Grant Thornton

Aged Residential Care Service Review

Summary of findings September 2010

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Overview

"As a result of the Review we know what the challenges are. They are major and urgent and it will take a robust collaborative approach between the key stakeholders to identify and implement solutions. This is a unique opportunity to take the steps required."

Martin Taylor
Chief Executive
New Zealand Aged Care Association

Like most developed countries, New Zealand faces a rapidly aging population. Between 2006 and 2026, the total population is expected to grow by almost 20% (from 4.2m to 5.0m). The population aged over 65 is estimated to increase by 84% from 512,000 to 944,000.

This means demand for rest home care will increase, from as early as 2012. Demand for high dependency services (hospital and dementia) will also grow.

The Aged Residential Care Service Review was undertaken over a 12 month period with the full 200+ page review published in September 2010. This summary provides you with an outline of key findings. The full report can be viewed on our website www.granthornton.co.nz.

The Review assesses the cost, capacity and service delivery implications of the growing number of New Zealanders likely to need aged residential care services. It does not propose definitive solutions – its intention is to map the landscape with sufficient clarity that sound solutions can be developed with confidence.

This is the most extensive review of this sector ever undertaken in New Zealand and had the highest provider participation rate of any comparable international study. It represents an accurate and thorough assessment of the current position and future projections. Its four broad components are:

- the costs associated with fair and reasonable service delivery models provided by an efficient and effective provider
- assessing current (baseline) demand and forecasting future demand for services and the resources required to meet it
- workforce demand and supply
- models of care, also called service configuration scenarios.

“To provide more certainty and security for current and future services, we need good information and we need to start planning now. The Review delivers on the first part of that equation, and provides a solid foundation for the second.”

Hon. Tony Ryall
Minister of Health

Key findings

"The Review is the first step in determining the collaborative solutions to the issues that it raises. Intensive planning and consultation with key stakeholders must now begin in earnest."

Chris Fleming
Lead Chief Executive Health of Older People on behalf of
20 District Health Boards

Between now and 2026, we can expect:

- between 12,000 and 20,000 extra residents will require aged residential care
- an increase of between 78% to 110% in new beds by 2026 to accommodate increased demand and to replace aging facilities
- supply and renewal of aged residential care facilities to increase significantly from current rates if projected demand is to be met
- workforce demand in the sector will increase between 50% and 75% (on an FTE basis).

One of the greatest barriers to meeting demand is that current financial returns for subsidised aged residential care operations are insufficient to support building new capacity and replacing aging stock. Approximately half the current stock is now over 20 years old.

The question is not whether pressures will arise, but when, over what time, and to what degree. And, finally, what should we do about it?

Report overview

To answer those questions, we need to begin drilling down. To assist this, the Review looks closely at current and future:

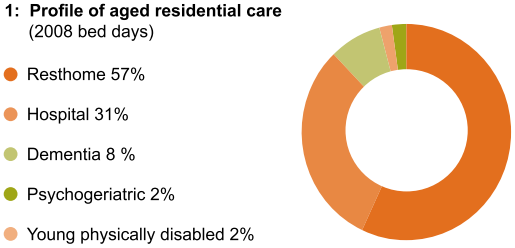
- demand for facilities
- supply of facilities
- costs and investment
- workforce implications
- models of care.

Demand for facilities

Aged residential care services considered in this Review comprise rest home, hospital, dementia, psychogeriatric and young physically disabled (YPD) services.

In 2008, 88% of those in aged residential care were in rest homes or hospitals (Figure 1).

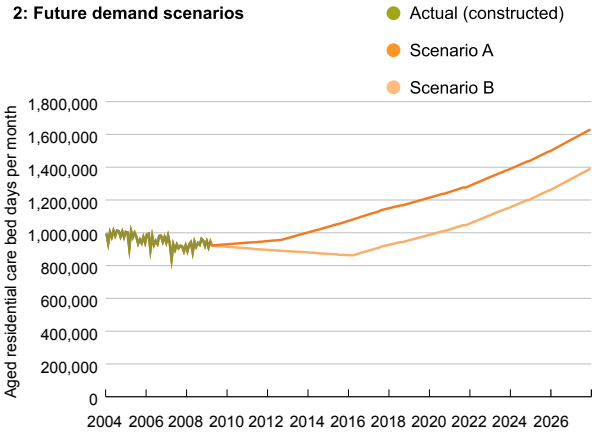
1: Profile of aged residential care (2008 bed days)



Aged residential care utilisation has been generally flat over the last 20 years. While there has been a steady increase in utilisation of hospital and dementia facilities this has been offset by a decline in rest home utilisation.

Growing demand for aged care services over the last decade has largely been absorbed by increasing utilisation of home support services. This is not sustainable, largely because rising dependency levels indicate the decline in rest home utilisation will slow before beginning to grow. This means there is a significant latent demand for aged residential care services.

2: Future demand scenarios



The Review models two future demand scenarios based on different rest home utilisation rates. Actual demand is expected to fall somewhere between the two.

The critical question is when demand for rest home services will start to grow. Under Scenario A, demand is projected to grow slowly until 2012 then begin to accelerate. By 2014, current sector capacity will be exhausted. Under Scenario B, demand for aged residential care will decline until 2015, then begin rising. Under both scenarios, demand for hospital and dementia beds will increase steadily until 2026.

In developing these scenarios, the Review team considered:

- Projected growth and aging of the population
- Other significant drivers of demand, including older people's preferences, changes in length of stay and assessment criteria
- Historic influences on rest home utilisation including changes in asset testing thresholds and the impact of home support services and alternative care arrangements
- New Zealand and international literature on the demand for aged residential care services

By 2026, demand for beds is projected to be between 44,000 and 52,000, compared with 32,000 today. The largest proportional increase will be in demand for dementia beds.

Baseline demand is a key input into the supply model developed in the Review. The model has been prepared to not only facilitate modelling of supply right now, but also as a tool to monitor and review the key influences on supply over time.

Supply of facilities

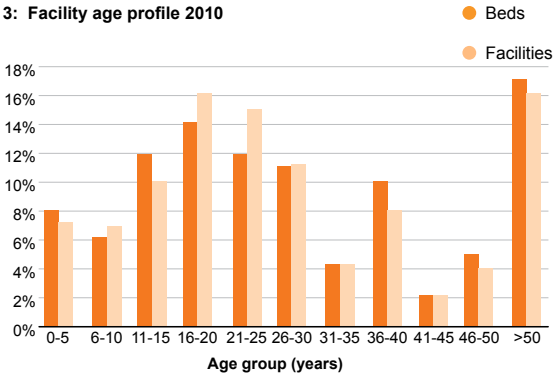
Supply and renewal of facilities has slowed and needs to increase significantly to cope with projected demand.

Projected demand indicates the need to cater for an additional 12,000 to 20,000 residents by 2026. Investment is also required to replace or renovate existing stock. Total investment required by 2026 could be the equivalent of 78% to 110% of current stock; an increase of between 0.8% and 1.8% per annum.

Stock tends to have a usable life of about 25 years. As Figure 3 shows, currently about half of all beds and facilities are older than 20 years – and a significant proportion are 50 years old or more.

Although structures last longer, their usefulness is affected by changing social norms, resident expectations, care needs, and the building code. The Review's financial analysis assumes a steady 4% p.a. economic depreciation rate of buildings.

3: Facility age profile 2010



Assuming no change in service delivery, additional aged residential care capacity is projected to be required between 2014 and 2021. Bed shortages may actually appear earlier, as demand and supply are not even across all regions. Not all underlying demand will be met due to delayed entry into aged care and/or greater use of home support.

Costs and investment

Financial returns for most rest home, hospital and dementia services operators generally cover operating costs, but are below those needed to justify replacing aging facilities or building new capacity.

The research into costs and investment was based largely on a survey of New Zealand aged residential care providers, in which the response rate covered 61% of operational beds across the country. This is an exceptional result; similar surveys in Australia and the UK have elicited response rates ranging from 10% to 31%.

Although low respondent numbers in smaller regions limit the comparative value of some results, there was a high degree of consistency across all major regions. Pricing was not included, but all income sources were.

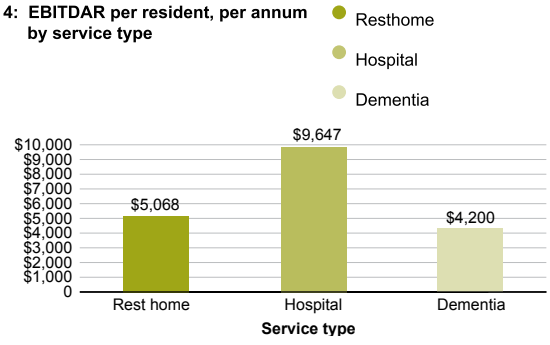
Key findings include:

- There has been limited investment in new building stock over the last decade
- Most of the recent investment in modern facilities has been targeted at those able to pay for some portion of services
- Rest home and dementia services deliver the lowest returns
- The most efficient-sized facility is 80 beds plus. Half the sector operates 50 beds or less
- Approximately half of New Zealand's building stock is over 20 years old. The oldest facilities deliver the lowest returns
- 37% of facilities are co-located with retirement villages, offering greater potential for continuity of care
- 43% of all facilities, and 58% of facilities built in the last decade, charge some residents extra fees for additional services. The numbers doing so have more than doubled since 2006
- The costs to construct new facilities are similar across types of care and range between $160,000 and $200,000 per bed

Managing higher acuity levels involves higher costs and has contributed to comparatively low returns to rest home and dementia unit operators as shown in Figure 4.

This analysis presents financial returns as earnings before interest, tax, depreciation, amortisation and rent (EBITDAR). This allows comparison of operating performance in a sector-neutral way without the influence of differential tax or financing arrangements.

4: EBITDAR per resident, per annum by service type



A Greenfield model was developed, based on the findings from the Review Survey, site visits and discussions with providers and other sector participants. The Greenfield analysis assesses the operating and capital costs of an efficient and effective provider of a fully modernised facility. Table 1 shows average operating costs in the sector are higher than Greenfield costs.

Table 1: Greenfield and average operating costs

Facility type	Green field site per resident per day	Review survey average historical costs per resident per day
Rest homes	$78.70	$81.90
Hospitals	$126.60	$134.77
Dementia units	$104.25	$108.21

An annual capital cost for a Greenfield facility was estimated based on assumptions about construction costs, land costs, occupancy, depreciation rates, asset life, return on investment requirements, tax rates and inflation. Table 2 presents total costs per resident per day (operating and capital) under three land cost assumptions for Greenfield sites. Because these costs are only representative of the modern facility, they are not intended to be used for any purpose other than estimating adequate future investment in the sector.

Table 2: Total costs per resident per day

Facility type	$200/m²	350/m²	$500/m²
Rest homes	$148.33	$155.31	$162.30
Hospitals	$196.23	$203.21	$210.20
Dementia units	$173.88	$180.86	$187.85

A fair rate of return for an efficient and effective provider was estimated to be between 11.3% and 12.9% after tax. The current operating profits of many industry participants are below those required to justify investment in new capacity – particularly rest home and dementia operators.

Workforce implications

The aged residential care workforce is expected to adjust to market demand through mechanisms such as remuneration and population growth.

Over 33,000 people are currently employed in the aged residential care sector. Nurses, caregivers and occupational and diversion therapists make up just over 70% of that workforce, and approximately 80% of the nurses are registered nurses.

Workforce demand is projected to remain stable or grow slowly for the next five years (see Table 3) and then grow by 50% to 75% (on an FTE basis) until 2026. As a result, the proportion of the total workforce employed in the sector will increase, but by a manageable degree.

Workforce supply is likely to adjust to demand through increased remuneration and new workers entering the sector. Retaining nurses will be more challenging than support workers.

Table 3: Projected demand for workforce - full time equivalents

Year	Facility manager		Nurse		Caregivers		Therapists		Non-care		Total	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
2008	599	599	3,440	4,151	11,817	12,831	809	1,074	4,214	5,351	20,879	24,005
2011	576	608	3,516	4,371	11,749	13,316	803	1,116	4,018	5,445	20,662	24,856
2016	573	715	3,789	5,161	12,241	15,731	833	1,322	3,936	6,394	21,372	29,323
2021	687	835	4,469	6,021	14,584	18,400	995	1,549	4,705	7,462	25,441	34,268
2026	873	1,027	5,559	7,367	18,347	22,587	1,253	1,902	5,981	9,158	32,013	42,042

Models of care

Models of care are defined as service configurations that may help address the demographic challenges facing aged residential care. The Review was charged with 'defining a limited number of service configuration scenarios', as opposed to exploring all possible options.

To identify potential models of care, the Review team:

- undertook a review of international literature
- developed a briefing book in conjunction with clinical experts outlining potential models of care for discussion in a series of focus groups
- conducted nine focus groups around the country with 87 participants representing a wide range of interest groups in the aged care sector
- consulted the Expert Advisory Panel, a group of sector experts consisting of clinicians, academics and representatives from providers and DHBs appointed to assist the Review.

Four scenarios were identified as worthy of consideration.

Scenario 1:
Improvements in the current model

The status quo may prevail and be based on sound principles, so long as certain key issues are addressed.

Scenario 2:
Enhanced professional services in the community

New Zealand aged care residents appear to use more acute hospital and other services than international best practice indicates. The costs of this could be re-allocated to increased service delivery outside the acute setting, aimed more towards prevention and quality of life.

Scenario 3:
Individualised funding

Coordinating service delivery is a significant burden for health service organisations and assumes that people's care should be planned for by others. Empowering individuals to make their own choices from a broad range of services may be a way to transparently 'capture' those able to contribute to their own care.

Scenario 4:
Special purpose low income housing for the elderly

One of the drivers for residential care is the inability of many older New Zealanders to cope in their own homes. Retirement villages provide an alternative for those with means. Community-based housing may provide an option for those with limited means. Changing the vision for housing – and how we construct and manage existing aged residential care facilities – could provide more opportunities for the elderly to help each other.

Evaluating the models of care scenarios

Scenario 1: Improvements in the current model

Strengths of the current model include that it is in place, works in the vast majority of cases, and the current service delivery network of providers has adapted to it. Major structural elements of the system are well developed, with any shortcomings known. Providers compete on the basis of service, driving up performance. The sector has also been resilient and innovative in identifying alternative revenue streams and service delivery options.

Weaknesses include:

- Clinical staff report that they often feel isolated from the rest of the health system
- Recruiting and retention are more challenging for residential care providers than for DHBs
- Competition among providers has resulted in duplication in key resource areas and scarcity in others
- It can be difficult to link consumer need with some services to ensure consumers get what they need
- Aspects of the current model of care are inefficient and may be unsustainable

These issues and the sub issues that stem from them are mainly operational rather than structural. However, considerable work will be needed if they are to be addressed. Consider the following list of issues identified as requiring attention:

- Shortages of selected operational capacity or inappropriate allocation, including the need for expanded respite capacity, slow stream rehabilitation or post-acute discharge shortages, increase in Stage III dementia or psychogeriatric beds in specific locations and greater use of day services
- Workforce challenges, including disparities in funding for pay compared to DHBs for similarly trained staff, availability of staff and immigration policies, staff training, and increasing awareness of the need for sensitivity to factors such as resident sexuality and spirituality in service provision
- Changes in residential funding methodologies to more accurately reflect acuity and to incentivise providers to meet varying customer needs
- Formalising provision for permissible user-pay arrangements under the current ARRC contract
- Inconsistency among assessments, both within individual Needs Assessment and Service Coordination Services (NASCs) and across the country, adoption of interRAI and electronic linkages and greater case management and coordination amongst DHB-funded services
- Operational delays, often caused by lack of capacity, resulting in back-ups in acute care or clients requiring extra supervision in lower levels of care while waiting for openings, and assessment delays
- Health sector integration, including securing GP cover and involvement in care planning and extracting relevant information from acute hospitals for the care planning process
- Appropriateness of criteria for assessing the timing and level of care appropriate to the needs of individuals

The benefit of improving the current model is that it entails the least change from the status quo and any proposed initiative can be assessed on its own merits. This benefit is also its greatest obstacle, as the necessary work programme is ambitious and requires discussion of each item individually across all stakeholders.

Scenario 2: Enhanced professional services

This reflects a service model based on closer integration of health services through multi-disciplinary teams providing enhanced professional services to aged care clients. This model aims to identify and coordinate the necessary services to accomplish resident well being and ensure that unnecessary and unwanted services are not delivered.

Key factors to be considered in assessing the merits of this scenario are:

- the likely rates of usage of specific aged care services in future
- the comparative costs of each.

Figure 5 shows that between 2002 and 2008 the utilisation of medical and surgical inpatient services increased steadily, while the utilisation rate of assessment treatment and rehabilitation (AT&R) services fell initially, before rising in 2008.

5: Actual care utilisation per 1,000 clients

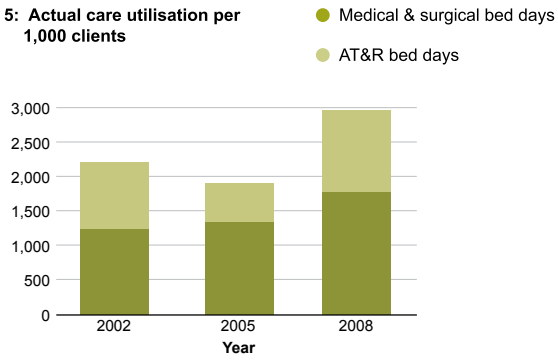


Figure 6 shows the cost of aged residential care and home support services for one person for 365 days, and the cost of their related use of acute hospital services.

On average, aged residential care clients do not stay in a facility for an entire year. Therefore, the cost of an average client would be less than shown.

The cost per aged residential care hospital level client is 50% to 60% higher than for rest home level clients. The use of acute hospital services by aged residential care hospital level clients and rest home level clients is similar.

6: Average cost per client per year

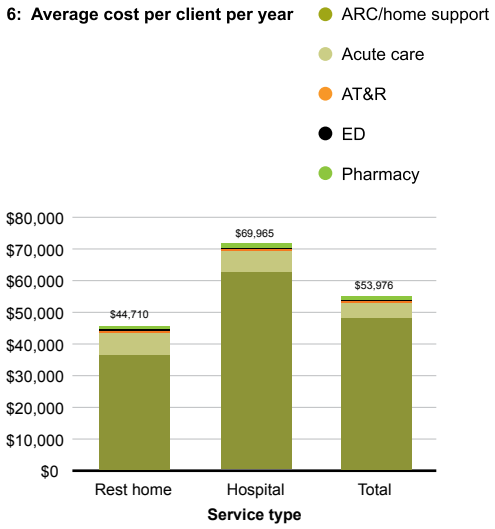
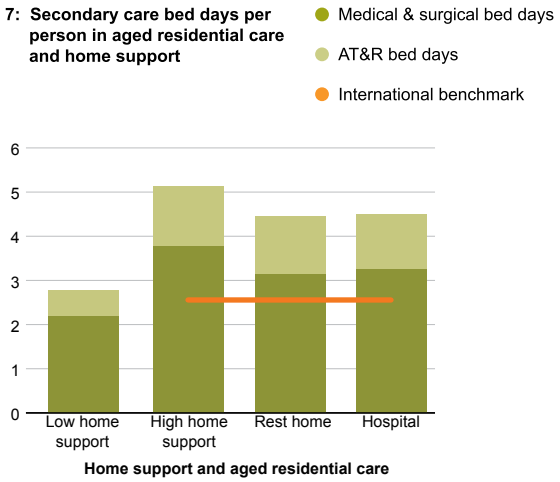


Figure 7 compares average bed days in 2008 for aged residential care residents in rest homes and hospitals in 2008, with those of the 30,000 highest recipients of home support services and all remaining home support service clients.

Enhanced integration of aged care and other health services could improve older people's outcomes and lower direct costs. It is, however, a complex structural change and international experience suggests that it may, in fact, not reduce total costs, primarily because initial savings are often offset by increased longevity.

7: Secondary care bed days per person in aged residential care and home support



Reducing bed usage would require substantial improvements in clinical and professional resources in the community organised around some form of economic unit to provide services with more effective utilisation of resources.

Two variations of the enhanced professional services model were considered in the Review; a group of aged care professionals organised together with common incentives, tools and a shared philosophy (called aged care services teams) or teams based around Primary Health Organisations (called primary care based teams).

The potential benefits under the aged care services team based approach fall into three categories:

- Improved outcomes as measured by greater longevity, improved satisfaction and quality, workforce improvements and other qualitative benefits
- Improved allocation of resources between home support and residential care from tighter integration
- Cost savings from avoided utilisation in other parts of the health system

The most significant benefit of the primary care based approach is that it is consistent with the Government's primary care strategy and leverages other investments already being made in the PHO system, such as capitation funding arrangements and information technology initiatives to provide for connectivity and sharing of medical information.

In theory the benefits identified under the aged care teams option should also be attainable under this option. In practice, however, attaining these benefits would depend on:

- the priority and resourcing decisions the primary care sector makes in aged care
- the funding arrangements between the various (virtual) providers engaged in the primary care team.

Tradeoffs and obstacles primarily centre on:

- the extent to which the aged residential care sector will be a sufficiently high priority to see action
- establishing the economic arrangements between a large number of disparate organisations to align incentives.

Scenario 3: Individualised funding

Devolving funding to the individual so they can manage their own care is regularly identified as a mechanism for organising the aged care sector. This is not a 'discrete service delivery alternative' but was considered in the Review for completeness.

From the client's perspective, the benefits of this model are choice and control.

From a policy perspective, this model allows the greatest contribution from those who can afford it and is the most transparent in its application. As it is a market-based solution, it is also the most likely to encourage innovation and adoption of best practices. Drawbacks include:

- Some clients have difficulty making sound decisions for a variety of reasons, including cognitive impairment, time pressure and other factors. This risk can be mitigated by a manager-led variation of the model, which is explored in the full version of the Review report
- Clients may make unsound decisions, leaving the provider to ameliorate a situation not of their doing
- The model requires access to complete and reliable information sources
- Public expectations of consistency in delivery may not be met
- Some elderly people may be pressured to make decisions they don't want to, or even be subject to abuse in some situations

Scenario 4: Special purpose low income housing for the elderly

There is a gap right now in the provision of supported housing for the low income elderly. Retirement villages meet this need for those with the financial means but not for those without.

Furthermore, supply analysis suggests that a further 26,500 to 37,500 new and replacement aged residential care beds will be required by 2026. Accordingly, one option is to divert some portion of the new beds to construction of community-based housing for those with limited means.

The primary benefit of this model is the expansion of low acuity housing to relieve pressure on fully funded (and staffed) residential care providers. In addition, this model provides more choice, encourages the use of informal carers over paid carers, and supports greater social connection.

A challenge with this model is sourcing capital to construct new facilities or retro-fit existing facilities. International experience suggests these models do not cover their full costs. Therefore, some form of low cost or subsidised financing is required. In addition, changes would be required in the regulatory regime for both residential care and retirement villages.

Recommendations

Growth in the over 65 age group over the next 20 years will place significant pressure on all services provided to older people. Significant investment is needed in aged residential care services to ensure that supply matches future demand. Any future investment also requires significant preparation time and robust models of care. The models developed in the full Review can be regularly updated as the economic, social and other environments change over time. The report makes 15 recommendations which are summarised here.

One: Greater public recognition of the need for additional aged residential care services and funding to meet future demand.

Two: The steering group should annually update, monitor and review the key assumptions in the Costing, Supply and Demand models (see the full report for details).

Three: To be ready for increased demand from about 2014 onwards, there is a need to develop appropriate pricing and policy settings to ensure appropriate and timely investment. This work must begin in 2010/11.

Four: Dementia has the highest rate of demand but an unsustainable rate of return and is therefore unlikely to attract future investment. This issue must be addressed as a priority.

Five: Ensure appropriate existing market capacity is not lost.

Six: Evaluate costing results from the Review to recognise the differing performance of providers in different regions to inform the validity of current TLA pricing.

Seven: Undertake additional analysis around the efficient frontier for providers to further develop pricing and policy settings, particularly in the short term.

Eight: Further analyse the data developed to provide demand and supply modelling by DHB and region, with the aim of ensuring that initiatives reflect regional demographic differences throughout New Zealand.

Nine: Consider options to influence the market's expectations regarding rate of return.

Ten: Develop appropriate service models to support care delivery to unique clientele in differing locations.

Eleven: Review how the current regulatory environment influences supply and demand, with a view to supporting appropriate and targeted investment and models of care.

Twelve: Evaluate the costs and benefits to providers and funders of a managed bed policy.

Thirteen: Undertake a structured approach to pilot options around enhancing professional services in the community and low income housing and other models of care that support the elderly.

Fourteen: Develop initiatives to increase participation in the aged residential care workforce.

Fifteen: The steering group should ensure the report's initial recommendations are implemented and opportunities identified to develop services throughout New Zealand.

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