key measures, 2000 to 2014



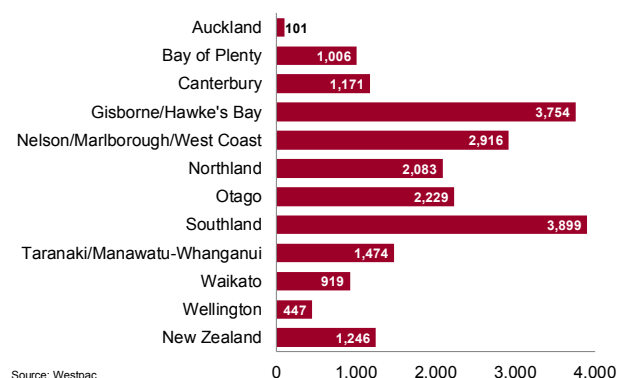
These figures highlight the challenges of providing comparable levels of care across different parts of New Zealand, some of which are densely populated, and others of which are sparsely populated or inaccessible.

As pointed out in the primary and secondary healthcare section, the differences in hospital staffing and geographic coverage per hospital is not indicative of a failing on its own. Some DHBs may offer exceptionally efficient services using fewer staff, for instance. But the disparities highlight the difficulty of appropriately funding and running tertiary healthcare services across such varying demographic spreads of people and service levels.

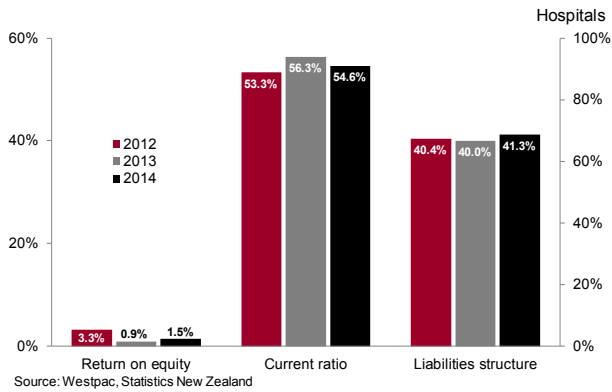
## Benchmarking

Returns on equity across the hospitals sub-sector tend to be low. This is because the sector is dominated by large, public hospitals that are not run for profit. Further, hospitals require huge capital outlays in terms of buildings, surgical and diagnostic equipment. As a result, returns on equity across the hospital sub-sector have averaged between just 1% and 3% in recent years.

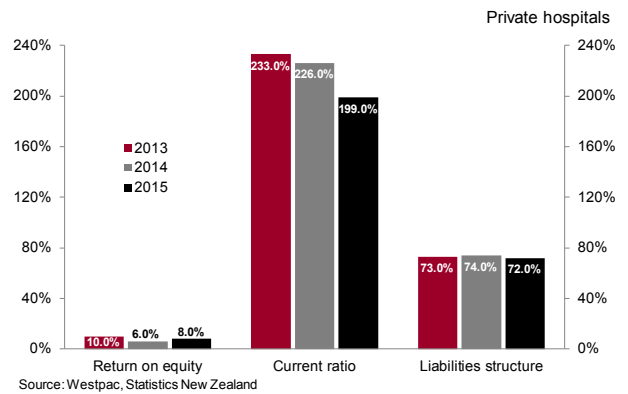
### Km<sup>2</sup> per hospital (000)



## Key commercial indicators



## Key commercial indicators<sup>6</sup>



Similarly, government funding means the requirement to meet short-term debts with current assets is not as pressing, yielding current ratios of 53% to 56%.

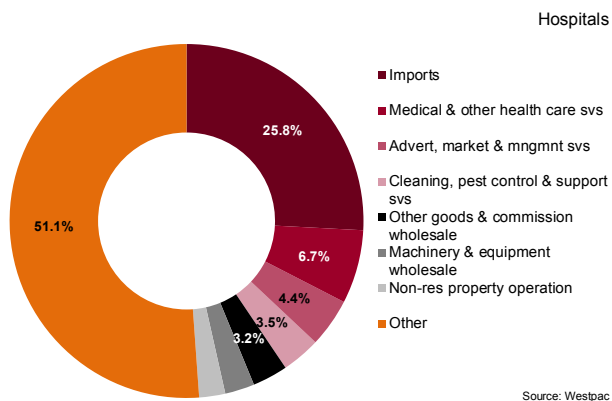
Data for private hospitals is available for 2013 to 2015. It shows higher returns on equity as one would expect for for-profit businesses although the rates are not particularly strong. Current ratios are much higher, indicating far greater liquidity, and ownership rates average around 72%. In other words, liabilities are around 28% of total asset value.

## Inputs and outputs

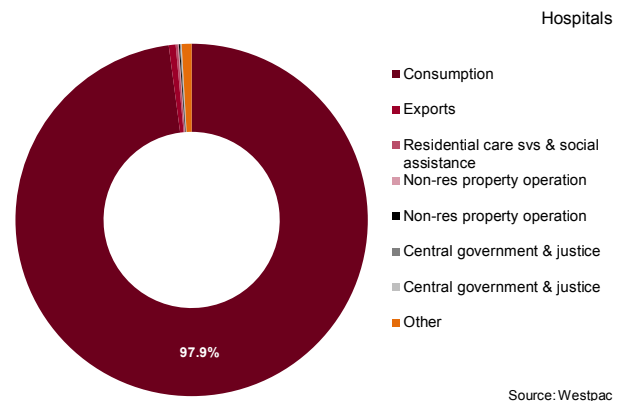
Inputs into the tertiary care sub-sector come from a wide range of sources, but by far the largest is imports, accounting for more than one quarter of all inputs. The other major input sources are also quite different from in primary and secondary care, with a focus on machinery and other goods wholesaling. More than half the sub-sector's inputs come from industries other than the top few examined here.

On the outputs side, hospital services are about as pure a consumption service as one can get. Almost 98% of outputs are estimated to be directly consumed by users of healthcare services, with negligible proportions acting as inputs into other sectors.

## Where inputs come from



## Where outputs go



<sup>6</sup> Data for 2015 is unavailable as Statistics New Zealand have stopped releasing this data for public hospitals in 2015, making comparisons with previous years impossible.

# Senior care and social support services

- The number of businesses providing senior care has fallen in recent years due to reduced profitability of smaller facilities.
- Most new senior care facilities are being built by private and corporate developers who build retirement villages, providing a continuum of care through to rest home and hospital care.
- Huge potential for growth in rest home and dementia care exists, but demand may be unmet with current restrictions on maximum prices that can be charged.
- The largest growth in senior care and social support services has been in residential and child care services not for senior citizens, with these services increasingly provided by NGOs.

## Growth, performance and representation

The senior care and social support services sub-sector has experienced strong growth in employment, value added and number of "front doors" in recent years. The one exception has been the number of business units in senior care services, which declined by 5% between 2000 and 2014, even as employment and value added in senior care services grew. This is largely the result of several smaller rest homes closing due to financial challenges, a topic we discussed in Diagnosis Three.

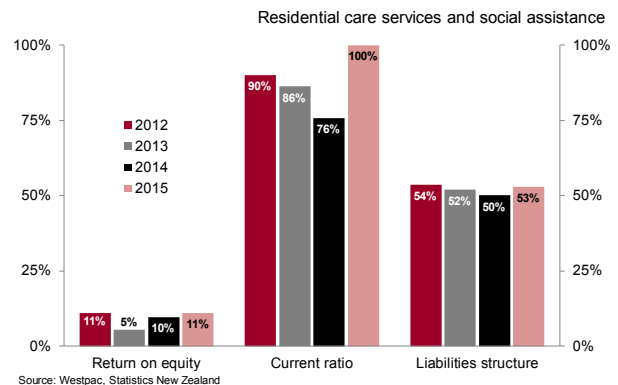
By far the largest growth in employment has been in other residential and child care services, which saw employment rise 85% in 14 years, and value added increase by 112%. This has been driven in part by more assisted living service provision for people other than those aged over 65.

Nevertheless, senior care remains the biggest part of the senior care and social support services sub-sector, with nearly 46% of the workers and 43% of value added. But as with other sub-sectors, access to senior care services varies around the country. The number of senior care industry workers per 1,000 people aged over 65 varies significantly, from 34 in Northland to 57 in Taranaki and the Manawatu-Whanganui regions. Auckland and the Waikato also have relatively poor access to senior care workers even once varying age profiles of regions are taken into account. In contrast, Southland and Wellington are relatively well served. Given that these figures are age-adjusted, this points to a significant skewing of access across the country.

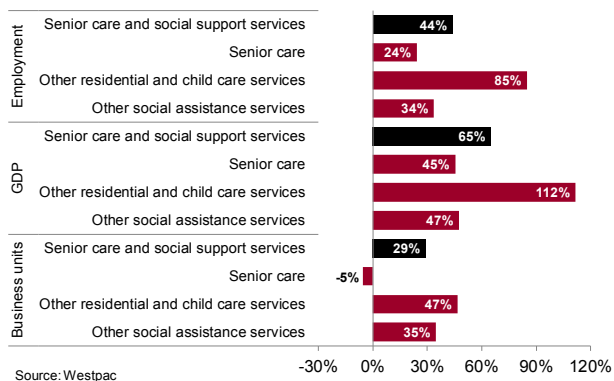
## Benchmarking

The sub-sector is characterised by moderate to good returns on equity, relatively weak ability to service current liabilities, and reasonable levels of shareholders' equity.

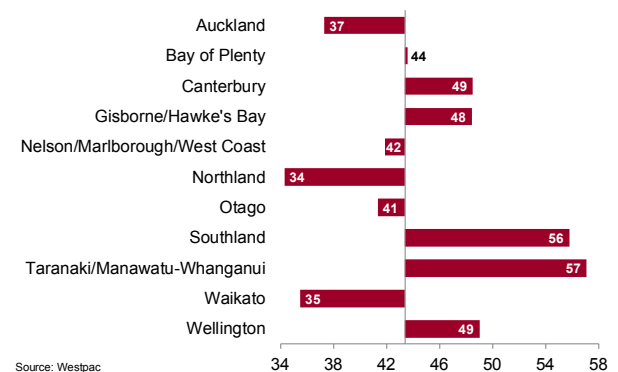
### Key commercial indicators



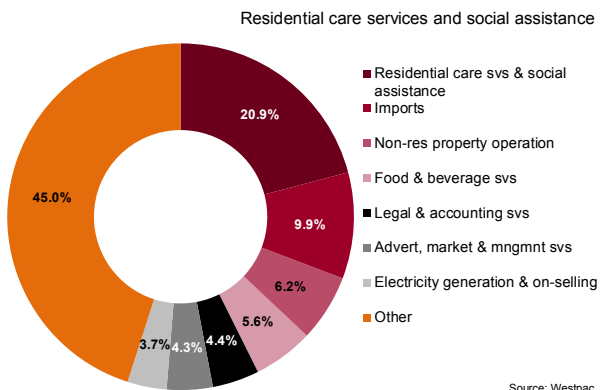
## Senior care & social support services, changes in key measures, 2000 to 2014



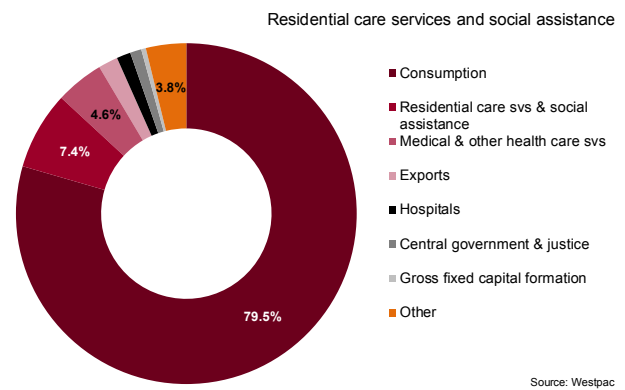
## Senior care workers per 1,000 residents over 65



## Where inputs come from



## Where outputs go



Returns on equity have ranged between 5% and 11% over the last four years. Returns in 2013 were relatively weak, but have since returned to a stronger footing. Current ratios across the sub-sector fell steadily between 2012 and 2014, but have since recovered to a point at which current assets and current liabilities are broadly matched.

Around half of the assets in the sub-sector are owned by shareholders, with the improved fortunes of the sub-sector in the last year reflected in an increased share of assets being owned by shareholders.

## Inputs and outputs

One-fifth of the inputs into the senior care and social support services sub-sector come from within the sub-sector itself, while imports and a range of service industries also play an important

role in providing the inputs the sub-sector needs to operate. Inputs come from a relatively diverse number of industries, suggesting that changes in the fortunes of the senior care and social support services sub-sector have widespread impacts across a number of supply industries.

Although the vast bulk of services produced by the sub-sector are still consumed directly by consumers, the share is lower than for the other components of the healthcare and social support services sector, at around 80%. The relationship between different service providers within senior care and social support services is indicated by the fact that more than 7% of outputs from the sub-sector are used as inputs in other parts of the same sub-sector.

Huge potential for growth in rest home and dementia care exists, but demand may be unmet.



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