Report of the Wakatipu Health Services Expert Panel

29 August 2011

Recommendations to the Southern District Health Board
for sustainable health services
for the people of the Wakatipu Basin

Acknowledgements

The Expert Panel would like to acknowledge the many parties that have contributed to this report, especially acknowledging the members of the community who have attended public meetings or drop-in centres or have provided written submissions on health services in the Wakatipu. The Panel would also like to acknowledge the clinicians and the interest groups that have spent time with the Panel to inform their deliberations and recommendations on health services in the Wakatipu Basin.

Acknowledgements include:

- the Wakatipu Community
- members of the South American Community
- Māori representatives, Wakatipu
- Lakes District Hospital Staff
- Queenstown Medical Centre
- Wakatipu Medical Centre
- Midtown Medical Centre
- Wakatipu Health Trust
- Wakatipu Health Governance Reference Group
- Queenstown Lakes District Council
- Association of Salaried Medical Specialists
- Southern District Health Board Executive Team
- Southern District Health Board Board
- Invercargill Hospital Management and Clinical Team
- Dunedin Hospital Management and Clinical Team
- Dunstan Hospital Board, management and staff
- General Practitioners Cromwell Medical Centre
- Newtown Medical Centre, Wellington
- Queenstown Community Mental Health Services
- St Johns, Wakatipu
- Southland Hospice
- Wakatipu Rest Home and Hospital
- Southern PHO
- Public Health South
- Southern PHO Community Advisory Committee
- Health Workforce New Zealand
- University of Otago
- Community Pharmacist's, Wakatipu
- Southern Cross Limited
- Remarkables Development Limited
- the project support team at the National Health Board.

Contents

Executive Summary

During the past two years a series of discussion documents and engagement processes have been undertaken by the previous Southland District Health Board (DHB) and newly formed Southern District Health Board (SDHB)[1] to determine the future of health services in the Wakatipu Basin.

This included a review of hospital capacity and a proposal by the Southland DHB in March 2010 to establish an Integrated Family Health Centre (IFHC).

There is not yet a consensus view among primary care clinicians, secondary care clinicians, the community and the SDHB on the most appropriate future configuration of health services for the region.

In May 2011 the SDHB asked the National Health Board to lead an independent process to develop accelerated planning for future health care services for the people of the Wakatipu Basin. The National Health Board established the Wakatipu Health Services Expert Panel, with three[2] members who between them had primary and secondary care and consumer expertise.

The Expert Panel comprised:

- Dr Peter Foley, Independent Chair; Deputy Chair of the New Zealand Health Quality and Safety Commission, and Chief Medical Officer Primary Care Hawke's Bay DHB
- Dr Angela Pitchford, Emergency Physician; current Clinical Director, Emergency Department, Christchurch Hospital
- David Russell, non-clinical member; consumer rights advocate and former head of Consumer New Zealand; and member of the recent Neurosurgery Review Panel
- Professor Mike Ardagh, Emergency Physician, Professor of Emergency Medicine, Christchurch School of Medicine and Health Sciences.

The purpose of the Panel was to provide advice to the Board of the SDHB on the configuration of clinically and financially sustainable, safe, high quality integrated health services in the Wakatipu Basin. This process mirrored the successful process followed by the South Island Neurosurgery Panel in 2010. A copy of the full terms of reference is attached in Appendix 1.

The Panel has attempted to cover all issues relevant to the effective delivery of services including both the optimal structure and governance of health services in the Wakatipu.

It is important that this review results in the end of community and provider uncertainty over the future provision of quality, safe and effective local health services in this region.

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[1] The Otago and Southland DHBs were merged on 1 May 2010 to form the Southern DHB, which is governed and managed by a single Board and Executive Team.

[2] A fourth Panel member, Professor Mike Ardagh, shared the position with Dr Angela Pitchford, who was initially unavailable.

The Panel identified key principles which have guided its deliberations. These Principles were:

- patients should be able to receive equitable access to health services across the SDHB
- health services need to be provided in a way that supports Government policy – *Better, Sooner more Convenient* patient care
- any proposed changes require the support of community, providers and funders working together
- future delivery of health services will require a greater partnership between patients and clinicians
- most health care should be delivered in the primary care setting through a continuous relationship with the general practitioner and their team as a patient's 'medical home'.

The Panel made it clear in its communication with the community and with key stakeholders that there were no pre-conceived outcomes. The Panel also acknowledged that any recommendations needed to be realistic and achievable within current national policy and funding frameworks.

The Panel made a commitment to engage extensively with the community, and at the end of the engagement process had held over 70 meetings with the community, key stakeholders and clinicians.

During the engagement process the Panel was repeatedly made aware of the community's lack of trust in the DHB (past and present) to acknowledge their needs and to show any real commitment to deliver required changes. This lack of respect and mistrust existed at multiple levels, and certainly contributed to two main themes from the community, the perception that:

1. the only solution was for the local community to take over governance and operational control of health services for the area
2. primary and secondary providers could not work together to integrate their services (while the SDHB failed to understand and realistically negotiate the risks to any new model of care).

Overall, the Panel was impressed with the way in which community and provider groups engaged with them. Stakeholders were reasonable in their expectations of health services for the area.

While the Terms of Reference were initially limited to the Wakatipu Basin, it was apparent that health services in the Wakatipu Basin could not be seen in isolation of the wider health system, which included base hospitals at Dunedin and Southland and regional rural health services such as Dunstan Hospital.

The Panel has therefore made several recommendations which focus on regional planning and regional service delivery as part of the package of recommendations.

The Panel was struck by the lack of coordinated long term regional planning and development of clinical pathways that reflect community and patient needs (rather than historic governance geographic boundaries).

It is hoped that the Panel's work with the community over the last three months has helped alter perceptions and resolve some of the mistrust, opening the door to further productive engagement with the community.

Many of the recommendations are not in themselves new, but the collective package is, and the environment in which to enact the changes certainly is.

The National Health Board has completed a financial analysis on the impact of implementing all recommendations made by the Panel and the impact of a growing population over the next 15 years. The National Health Board has confirmed with the Panel that the package being proposed has been costed and, over time, will not cost the SDHB any more and will provide more health care services to the population of the Wakatipu Basin. Indeed, the National Health Board believe that with better cooperation between Dunstan Hospital and Lakes District Hospital and more innovative practice, better value for money can be achieved. The financial analysis takes into account not just the costs associated with Lakes District Hospital but the whole spectrum of DHB-funded health services impacted by this review.

Critical to the success of this review is ensuring that the SDHB delivers on the recommendations and improvements to health services as outlined. To this end the National Health Board will continue to support the implementation process to ensure that the population of the Wakatipu Basin receives the benefits from this review.

The Panel unanimously supports all of the recommendations from this review and anticipates the end of community uncertainty as the SDHB works with all parties to implement positive change to health services in the region.

Dr Peter Foley (Chair)
Dr Angela Pitchford
Professor Mike Ardagh
Mr David Russell

Recommendations

Enhancing Regional Service Planning:

1. The SDHB adapts the provision of clinical services across the region to ensure that as far as possible there is equity of access and comparable outcomes.

2. The SDHB develops a clinical services programme that defines pathways of care across the whole region that are safe and as much as possible close to home.

3. The SDHB delegates responsibility to a tier 2 manager of the Executive Team for services provided in the Central Otago / Lakes District, ensuring that services are provided:
   a. independently of historic boundaries
   b. in a way that best meets the needs of patients.

Retaining Hospital Services:

4. The SDHB retains and enhances services at Lakes District Hospital.

5. Lakes District Hospital retains an Emergency Department (ED).

6. Lakes District Hospital is retained on the current hospital site and is further developed as a health campus for the Wakatipu Basin.

Clinical Workforce:

7. Lakes District Hospital maintains a minimum roster of eight medical full-time equivalents (FTEs), of which one or two could be Registrars, supported by Health Workforce New Zealand (HWNZ).

8. The SDHB pursues a partnership opportunity with the University of Otago to develop a centre of excellence for the training of rural health practitioners.

9. Lakes District Hospital expands the breadth of services that the medical and nursing teams can provide.

10. The SDHB encourages the development of special interests amongst hospital / non-hospital doctors and nurses in the Wakatipu Basin. Examples include General practitioners with special interest (GPSI) and senior medical officer with special interest (SMOSI) roles.

Enhancing Integration:

11. The SDHB extends an open invitation to appropriate health providers to relocate to the Lakes District Hospital site, supporting the development of better integration of care on a health campus.

12. The SDHB facilitates (through an independent chair) a clinical services forum for ongoing dialogue on health services provision and planning in the Wakatipu Basin.

13. The SDHB encourages the further integration of services in the region, including sharing of resources, stronger clinical engagement between Dunstan and Lakes District Hospital and the development of clinical pathways and IT solutions. This would include a broader clinical forum covering the Central Otago / Lakes District (or perhaps expanding to all rural health sites within the SDHB).

Improving Outpatient Services:

14. Lakes District Hospital expands the local and regional provision of outpatient services that better meets the needs of the Wakatipu region (including the coordination of private and public outpatient services).

Enhanced Community Services:

15. The SDHB encourages the development of increased capacity in aged residential care beds in the Wakatipu Basin, improving the ability to provide respite care and slow stream rehabilitation services.

16. Lakes District Hospital develops palliative care bed capacity on their campus as part of aged residential care facility developments.

Enhanced Diagnostic Support:

17. The SDHB supports the establishment of a CT scanner for the Central Otago region located at Lakes District Hospital.

18. Diagnostic services such as laboratory and radiology are best consolidated onto the Lakes District Hospital site.

Governance:

19. The SDHB retains governance of Lakes District Hospital, including the funding and provision of health services.

20. Queenstown Lakes District Council (QLDC) in consultation with the Wakatipu Health Trust and Wakatipu Health Governance Reference Group establishes a Community Reference Group.

21. The SDHB commits to engaging with the Community Reference Group early in the planning of any significant changes to clinical services.

Section One: Background – Wakatipu Health Services Review

Events Leading to the Panel's Appointment

A number of Southland DHB and SDHB discussion documents and community engagement processes, to determine the future shape of health services in the Wakatipu Basin, have raised concerns from the community and clinicians.

The concerns have focused on events since 2009, when a proposal to change the model of care for health services in the region was put forward. This proposal focused on the development of an integrated family health care centre (IFHC) and different arrangements of service configuration at the Lakes District Hospital, particularly around the management of the ED and a reduction in the number of doctors and nurses at the hospital.

The key aim of the public consultation document was:

> *To establish an integrated model of care, or IFHC so health services are provided in a 'one stop shop', in the Wakatipu Basin. The IFHC would allow:*
>
> - *Additional services provided locally, for example aged care bed availability, specialist outpatient clinics, day case elective surgery and an increase in community nursing;*
> - *The collocation of General Practice, Mental Health Services, community services and hospital services with the redevelopment of the Lakes District Hospital campus;*
> - *24 hour General Practice offered from the redeveloped campus;*
> - *Entry into the co-located health services to be managed through General Practice;*
> - *Non emergency cases no longer to be managed in the Emergency Department, but in an adjourning General Practice facility. Patients seen in this setting to be charged for General Practice visits (as normally the case for General Practice visits);*
> - *Governance arrangements to of the IFHC to include community representatives and providers.*[3]

In response to this the local health advocacy group, the Wakatipu Health Trust and community members raised concerns about the proposed model and their perception regarding the downgrading of Lakes District Hospital with reduced resourcing of ED, the gate to health services being managed by general practice, and the commercial agendas of the various parties involved.

The SDHB also asked Queenstown's Lakes' mayor to establish a group to explore local governance options for health services in the region and to make recommendations to the SDHB. The Wakatipu Health Governance Reference Group was subsequently established, and started a process of consulting with the community on governance options for managing health services.

The Association of Salaried Medical Specialists (ASMS) and other unions also became involved, and challenged the SDHB regarding the lack of appropriate consultation of its members in the development of this proposal. The ASMS identified that that the proposal had breached the ASMS Multi Employment Collective Agreement and the lack of

[3] Southland DHB Public Consultation – Hospital Capacity Review, March 2010.

consultation did not support the Government's policy as set out in the *In Good Hands* document.

A clinical advisory group was then established at the request of the SDHB to provide clinical advice on potential models of care for the region. This group was chaired by Professor John Campbell, and a report was released with findings in December 2010, recommending:

> *Lakes District Hospital would continue to provide walk-in ED, inpatient beds and after hours for primary care. Accident and Medical Services would be provided by Queenstown Medical Centre between the hours of 8am and 10pm with GPs providing second on call to the hospital Doctor overnight.*[4]

The report recommended support of the current model of health care with some innovations, such as general practitioners providing second on call, improved coordination of workforce between Dunstan and Lakes District Hospital, specialist and advanced generalist services provided from either Dunstan or Lakes District Hospital, and a clinical coordination team appointed to enhance coordination and collaboration between providers. The clinical advisory group also made recommendations regarding the governance arrangements for the region, proposing that a regional governance model be implemented for the whole of the Central Otago / Lakes District.

Following consideration of the clinical advisory group process and feedback from the earlier public consultation, the SDHB consulted with staff and the ASMS to establish whether they had any serious professional or clinical concerns, with a view to resolving these before making a final decision. The SDHB then held a further public meeting in the Town Hall explaining the rationale and implications of the proposed model, to counter what the DHB viewed as misleading statements from various interest groups.

In the meantime the Wakatipu Health Governance Reference Group released its proposal for a community governance model for Lakes District Hospital in May 2011, advocating for community-run supervision of health services by a combination of elected and appointed trustees.

The Expert Panel was subsequently appointed during May, following a request by the SDHB to the National Health Board to assist them in engaging with the community and making recommendations for the future of health services in the area.

In June 2011 the ASMS released *Health Dialogue: 'A Public Hospital for 2026: Queenstown'*, providing a summary of events to date from their perspective while advocating for an integrated rural health strategy for the SDHB.

A summary table of the events leading up to the appointment of the Expert Panel is provided in Appendix 2.

[4] Wakatipu Models of Care Clinical Advisory Group. 2010. *Report of the Wakatipu Models of Care Clinical Advisory Group*.

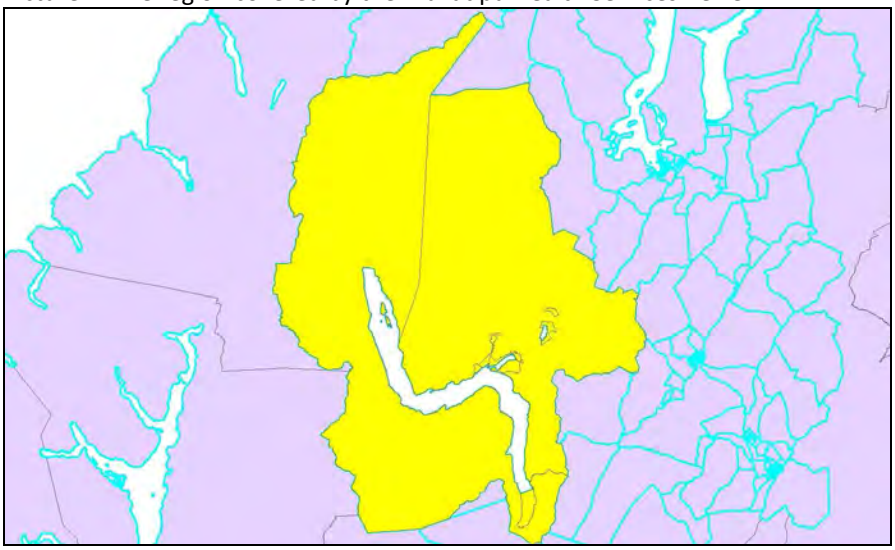
Section Two: Profile of the Wakatipu Basin

2.1 Population Profile of the Wakatipu Basin

The purpose of this section is to establish the resident and visitor population in the Wakatipu Basin projected to 2026.

The Wakatipu Basin as defined by the SDHB and agreed by the National Health Board includes Frankton, Glenorchy, Kelvin Heights, Sunshine Bay, Queenstown Bay, Queenstown Hill, Arrowtown, Wakatipu and Lake Hayes. These have been analysed by their Census Area Units (CAUs). The Wakatipu Basin area is shown in Picture 1 below.

Picture 1: The region covered by the Wakatipu Health Services Review



The population profile of the Wakatipu Basin is important in the context of this review, as different reports have produced various population figures, which have been the subject of debate.

Some of the reports reviewed by the Panel have not acknowledged the impact of the large visitor population, which is both a constant and variable aspect of the Wakatipu population impacting on local health and other infrastructure.

The population of the Wakatipu Basin was estimated to be 16,585 in July 2006. The estimated total resident population in 2010 was 18,729. The expected growth of the resident population in the Wakatipu Basin between 2006 and 2026 is 52.1 percent. This increase has been interpolated using the National Health Board's population projection modelling. This represents an increase of 8,637 and a total resident population in 2026 of 25,222: see Table 1.[5]

[5] National Health Board. 2011. *Utilisation of Health Services by Residents of the Wakatipu Basin and Utilisation of Health Services in the Wakatipu Basin*. Wellington, National Health Board.

Table 1: Projected Resident Population Change, Wakatipu Basin, 2006–2026

2006	2026	Change 2006–2026	% Change 2006–2026
16,585	25,222	+ 8,637	52.1%

The QLDC projected that average visitor numbers per day to the Wakatipu Basin in 2006 were 9,936. Projections formulated by Rationale Limited in 2011 on behalf of QLDC show that visitor numbers per day are expected to increase by 2 percent per year. Using these assumptions the increase by 2026 will be 3,865, totalling an average of 13,801 visitors per day to the Wakatipu Basin: see Table 2.

Table 2: Projected Visitors per day, Wakatipu Basin, 2006–2026

2006	2026	Change 2006–2026	% Change 2006–2026
9,936	13,801	+ 3,865	38%

Demography of the Wakatipu Basin

The population of the Wakatipu Basin is presumed to be younger, healthy and comparatively well off. While this is the case for many of the residents of the Wakatipu Basin, there is a lower socioeconomic group, which includes service industry workers and a high number of seasonal workers. There is also a growing aging population.

The resident population change by age group projection for the Wakatipu Basin shows that the fastest area of growth in the region is people 65 and over. Services for older people will require more focus as people particularly over the age of 75 tend to be the highest users of health services. Table 3 provides the projected change in population by age group.

Table 3: Projected Resident Population Change by Age Group, Wakatipu Basin, 2006–2026

Age group	2006	2026	Change 2006–2026	% Change 2006–2026
0–14	2490	4177	1688	67.8%
15–24	2483	3403	920	37.1%
25–44	6757	7137	380	5.6%
45–64	3584	7282	3698	103.2%
65–74	**757**	**1954**	**1197**	**158.1%**
75+	**513**	**1269**	**755**	**147.0%**
Total	16585	25222	8637	52.1%

Service industry workers and seasonal workers (who are often from overseas and on temporary working visas) have consistently come up in discussions with the community. They are often a mobile population and not always entitled to funded health services. The Panel have been told that this group numbers 1000–4000 people. The Panel has been unable to confirm the size of this population or whether or not they are adequately represented in population projections. The Panel does, however, acknowledge that they are an important part of the local community and are users of health services (albeit in some instances with different entitlements to publicly funded services).

Community members have also consistently stated that they do not think that the health funding coming into the region sufficiently recognises the large visitor population or that the SDHB (and more specifically the Wakatipu Basin) is adequately reimbursed for the impact this population has on health services. This is further discussed in section 2.3 of this report.

Population Profile of the SDHB and Central Otago Region

Growth in the SDHB area is projected to be relatively flat out to 2026. While the rest of the region will see flat or even declining patterns to their populations, the Central Otago and Lakes Districts are expected to see substantive population growth. This is illustrated in Table 4 below. The total population growth for the SDHB area is shown in Table 5. The region's population configuration is likely to change, and this must be considered when planning health services in the Wakatipu Basin.

Table 4: Projected Population change by area, SDHB

	Projected Population in SDHB by Area			
	2010	2026	Change 2010–2026	% Change 2010–2026
Wakatipu Basin	18,729	25,293	+ 6,564	35%
Dunstan Catchment	26,968	32,811	+ 5,843	22%
Dunedin	118,519	122,754	+ 4,236	4%
Invercargill	50,914	48,087	- 2,828	-6%
Southland	28,727	28,122	- 605	-2%
Gore	11,941	10,504	- 1,438	-12%
Clutha	16,744	16,179	- 564	-3%

Table 5 Total population change for SDHB area

	Projected Population in SDHB by Area			
	2010	2026	Change 2010–2026	% Change 2010–2026
Southern	**301,523**	**314,713**	**13,190**	**4%**

2.2 Health Services in the Wakatipu Basin

Many of the challenges facing the health system in the Wakatipu Basin have emerged over the past ten years as health services and the population in the region have continued to grow and develop.

General practitioners and Lakes District Hospital clinicians have been working together as part of the health system for some time, albeit in different locations, with different funding arrangements, drivers and incentives. Patients in the Wakatipu Basin generally have good access to primary care services (general practice), either by appointment with a general practitioner or through an Accident and Medical (A&M) service, and for more acute health

needs through the Lakes District Hospital ED. A range of community health services, such as district nursing, home-based support services (HBSS) and allied health services, support both primary care and hospital services.

Both general practice and Lakes District Hospital have in the past worked together, sharing facilities and workforce to provide health services. Going back to the 1990s (and even earlier to the 1980s), Queenstown Hospital Medical Services were provided by general practitioners, who managed the hospital facility, provided assessment and stabilisation services and managed and admitted a range of patients in the hospital. General practitioners were paid a retainer to provide these services along with their general practice services.

In response to increasing demands, a permanent medical workforce was established at the hospital in 2002, with three medical officers (non-specialist hospital doctors) being appointed to provide a 24-hour service with the ongoing support of the town's general practitioners.[6] This model involved medical officers and general practitioners working from the same facility and operating both a free and user pays system from the ED. In December 2004 general practitioners withdrew from this fee-for-service contact for the provision of medical support to Lakes District Hospital. Over a period of time the medical staff at Lakes District Hospital was gradually increased to six FTE doctors. Due to increasing busy periods during the day and the frequent call back of the night shift doctor, a swing shift was introduced in 2008, initially from Monday to Thursday to ensure another doctor was rostered between 11am and 9pm.[7] This was extended to the full week, requiring medical staffing to be increased to the current eight doctors (seven FTEs). Nursing staff has also increased, from 22.0 FTEs in 2005/2006 to 25.6 FTEs in 20010/2011.

Primary Care Services

Primary care services (those provided by general practitioners and practice nurses) in the Wakatipu Basin have also grown over time as the population has grown and the impact of substantive tourism activities has increased the demand for primary care services. General practice services are provided in the Wakatipu Basin by three general practices – Queenstown Medical Centre, Wakatipu Medical Centre and Mountain Lake Medical Centre. Queenstown Medical Centre is the oldest practice in the region. It has been providing primary care services since 1970 and was established by Dr Pat Farry, while the Wakatipu Medical Centre was established in 1994 by Dr Tom Milliken. Dr Michael Stephens was until recently the sole general practitioner at Mountain Lake Medical Centre. Queenstown Medical Centre and Wakatipu Medical Centre have achieved Cornerstone Accreditation, having met the Royal New Zealand College of General Practitioners standards for practice systems and quality.

Queenstown Medical Centre and Wakatipu Medical Centre are also associated with the Otago School of Medicine and Nursing, and provide training and teaching opportunities for medical and nursing students and also for post-graduate trainees and registrars in general practice. Queenstown Medical Centre is an accredited provider for the Royal New Zealand College of Practitioners for the provision of general practice continuing medical education.

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[6] ASMS. 2011. *Health Dialogue: 'A Public Hospital for 2026: Queenstown'*. Wellington: Association of Salaried Medical Specialists.

[7] ASMS. 2011. *Health Dialogue: 'A Public Hospital for 2026: Queenstown'*. Wellington: Association of Salaried Medical Specialists.

Queenstown Medical Centre is the largest of the practices and has a substantial facility in the Queenstown central business district, Isle St, which provides general practice services and also operates an A&M service. Hours for the practice and the A&M clinic are from 8.00 am to 8.00 pm weekdays and 9.00 am to 8.00 pm on weekends and public holidays. The A&M clinic caters to acute walk-ins and accident-related injuries. The Centre provides a wide range of other services, including radiology services (plain X-ray and ultrasound provided by Otago Radiology), community pharmacy, laboratory services, physiotherapy and access to dietetics, psychology and acupuncture services. It also provides general practice services from two other locations at the Remarkables Park Surgery at Frankton (along with a pharmacy) and Arrowtown Surgery (along with physiotherapy).

Queenstown Medical Centre has a workforce of 14 general practitioners, or 10.3 FTEs, and 10–11 nursing FTEs, and has an enrolled population of 13,116 (as at 1 April 2011).[8]

As well as general practice services, it hosts a broad range of private specialists who provide outpatient clinics on a regular basis. Specialities include orthopaedics, paediatrics, urology, gynaecology, dermatology, ear nose throat (ENT), plastic surgery, pathology, radiology (ultrasound), breast and general surgery and gastroenterology. Most of the specialists providing private services at Queenstown Medical Centre are from Christchurch or Dunedin.[9]

These private outpatient services are hosted from the Isle St facility but also from the Queenstown Skin Institute (QSI), which is a private company owned by Dr Hans Raetz, one of the directors of the Queenstown Medical Centre business and also the medical director of the QSI. The QSI is also based beside the general practice service at the Remarkables Park Surgery at Frankton.

During the winter months Queenstown Medical Centre is contracted to provide medical care on the Coronet Peak and Remarkables ski fields.

The Wakatipu Medical Centre is a community general practice based on McBride Street in Frankton. It provides general practice services catering primarily for local families. It operates Monday–Friday 8.00 am to 5.30 pm and Saturdays 9.00 am to 1.00 pm.

The Wakatipu Medical Centre has a workforce of three general practitioners or 2.4 FTEs and four nurses, and has an enrolled population of 3,993 (as at 1 April 2011).[10]

The Mountain Lake Medical Centre is a general practice near downtown Queenstown. Information regarding this practice is limited, as it was until recently owned by a sole practitioner who was not part of the Southern Primary Health Organisation (PHO). Dr Bruce McKinnon has since joined the practice (and the Southern PHO), and he is developing and growing the general practice business.

The Mountain Lake Medical Centre has a workforce of two general practitioners, or 1.1 FTE, and has an enrolled population of 452 (as at 1 April 2011).[11]

Primary care services in the region receive an estimated $2.4 million in funding per annum from the SDHB for services provided for first contact services[12]. As in the rest of the country,

[8] Data sourced from Southern PHO and SDHB.
[9] Information provided by Queenstown Medical Centre.
[10] Data sourced from Southern PHO and SDHB.
[11] Data sourced from Southern PHO, SDHB and Dr Bruce McKinnon.

these funds are paid quarterly as capitation funding proportional to the enrolled practice population. General practices are able to charge patients a co-payment, which recognises that the funding received from the Government does not fully meet the cost of providing general practice services.[13] The setting of fees for primary care is managed through the contract the SDHB has with the Southern PHO. All changes in fees go through a formal notification process with the SDHB, and fee increases are expected to be within an allowable range set nationally each year.

The Ministry of Health surveyed all practices in 2009 and 2011 on their fees. Table 6 presents fees information for the general practices operating in the Wakatipu Basin. For comparative purposes the SDHB's medium co-payments fees are also provided.[14]

Table 6: Primary Care Fees, Wakatipu Basin

Age group	Queenstown Medical Centre		Wakatipu Medical Centre		Mountain Lake Medical Centre		SDHB (median)	
	2009	2011	2009	2011	2009	2011	2009	2011
0–5	$11.00	$10.00	$0.00	$0.00	-	$10.00	$0.00	$0.00
6–17	$25.00	$25.50	$35.00	$35.00	-	$20.00	$26.00	$27.00
18–24	$53.00	$57.00	$51.00	$53.00	-	$45.00	$31.00	$34.00
25–44	$53.00	$57.00	$51.00	$53.00	-	$45.00	$32.00	$35.00
45–64	$53.00	$57.00	$51.00	$53.00	-	$45.00	$32.00	$35.00
65 +	$53.00	$57.00	$51.00	$53.00	-	$45.00	$32.00	$35.00

Queenstown Medical Centre have in the past two months moved to free consultations for children under the age of six.

While the fees for the Wakatipu Basin are higher than the SDHB average, as noted above, local providers comment that contributing to this is the high cost of land and/or commercial rental costs in the Wakatipu Basin. All fees noted above have been subject to the PHO fees review process and have been within allowable increases.

After-hours services are provided through collaborative arrangements with all general practitioners in the Wakatipu Basin who are part of an after-hours on-call roster. The after-hours service operates from 5.30 pm to 8.00 am on weekdays and weekends. All general practitioners switch their phones over to Healthline after hours. Healthline provides phone advice for health conditions and onward referral to either the ED at Lakes District Hospital or to the on-call general practitioner.

However, Queenstown Medical Centre also operates their A&M facility, which picks up after-hours consultations weekdays from 5.30 pm to 8.00 pm and all weekend or pubic holiday consultations that fall within the A&M's hours of operation. The A&M clinic is open from 8.00 am to 8.00 pm weekdays and from 9.00 am to 8.00 pm on weekends and public holidays, so by default provides some after-hours primary care services for the region. Fees for A&M consultation differ for enrolled and non-enrolled patients and overseas visitors. They also differ between after hours and normal hours, age and whether the consultation is general practitioner or nursing based.[15]

Hospital Services

[12] This is a subsidy paid by the Government to reduce the costs of seeing a general practitioner.
[13] Information provided by Ministry of Health Primary Care Team.
[14] Information provided by Ministry of Health Primary Care Team.
[15] Information provided by Queenstown Medical Centre.

Lakes District Hospital was built in 1988 and is located in Frankton, near the southern end of the Airport. The facility consists of an ED, including an acute assessment area, 10 inpatient beds, five maternity beds and outpatient facilities, including therapy space for allied health services. Attached to the Hospital is a 34-bed aged residential care facility, which is subleased to a private operator. The Community Mental Health Service (CMHS) is on the same Hospital site, as is the St John's ambulance base. The Mobile Surgical Bus visits every six weeks and provides general surgery and oral surgical services. Lakes District Hospital is a 2.5-hour drive from Southland Hospital, a one-hour drive from Dunstan Hospital and a 3.5-hour drive to Dunedin Hospital.

For the 2010/2011 year Lakes District Hospital had a total workforce of 40.80 FTEs, consisting of eight senior medical officers (SMOs), 25.6 registered nurses (including 6.8 senior nurses), 3.4 allied health providers (including occupational therapy, physiotherapy, social work and medical radiation therapists and students) and 3.8 administrative staff.

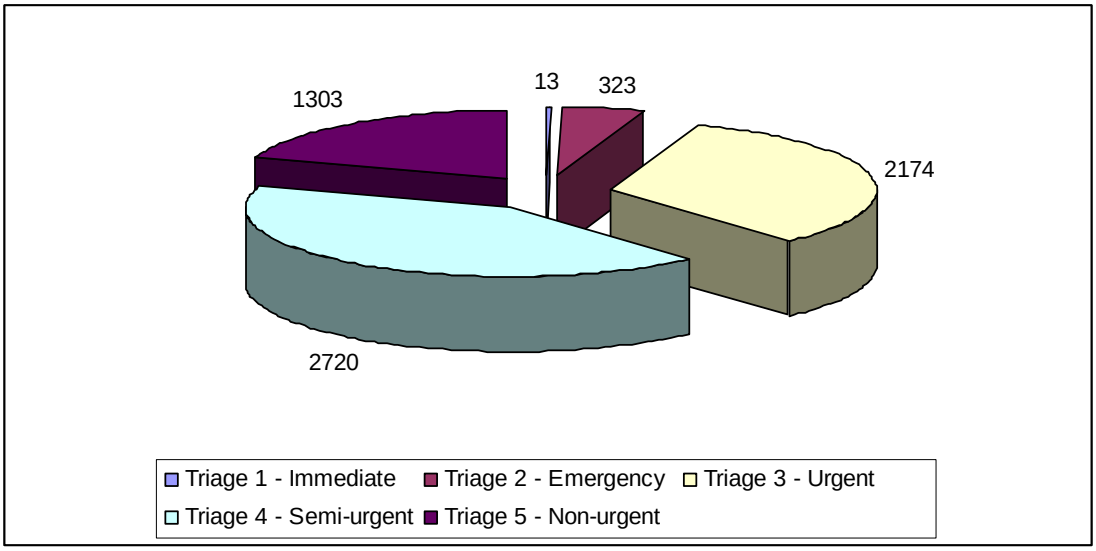
Management of Lakes District Hospital is provided by a full-time onsite manager, who in turn reports to a general manager at Southland Hospital who is responsible for medical services (one of four departments) across the Southland Hospital region, who in turn reports to the chief operating officer at Southland Hospital.

The Hospital ED is staffed around the clock by SMOs and registered nurses. In the 2010/2011 year there were 6532 ED attendances,[16] of which 1064 or 16 percent were identified as foreign nationals and 1109 or 17 percent as attendances from New Zealand residents living outside of the Wakatipu Basin. 1152 or 18 percent of ED attendances in this year were admitted from ED to either the acute assessment area or to an inpatient bed.

Patients attending the ED are assigned a triage code that indicates how urgently a patient needs to be seen by a doctor. Of the 6532 ED attendances for 2010/2011, 62 percent were identified as triage 4 and 5 (semi-urgent and non-urgent), 33 percent as triage 3 (urgent) and 5 percent as triage 1 and 2 (immediate and emergency).[17] The ED presentations by triage category for the 2010/2011 year are provided in Chart 1 below.

[16] Data sourced from SDHB.

Chart 1: ED Presentations by Triage Category for 2010/2011



Diagnostic and support services are available onsite at Lakes District Hospital around the clock. Radiology services are provided by medical radiation technologists (MRTs) Monday to Friday from 9.00 am to 4.30 pm, and on-call for all urgent services after 4.30 pm. Plain film X-rays are provided at Lakes District Hospital and accessible via PACS (picture achiving and communication system) to the Southland Hospital Radiology Department. Sonography services are provided at Queenstown Medical Centre by Otago Radiology (under contract by the SDHB) who also provide plain film X-ray for general practice. This means that some inpatients who require official ultrasounds by a sonographer are transferred by ambulance from Lakes District Hospital to Queenstown Medical Centre for access to this service. Laboratory services are provided by Southern Community Laboratory, which has a laboratory in Frankton and provides a twice daily pick-up service at the Lakes District Hospital. Doctors have the ability to complete urgent bedside tests if required; otherwise access to after-hours laboratory tests is available on-call.

Lakes District Hospital is funded by the SDHB and is part of a number of provider arm (hospital services) services throughout the SDHB region. Annual funding is allocated to the hospital to fund health services. The majority of the expenditure incurred by the hospital relates to workforce costs (over 70 percent), with the balance pertaining to, for example, clinical supplies, outsourced services (locum costs) and infrastructure costs such as hotel services, facility costs, transport, IT etc. For the 2010/2011 year the total cost of providing the Lakes District Hospital service was $5.4 million.

Hospital utilisation for the 2010/2011 year has been analysed to determine where patients from the Wakatipu Basin receive their health services. Lakes District Hospital is reliant on base hospitals for the provision of an extensive range of outpatient and inpatient secondary and tertiary services. Table 7 shows that nearly 40 percent of hospital discharges were from Lakes District Hospital, while 37.9 percent were from Southland Hospital, 9.8 percent from Dunedin Hospital and 4.5 percent from Christchurch Hospital.[18]

[18] National Health Board. 2011. *Utilisation of Health Services by Residents of the Wakatipu Basin and Utilisation of Health Services in the Wakatipu Basin*. Wellington, National Health Board.

Table 7: Hospital Utilisation by Wakatipu Residents, Inpatient Discharges and Day Cases, 2010

Hospital	Inpatient discharges	Day case discharges	Total discharges	%
Lakes District Hospital	776	366	1142	39.2
Southland Hospital	824	280	1104	37.9
Dunedin Hospital	210	74	284	9.8
Christchurch Hospital	57	73	130	4.5
Mobile Surgical Services	0	58	58	2.0
Burwood Hospital	30	7	37	1.3
Southern Cross Invercargill	7	17	24	0.8
St Georges Hospital	19	4	23	0.8
Auckland City Hospital	10	4	14	0.5
Winton Birthing Centre	14	0	14	0.5
Other	60	21	81	2.8
Total	2007	904	2911	100.0

The services most frequently used by Wakatipu residents include medical, short-stay ED, ante / post-natal care, mother craft and surgical long- and short-stay: see Table 8. [19]

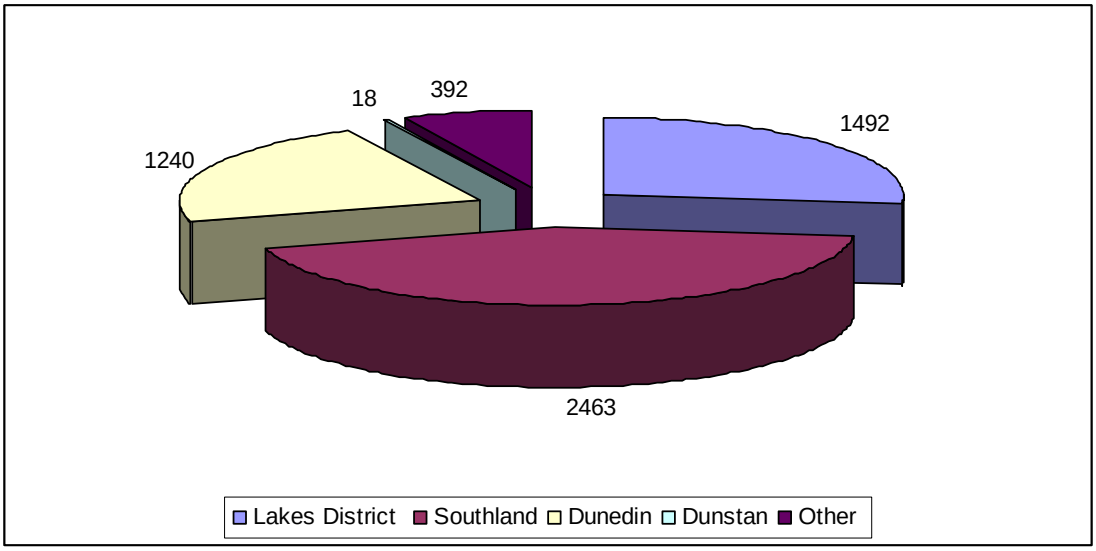
Table 8: Utilisation of Lakes District Hospital by Wakatipu Residents, 2010

Service	Discharges	%
Medical	679	59.5
Short-stay A&E	164	14.4
Ante/ Post-natal without Caesar	131	11.5
Mother Craft	118	10.3
Surgical – Short Stay	27	2.4
Surgical – Long Stay	16	1.4
Health of Older Adults	4	0.4
Neonatal Intensive Care Unit	2	0.2
Paediatric Medical	1	0.1
Total	1142	100.0

A limited range of outpatient services are provided at Lakes District Hospital: patients have to travel to Southland Hospital for the full range of outpatient services. This is despite the fact that a wider range of outpatient services are provided at Dunstan Hospital (supported by Dunedin Hospital), an hour's drive from Queenstown. Outpatient services and volumes (first specialist assessments (FSAs) and follow-ups (FUs)) provided at Lakes District Hospital, Southland Hospital and Dunedin Hospital for the 2010/2011 year for Wakatipu residents are shown in Chart 2.

[19] National Health Board. 2011. *Utilisation of Health Services by Residents of the Wakatipu Basin and Utilisation of Health Services in the Wakatipu Basin*. Wellington, National Health Board.

Chart 2: Outpatient FSA and FU Volumes Provided to Wakatipu Residents by Hospital Provider[20]



Community Health Services

As well as the services provided by primary care and Lakes District Hospital, there are a number of other DHB-funded health services in the Wakatipu Basin that service the needs of the community. These include:

- aged residential care services – rest home and hospital level beds
- HBSSs
- CMHSs
- public health services
- needs assessment and service coordination (NASC) services
- palliative care and hospice services (from Invercargill)
- community pharmacy
- primary maternity services
- district nursing services and allied health services.

There are also a range of non-governmental organisations (NGOs) not funded by the DHB that operate in the region and provide support services for patients or consumers: for example the Salvation Army, Queenstown Lakes Centre, Happiness House, Abbyfield House and the Youth Trust, to name a few.

Rural Hospital Configuration in Central Otago

While patients from the Wakatipu Basin access a wide range of secondary and tertiary services from Southland and Dunedin Hospitals, Lakes District Hospital is part of a wider network of rural hospitals in the Central Otago / Lakes District with rural hospital facilities in Balclutha, Gore, Clyde, Oamaru and Maniototo. Each of the rural hospitals are unique and have different governance arrangements, varying levels of access to services and different arrangements with primary care for accessing acute and emergency services. While the Southland and Otago DHBs have merged, there has been little change in the way in which

[20] National Health Board. 2011. *Utilisation of Health Services by Residents of the Wakatipu Basin and Utilisation of Health Services in the Wakatipu Basin*. Wellington, National Health Board.

clinical services are provided, with most of the rural hospitals linked to historical DHB boundaries and management structures. This means that patients often have different access to services across the region, with some services available in one town and not in another, dependent on how services have evolved over time. There is real opportunity with the ongoing merger of the DHBs for clinical services across the Central Otago / Lakes District to be realigned to ensure that patients can access similar levels of service that are provided in the most integrated way and are closer to home.

Southland DHB completed an evaluation of capacity in the region's rural hospitals in 2009. This work, commonly referred to as the *Cranleigh Report,* was the catalyst for discussion in the Wakatipu Basin regarding the development of integrated models of care. While the report is based on 2007/2008 and 2008/2009 data, it provides a useful overview of the configuration and performance of rural hospitals in the Central Otago Region. A summary of the key points from the report's Executive Summary and trend information is provided in Appendix 3.

During the engagement process the Panel visited the Dunstan Hospital and Board and a group of general practitioners in Cromwell. A senior official from the National Health Board also visited the Gore and Balclutha Hospitals / Trusts.

2.3 Funding for Health Services

A key theme consistently raised by members of the community and by health providers in the Wakatipu Basin is whether the area is getting its fair share of health funding. This question has been driven by a number of issues, the:

1. SDHB has said in public forums and in discussion documents that health services are clinically and financially unsustainable
2. community is aware of the large number of visitors coming into the region and wants to know if the SDHB is being funded for the impact they have on health services
3. population in the region is growing and is set to rapidly increase compared to the rest of the SDHB region. Is the Wakatipu Basin being funded to meet the needs of a growing population, and is planning occurring to meet this increasing demand?
4. community is aware of a population of international workers on visas who come into the region to live and work who are not eligible for funded health services until they have been in the country for 24 months. Is the region being funded sufficiently to provide health services to this population?

To respond to these questions requires some background and understanding of the funding currently going into the Wakatipu Region, and then some explanation of how population based funding (PBF) works. This is provided in the following section.

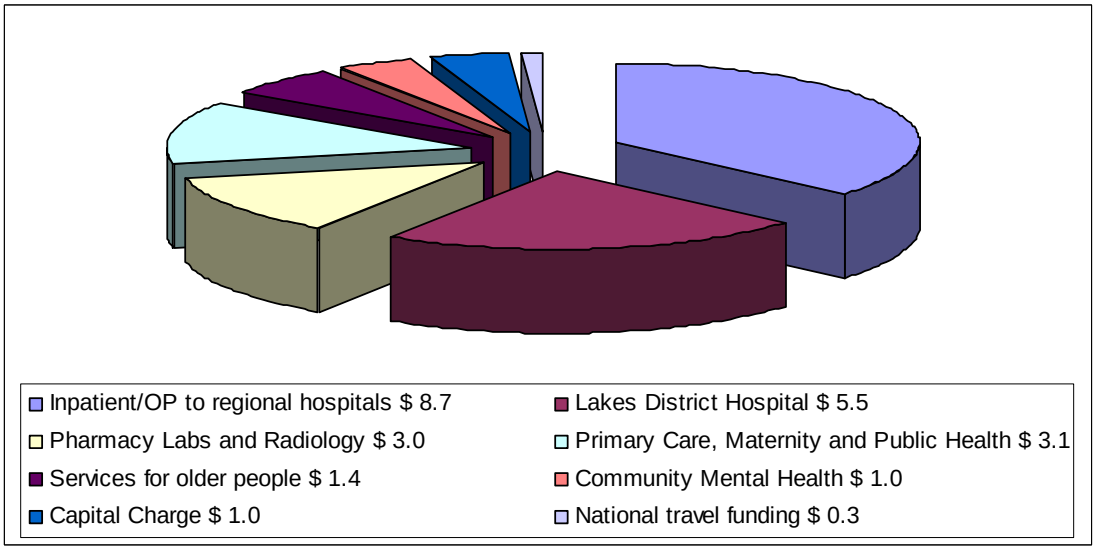
Funded Health Services in the Wakatipu Basin

The Wakatipu Basin is a small part of the SDHB, representing approximately 16,000 residents as part of a total SDHB population of approximately 300,000. It is challenging to unpick all of the funded health services in the SDHB region to come up with a proportional value for health services for the Wakatipu Basin.

Despite this the National Health Board has ascertained that approximately $24,125 million[21] in publicly funded health services are provided to the population of the Wakatipu Basin. This includes $8.736 million in funding for inpatient and outpatient activity that flows to Invercargill, Dunedin and other South Island DHBs for services provided to patients from the Wakatipu Basin (but who access services outside the region). It also includes funder arm contracts such as aged residential care, HBSSs, general practice capitation funding, community pharmacy and other services funded by the SDHB.

Chart 3 illustrates funding for health services in the Wakatipu Basin for the 2011/2012 year, and the areas of health expenditure.

Chart 3: Estimate of 2011/2012 health services funding in the Wakatipu Basin ($ million)



Understanding Population-Based Funding

Population-based funding was introduced in July 2003, and is a process used to allocate funding each year to DHBs to fund public health services. Population-based funding includes:

- the DHB's share of the projected New Zealand population, weighted according to the national average cost of health services used by different demographic groups
- a policy-based weighting for unmet need that recognises the different challenges DHBs face in reducing disparities between populations
- a rural adjustment and an adjustment for overseas visitors, each of which redistributes a set amount of funding between DHBs to recognise unavoidable differences in the cost of providing certain health and disability services.[22]

[21] This is an estimate of the values of all contracted services in the Wakatipu Basin provider arm and funder arm contracts, and has taken into account services funded through Sector Services. There are some areas for which the National Health Board was unable to ascertain costs of services, such as acute retrieval and transport, and the Wakatipu Basin's share of some national contracts, such as disability support services, Plunket and Healthline. However, the National Health Board is confident that this fairly represents health expenditure in the Wakatipu Basin.

[22] Ministry of Health. 2003. *Population Based Funding*. Wellington: Ministry of Health. URL: www.moh.govt.nz/moh.nsf/wpg_index/About-population+based+funding (accessed 26 August 2011).

Population-based funding covers all services provided to a DHB's population, and includes the following categories:

- personal health; primary care
- personal health; hospital and community
- disability support services
- mental health
- unmet need
- overseas visitors
- rural adjustor.

Population-based Funding and the SDHB

The SDHB for the 2011/2012 year will receive $720.1 million in funding from the Crown for Vote Health services across the entire SDHB region. This figure includes a 2.6 percent or $18.3 million increase in funding on the 2010/2011 year for cost pressures. This was less than the national increase of 3.5 percent, as the SDHB is overfunded against its PBF share by $8.3 million. This means that the DHB needs to reduce its expenditure over time to stay within its PBF share of funding. The SDHB is forecasting an operating deficit of $10.5 million for the 2011/2012 financial year.

The SDHB's unweighted share of the national population (based on Statistics New Zealand 2010 population projections) is 6.85 percent. Table 9 shows the SDHB's 2011/2012 funding per person for each category of the PBF.

Table 9: SDHB funding per person for each category of PBF

Category	SDHB funding ($)	National average ($)
Rural adjuster	34	30
Overseas adjuster	2	8
Personal health primary care	506	504
Personal health other	1,120	1,168
Health of older people	337	303
Mental health	212	236
Unmet need	25	36
Psycho-geriatric	18	16
Total	**2,255**	**2,300**

The SDHB's population tends to be slightly older that the national average, and as such they receive more funding for older adults. Southern has a low proportion of Māori and Pacific Island people living in the region compared to the national average. Southern also has a high proportion of people in deprivation quintile 1[23] when compared to the national average, and a low proportion in quintile 5.[24]

There are two specific components to PBF that require further explanation linking back to the concerns raised by the community: the rural adjustor and the overseas adjustor.

[23] Quintile 1 represents the least deprived section of the population, while quintile 5 represents the most.

[24] Southern DHB summary of 2011/2012 Population Based Funding Formula, National Health Board.

The Rural Adjustor

The rural adjustor is an adjustment in the current PBF for the differences in costs DHBs face in providing services to rural populations. This adjustment is calculated by estimating the actual costs incurred by DHBs in providing these services. The greatest contributions to the adjustment (just over 50 percent) are the rurality premium and diseconomies of scale payments to DHBs. These payments recognise the additional costs related to diseconomies of scale for small hospitals in remote / rural locations, and for providing hospital and some community services in rural or remote areas.[25] SDHB was allocated approximately $5.2 million in rural adjustor payments for the 2010/2011, year which is nominally allocated to six facilities across the SDHB – Clutha, Dunstan, Oamaru, Gore, Lakes District Hospital and Southland Hospitals.

The Overseas Adjustor

All overseas visitors are eligible for acute care for personal injuries through the Accident Compensation Corporation (ACC). However, while ACC pays the Crown a levy to cover the cost of acute care, funding to the DHBs comes through Vote Health. This means that each year ACC agrees to pay Vote Health a sum of money to cover the health costs of overseas visitors. Payment to DHBs thought the PBF formula includes the costs of providing inpatient care to overseas visitors and an estimate of pharmaceutical and laboratory costs. This adjustor covers three categories of visitors:

- eligible visitors from some countries that have reciprocal rights to certain publicly funded health services in New Zealand
- ineligible visitors who have health insurance
- ineligible visitors who do not pay.

The calculation of the overseas adjustor is determined based on individual DHBs' coding of hospital admissions for overseas visitors when they use hospital services. DHBs need to improve systems for coding overseas visitors, and not all of overseas visitors' activity is being captured through national data collections. It is up to individual DHBs to ensure that they have robust system and processes in place for the coding and tracking (and charging where appropriate) of overseas visitors using publicly funded health services. This should be an area of focus for Lakes District Hospital given the large overseas visitor population in the region.

Conclusions

The Panel can conclude that PBF does take into account a DHB's change in population over time, that the SDHB does receive as part of its PBF a rural adjustor to account for the costs of running rural health services and that PBF does have a mechanism to determine the impact of overseas visitors on health services. This is, however, determined by DHBs ensuring that they correctly code and account for visitors accessing hospital services.

It is more difficult for the Panel to conclude whether the region is receiving its fair share of funding. This is because it is difficult to disaggregate PBF down to a geographical region within a DHB, such as the Wakatipu Basin. There are many factors that determine a region's funding, including the current infrastructure of health services, historical funding flows, costs

[25] Ministry of Health. 2003. *Population Based Funding*. Wellington: Ministry of Health. URL: www.moh.govt.nz/moh.nsf/wpg_index/About-population+based+funding (accessed 26 August 2011).

of health services and the location and cost of regional infrastructure for secondary and tertiary health services. This is true for all DHBs that fund multiple services and hospitals across their service areas. The Panel, however, can find no evidence to suggest that the Wakatipu Basin is over-funded for the range of health services provided to its population.

Section Three: Consultation and Engagement

A prime task for the Panel was to engage with the community, stakeholders and health professionals within the Wakatipu Basin.

At the conclusion of the engagement process the Panel had held more than 70 meetings with the community, key stakeholders and clinicians; facilitated three public meetings; held three community drop-in gatherings (all well attended); held two clinical forums; and received more than 67 written submissions.

In addition, the Panel talked with clinical staff at Dunstan, Invercargill and Dunedin Hospitals.

To complete its picture of the health services in the region, the Panel visited the small outlying community at Glenorchy. The following provides a summary of the key feedback and themes that were discussed with the Panel.

Summary Feedback from the Wakatipu Community (feedback from drop-in centres, public meetings and one-to-one interviews)

Participants expressed frustration about the uncertainty surrounding health services in the region. This position was fuelled by the various proposals from the SDHB to change the way in which health services might be provided. Some of the frustration stemmed from a lack of understanding about how these changes might impact on the community. In particular there was concern that the IFHC model had been ill-defined. There was also real concern that some of what was proposed was inequitable or would limit access to publicly funded health services.

The ongoing suspicion about the intentions of the SDHB and the continued advocacy from the Wakatipu Health Trust had led to a call for community governance of health services. This advocacy for local control mirrored the community feedback to the Wakatipu Health Governance Reference Group, which had recommended the establishment of the Wakatipu Community Health Board as the proposed governance structure for Lakes District Hospital. Other key themes from the community included:

- strong support for retaining the hospital and emergency services with inpatient capacity
- satisfaction with the health services in the region, but concern about the relative costs of seeing general practitioners
- a lack of outpatient clinics in Queenstown, which led to patients having to travel to regional hospitals. The Panel heard stories about five-hour round trips to Invercargill for five-minute consultations. People queried why Dunstan appeared to be better served than Queenstown
- poor coordination for patients accessing health services at Southland or Dunedin Hospitals. Examples included patients from Queenstown being discharged at 8.00 pm with no means to get home, and siblings being given appointments in Southland Hospital on different days in the same week
- concern about services for older people, particularly the lack of aged residential care inpatient beds. The proposition that older people do not stay in the region was rejected as a reason for the low number of aged care facilities
- concern about the IFHC model, with the 'front door' being controlled by a private business model and the subsequent potential cost implications for patients

- the use of the PBF model to support the claim by the SDHB that the current services offered at Lakes District Hospital are financially unsustainable. A related funding issue was the concern that overseas visitors are an unfunded cost burden to the region.

A complete summary of feedback from the community is provided in Appendix 4.

Summary feedback from Health Providers (includes feedback from general practice staff, hospital staff and community health providers)

The Panel met with the executive team of the SDHB and clinicians from Southland and Dunedin Hospitals. The Panel also met with the Wakatipu Health Trust and Wakatipu Health Governance Reference Group on several occasions. It was clear that the views of the SDHB, the Wakatipu Health Trust and the Wakatipu Health Governance Reference Group are generally well known by the community.

Health service work relies on the skills, leadership and expertise of clinical staff. These clinicians include doctors, nurses, allied health staff and others, such as community pharmacists and mental health workers. Clinical staff are therefore critical for any solution for the Wakatipu Basin, and were a major focus for the Panel in their engagement process. Every attempt was made to engage and consult with staff providing hands-on care.

In health you will often hear the terms primary and secondary care. Primary care is typically used to reference general practice and other community providers, such as community pharmacists. Secondary care typically refers to those services provided by hospitals. Each area is funded quite differently: primary care is usually provided by clinicians in a private business who are able to charge for their services while public secondary services are provided free of charge to the community. An obvious tension in the Wakatipu Basin is how the private and public relationships and funding streams are managed as health services become more integrated.

Health providers have become involved in a public debate about the merits or otherwise of an IFHC, which would see primary and secondary services brought together on one site. There are a number of impediments that need to be worked through with all of the clinical groups before further integration of services can occur.

There are tensions between some of the health providers in the region, which has been exacerbated by the SDHB's proposal for a different service model. There needs to be a clear process for clinical engagement and involvement in health planning, to build trust and confidence between the various clinical groups.

The Panel was able to bring together a group of clinicians for a clinical forum. This was an evening meeting, with wide representation from primary and secondary care, mental health, public health, St John's, community pharmacy and others.

The parties were able to express their views and opinions in a non-threatening environment: something they have had limited to no opportunity to do in the past as a broad group of clinicians. Some of the health providers in the room had not in fact met each other before.

In the current policy environment, which is promoting a much greater role for clinical leadership (as summarised in the *In Good Hands* document), more clinical engagement is needed. Over time, this will reduce the real and perceived barriers for the SDHB to progress its various initiatives.

A more complete summary of feedback from the community is provided in Appendix 5.

Section Four: Responding to Key Themes in the Wakatipu Basin

The report has so far provided background information for the reader on the events that have led up to the Panel's appointment, information on the population, the range of health services provided in the region, health funding and findings and themes from engaging with the community, health providers and other stakeholders. The purpose of this section is to extract what the Panel sees as the key themes and to outline the recommendations and rationale for each of the themes. The Panel has made a total of 21 recommendations, covering eight themes:

1. enhancing regional services planning
2. retaining hospital services
3. clinical workforce
4. enhancing integration
5. improving outpatient services
6. enhanced community services
7. enhanced diagnostic support
8. governance.

It is important to consider all the recommendations noted in this section as a package of recommendations for improving health services in the Wakatipu Basin. The Panel acknowledges that implementing these recommendations will have flow-on implications on surrounding health services, which has been considered by the Panel in its deliberations. This makes it even more important for the SDHB to ensure that it moves forward with regional service planning that supports equitable clinical and patient pathways across the region, moving away from services based on historical DHB boundaries and constraints.

The National Health Board has completed a financial analysis on the impact of implementing all recommendations made by the Panel and the impact of a growing population over the next 15 years. The National Health Board has confirmed with the Panel that the package being proposed has been costed and, over time, will not cost the SDHB any more and will provide more health care services to the population of the Wakatipu Basin. Indeed, the National Health Board believe that with better cooperation between Dunstan Hospital and Lakes District Hospital and more innovative practice, better value for money can be achieved. The financial analysis takes into account not just the costs associated with Lakes District Hospital but the whole spectrum of DHB-funded health services impacted by this review.

4.1 Enhancing Regional Services Planning

Panel Recommendations:

1. The SDHB adapts the provision of clinical services across the region to ensure that as far as possible there is equity of access and comparable outcomes.

2. The SDHB develops a clinical services programme that defines pathways of care across the whole region that are safe and as much as possible close to home.

3. The SDHB delegates responsibility to a tier 2 manager of the Executive Team for services provided in the Central Otago / Lakes District, ensuring that services are provided:
   a. independently of historic boundaries
   b. in a way that best meets the needs of patient.

The Panel recognised at an early stage in the review that there was a need to consider how services across the entire SDHB region were being provided, with a specific emphasis on the Central Otago / Lakes District. This view is based on the considerable comment received on how patient care and access to services across the region was different depending on where people lived. The Panel was left with the impression that many health services were still largely based on historical DHB boundaries. It was also apparent that there was a lack of regional planning of clinical services. Further, there were indications that some incentives preserved funding and services in certain parts of the region, to the detriment of others. The Panel acknowledges that regional services are out of the scope of this review, but felt strongly that a number of observations with regard to regional planning needed to be made.

There are a number of examples which illustrate the challenges facing the Central Otago / Lakes District and the SDHB. One is different access to outpatient services when comparing Lakes District Hospital to Dunstan Hospital (less than one hour's drive away). Patients from the Dunstan catchment are able to access a greater number of outpatient services locally than those living in the Wakatipu Basin.

This problem reflects the fact that while the SDHB has merged its Board and administrative functions, clinical services and management structures are still operating to the original Southland and Otago DHB boundaries. All Dunstan Hospital patient flow and clinical relationships, for example, are with Dunedin Hospital, while for Lakes District Hospital all clinical relationships and the majority of patient transfers are with Invercargill Hospital. The purpose of merging the two DHBs was to gain efficiencies and by doing so improve patient care. The Panel recognises that the merger is new, but observes that more work is needed to fully realise its potential.

Recent changes to the structure of PHOs within the SDHB boundary will provide an opportunity for greater service planning and consistency across primary care services. The entire region with the exception of Mornington PHO in Dunedin has been merged from nine PHOs into one structure called the Southern PHO. Prior to the merger PHOs were running their own programmes, with little consistency as to how services were planned or funded beyond first contact services. Southern PHO has subsequently developed a clinical service plan (CSP) for the Southern region, which aims to focus on 10 key clinical services programmes across the region with a key objective of providing equity of access to primary care services. This realignment will mean that some local programmes will stop while regionally consistent new programmes are established. It will also result in some realignment of funding to primary care. It is unclear at this stage what the implications of the CSP will be in terms of primary care services in the Wakatipu Basin.

A further observation about regional planning is that there appears to be limited opportunity for clinicians to come together to share their views and to contribute to planning processes. As already mentioned, this was highlighted in a clinical forum facilitated by the Panel in which some clinicians commented that this was the first time all of the health providers had been in the same room together to discuss issues facing the health system in the Wakatipu Basin. There are currently no clinical forums for collegial activity or service planning. Dunstan and Lakes District Hospital clinicians, for example, appear to have little professional interaction with each other for continuing medical education or other professional activities, yet are the closest geographically to each other. This is inconsistent with *In Good Hands*,[26] which focuses on ways for DHBs to foster effective clinical leadership

[26] Minister of Health. 2009. *In Good Hands*. Wellington: Minister of Health. This report was commissioned to help DHBs introduce greater clinical leadership into the public health system.

and institute a more participatory and less top-down approach for doctors, nurses and other health staff.

The Panel strongly believes that the SDHB needs to commit to reviewing the range of clinical services provided across the SDHB, particularly in the Central Otago / Lakes District. This is a critical piece of work to ensure that sensible patient pathways to access services are implemented, that there is equitable access to clinical services (considering the current Government policy of 'Better, Sooner, More Convenient') and that the workforce is organised in such as way to make best use of this scare resource: for example, joint clinical departments and rosters across the region or sub-region. There is also a real imperative to enhance and strengthen clinical leadership and engagement in service planning. Furthermore, the SDHB needs to consider how the current management structure can be adapted to take a whole-of-region, patient-centred approach. The Panel endorses the steps taken in merging the Otago and Southland DHBs, but believes a greater effort is needed to consign outdated and arbitrary provincial boundaries to history.

Completing a clinical services programme that defines pathways of care and ensures there is more equitable access to health services with aligned management structures will assist the SDHB in making future operational and capital investment or disinvestment decisions for the region.

4.2 Retaining Hospital Services

Panel Recommendations:

4. The SDHB retains and enhances services at Lakes District Hospital.

5. Lakes District Hospital retains an emergency department.

Background

A key aspect of the model of care put forward by the Southland DHB in March 2010 involved the potential redevelopment of the Lakes District Hospital campus with a new collocated facility which would provide a general practice and non-emergency care on the site. Conceptual facility designs on the Lakes District Hospital site were provided as part of the consultation process.

The Panel understands that discussions have also taken place between SDHB and the developer of Remarkables Park in Frankton about plans for health services as part of a large residential development north-east of the Remarkables Park shopping centre. These plans included an integrated precinct including general practitioners and specialists, hospital services, A&M services, specialist services and diagnostic support services (laboratory and radiology).

Under the model of care proposed by Southland DHB, there was potential to reduce the workforce at Lakes District Hospital (once primary care presentations at ED were managed by general practice), and reduce bed numbers (due to low occupancy of beds as recorded at midnight) while looking at how a better range of community and outpatient services could be provided, such as aged care services and palliative care. Addressing the fragmentation in services and workforce between Lakes District Hospital and general practice services was also desired.

There has thus been an ongoing debate with the community and health providers not only about the model of care but also about what range of services should be available to the community and where health services should be located. Does the Wakatipu Basin need an ED and hospital service? What level of access to health services is needed by the Wakatipu Basin population? Should the Lakes District Hospital site be redeveloped, or should all health services move to a purpose-built private / public facility in the Remarkables Park? These became key questions for the Panel to consider, and are covered in this section of the report.

Retaining ED and Hospital Services

Population Projections

The Panel supports the retention of both the ED and also the current inpatient capacity at Lakes District Hospital. One of the key drivers for retaining services in the Wakatipu Basin is the projected change in the population for the region and some of the key characteristics of that population change.

As signalled earlier in this report, the Central Otago / Lakes District, including the Wakatipu Basin, is one of the few areas in the SDHB predicted to experience significant population growth in the next 15 years. The Statistics New Zealand Census figure for the Wakatipu Basin in 2006 was 16,585, and this is expected to increase by 52.1 percent to 25,222 by 2026. The QLDC estimate of average visitor numbers per day to the Wakatipu Basin in 2006 was 9,936, expected to increase by 2 percent per year to 13,801: a 38 percent increase by 2026. Both areas of growth will place demands on the health system. Growth in the volume of flights from Queenstown International Airport is a clear indication that the visitor numbers to the region will continue to grow.

The population of Queenstown is also aging. Those over 65 and 75 are expected to double in the next 15 years, increasing by over 1900 by 2026. This is significant, especially for those over the age of 75, who tend to be the highest users of health resources.

Acute Node Hospital

Work by the National Health Board on defining levels of hospital services for populations has supported the Panel's view regarding the retention of hospital and ED capacity in the Wakatipu Basin. An 'acute node' can be described as a hospital service that works closely with care provided in the community and the regional and sub-regional specialist services around it. It provides a planned and safe level of access to acute care and provides a hub around which wider health services can be developed.

In these communities these services could be co-located with what is traditionally seen as primary care infrastructure. This particularly includes urgent and after-hours general practice and community diagnostics. This enables a stronger critical mass for clinical sustainability, and will improve efficacy and affordability of these services over time.

Key service aspects of an acute node hospital (not specific to Lakes District Hospital) are presented in Table 10.

Table 10: Key aspects of an acute node hospital

Key service area	Description
Emergency care and stabilisation	The key purpose of acute service nodes are as a staging post, to enable rapid diagnosis, stabilisation and resuscitation prior to transfer to a major acute hospital should this be required. The identification of low-risk cases versus high-risk cases which need to be transferred is an important activity. This requires a strong emergency care and stabilisation capacity, including: intubations and resuscitation, CT scanning (with remote reading), management of uncomplicated medical conditions, initial assessment, investigation and observation of surgical presentations.
Diagnostic capacity	Rapid access to diagnostics will be required in the hospital that supports an acute node. This implies ultrasound or CT scanning being available on site with access to remote specialist reading and diagnosis using the results of locally conducted diagnostic tests and scans.
Maternity services	A catchment area of 25,000 people would normally have sufficient births to run a primary birthing unit led by lead maternity carers (LMCs) with some overnight stays staffed by nursing staff in the hospital. Visiting ante- and post-natal services could be provided on site. An acute node may provide elective caesarean section deliveries with visiting specialists. All high-risk births would occur in the major acute hospital within the network, as there will be insufficient births to have obstetrician cover and to provide urgent caesarean sections at the acute node hospital.
Elective surgery	Some elective surgery could be provided on site, dependent on the number of cases. Sufficient volumes of lower risk elective surgery cases are needed to enable an effective visiting service to take place. Visiting rosters for these elective cases would need to be carefully planned so that medical cover was also largely provided by visiting specialists and registrars. No acute surgery could be provided as there is insufficient population to support this level of service.
Medical staffing	Emergency departments could be staffed by rural hospital doctors who could also provide the medical cover for the hospital overnight and at weekends. Access to visual and telephone links for further specialist input would further support this workforce. Elective and visiting surgical services could be provided by: • deployment of general surgeons and anaesthetists as part of a wider sub-regional roster to allow rotation from a local hospital and/or a major / acute hospital • cooperative arrangements with any potential private surgical services for the sub-region • identification of local general practitioners and other acute care practitioners with interests in acute surgical assessment.
Transportation	Planned all-weather emergency air transport or a strong road transport option must be available to sustain acute nodes in these larger populations.
Exclusions	These acute nodes do not have sufficient population or service volumes to support: • emergency caesarean section deliveries • acute or out-of-hours surgery.

The long-term solution for the Wakatipu Basin is premised on the forecast population and its correlation to an appropriate level of service delivery configuration. The catchment population of the Wakatipu Basin is predicted to grow as is the daily visitor population. Daily visitor populations are most likely to use emergency assessment and medical services. Therefore they are considered as part of the acute node planning, but should not be

considered when analysing elective surgical services, maternity services and other planned interventions.

This population forecast could sustain an acute node as part of its hospital infrastructure, generating sufficient critical mass to be able to sustain a quality acute management service that provides fair and safe access to care for the population. It cannot sustain a higher level of service given the population, and a lower level of service would give the Wakatipu Basin less access than other similar populations in New Zealand.

As outlined above, the Wakatipu Basin is supported by a network of services across the lower South Island. When evaluating the options appropriate for the Wakatipu Basin the relationships to this wider network of services should also be considered. This network of services influences the structure of safe services for the people of the Wakatipu Basin. The current facilities within this district are described below. The level of service is that attributed by the New Zealand role delineation model. Hospitals that are Level 3, or above, provide acute 24-hour care to their catchment population: see Table 11.

Table 11: Role delineation model – levels of service

Hospital	Medicine	Surgery	Maternity	Descriptor
Lakes (Wakatipu)	L2	L2	L2	Rural hospital
Gore	L2	L2	L2	Rural hospital
Clutha	L2	L2	L1	Rural hospital
Dunstan	L2	L2	L2	Rural hospital
Southland	L3	L3	L3	Local acute hospital
Dunedin	L5	L5	L5	Major acute specialist hospital
Christchurch	L6	L6	L5	Supra specialist hospital

This network of hospital services should be considered when planning the next stages of the Wakatipu Basin development as an acute node, as there are implications for other catchment populations. This should be part of a district or sub-regional planning process.

The process of regional service planning needs to consider the network of services that would be safe and effective not only for the Wakatipu Basin but for the lower South Island. This process of planning could use the planning process described above to evaluate all of the catchment populations in the lower South Island and the networks of service provision.

This would enable the SDHB to consider the decisions regarding the Wakatipu Basin against an understanding of the networks of service delivery for the lower South Island. By using the technology above it is possible to evaluate population projections, workforce demands and cost impacts over the next 30 years. This work has not been completed, as it is outside the scope of the work of the Review Panel, but is picked up as one of the key themes in Section 4.1 of this report.

Further information on the acute node hospital is outlined in Appendix 6.

Services between Dunstan and Lakes District Hospital

The Panel is aware that Dunstan Hospital is an hour's drive from Queenstown, and there has been suggestion that this should be considered the third major hospital site in the region. It

is clear there is greater opportunity for the two facilities to work in a much more collaborative and coordinated way, from a workforce perspective but also in terms of the range of services that each facility offers. However, the Panel supports the continued presence of a hospital facility in the Wakatipu Basin, for the reasons already mentioned (population projections, acute node hospital concept), and due to the different demography of the population. Queenstown has a large proportion of visitors and is a major tourist destination for a wide range of adventure tourism activities associated with a high risk of injury. Furthermore it has a busy international airport and is relatively isolated (discussed further below). These characteristics suggest Wakatipu Basin requires a robust ability to respond to acute health crises (particularly trauma), and needs an independent capability. Not only does Wakatipu Basin independently justify an acute hub hospital, but the arguments presented above support the acute hub hospital for the region being in Queenstown.

Geographical Isolation

Queenstown is one of the few larger towns in New Zealand more than 2.5 hours' drive from the nearest secondary hospital facility. Furthermore, there are occasions each year in which travel in and out of the region is not possible due to extreme weather conditions such as snow and ice (during the brief period of this review all routes in and out of Queenstown were cut off by extreme weather on two separate occasions, one of these events isolating the town for three days).

There is already a high volume of transfers out of the region, with over 657 patients transferred acutely out of the region per year. Reducing hospital services in the region will substantively increase the work load of St John's, which already complains about considerable delays in transferring patients out of the region due to limited workforce capacity and the sheer driving time it takes to transport patients to Southland Hospital or further aboard. To do so not only draws on the resources of St John's but also ties up a transfer nurse for the duration of the transfer. Other costs not measured include the costs to families and friends for travel and time off work.

Community and Key Stakeholder Support

The community's voice is an important consideration. During the wide range of engagement opportunities there has been a strong view from the community that hospital and emergency services must be retained and enhanced in the Wakatipu Basin. There has also been a consistent view discussed with the Panel that Lakes District Hospital is an asset and that the land and the facilities can be further enhanced with no cost for the land and private capital opportunities for facility development. Local clinicians and those at Southland and Dunedin Hospitals, as well as the police in Queenstown, have strongly supported the need to retain hospital and ED services in the region.

Summary

A level of capacity is required in the region to provide emergency and inpatient care to the population of the Wakatipu Basin. The DHB made a step increase in its workforce in late 2009, which provides capacity to meet demand for the next period of time for ED and inpatient services. The Panel supports the retention of an ED at Lakes District Hospital subject to the service specifications and standards expected of other EDs around the country.

However, it is essential that the SDHB continues to explore service models with primary care and other health providers, to enhance integration and sharing of resources, so future investment can be managed as demand for health services continues to grow.

There is also the opportunity for greater collaboration between Dunstan and Lakes District Hospital for each of the facilities to develop special interests or areas of expertise, such as one facility providing more of a medical focus and the other more of a trauma focus.

The Panel supports the further enhancement of services on the Lakes District Hospital site with the provision of a wider range of services offered to the community. This is covered in the next section of this report, and includes services such as consolidating diagnostic services, new services such as CT scanning, expanded aged residential care facilities, improving palliative care services and other opportunities for private-public partnerships on the Lakes District Hospital campus. In addition to providing an extended range of services on site, greater clinician satisfaction and better use of the available inpatient capacity are likely.

Panel Recommendation:

6. Lakes District Hospital is retained on the current hospital site and is further developed as a health campus for the Wakatipu Basin.

A further consideration for the Panel was the location of health services in the Wakatipu Basin. Should the DHB retain and develop the Lakes District Hospital site or should it move all services to the Remarkables Park as part of a private / public partnership? The Panel's conclusion was that the Lakes District Hospital campus should be retained and that the site should be further developed over time as a health campus for the region. Key reasons for this follow.

Lakes District Hospital Land

The Panel has obtained a preliminary legal opinion on the status of the land that houses Lakes District Hospital and the surrounding CMHS and aged residential care facility. While a full legal status report is required in order to establish all of the issues surrounding ownership of the land in question, preliminary enquiries have established that the land currently occupied by the Lakes District Hospital in Queenstown is made up of 13 separate parcels, contained between Lucas Place to the east and Kawarau Road to the west.

The site can be largely be broken into two types of land. Firstly, there is a large block, on which the current hospital and St John's facility are located together with a number of small peripheral parcels in relation to which there are no certificates of title. This land was reserved from sale for the purposes of a hospital reserve by the Crown through two separate *Gazette* notices in 1890 and 1911. This means that the reserve land is effectively owned by the Crown as a reserve specifically for hospital purposes and is subject to the provisions of the Reserves Act 1977 and the Health Sector (Transfers) Act 1993.

The remaining land occupying the site, largely on the Kawarau Road boundary towards the lake front, is made up of seven parcels of land held by way of live certificates of title under the Land Transfer Act 1952, all in the name of the (now replaced) SDHB as registered proprietor. Some of these titles show that the land contained within these parcels is held in trust or as reserve for hospital purposes, thereby also restricting their saleability and use.

Furthermore, indications on both the live titles and reserve land *Gazette* notices show that at least some of the land making up the Lakes District Hospital site was taken for a public work, triggering the offer-back requirements of the Public Works Act 1981. This means that before this land can be sold on the open market it must first be offered to those previous owners or their descendants from whom it was originally acquired.

The land is also subject to the Ngai Tahu Claims Settlement Act 1998, and Ngai Tahu has first right of refusal should the land be freed for sale.

Consequently a preliminary review of the land indicates that there are considerable impediments to the sale of much of the land making up the Lakes District Hospital site. While it might be possible to sell some of the smaller live title parcels which border the reserve land after clearance from both Public Works, a sale of the reserve land itself would not be possible until this land was brought under the Land Transfer Act and a certificate of title issued. In addition, among other matters, sale of the reserve land would most likely require a change in status of the land, a revocation of the reserve status and the consent of both the Ministers of Conservation and Health following a public consultation process.

Existing Assets and Infrastructure

Lakes District Hospital was built in 1988, and while in need of some updating and modernising the building appears to be in good condition and, according to several architects and builders met during the engagement process, is structurally sound.

Previous work completed by Cranleigh Health looked at refurbishment options for Lakes District Hospital using the existing foundations, slab, services and infrastructure as much as possible and the development of a new two-storeyed north-facing building to accommodate the components of an IFHC. This was reflected in the Southland DHB consultation documentation in March 2010, including concept drawings. This option was preferred by Cranleigh as it involved the expansion of existing facilities, could be completed in a staged way, made moves towards a more integrated service and was a more cost-effective option than a greenfields approach.

The Panel concurs with the view that expansion and development of the current infrastructure at Lakes District Hospital is preferred, that there is ample space for expansion of services, and that any such expansion could occur in a staged way based on a well thought-out master plan. The other significant advantage is the security of tenure, as the land and building are owned by the DHB. Such developments could also occur initially without disruptions to existing operations. The Panel supports this concept, as it lays the foundation for the Lakes District Hospital's future development as a health campus that could attract a range of private and public providers, including the opportunity for training facilities through the Otago School of Medicine.

The Panel acknowledges that there is some concern about the current site and its location to the Airport: particularly the noise levels at Lakes District Hospital. Any refit would need to include measures to mitigate and manage the impact of noise on new or refurbished facilities. This is not insurmountable from a building design perspective. Road access would also need to be carefully thought-out.

The Panel acknowledges the proposal for an integrated health facility as part of the Remarkable Park development, but for the reasons outlined does not support public hospital

services relocating to this site. The Panel was concerned about future lease costs given the price of land and property in the region and the ability for publicly funded health services to expand in the future. Security of tenure for the DHB on the current site is a key advantage over this option.

4.3 Clinical Workforce

Panel Recommendations:

8. Lakes District Hospital maintains a minimum roster of eight medical FTEs, of which one or two could be registrars, supported by HWNZ.

9. The SDHB pursues a partnership opportunity with the University of Otago to develop a centre of excellence for the training of rural health practitioners.

10. Lakes District Hospital expands the breadth of services that the medical and nursing teams can provide.

10. The SDHB encourages the development of special interests amongst hospital / non-hospital doctors and nurses in the Wakatipu Basin. Examples include General practitioners with special interest (GPSI) and senior medical officer with special interest (SMOSI) roles.

Background

One of the key issues presented to the community and to the clinicians at Lakes District Hospital by the Southland DHB is the issue of clinical and financial sustainability. In the consultation document presented by the Southland DHB in March 2010 a key change proposed in the model of care was in arrangements for accessing the ED. The change would see all patients being seen by either a general practitioner or a rural hospital doctor, depending on their initial triage category. This was in response to a view that a large number of ED presentations were categorised as best being seen by a general practitioner, and that many Queenstown residents use the ED for primary care services.[27]

It was also proposed as an immediate step, due to the SDHB's financial position and cost pressures at Lakes District Hospital, that there be a reduction in the number of senior doctors and nurses, reducing senior doctors from eight to six and implementing a nursing staff reduction of 0.8 FTE. This change was supported by the SDHB on the basis that a 'desk top review' completed by a previous chief medical officer concluded that the majority of attendances at the hospital could have been safely dealt with in primary care. Such changes would reduce the DHB's expenditure by an estimated $500,000 per annum.

The ASMS and the New Zealand Nurses Association (NZNO) had become involved during the Hospital Capacity Review consultation process, and raised a list of serious professional and clinical concerns regarding the proposals being put forward by the SDHB. This led to the SDHB agreeing to establish a working group made up of ASMS, NZNO and management nominations to 'recommend innovative models of care, quality improvement initiatives and cost saving initiatives to enhance the effectiveness of the medical and nursing workforce

[27] Southland DHB Public Consultation – Hospital Capacity Review, March 2010.

employed at the Lakes District Hospital'.[28] This process was subsequently put on hold due to the announcement of a wider review by the National Health Board.

Medical and nursing staffing numbers at Lakes District Hospital were reviewed in 2009 in response to concerns raised by staff that the working environment at any one time (except during swing shifts) was intrinsically unsafe. The medical division of Southland Hospital completed an analysis which showed that:

- ED attendances had risen progressively in line with population trends since the Lakes District Hospital structure was established in 2002
- waiting times had progressively increased over the period 2004–2009
- peak presentation rates occur from 11am to noon, and an afternoon peak is sustained until late evening
- in 2009 the average length of stay for inpatients was less than a day, with 5.6 patient movements per day (medical and nursing staff manage all inpatient care as well as the ED).

The medical division concluded:

> *After much thought and on listening to the witness of the medical staff concern, the Division has concluded that the current demand at Lakes District Hospital with the current configuration of healthcare at the site is at about the limit that can be expected of a single person operation. If it can be deemed that this condition has not been satisfied to date then we have no doubts that it shortly will. The point of view is emphasised by the attendance figures for July and August 2009, which show a quantum increase to 650 and 680 patients respectively (annualised 8160, a potential increase of 37% over the fiscal year data used in our analysis).*[29]

Subsequent to this analysis, staffing numbers were increased in December 2009 to seven FTE for SMOs (with an eighth FTE to cover leave) and nursing staff from a four-day week roster to a seven-day week roster (to cover the nursing overlap shift). This was considered a temporary staffing increase while new models of care were developed as a result of the Cranleigh Review, which was occurring concurrently.

Current workforce and future projections

While acknowledging the previous proposals for different service models at Lakes District Hospital and previous changes to workforce capacity, a key question that the Panel wanted to answer was: what level of current and future capacity is needed to safely manage the range of patients presenting for emergency and ongoing inpatient care at Lakes District Hospital?

There is a current medical workforce at Lakes District Hospital of eight FTE, of which there are currently five permanent FTEs (seven doctors), two swing-shift FTEs (of which there is a 0.5 vacancy) and an eighth FTE to cover leave (which is currently vacant).

Lakes District Hospital is fortunate to have a relatively stable medical workforce qualified in rural hospital medicine or working towards post-graduate qualifications in rural hospital medicine. Lakes District Hospital currently has four doctors who have vocational registration

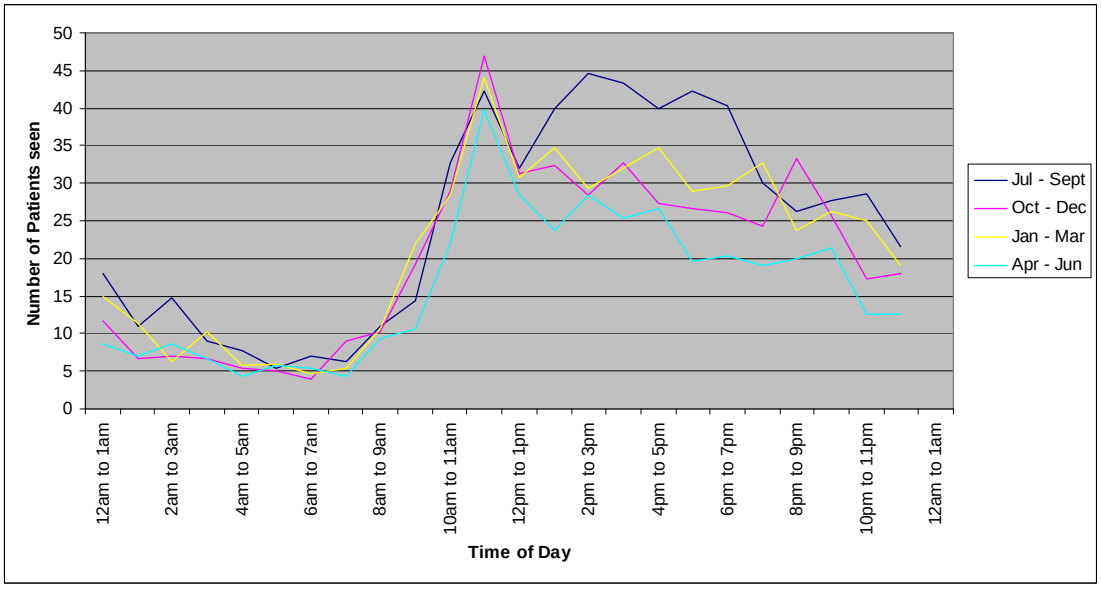
[28] ASMS. 2011. *Health Dialogue: 'A Public Hospital for 2026: Queenstown'*. Wellington: Association of Salaried Medical Specialists.

[29] Southland DHB Memo – options for Lakes District Hospital, November 2009.

in rural hospital medicine, two doctors who are on the training programme for rural hospital medicine, and one doctor who is vocationally trained in paediatric emergency medicine and has vocational registration in rural hospital medicine. This is a significant asset for the SDHB.

Guidance for the number of specialist and other medical staff has been provided by the Australasian College for Emergency Medicine, and a formula was suggested by an advisory group to the Ministry of Health,[30] based on the number of patient presentations per annum. However, such guidance is hard to apply to departments with relatively small numbers of patient presentations. Lakes District Hospital needs a 24/7 medical presence and, therefore, must have at least one doctor on duty at any time. Because some times are consistently busier, and require two doctors, and because there must be at least one doctor even when the department is least busy, formulae which use the annual patient census and assume an even distribution of patient presentations across 24 hours underestimate the requirement for medical staff at hospitals such as Lakes District Hospital. Chart 4 shows the average quarterly ED presentations for the 2010/2011 year, and the timing of patient presentations over the year. Presentations to ED are consistently busier between the hours of 12pm and 9pm throughout the year, which reinforces the current need for the swing shift to manage patient presentations.

Chart 4: Average Quarterly ED Presentations, 2010/2011[31]



Further, translating these guidelines to Lakes District Hospital, which has a rural hospital doctor model with both ED responsibilities for over 6000 presentations a year and responsibilities for inpatient care, is problematic. Lakes District Hospital needs to be staffed to provide the capability to treat urgent and life-threatening conditions 24 hours a day, seven days a week. Resuscitation, whether it be managing multiple traumatised patients or critically ill patients or performing procedures requiring procedural sedation, requires more than one doctor on duty at a time. Furthermore, times of peak presentation require a capability to manage patients without undue delay. Employment of medical staff to run Lakes District Hospital to maintain 'capability' needs to encompass sufficient doctors on a

[30] Ministry of Health. 2002. *Guidelines for Staffing and Skill Mix in New Zealand Emergency Departments: A Report from the Emergency Department Clinical Advisory Group to the Deputy Director-General, Clinical Services Directorate, Ministry of Health*. Wellington: Ministry of Health.

[31] Data sourced from Ministry of Health Emergency Departments and Acute Services Programme.

roster to allow for double rostering at times of need, and the ability to call back off-duty staff.

The Panel has visited the ED, spent time with the medical staff, reviewed rosters, evaluated the range of presentations attending the ED, reviewed the recent call-back patterns and taken into consideration the impact of also managing up to 10 inpatient beds, and concludes that the current model of care requires a minimum roster of eight medical staff.

Undergraduate and Postgraduate Training Opportunities

The Panel believes that there is the opportunity for medical staff to support up to two registrar positions (as part of the minimum roster of eight FTEs). These registrar positions could attract funding from HWNZ, which would partially offset costs. DHBs apply on an annual basis for registrar positions, of which there are a limited number available. Including registrars as a part of the workforce at Lakes District Hospital creates more opportunities for the SMOs to train the staff of tomorrow and to foster the further development of rural hospital medicine as a viable and preferred career option. The Panel acknowledges that registrars will create further workload for SMOs, but the stimulation for SMOs of providing this training will enhance their own professional satisfaction. Lakes District Hospital was recently visited by the Australasian College of Emergency Medicine as part of a process towards having the Hospital accredited for the purpose of training new specialists.

There is also scope to further support SMOSIs. There are opportunities to enhance and expand the role of hospital doctors by extending their practice to include other conditions which might be managed at Lakes District Hospital. At present, some patients who could be managed either in ED or as inpatients at Lakes District Hospital following diagnostic CT are required to travel to Invercargill for imaging. If further assessment, treatment or inpatient management is required, this is provided in Invercargill post–scan, rather than closer to the patient's home. One of the Lakes District Hospital SMOs has paediatric expertise, and is both willing to provide and capable of providing a paediatric outpatient service, with appropriate reference to the paediatric services at Invercargill Hospital. Provision of such a service would enhance the work satisfaction for the Lakes District Hospital SMO, would provide services safely and closer to home for local paediatric patients, would reduce the need for people to travel long distances, and would enhance communication and relationships between Lakes District Hospital and Invercargill Hospital. There is scope for other Lakes District Hospital SMOs to develop a variety of other special interests, either based on current competencies, or based on 'upskilling'. At present, Lakes District Hospital doctors are not formally part of the SDHB ED family. Closer relationships with both Dunedin and Invercargill EDs are desirable from a collegial viewpoint, and would provide the opportunity to share resources.

Undergraduate programmes in rural medicine are already well supported in the region, with general practices in the Wakatipu Basin and Lakes District Hospital supporting two undergraduate programmes through the Otago School of Medicine. The Rotational Programme and the Immersion Programme both provide fifth-year students the opportunity to develop and enhance their skills in rural medicine, and are already well established throughout the Central Otago / Lakes District. The Panel believes there is a real opportunity for Lakes District Hospital and the Dunstan and Central Otago region to develop a partnership with the Otago School of Medicine to develop a centre of excellence for rural health practitioners who would further support postgraduate and undergraduate training programmes. Having a well-qualified medical team at Lakes District Hospital provides an excellent platform for current medical and nursing staff to support an ongoing training

programme for the region. Discussions with the Otago School of Medicine indicates strong support for this approach.

The Nursing and Midwifery Workforce

The Panel acknowledges the critical role that the nursing and midwifery workforce plays at Lakes District Hospital. The Panel understands there are currently 25.6 registered nurses (including 6.8 senior nurses) and three LMCs employed permanently, and casual staff employed for the maternity unit.

The Panel foresees that some of the recommendations in the report will have a positive impact on the nursing and midwifery workforce. Being able to eliminate 30–40 transfers per annum will free up nursing resources and reduce costs for the DHB and the wider health system (which will have effects such as the freeing up of St John's capacity). There will also be other opportunities for nursing staff as a greater range of outpatient services are repatriated to the Wakatipu Basin, which will provide opportunities for nursing staff to enhance their clinical skill and scopes of practice. Retention of the ED, the development of the health campus and enhancing relationships with universities will also provide opportunity for the nursing and midwifery workforce.

With respect to maternity services and the current workforce, the Panel recognises the challenges with not having a permanent workforce. There may be scope with the release of nursing resources from reduced transfers to consider how more specific nursing support could be made available at the facility to support local midwives. The Panel would also strongly endorse enhancing the support provided to the midwifery and LMC workforce with better obstetric outpatient support locally for the management of women in the Wakatipu Basin. This could be one of the areas the SDHB looks at repatriating to the region. This could have the dual benefit of providing greater support to the workforce and retaining a greater volume of local births.

The limitations of the current maternity facility are acknowledged, and it is the Panel's hope that with the development of the health campus there will be at some stage a refurbishment of the existing Lakes District Hospital facility including the maternity facility to address some of the concerns raised regarding the adequacy of birthing and post-natal facilities.

The acute node description provided earlier in the report supports the continuation of primary maternity services by LMCs, with overnight stays and visiting ante- and post-natal services provided on site and more high-risk births occurring in Southland and Dunedin Hospitals.

4.4 Enhancing Integration

Panel Recommendations:

11. The SDHB extends an open invitation to appropriate health providers to relocate to the Lakes District Hospital site, supporting the development of better integration of care on a health campus.
12. The SDHB facilitates (through an independent chair) a clinical services forum for ongoing dialogue on health services provision and planning in the Wakatipu Basin.
13. The SDHB encourages the further integration of services in the region, including sharing of resources, stronger clinical engagement between Dunstan and Lakes District Hospital and the development of clinical pathways and IT solutions. This would include a broader clinical forum covering the Central Otago / Lakes, or perhaps expanding to all rural health

Does Integration Work?

There is a lot of research and material available on integration and the success or otherwise of integrating health services. The central consideration for the Panel when considering any opportunity to integrate services was: how will this improve and enhance the services for individual patients and the population? What is the model of care that would work best to support clinical services, and how can this be provided and funded with limited resources?

Ramsay and Fulop[32] suggest there is evidence that integration can be an effective way of delivering health care, and that it can provide opportunities to break down barriers between primary and secondary health care, as well as health and social care. They go on to say that there are four different types of integration and two factors that are important to successful integration:

1. organisational integration, in which organisations are brought together by mergers and/or structural change; or virtually, through contracts between separate organisations
2. functional integration, in which non-clinical support and back-office functions are integrated
3. service integration, in which different clinical services provided are integrated at an organisational level
4. clinical integration, in which patient care is integrated in a single process both within and across professions, for example through use of shared guidelines.

Two additional factors are important to successful integration:

5. normative integration, in which there exist shared values in coordinating work and securing collaboration in delivering health care
6. systemic integration, in which there is coherence of rules and policies at all organisational levels.[33]

[32] Ramsay A, Fulop N. 2008. *The Evidence Base for Integrated Care*. London: Department of Health.
[33] Ramsay A, Fulop N. 2008. *The Evidence Base for Integrated Care*. London: Department of Health.

The Panel recognises that any proposal for integrating health services in the Wakatipu Basin needs to achieve a level of service or clinical integration to achieve the best outcomes for patient care in the region.

Background

A key component to the various proposals is the development of an IFHC. The origins of this proposal came from the Cranleigh Report, which proposed the concept of a new facility which collocated general practice with mental health services, community services and the redevelopment of the Lakes District Hospital site. This has been well outlined in this report so far.

One of the objectives of this proposal is to look at how there can be greater integration of health services which make better use of the workforce, reducing duplication and overlap in how services are provided and (where appropriate) reducing and controlling costs.

Unfortunately there has been considerable concern from the community and from health providers about how this might work. The Panel has, however, continued to explore the possibility of greater integration of health services with the general practices and Lakes District Hospital staff during the engagement period to establish what type of on-site configuration might be possible and to identify which providers would support this type of service configuration.

There are some key points of agreement between health providers and some key barriers. These are briefly outlined in Table 12.

Table 12: Points of Agreement and Disagreement between Health Providers

Points of Agreement
Some form of integration of the health services makes sense and could be better for patient care.
Integration is not just about facilities. There are other ways integration can be achieved through the use of technology and shared care records.
Any collocation or integration of health services needs to be financially viable for the public and private providers – win, win.
Business and funding models for privately versus publicly funded services are a barrier to integrating services.
Points of Disagreement
Not all of the health providers see that anything is broken or that there is any need to change the way health services are provided.
There is difference of opinion as to how the 'front door' will be managed and how user pays versus free walk in ED access will be managed with collocated or integrated facilities.
There is difference of opinion as to how patients will be triaged and who will do the triaging, for example ED nurse v primary care nurse.
There is difference of opinion as to where a health campus should be located, due to perceptions about limitations of the Lakes District Hospital site.

Also apparent when considering health services in the Central Otago / Lakes District is the lack of cooperation and collaboration between Dunstan and Lakes District Hospital: there is a different range of services and access between the two facilities. There is no sharing of workforce, limited clinical interaction and no forum for clinical engagement or continuing education across the sites. It is clear to the Panel that there needs to be a much greater level

of interaction and collaboration between these services, irrespective of governance arrangements.

A Way Forward

Progress has been made over the limited time that the Panel has been in the region. Clinicians have been brought together on several occasions collectively, and there is willingness for providers to consider different ways of working together that will lead to a more integrated health system in the Wakatipu Basin.

The Panel has explored various scenarios with health providers, including the development of a health campus on the Lakes District Hospital site. Concepts that have been explored have included the collocation on site of a substantive primary care facility, which may include after-hours primary care services. This could sit alongside a range of other private services that would complement a private / public service configuration, such as radiology and laboratory, private outpatient services and private hospital services.

The Panel has been in discussions with general practices, particularly including Queenstown Medical Centre, the largest practice in the Wakatipu Basin, and the current providers of A&M services in Queenstown, to explore potential models of care. Discussions have explored the opportunity for potential models of integration, which may or may not include collocated facilities.

There are currently no real impediments for the land on the Lakes District Hospital site being used for the purposes of health services: only a relatively small footprint is presently being used. There is also precedent for this type of development: a privately owned aged residential care provider already operates from the site, as well as St John Ambulance, which is collocated on the hospital grounds.

The Panel believes that with continued engagement and discussions between key health providers, further progress can be made. What is important as a first step is ensuring there are good relationships and trust between providers. All clinicians have expressed their willingness and commitment to continuing to work with the SDHB to find a viable and sustainable model that will work for the region.

To provide an environment for these discussions to occur the Panel is proposing that a clinical services forum be established, which would involve clinicians from primary and secondary care as well as DHB representatives. The purpose of this forum would be to build trust and confidence with clinicians, to provide a forum for service planning and to provide an environment in which service configuration issues can be thrashed out and agreed. This is consistent with the *In Good Hands* policy, and would provide clinicians the opportunity to be involved in key decisions affecting DHBs. For the clinical forum to be successful, SDHB will need to make a commitment to participate on a regular basis with all health providers in the Wakatipu Basin. In promoting the need for the immediate establishment of this local forum, the Panel would also support the establishment of a broader clinical leadership group with jurisdiction over the rural regions or even all of the SDHB catchment.

In the meantime the Panel proposes that an open invitation is extended to appropriate health providers in the region to consolidate health services on the Lakes District Hospital site. This will obviously involve a process of negotiation and discussion with interested parties and the development of a robust site plan. The Panel envisages that development of

further services or leasable premises could be established on the site, making use of private-public partnerships. Ideally any future primary care facilities would be a genuine cooperative option that did not compromise the viability of any current local provider. The Panel is aware that the establishment of a focused health campus would be a prerequisite for any future partnership with private surgical providers who have indicated that a future rekindling in their interest is a possibility, given such a campus and an increased need from a bigger population.

Prior to such site development the Panel recognises the need to immediately implement better electronic connectivity of patient records and investigation results across the primary and secondary services of the region (also referred to in Section 4.7).

The Panel would highlight, in keeping with recommendations 1, 2 and 3, that integration does not just refer to local services such as those offered by primary and secondary providers. Integration is also needed across the region and, indeed, all of the SDHB area as patient care becomes more seamless, is delivered as close to home as possible and is provided at the most appropriate specialist centre.

4.5 Improving Outpatient Services

Panel Recommendation:

14. Lakes District Hospital expands the local and regional provision of outpatient services that better meets the needs of the Wakatipu region (including the coordination of private and public outpatient services).

Background

As already well documented in this report, there is a limited range of outpatient services provided at Lakes District Hospital: patients have to travel to Southland Hospital for the full range of outpatient services. Dunstan Hospital provides a wider range of outpatient services for its local population, reducing the need for its population to travel out of the region for services.

The Panel heard many patient anecdotes about the time taken for families to travel to Southland Hospital, which is a five-hour round trip, and the impact on families this has in terms of cost and time (costs which are currently not measured in the health system). A working mother explained the challenge of multiple visits to Southland Hospital for specialist outpatient care for her four children with the same condition.

Consistent with the Panel's view that services wherever possible need to be provided closer to home (in keeping with the 'Better, Sooner, More Convenient' Government policy), the Panel strongly advocates for a wider range of outpatient services being provided to the resident population in the Wakatipu Basin.

The Panel is not advocating for additional funding or volumes for outpatient services, but that services are shifted closer to home and that there is some equity in the region with regard to the range of services accessible to resident populations. As noted by the DHB, services will need to be economically viable (given the relatively low volume of activity for some specialities) and take into account regional access to services.

Outpatient Services provided to Wakatipu Residents

Table 13 shows the volume of outpatient activity[34] completed at Lakes District Hospital, Dunstan Hospital, Southland Hospital, Dunedin Hospital and out of the region, for Wakatipu residents.

Table 13: FSA and FU Outpatient Volumes Provided to Wakatipu Residents for the 2010/2011 year

	Hospital				
	Lakes District Hospital	**Southland**	**Dunedin**	**Dunstan**	**Other**
Cardiology	1	52	10	-	16
Cardiothoracic	-	7	1	-	-
Colonoscopy/gastroscopy	18	44	7	-	12
Cystoscopy	-	17	-	-	-
Dermatology	-	14	1	-	-
Diabetes	-	9	-	-	1
ENT	-	114	35	-	3
Gastroenterology	-	35	3	2	6
Gastroscopy	10	58	7	-	-
General medical	1	74	1	-	5
General surgery	163	171	20	4	16
Gynaecology	-	103	22	-	2
Haemotology	-	38	41	-	20
Health of older people	219	10	2	-	21
Infectious diseases	-	4	6	-	9
IV chemotherapy	49	130	41	-	13
Nuerology	72	5	10	-	2
Neurosurgery	-	-	11	-	4
Oncology	-	147	523	-	44
Opthamology	-	130	168	-	32
Orthopaedics	679	446	44	11	65
Other medical	35	493	125	1	68
Other surgical	7	69	44	-	3
Dental	-	18	-	-	2
Paediatrics	238	60	9	-	7
Plastics	-	32	15	-	29
Renal medicine	-	18	47	-	9
Respiratory	-	31	8	-	1
Rheumatology	-	13	38	-	-
Specialist paedeatric	-	9	-	-	-
Urology	-	112	1	-	2
Total	**1,492**	**2,463**	**1,240**	**18**	**392**

[34] National Health Board. 2011. *Utilisation of Health Services by Residents of the Wakatipu Basin and Utilisation of Health Services in the Wakatipu Basin*. Wellington, National Health Board.

The National Health Board has projected that outpatient attendances for the Wakatipu Basin are expected to increase by 33 percent between 2010 and 2026. The greatest proportionate increases for services with large numbers of attendances are expected to be in health of older people, podiatry and professional nursing services. The greatest decreases are expected for orthopaedics first attendances and outpatient maternity services. Dunstan Hospital outpatient volumes are expected to increase by 50 percent for the same time period, Gore by 5 percent and Clutha Health First by 10 percent: see Appendix 7.

Improved Private Public Coordination of Outpatient Services

In contrast to the limited publicly funded outpatient services available in the Wakatipu Basin, there are 18 private specialists providing outpatient services at Queenstown Medical Centre and QSI. Most of the visiting specialists are based at Dunedin or Christchurch Hospitals, with a smaller number from Southland and Auckland Hospitals.

Private outpatient clinics include the following specialities:

- orthopaedics (four weekly)
- paediatrics (four weekly)
- urology (six weekly)
- gynaecology (four weekly)
- dermatology (four weekly)
- ENT (six weekly)
- plastic surgery (six weekly)
- diagnostic pathology clinics (four weekly)
- radiology – musculoskeletal ultrasound (four weekly)
- general surgery (four weekly)
- breast specialist (eight weekly)
- gastroenterology (six weekly)
- oncology (six weekly)
- psychology (three days week)
- rheumatology (eight weekly)
- cardiology (four weekly)
- respiratory medicine (six weekly)
- renal medicine (six weekly)
- podiatry
- dietetics
- bone densitometry
- endoscopy.[35]

Having this broad range of privately funded outpatient services in Queenstown creates the opportunity for the SDHB to look at better coordination of privately and publicly funded outpatient services. As an example of how a service could be better coordinated, a specialist seeing private patients at Queenstown Medical Centre is unable to see public patients for the same speciality in Queenstown. Instead the specialist and the patient are required to travel to Southland Hospital for the outpatient clinic.

[35] Information provided by Queenstown Medical Centre.

4.6 Enhanced Community Services

Panel Recommendations:

15. The SDHB encourages the development of increased capacity in aged residential care beds in the Wakatipu Basin, improving the ability to provide respite care and slow stream rehabilitation services.

16. Lakes District Hospital develops palliative care bed capacity on their campus as part of aged residential care facility developments.

Background

The Panel was pleased that it was able to also speak with a broad number of other health providers and organisations that either directly provide health services or are NGOs that support health services and their patients. It will be of no surprise that two areas of focus for the panel warranting comment and action are aged residential care and palliative care.

The Panel appreciated that it is not always possible for the full range of health services to be accessible locally to a population the size of Queenstown. However, as has already been pointed out, the Wakatipu Basin is expected to increase in size over the next 15 years. While older people are only a small proportion of the population, population projections forecast that people in the age range 65–74 will increase by 1197, and those over 75 by 755: a 147 percent and 153 percent increase respectively. This will create challenges for the region in terms of health services, as people over the age of 75 particularly tend to be higher users of health services. Services in the region would currently find it difficult to cope with aspects of providing care to this change in population.

The Panel heard from the community – particularly from older constituents – that many older folk when they reach a certain age or start to experience health problems will leave the region in order to access facilities and health services.

Services for Older People

Currently there is only one aged residential care facility in the Wakatipu Basin. HBSSs are provided to patients who require support and assistance to live in the community. One challenge for HBSSs is continuity of care: some in the community reported that there is a high turnover of caregivers. A private residential facility called Abbeyfield House has a 10-unit home for older people who are able to live independently within a shared or communal living environment. Residents are required to pay for their own board and food costs, and care is not subsidised by the DHB. Volunteers provide support services for older people, including the provision of some transport services. Older people are supported by an Age Concern fieldworker who works across the spectrum of services for older people. Needs assessment and service coordination services are provided from Southland Hospital by a local coordinator.

Aged Residential Care Facilities

Aged residential care beds are limited in the Wakatipu Basin. A 34-bed facility is located on the Lakes District Hospital site as part of the Lakes District Hospital facility and infrastructure, an arrangement relatively unique within New Zealand. Ownership recently

changed from Presbyterian Support Services to a private operator who has facilities in the Bay of Plenty and Auckland. The Panel met with the owners and the facility manager, touring the facility and meeting with its residents as part of its engagement process.

The current facility is attached to the Lakes District Hospital, accessible through internal double doors which open onto the reception area of the facility. While the facility is dated (built in 1988), it is in very good condition and well kept. Lease arrangements with the current owner reflect a long-term commitment from the DHB.

The current challenge facing the facility is that is has maintained relatively high occupancy in the past 12 months (95 percent), and has an increasingly complex mix of patients: 14 currently require hospital-level care and 18 rest home-level care.[36] This is likely to increase with an aging demographic. The facility does offer respite care beds, but due to the high occupancy rate these are infrequently available. No day-care facilities are currently provided in the region. The facility provides the meals for the residents as well as for the Lakes District Hospital and for meals on wheels. Further opportunities may exist to reduce the duplication between the hospital and aged residential care facility for other hotel services eg. cleaning and housekeeping.

The current owners believe that the region could support up to an additional 15 aged residential care beds that would over a 12-month period be fully utilised. They are supportive of exploring opportunities to expand and refurbish the current facility, but have not had any active discussions with the SDHB regarding this possibility.

Given the limited number of aged residential care beds available, current occupancy rates and the need to provide more respite, day-stay and hospital-level care, there is a real opportunity to expand and enhance facilities on this site. Public / private opportunities should be explored to facilitate this development.

While the level of cooperation between the aged residential care facility and the Hospital is good, there is one minor but important issue that needs urgent resolution from a patient's perspective. When patients become acutely unwell, requiring assessment by the ED, an ambulance is called, often requiring the patient to wait and then be transported 20 metres down the road. Appropriate internal arrangements between the ED and the facility to provide direct access down the hallway must be achieved.

Palliative Care

Currently there are no palliative care residential options available in the Wakatipu Basin. Patients are required to travel out of the region for residential or hospice care. In other parts of the country of a similar size and population, palliative care services are commonly provided in the primary care setting, with appropriate back-up and support from specialist services. In the Wairarapa, for example, general practitioners provide the majority of medical care for patients, with back-up from regional specialist services. Inpatient palliative care is available through local aged residential care facilities at a higher bed day rate, acknowledging the complexity of care often involved with palliative patients.

[36] Current occupancy of the facility has not been impacted by the Christchurch earthquake and the shifting of aged residential care patients out of the Christchurch area.

The Panel on its visit to Dunstan Hospital was impressed with the facilities available to patients requiring palliative care: there was a room and additional facilities available for patients and their families.

The Panel supports the development of improved palliative care facilities in the Wakatipu Basin, which could include access to a dedicated bed on the Lakes District Hospital site. This could be best sited as part of the aged residential care bed capacity. The Panel also strongly advocates that Wakatipu residents should be able to access inpatient facilities for palliative care at Dunstan as an option until local facilities are available.

Community Mental Health Services

As already referenced in this report, CMHS is located across the road from the Hospital in a stand-alone facility on hospital land. This houses approximately 12 community mental health workers. CMHS was originally included in earlier discussion documents as being part of an IFHC facility development. While the service is not opposed to this, issues such as how patient privacy would be maintained and governance arrangements would need further consideration.

The Panel endorses the development of a health campus in which CMHS is considered as part of an integrated range of multidisciplinary services. Having CMHS closer and working as part of primary care services is an evolving model in New Zealand as part of the 'Better, Sooner, More Convenient' policy. Pilots around the country, such as in the Wairarapa and MidCentral DHBs, are looking at how a wider range of mental health services can be provided closer to patients and in a primary care or community setting.

While not specifically discussed in this report, Public Health South and Community Oral Health Services are two other important services that should be considered as part of a health campus development.

Glenorchy Medical Centre

The Panel was privileged to visit Glenorchy and meet a number of residents. This community of 450 is clearly passionate about the small but important health services they receive in their region, which consist of a visiting district nursing service (on referral) and a weekly two-hour nursing clinic, which the panel understands is funded by the PHO and provided by Queenstown Medical Centre. These services are provided from a community-funded medical clinic.
A significant number of local residents attended the community meeting with the Panel, as they were concerned that the funding for their two-hour weekly service was to be cut and strongly advocated that while the service is very small it is an important support for the residents of the area, particularly the elderly who cannot drive and mothers and young babies. No other health services are provided in Glenorchy.

The Panel strongly advocates for the ongoing provision of the visiting nursing service to this region.

4.7 Enhanced Diagnostic Support

Panel Recommendations:

17. The SDHB supports the establishment of a CT scanner for the Central Otago region, located at Lakes District Hospital.

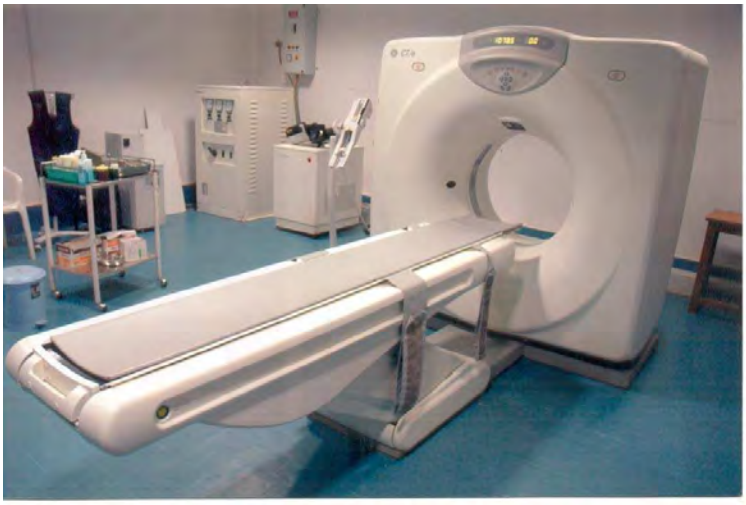
18. Diagnostic services such as laboratory and radiology are best consolidated onto the Lakes District Hospital site.

Background

With confirmation that Lakes District Hospital should be retained with an ED and an appropriate level of medical and nursing workforce, the Panel considered what opportunities there are to further enhance the care provided to patients of the Wakatipu Basin. The Panel wants to ensure that there is opportunity for the workforce to continue to enhance its clinical skills and capabilities.

One of the opportunities for the region is the purchase of a CT scanner. CT scanning is sometimes called CAT scanning – it is a non-invasive medical test that helps doctors diagnose and treat medical conditions. CT scanning combines special X-ray equipment with sophisticated computers to produce multiple images or pictures of the inside of the body. These cross-sectional images can then be examined on a computer monitor, printed or transferred to a CD. CT scans of internal organs, bones, soft tissue and blood vessels provide greater clarity and reveal more details than regular X-ray exams. Using specialised equipment and expertise to create and interpret CT scans of the body radiologists can more easily diagnose problems such as cancers, cardiovascular disease, infectious disease, appendicitis, trauma and musculoskeletal disorders.[37] In New Zealand it is common for a CT to be completed by an appropriately trained MRT, and where clinically appropriate for the scan to be read remotely by a radiologist.

Picture 2: CT Scanner



[37] Information from www.radiologyinfo.org (accessed 26 August 2011).

Application and Service Utilisation

CT scanners have become less of a specialist diagnostic tool and more of a generalist diagnostic tool, and are located in a number of rural hospital facilities throughout the country. Having a CT scanner on site would enable Lakes District Hospital doctors to manage a new group of patients whom they previously would have transferred to another centre for imaging and in some instances ongoing care. This would also increase use of Lakes District Hospital beds (which has been a point of concern for the SDHB), reduce the need to transfer patients out of the area and support services being provided closer to home. The Panel strongly supports the scanner being used to service the Central Otago / Lakes District, thus also providing CT services to Dunstan Hospital and surrounding areas.

The National Health Board has evaluated the volumes of CT scans being completed for patients from the Wakatipu Basin and those from the Dunstan area. Both are currently serviced from different base hospitals: CTs for Wakatipu patients are performed at Invercargill Hospital and for patients from Dunstan at Dunedin Hospital. The Panel has considered the need for acute and elective CT scans at Dunstan and Lakes District Hospital. Although current volumes would be marginal, the clinical need in an isolated high-action tourist area justifies provision of the (now) basic clinical tool. The greater isolation and faster expanding population supports the Panel's recommendation for locating the CT at Lakes District Hospital. In addition the Panel has received local and base hospital clinical support for this recommendation. A CT could be provided through a private / public partnership, with the capital and aspects of the facility development funded privately or through community support. Such a scanner will reduce the unnecessary transfer of many patients and associated costs to both the SDHB and patients' families – producing real savings over time.

The volumes of CTs completed for Dunstan and Wakatipu population are provided in Appendix 8. Approximately 26 CT scans per week could be completed for publicly funded patients across the Central Otago / Lakes District without factoring in further volumes generated by the private sector.

Private / Public Funding Opportunities

Due to the short time that the Panel has been on the ground in the Wakatipu Basin, it has not been able to confirm all of the specific financing and ownership options for a CT. However, from discussions with the community and health providers the Panel has identified the following components of a package which we believe can be implemented.

- the development of a private radiology suite through a private / public partnership on site at Lakes District Hospital positioned for accessibility to Lakes District Hospital public hospital functions while also being accessible to future private providers (this needs to be part of a well thought-out campus plan)
- funding of the capital equipment and other components of the build or fit-out through possible grants or fund-raising. This would be an excellent project for the Wakatipu Health Trust to support; conversations with the Wakatipu Health Trust thus far have indicated potential support for significant capital equipment such as a CT scanner
- contracting of the provision of consolidated radiology services to a private provider, which would include provision of clinical oversight of the service and radiologist and remote reading services
- capacity agreement for the provision of publicly funded CT scans

- making use of Lakes District Hospital existing MRTs trained to provide CT scans (this would involve some increase in FTEs).

The Panel is confident that there would be minimal costs for the DHB for capital and facility development if combined with community support and a public / private facility development. Increased MRT costs could be offset by lease and rental revenue. A detailed business case would need to be developed by the DHB to support this investment.

Why Lakes District Hospital?

CT scans are done in three general contexts, defined (for the purposes of this report), by the degree of urgency for the scan. First are non-urgent scans undertaken as part of a work-up of a patient in an elective (outpatient) capacity to plan surgery or other treatment. These scans tend to be booked some days in advance, and the patient can generally travel (although ideally, the need to travel will be minimised, as reasonably appropriate for patients' circumstances). Second, scans are done acutely (urgently) so that a diagnosis can be made and management can be planned and delivered. Many acute presentations to emergency departments have CT scans for this reason. Examples are patients with certain types of sudden onset headache (ruling out a haemorrhage will allow treatment in the ED or at home, rather than admission to a base hospital), patients with renal colic (kidney stones) (making the diagnosis allows treatment in the ED and discharge home), ruling out pulmonary embolism (clots in the lung) in cases of shortness of breath (again allowing ongoing treatment in the ED in many cases), and differentiation of acute abdominal pain to determine if admission to an inpatient surgical service is required. The third context for CT scans is during an emergency in which the patient is in a critical state, and the reasons for their altered consciousness, respiratory failure or shock need to be defined so that the right emergency treatment can be provided. In many EDs a CT of this sort will determine the need for immediate intervention, such as surgery. In Lakes District Hospital's case some on-site interventions might be mandated by the results of a CT in such circumstances, but more often a CT in the context of a life-threatening emergency would inform the speed and nature of transfer (road or air, nurse or doctor, and so on) and best destination (neurosurgical service or general surgical service, for example).
Note that outpatient CT scans can be classified as 'urgent' if needed within days; however, for the purpose of this section, urgent and emergency CT scans are those performed within hours to minutes of a patient's presentation to ED.

Due to the presence of a busy ED and the nature of the case-mix presenting to Lakes District Hospital (including a relatively high volume of trauma), Lakes District Hospital does, and will increasingly, have higher numbers of patients in the urgent and emergency contexts of CT scan use. For the emergency category of patients benefiting from a CT scan the substantive argument for a CT scanner at Lakes District Hospital relates to patient safety. For the urgent category the arguments relate to safety, convenience and efficiency: convenience and efficiency gains are due to a reduced need to transfer patients out of the region. Acute transfers not only tie up an ambulance for a five-hour road trip but also require Lakes District Hospital to supply a transfer nurse for the duration. Both of these elements over time entail substantive costs to the health system. Importantly, having a CT scanner does not mean that all patients can then be treated at Lakes District Hospital or Dunstan Hospital, as some patients will still require transfer for surgical or more involved diagnosis and treatment at Southland or Dunedin Hospital. However, such transfers will be better directed to the most appropriate teams.

As already noted in Section 4.2, National Health Board modelling on the acute node hospital also supports a facility such as Lakes District Hospital providing assessment, diagnostic and stabilisation services, including CT scanning (with remote reading).

While Dunstan Hospital can similarly argue for a CT scanner on site, the distribution of cases benefiting from CT scanning in the three contexts of urgency for the scan and the greater distance from the base hospital would likely favour more urgent access to the CT scanner at the Lakes District Hospital site.

The economic viability of having a CT scanner should be segmented by ensuring there is private and public use of the CT scanner at Lakes District Hospital. The development of the health campus over the next 12–24 months will attract a number of private health providers and services whose services will be enhanced with access to CT. For example other providers locating to the hospital site providing general practice services and private outpatient clinics could access the CT scanner for diagnostic support. This has the potential to bring in ACC funded activity, as well as funding via private health insurance (for New Zealanders or those with travel insurance from overseas).

The level of diagnostic CT scanning will need to be discussed and agreed with Lakes District Hospital clinicians. It is not proposed at this stage that interventional radiology requiring the presence of an onsite radiologist is part of the initial service.

Various models of CTs are available at variable costs, dependent on make and model. This would also need to be discussed and confirmed with clinicians and the SDHB to ensure the type of CT is appropriate for the level of service being proposed.

Regional Implications

The Panel is aware that Dunstan Hospital has been progressing with the SDHB a case for the establishment of a CT at Dunstan Hospital. The Panel understands that the rationale for a CT scanner at Dunstan Hospital is similar to the rationale made here for a CT scanner at Lakes District Hospital. It is very clear that there is only need for a single CT scanner across the Central Otago region and not for one in each site.

The Panel is also cognisant that the development of a CT scanner in the Central Otago / Lakes District will marginally impact the volume of activity being provided for CT at Southland and Dunedin Hospitals, but is not sufficient to threaten the viability of these services. Both the Wakatipu Basin and Dunstan area are expected to be the future growth areas of the SDHB, so this is more about providing services where future population growth will occur.

Consolidation of Diagnostic Support Services on Lakes District Hospital campus
Consistent with the Panel's recommendation to develop a health campus at Lakes District Hospital, there is real opportunity to reduce duplication and to further enhance diagnostic services (including radiology and laboratory services) by consolidating these services on a single site. Currently patients have very good access to radiology (plain film X-ray) and laboratory services: these services are available 24/7 at Lakes District Hospital and during the general opening hours of general practice. More complex radiological services, as already discussed, are out of the region.

There is currently some duplication in the system and a lack of IT connectivity between Lakes District Hospital services and general practice, particularly for radiology services, which are provided by two different service providers. Currently doctors at Lakes District Hospital and Queenstown Medical Centre are unable to read each others' plain film results, but both have Picture Archiving and Communication System PACS capability. The way that services are currently configured also results in patients having to travel between Lakes District Hospital and Queenstown Medical Centre for certain procedures. Currently an inpatient who requires an ultrasound will be transported from Lakes District Hospital to Queenstown Medical Centre via ambulance, as there is no diagnostic ultrasound service at Lakes District Hospital.

There is real opportunity for some cooperation and coordination of services and the development of a comprehensive master site plan (as already referenced). Sensible collocating of services would reduce duplication and improve patient access to services. The Panel acknowledges there are different commercial interests that may drive the current service configuration, necessitating negotiation and agreement of any future changes.

4.8 Governance

Panel Recommendations:

19. The SDHB retains governance of Lakes District Hospital, including the funding and provision of health services.

20. Queenstown Lakes District Council, in consultation with the Wakatipu Health Trust and Wakatipu Health Governance Reference Group, establishes a Community Reference Group.

21. The SDHB commits to engaging with the Community Reference Group early in the planning of any significant changes to clinical services.

The recommendations in this section are reliant on the SDHB adopting the whole package of recommendations and demonstrating a commitment to implementing them.

Background

The governance of health services in the Wakatipu Basin, and more specifically Lakes District Hospital, has been a key consideration for the Panel throughout the review process. Much of the concern regarding the governance of the Lakes District Hospital comes back to the community's lack of trust and confidence in the SDHB to deliver appropriate health services. The community has also heard from the SDHB through a recent engagement processes that health services in Queenstown may change to an IFHC model, which would involve changing the access arrangements to the ED (including user part charges) while bringing a wider range of health services onto a single campus. This proposal is an ongoing concern for the community.

In the Wakatipu Basin the Wakatipu Health Trust is an independent, not-for–profit, Queenstown-based, registered charitable trust established in 2003. The initial purpose of the Trust was to obtain funding from the Central Lakes Trust for the purchase of capital equipment for the Lakes District Hospital, in a way that allowed ownership of this equipment to remain vested in the community, independent of the SDHB. More recently the

Trust developed its role as an overarching health body responsible for improving public health facilities in the Wakatipu Basin. It is also actively involved in strategic lobbying and advocacy on behalf of the community and working to drive a number of health reforms and improvements to secondary health services. It remains entirely independent from any DHB.[38] The Wakatipu Health Trust is a strong local advocate for the governance of health services in the region to be managed by the community.

In September the SDHB asked the mayor of Queenstown to establish a group to explore local governance options for health services in the region and to make recommendations to the SDHB. The Wakatipu Health Governance Reference Group was subsequently established, and started a process of consulting with the community on governance options for managing health services in the region. This work has culminated in the release of a draft document which is currently being considered by the community recommending the establishment of the Wakatipu Community Health Board as the proposed governance structure for Lakes District Hospital. Further consideration of this proposal is on hold while the National Health Board completed this review process.

In considering the governance issue the Panel paid particular attention to neighbouring Central Otago rural hospital facilities: most are governed by a trust for either the provision of services, the facilities or in some cases for both. Dunstan Hospital is one example of a hospital facility run by a rural trust, and is the closest facility to Lakes District Hospital. The Trust is operated by Central Otago Health Services Limited. It operates 24 funded beds, has 4.8 medical FTEs and a total staff of 120 and provides over 20 outpatient services. The facility does not have a walk-in ED: patients require a GP referral or ambulance delivery for access to inpatient services. It does not provide maternity or aged residential care beds. The Trust holds the service and funding contracts with SDHB and ACC, employs all staff and leases the hospital premises from the DHB. Capital expenditure for large items comes from community grants and fund-raising. For the 2009/2010 year the net operating position was a deficit of $51,820. The majority of the funding received is from SDHB and ACC, and includes $245,000 from donations and the Friends of Dunstan.[39]

Currently governance for the Lakes District Hospital and for other health services in the Wakatipu Basin sits with the SDHB, which is both the funder and provider of health services. This is a typical and common arrangement for DHBs around the country, which may have multiple facilities and hospitals within their geographical boundaries. Management of Lakes District Hospital is provided through a hospital manager who reports to the general manager of the medical division at Southland Hospital.

Community Perspectives

Consultation with the community revealed general support for some sort of community voice in how health services should be provided, whether through a trust arrangement or some other process. The community remains deeply concerned that health services are at risk in Queenstown and that there is the intention to put in place similar arrangements to Dunstan, where the community does not have access to a publicly funded ED.

There has also been comment from the community that some of the trusts in the region are struggling financially. Dunstan Hospital, for example, in its 2009/2010 financial year reported

[38] See www.whtrust.co.nz (accessed 26 August 2011).
[39] Central Otago Health Inc. 2010. *Annual Report*. Clyde: Central Otago Health Inc.

a $50,000 deficit, as noted above, and relies on community fund-raising. Further, The Panel is aware of some clinical staff agreeing to pay reductions to manage and control costs.

Advocates for local control feel that governance of the Lakes District Hospital would enable greater contributions from the community for capital assets such as a CT scanner or other expensive capital items. No matter what governance arrangement is put in place, the community recognises that it has a part to play in supporting and enhancing health services in the region.

Panel Perspective

The Panel has considered the views, concerns and opinions raised by the many stakeholders with an interest in the governance of health services in the Wakatipu Basin. The Panel's conclusion is that the SDHB should retain ownership and governance of health services in the region. The key reasons for this decision are as follows.

- In the Panel's view it seemed counter-intuitive to devolve responsibility for the operation of Lakes District Hospital when every effort was being made to implement better, more efficient and coordinated regional provision of health services.
- The recent merger of the Otago and Southland DHBs should be given the opportunity to bed down and deliver on the promises of unification. The SDHB needs to provide leadership in the provision of services across the whole region. Fragmentation at a local level has the potential to undermine the concept.
- The Panel is concerned that an over-reliance on community funding could place an unfair financial burden on the citizens of the Wakatipu Basin and run the risk of a reduction of core health services in the region. The SDHB has an obligation not only to fund health services but also to ensure they are delivered equitably. Devolving delivery to a trust absolves the DHB of this direct responsibility and allows it to isolate itself as funder. In a fiscally constrained environment this could place unnecessary financial limitations on a trust.
- Trusts in themselves do not necessarily result in improved services for patients. Arrangements for access to health services across the rural hospital trusts in Central Otago are different, with variable access to ED / acute services and different user-pays requirements dependent on the access arrangements to acute services.
- One solution does not fit all. While acknowledging the strong community ownership at Dunstan and in other regions, the Panel observation is that the Queenstown community is diverse and that there is a broad spectrum of opinion without necessarily any common ground. This is reflected in the need for the National Health Board to intervene to try to resolve long-standing differences. Is this an appropriate environment for community ownership of public health services?

The Panel therefore recommends that a Community Reference Group is established by the QLDC in consultation with the Wakatipu Health Trust and Wakatipu Health Governance Reference Group. The Panel supports the membership of the Community Reference Group being up to seven members including the chair. Membership of the group at a minimum needs to include one Council representative (chair), one primary care clinician, one secondary care clinician, at least two community representatives and an SDHB representative with sufficient delegation to speak for the DHB's interests. The Panel proposes this is initially for a fixed tenure of 24 months, to determine the effectiveness of the reference group. A key function of the group will be to ensure the SDHB delivers on the range of recommendations from this process and provides input into the emerging model of

care as it develops over the next 12–24 months. The Panel also proposes that the Community Reference Group has a relationship with the tier 2 manager and the SDHB, and that the Community Reference Group is fully consulted on any significant service changes being proposed by the SDHB.

Section Five: Implementing Change

The long-term success of this review will depend on how effectively the changes proposed in this report are implemented by the SDHB. Implementation is critical to move the Wakatipu Basin forward after years of uncertainty and to start the process of building trust and confidence between clinicians and between the community and the SDHB. This will also provide a basis for all other providers to plan their future service developments.

The SDHB is responsible for the implementation of this package of recommendations, and it will be important that the SDHB show leadership and a strong presence in the region to advance this range of initiatives. The National Health Board will continue to support the implementation process to ensure that the population of the Wakatipu Basin receives the benefits from this process.

The Panel has identified in the following tables the range of actions from this report that need to be implemented, and has proposed short-term, medium-term and long-term timeframes. The Panel would expect the SDHB to work with the community and health providers to develop this programme of work over the coming months.

It is anticipated that the Community Reference Group will play a key role in keeping this programme of work on track and ensuring that the SDHB delivers on these commitments.

Short-term (0–6 months: September 2011 –February 2012)

Action	**Completed by**
1. SDHB delegates a tier 2 manager of the SDHB Executive Team to have responsibility for the Central / Otago Lakes District	October 2011
2. QLDC establishes a Community Reference Group, agreeing on terms of reference with the SDHB	November 2011
3. SDHB facilitates through an independent chair a clinical services forum for ongoing dialogue on service provision and planning for the Wakatipu Basin	November 2011
4. SDHB initiates discussions with hospital clinicians and ASMS regarding minimum rosters and use of registrars as part of the workforce	October 2011
5. SDHB reviews outpatient services at Lakes District Hospital and develops an implementation plan for repatriation of more specialities to Lakes District Hospital	December 2011
6. SDHB resolves acute patient transfer issues between aged residential care and ED at Lakes District Hospital.	October 2011
7. SDHB initiates discussions with aged residential care and hospice providers, and the Community Reference Group regarding options for increased aged residential care and palliative care capacity in the region	January 2012
8. SDHB enters into discussion with the Glenorchy population confirming continued visiting nurse services to the region	October 2011

Medium-term (6–12 months: March–August 2012)

Action	Completed by
1. SDHB completes discussions with Otago University on opportunities for the development of a centre of excellence, with an agreed action plan	April 2012
2. SDHB commences planning with the Community Reference Group and clinical services forum on options for a health campus at the Lakes District Hospital site	March 2012
3. SDHB develops a business case for the provision of a CT scanner, including funding and financing options and consideration of action 2 above	May 2012
4. SDHB extends an open invitation to appropriate health providers to relocate to the Lakes District Hospital site, including diagnostic services as part of an agreed site master plan	August 2012
5. SDHB develops an agreed implementation plan for the inclusion of registrars as part of the medical workforce	April 2012
6. SDHB implements the plan for increasing aged residential care capacity and palliative care	June 2012

Long-term (12 months – ongoing: from August 2012)

Actions	Completed by
1. SDHB develops and implements a clinical services programme including clinical pathways across the whole region	Ongoing
2. The clinical services forum (in conjunction with professional bodies) develops options for expanding the breadth of services offered by the medical and nursing workforce, including the development of special interests	Ongoing

Section Six: Appendices

Appendix 1: Terms of Reference Wakatipu

Introduction

1. The Southern DHB has asked the National Health Board to lead a process to develop accelerated planning for future health care services for the people of the Wakatipu basin.

2. The National Health Board has established a Wakatipu Health Services Expert Panel ('the Panel'), with three members who between them have primary and secondary care and consumer expertise.

3. The purpose of the Panel is to provide advice to the Board of Southern DHB on the configuration of clinically and financially sustainable, safe, high quality integrated health services in the Wakatipu. This process mirrors the successful process followed by the Neurosurgery Panel in 2010.

4. The Panel is to consider the clinical and financial sustainability of primary and secondary health services, including integrating care for improved patient experience and health outcomes; supporting workforce training and development; and effective access to other hospital clinical specialties and support services.

Background

5. Over the past two years there has been a series of public documents and consultations on the future of health services in the Wakatipu basin, including a review of hospital capacity and a proposal to establish an integrated family health centre. Despite several consultation processes there is not yet a consensus view among primary care clinicians, secondary care clinicians, the community and the DHB on the most appropriate future configuration of primary and secondary services.

6. Southern DHB has decided that an independent approach is most likely to ensure public confidence and help reach such a consensus, building on the work undertaken during the past two years, and has invited the National Health Board to lead this process.

Mandate

7. The mandate of the Panel is to provide the Board of Southern DHB with clear recommendations on the desired medium-term service configuration for integrated community and hospital-based services, and how to implement this. This is likely to cover all issues relevant to the effective delivery of services including both the optimal structure and governance of health services in the Wakatipu.

Provision of Advice to the Board of Southern DHB

8. The Panel will provide its advice to the Board of Southern DHB, in the form of a report covering the areas defined in the Panel mandate.

9. The Panel will provide its advice for consideration at the Board's meeting on 5 August 2011.

10. The Panel will provide Southern DHB with a draft report for the purpose of checking accuracy and fact within a period of three working days. The draft report will be provided to the DHB in confidence.

11. Should the Panel fail to reach a consensus, the Report should include the Panel's main recommendations and identify key points of difference among the Panel members.

Decision Making Process

12. The Panel's Report will be given to the Board of Southern DHB. The Southern DHB Board will make a decision following the Panel's advice.

13. The National Health Board will publish the advice of the Panel when the report is completed.

Membership of the Panel

14. The Panel comprises:
    - Dr Peter Foley, Independent Chair; immediate past Chairman of the New Zealand Medical Association, current Deputy Chair of the NZ Health Quality & Safety Commission, and the Hawke's Bay Chief Medical Officer – Primary Care.
    - Dr Angela Pitchford, Emergency Physician; current Clinical Director of the Emergency Department of Christchurch Hospital, Chair of the Clinical Services Group and a member of the Christchurch Hospital Governance Committee. She is a Member of the NZ RACS Trauma Committee and holds a Fellowship from the Australasian College for Emergency Medicine.
    - David Russell, non-clinical member; consumer rights advocate and former head of Consumer New Zealand who is a member of several boards and groups as a representative of consumer rights. David also served on the recent Neurosurgery Panel.

15. Angela Pitchford is unfortunately not available until the workshops begin in July – the Panel will be joined by Professor Mike Ardagh, Emergency Physician, Professor of Emergency Medicine, Christchurch School of Medicine and Health Sciences until that time.

Role of the Chair

16. The Panel Chair is responsible for the following:
    - Overseeing and chairing meetings
    - Coordinating the work of the Panel and delivery of the final report

- Facilitating discussion among members
- Right of decision on co-opted members or invited guests
- Designated spokesperson for the media if required.

Responsibilities of members

17. Meetings of the Panel may be conducted face to face, by videoconference or teleconference. Panel members are expected to undertake work between, and in preparation for, the meetings to ensure the progress of the Panel's work.

18. Members have a responsibility to offer independent and objective advice. Other responsibilities include:
    - being available and prepared to participate in meetings of the panel, with concerned parties and representatives of the public
    - considering information that is relevant to the Panel's mandate
    - sourcing the information the Panel must or may use in reaching its conclusions, including the views of relevant stakeholders and specialist clinical or other advice
    - consideration of the Government's policies and objectives will guide the Panel's analysis
    - the need to respect confidentiality.

Access to information and support

19. The Panel will have access to the information gathered by previous working groups considering health services in the Wakatipu basin, and will be able to interview interested parties at its discretion. The Panel will also be able to request additional information or analysis from Southern DHB, from the Ministry of Health, or from other parties.

20. The National Health Board, Ministry of Health will provide secretariat, logistical, analytical, communication and financial support for the Panel.

Issues, conflicts and risk resolution

21. Issues and potential conflicts or risks will be identified and documented by Panel members and escalated to the Chair who will raise such issues with the Deputy National Director, National Health Board accordingly.

22. The Panel shall maintain a register of interests. The Panel Chair shall notify the Deputy National Director, National Health Board of any potential conflict of interest that he/she deems significant. Management of any conflict of interests will be in line with accepted public sector standards.

Travel and expenses

23. The Director-General of Health will determine how remuneration, travelling allowances and expenses for Panel members are to be met.

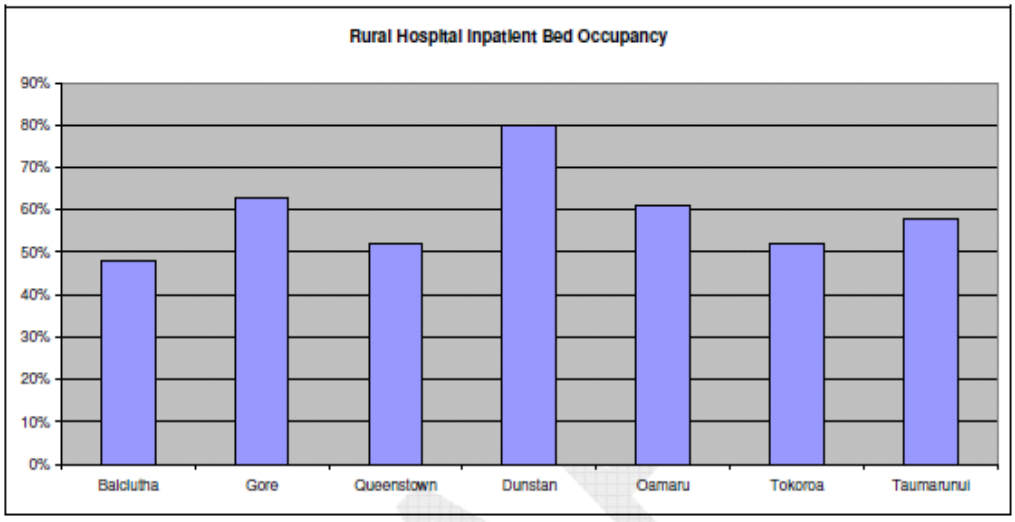
Appendix 2: Timeline of Events Leading to the Panel's Appointment

Timeframe	Development	Notes
October 2009	Cranleigh Report	Independent assessment of rural secondary health services with an emphasis on service access, equity and clinical and financial sustainability commissioned by Southland DHB
March 2010	Public consultation on the hospital capacity review	Consulting the public of the Wakatipu region on the Southland DHB's proposal for an IFHC
March 2010–April 2011	Concerns raised by the Wakatipu Health Trust	Regarding the proposed model of care in the Cranleigh Report
September 2010	Concerns raised by ASMS	Regarding their members not being sufficiently involved in the development of this proposal, and also the proposal by the DHB to reduce swing-shift medical officers
September 2010	Wakatipu Clinical Advisory Group established	To review the proposed clinical model of care and make recommendations to the SDHB chief executive officer
October 2010	Wakatipu Health Governance Reference Group established	Established in response to SDHB chief executive officer writing to the mayor of QLDC seeking advice on the range of organisational options for local governance of Wakatipu health services
December 2010	Wakatipu Clinical Advisory Group Report	Provided clinical advice on the Cranleigh model of care and other potential models in terms of cost-effectiveness and clinical service sustainability
March 2011	SDHB consults with staff at Lakes District Hospital and ASMS	To establish whether staff had any serious or professional concerns with a view to resolution before final decision
April 2011	Public meeting	Held by SDHB to explain the rationale and implications of the IFHC proposal more fully
May 2011	Wakatipu Health Governance Reference Group consults on its proposed community governance model	The proposal advocates for community-run supervision of health services open for public consultation followed by consideration by SDHB in July 2011
May 2011	National Health Board and SDHB meet	Agreement that expert panel will be appointed to develop and reach agreement on a model of care
May 2011	All further decisions regarding Lakes District Hospital and IFHC development put on hold subject to the outcome of the findings of the Expert Panel	
June 2011	ASMS releases its report *Health Dialogue: 'A Public Hospital for 2026: Queenstown'*	
May–August 2011	Expert panel is appointed and initiates the Wakatipu Health Services Review.	

Appendix 3: Extracts from the Executive Summary of the Cranleigh Health Report 2009[40]

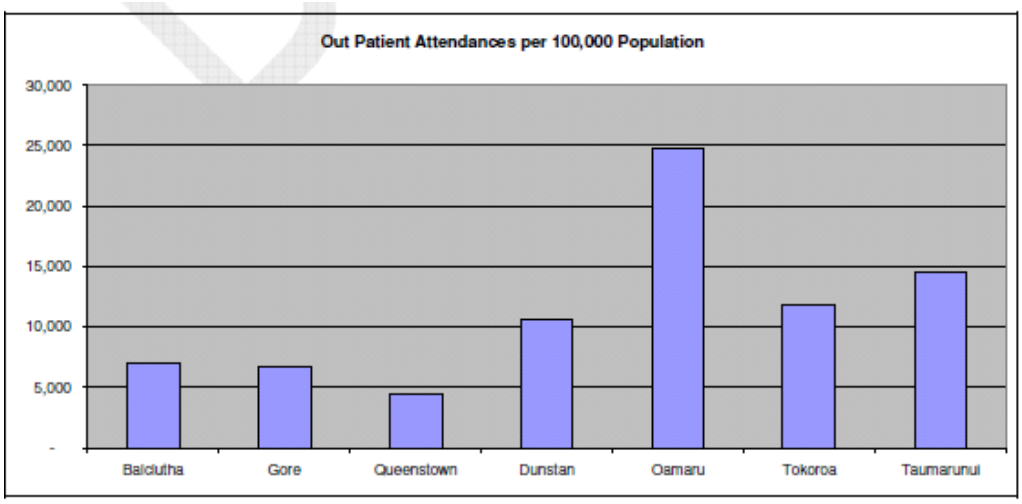
The current service features noted in the Cranleigh report included the following.

- Nearly half the services (inpatient, day patient, outpatient and ED) received by the populations of Clutha, Waitaki, Gore, Central Otago and Queenstown Lakes are delivered at base hospitals in Dunedin or Invercargill. The exception is non-major trauma ED services, which are generally accessed locally.
- There are varying levels of general practitioner presence in all areas, with Central Otago and Oamaru being the only areas where general practitioners offer a comprehensive 24-hour service.
- Use of inpatient rural hospital beds is generally low with the exception of Dunstan, which has an 80 percent occupancy rate (compared to urban hospitals, even this is low). The figure below shows occupancy levels for all rural hospitals. Occupancy has been calculated using total certified beds rather than public funded beds. Tokoroa and Taumarunui hospitals have been used for comparison purposes.

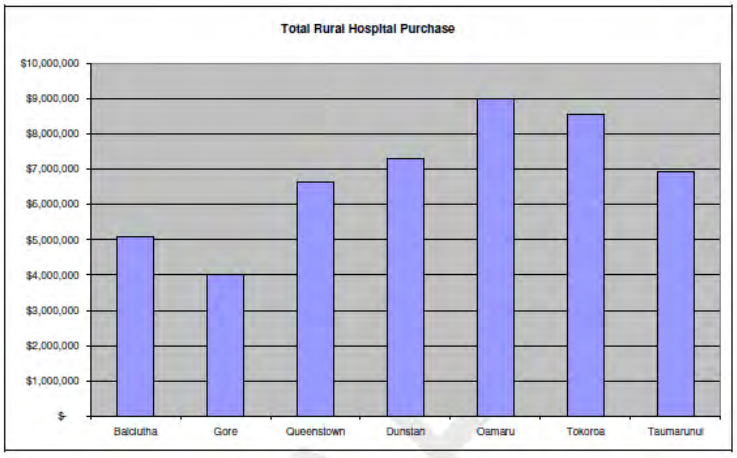


- Hospitals are generally around 10 years old and are well equipped. Lakes District Hospital is older but well maintained, while the Ranfurly facility dates from the 1930s.
- Average lengths of stay are within expected ranges of 2.8 to 5.1 days.
- There is good access to the critical clinical services of laboratory, radiology and pharmacy.
- A wide range of outpatient services are offered but, with the exception of Oamaru, these provide a low volume of service. The following figure shows outpatient volumes for all rural hospitals.

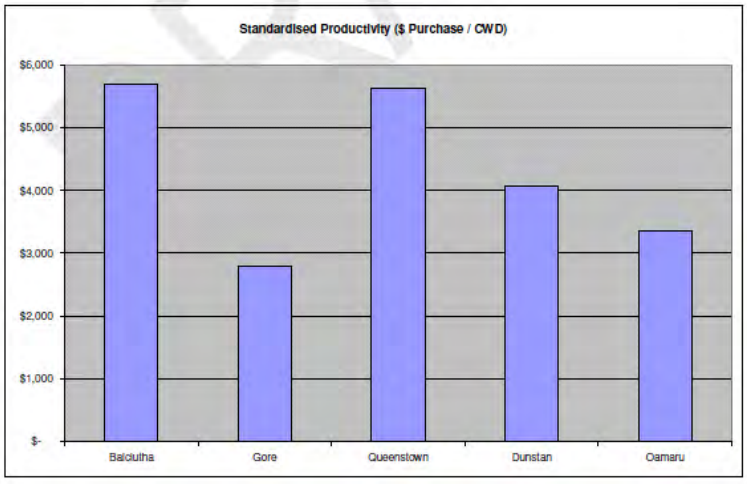
[40] Cranleigh Health. 2009. *Otago Southland District Health Boards Hospital Capacity Review.* Auckland: Cranleigh Health, p. 7.



- Community services are consistent with a range of allied health, nursing and other support services. There is significant variation in the volume of services delivered between hospitals.
- Ambulatory sensitive hospitalisations have been identified for admissions, showing that each hospital has opportunities to reduce inpatient, day patient and bed day volumes.
- Measuring and understanding health service delivery across a number of rural hospitals is difficult given their respective differences, which include:
  - extent of isolation
  - population demography and epidemiology
  - service volumes
  - service configuration and staffing levels.
- However, in undertaking a comparative analysis of rural hospitals, a group of common indicators was used. Wherever possible, these indicators were adjusted by population and age, which enabled the differences between hospitals to be taken into account and comparative measures to be assessed.
- Findings from the comparative analysis included the following.
  - Dunstan Hospital has the highest discharge numbers per capita (for their catchment) and Queenstown the lowest.
  - Oamaru has the largest volume of beds per capita, while Balclutha has the least.
  - Gore has the highest volume by population of ED attendances, followed by Oamaru and Queenstown. However, both Dunstan and Balclutha see ED patients in much smaller volumes, which is reflective of their service delivery models.
  - A higher number of Triage Category (TC) 4 and 5 patients than TC 2 and 3 are seen in rural EDs.
  - Oamaru has the highest purchase per capita for aged care beds and pharmaceuticals.
  - Gore Hospital has the lowest level of total rural hospital funding, while Oamaru has the highest. The following figure shows SDHB funding for each rural hospital.



The figure below illustrates that by applying a case weighted discharges methodology to hospital outputs, including inpatients, day patients, ED and outpatients, Gore demonstrates the lowest cost per CWD, while Balclutha and Queenstown present the highest costs.



A number of trends relevant to regional service planning were also noted in the report: they highlight some of the planning challenges facing rural hospitals. The following points are extracts.

- *Rural health services have been constantly under review and, in our opinion, this will not cease until long term funding arrangements based on best practice are in place between Rural Hospitals and the funder. These should be based on a cost model using best available practices in the OSDHB region.*
- *There is significant inconsistency in what is funded, where and when (e.g. scope and term), which has led to fragmentation of service provision in rural Southland and Otago.*
- *Currently, Rural Hospitals have a number of revenue streams other than OSDHB contracts (e.g. ACC, private sector and subleasing). These sources of income are important for the sustainability of the Rural Trusts.*
- *Artificial boundaries between primary and secondary purchasing and provision lead to inefficiencies in both cost and services for smaller rural populations.*
- *Within OSDHB there are several examples of innovation and good practice in service delivery but often these are not consistently shared or adopted throughout the DHB.*

- *Economies of scale are not possible in rural communities and, together with workforce issues, make delivery of healthcare to remote areas difficult and often tenuous.*
- *The main service growth areas for OSDHB will be in treating diseases of the elderly, as the percentage of over 75 year olds in the population continues to increase. Services will need to be targeted to respond to this demand.*
- *Visitor numbers, particularly to Queenstown Lakes, Central Otago and Waitaki, will increase over time but are not a major driver of health need.*
- *Implementation of new local travel and transport models will be needed to reduce non-emergency travel.*
- *Based on current utilisation rates and a reduction in ASH events, bed numbers in SDHB Rural Hospitals are adequate until 2026.*

Appendix 4 : Summary of Feedback from the Community

The following provides a summary of feedback from the community, collected through drop-in centres, public meetings and one-to-one interviews.

Theme	**Feedback**
Hospital services	• Support for retaining Lakes District Hospital facility and further expansion of aged residential care facility onto existing DHB-owned land. • Hospital site could better utilised. There are other specialists in the area that could be provide publicly funded services in the hospital. • Limited outpatient services are provided in the region, requiring patients to travel to Southland Hospital. • Solution for health services needs to be evolutionary not revolutionary. • Where better to recuperate than on a lake front?
ED services	• The ED needs to be retained at Lakes District Hospital. • If there are car accidents, ski accidents etc then the ED is robust, with very good doctors capable of stabilising patients. • Because Queenstown is land-locked by mountains it needs an ED.
Lakes District Hospital facility	• The hospital has been assessed by an architect (supported by the Wakatipu Health Trust) and is structurally sound. Positive features include the heating system and accessibility of all services in the subfloor of the hospital. • Counter to this view, the Panel has also heard that the heating system is expensive to run and inefficient. • The building has been future-proofed for further development.
IFHC	• The community does not understand what an IFHC is and what it will mean for them. • The community does not like the idea of the IFHC as previously presented, but is willing to consider better integration of services. • Concern about any new integrated facilities front door being controlled by a private GP business – seen as a conflict of interest. • Any front door needs to be managed by someone independent to the DHB or general practice. There are also social factors and financial factors to consider when determining which service a patient should access.
Costs of seeing your doctor	• While the clinical service received by primary care is very good the costs of daytime visits are high, especially for A&M and after-hours services. • Can the tourist population not be used to off-set charges and encourage new services in Queenstown?
Funding of health services	• Major breakdown to the community as far as communication and trust are concerned with the SDHB. • Where is the health funding going and what is it being spent on? • Answering the funding queries is crucial to public acceptance of any solution. • Does Queenstown get allocated enough of its share of ACC funding given the incidence of accident and injury from adventure tourism? • Wakatipu has much larger numbers than PBF suggests. • Fastest growing area in the southern hemisphere: plans need to be made for the future and not for yesterday.
Transport Transfers	• Example given of patients being discharged from Southland Hospital at 9pm and being expected to get home under their own steam • Example of patient who had a heart attack who was assessed at Lakes District Hospital, transferred to Invercargill then Dunedin Hospital. • Example of patient who had to travel to Southland Hospital for chemotherapy when the service was available one hour down the road at Dunstan.
Governance	• Need to get the governance of the Lakes District Hospital sorted first. • The Wakatipu Health Trust should look after the hospital.

General practice	• The GPs push themselves too far – beyond what they are trained to do because of the commercial imperative. • If a child breaks their leg up the mountain they will be sent to Queenstown Medical Centre A&M, which is not fair as they should be able to access the ED. • No continuity of care: all of the GPs with the exception of two are part-time.
SDHB	• The way that the DHB presented the proposal was poor and the community were offended by the way the DHB tried to retro-fit the system. • The DHB has taken a National government position without due concern for how this will work in Queenstown.
Tourism	• Community does not believe that tourists should be able to access free health care in New Zealand. ACC should be for New Zealanders only. • If something goes wrong with the health system in Queenstown then tourism will be in trouble. People will not travel to a place that they do not feel safe and have good access to health services.
South American population in Queenstown	• Large number of South Americans in Queenstown who are not entitled to health services until they have been in the country for more than 24 months. • Two groups: those with residency and those awaiting residency. • Have to pay casual rates for all primary care visits. • Often access Mountain Lake Medical Centre, who set realistic fees.
Patient experiences	• The Panel heard many personal stories about patient journeys and how distance and timing is often an avoidable issue for both patients and their families.
Mental health	• People are shipped out of the region to Dunedin, so patients do not have the opportunity to be close to family. • Need an improved service in the central region (Queenstown, Lakes, Central Otago).
Access to health services	• Community-based services should be available and accessible to all. Queenstown has lost a lot of community-based services • Community needs to be educated on how health services should be used and when and where to access what. • Young mothers will go to a base hospital for deliveries. There should be a wider skill mix so that mothers can stay in their own town where they are most comfortable and have their family with them.
Aged care	• Needs a purpose-built elderly care facility with a secure dementia unit. • No aged care / dementia day facility. This is an urgent need so people do not have to keep going away.
Glenorchy Community Drop-In	• The Medical Centre is a community-funded facility which is serviced by a DHB nurse currently once a week. Monday 10am–12pm in the summer and 11am–1pm in the winter. • The service here is vitally important to individuals who need additional help and can not drive. • Young babies and the elderly would be at risk without a medical centre available in Glenorchy. • No other health services come to Glenorchy. Plunket came last year but there was not enough uptake. The community believe it would work better now because there are more young families and they have formed an informal group. • The nurse coming to Glenorchy is a positive service for the community. • Many people from Glenorchy regularly use the nurse: for example cancer patients, children, patients needing to check blood pressure, etc. • There is a Glenorchy support committee looking to find the best range of services for Glenorchy people.

Appendix 5: Summary of Feedback from Stakeholders and Health Providers

The following provides a summary of feedback from health providers from SDHB, all general practices, Lakes District Hospital, Southland and Dunedin Hospitals, Wakatipu Health Trust, Wakatipu Health Governance Reference Group and ASMS.

Theme	**Feedback**
Health services	• Not a lot broken, not a lot to fix – good GP services in Community and Lakes District Hospital serves community well as a staging post.
Hospital services	• Concern about losing the hospital – loss of control over health services, independence and possibly the hospital land. • Perception that DHB is going to sell the land, which is very valuable. If the hospital site was to move as part of a private development the rent in 10 years would be unaffordable without a very tight commercial arrangement. • If the land was to be sold the community would seek reassurance that the money would stay in Wakatipu. The current hospital site was built with plans for the future as there is room to extend it as needs increase. • The costs of health services in the Wakatipu Basin are unsustainable. The continued increase in expenditure is not viable. • The DHB committed $500,000 for two extra SMOs on an interim basis and the Lakes District Hospital management were tasked with finding a sustainable solution for the medium and long term. • Concerns that it will be difficult to sustain a medical workforce in Wakatipu as the costs of living are too high. • The ongoing uncertainty about SMOs needs to be addressed as this will lead to uncertainty and staff turnover. • There should not be a 'front door gatekeeper' system at Lakes District Hospital or anywhere in New Zealand until the funding between primary and secondary health care is better aligned. This is a national policy issue. • When making a decision about Lakes District Hospital, Southland Hospital must be considered. All services need to be viable across the region. • The current site is limited and the existing facility would have to go. Could not bring in broader services on the footprint proposed by the DHB. • The eight medical FTEs at the hospital could offer a larger range of services. • Concern about any proposal that involved significant restructuring of its members but supportive of a focus on continuous quality improvement and workforce development.
ED services	• It is a 2.5-hour drive to larger hospital, and community has concern about loss of ED services. • If there is to be a gatekeeper the community will resist anything controlled by private business. • Will need to provide a higher level of ED for this population due to the visitor numbers and trauma cases. • The ED has a significant ability to diagnose and hold patients when necessary. • The ED is supported by specialist intensive care unit teams from Dunedin Hospital if required. • Co-location of primary and secondary services would not reduce the overall volumes of patients presenting to ED. • Dunstan will need to redevelop an ED in the years to come. • If there was no ED at Lakes District Hospital then Dunstan, Dunedin and Southland Hospital would come under immense pressure. More risks would be taken to retrieve patients in adverse conditions.

	• The only reason an ED at Lakes District Hospital should be closed is if there is a central government decision and a nationally consistent approach to the provision of emergency care. • The ED should be called something different if under 30,000 attendances. Previously called an assessment and stabilisation unit. • Lakes District Hospital is a great staging post for 24-hour stabilisation. After this patients can be either sent on to Southland/Dunedin Hospital or sent home to recuperate.
Lakes District Hospital facility	• A CT scanner would add value and allow improved management of trauma cases and reduce transfers to Southland Hospital. • In time the hospital in Queenstown could potentially evolve into a full secondary hospital, depending on local population growth and relationships with other hospitals in the region. • The SDHB is looking at further developing Dunstan Hospital in the future; it is the best regional solution as it is geographically central. • There has been a substantial reduction in public outpatient clinics in the Wakatipu over last 10–15 years, and this needs to be addressed • Lakes District Hospital has a good infrastructure for a base hospital. Good bones, ample space for expansion, no costs for the land. The current land should be utilised. • The rural hospital doctors accreditation scheme will fall over if Lakes District Hospital is closed. • An architect (with the support of the Wakatipu Health Trust) has reviewed the existing site and facilities and confirmed that there were no significant impediments with planning an expansion of the current facilities.
Integration	• There needs to be a better communication network / shared services between Lakes District Hospital, Dunstan, Invercargill and Dunedin. • There have not been any significant conversations about Lakes District Hospital and Dunstan collaborating. • Good professional links with Otago Hospital for doctor training and nurses training, so no barriers to date in getting new staff. • The solution for the Wakatipu will set a precedent. • The hospital and primary care facilities should stay separate. There is no public confidence in utilising general practices to be the gatekeeper for primary care at the hospital. • There is lack of goodwill and trust between the clinicians, which is a issue for integrating services. • There should be a focus on breaking down barriers between private and public services with a single-service focus. • The public need to be better informed about how to access the health system. The community are currently confused between the ED, A&M and general practices. Needs a comprehensive communication programme. • General practice (Queenstown Medical Centre) are not keen to risk their business by collocating with an open door ED – unless rules are established and mitigation of these risks is addressed. • Front door of the IFHC should be managed by primary care. • If an IFHC was formed it should have a board to manage the facilities and how the 'gate' was managed. • Queenstown Medical Centre state they are currently losing money running the evening after-hours service, and need to cross-subsidise from other services. • Not convinced IFHC model is right for Wakatipu; no data evidence has been given. The Wakatipu already has levels of integration without collocation. • An IFHC is a government directive which is an experiment and not necessarily applicable to the Wakatipu Basin. There are currently different arrangements for public and private radiology

	services in town, for example X-ray at Lakes District Hospital is reported to Invercargill while X-ray completed privately is reported to Otago Radiology at Dunedin. There is no electronic reporting between Lakes District Hospital and general practice.
Costs of seeing your general practitioner	• The costs of a general practice visit is perceived to be excessive (daytime general practice consultations and A&M) • General practice costs are much higher than in many other parts of the country for example because of lease or rental costs, costs of land which significantly contribute to overall costs of services. • Although the population is generally 'well off' and healthy there is a group which cannot afford health services (for example those in the service industry).
Regional services	• The wider region and the impact on other hospitals in the region need to be considered when considering any change to health services. • Need to consider what is the best model for the Central Otago / Lakes District – need to get clinicians working collaboratively across the region. • Dunstan has embraced the community and has a cohesive group of clinicians with visiting specialists, ED manned by general practitioners, inpatient beds and good relationships with tertiary clinicians. • There is a need for more general surgeons in Southland; this would increase their ability to offer visiting services at Lakes District Hospital. • Any solution for Wakatipu needs to be seen in a regional context consistent with Government policy.
Transport Transfers	• There are significant volumes of acute patients transferred out of the region for care. • St John's is under significant pressure in the region and there can be long delays for transporting patients out of the region due to the backlog of jobs. • Transfers tie up substantive resources – five-hour round trip to Southland Hospital along with use of a transfer nurse from Lakes District Hospital for each transfer. • Hospital transfers by helicopter are expensive. There is the cost of the helicopter, paramedics and if from Dunedin the intensive care unit doctors and the nursing staff to consider. • All Queenstown patients referred for outpatient services to Dunedin Hospital are automatically declined. While there has been a merger of DHBs in name, clinical pathways have not changed and are still based on historical patterns.
Governance	• Wakatipu would benefit if the community had ownership, as there will be more private investment and ownership by community. • Local governance should be considered once the model of care is confirmed. Creating local governance in itself is not a solution. • There should be a trust to run the hospital; they should have a role in the provision of services and the management of the facilities. This will encourage more interest in public / private partnerships. • Dunstan medical officers have had to take a pay cut to keep services viable and to stay within financial parameters. • Governance structure needed to support the agreed model of care. • It is anticipated that there would be more capital investment if a trust had governance of the Hospital. Funders are lined up who would be willing to offer their support for large capital items.
General practice	• The change in the PHO structure has meant reduced services provided by general practice – sexual health, diabetes, asthma. • Queenstown Medical Centre is very well set up and is already an IFHC. It has excellent A&M facilities. • The quality of the clinical care provided by general practitioners is very good but patients often struggle to access a consistent clinician, as many work part-time. • There has been a policy vacuum on supporting the development of primary care

	services. • There are long-standing historical tensions between general practitioners and the hospital clinicians.
SDHB	• There has been a loss of confidence in the DHB with the recent consultation process and mistrust over their intentions. • 'We never see anyone from the SDHB. We have had one visit from planning and funding that we can recall. Nothing has changed for us since the merger of the DHBs.' • 'We have never had an explanation from the CEO as to what is financially unsustainable at Lakes District Hospital. The budget for the hospital is a sham and does not reflect the number of staff (FTE) employed.'
Access to health services	• The Central Otago sites all have very different models of care for acute care and access to the ED. Any decision is going to need a clear rationale about why the Wakatipu gets to be different or why it needs to be the same as other models of care. • There has been no strategic planning for this region considering the population growth expected in the next 10–15 years. • There is a significant population in Queenstown that is outside of the two-hour driving time to the nearest secondary hospital.
Aged care	• There is insufficient access to aged residential care in the region. The rest home is full and HBSSs are variable. • There is limited access to specialist care for older people. • The elderly are moved out of Wakatipu Basin. Aged residential care facilities not being developed due to the cost of land.
Maternity services	• Most births go out of the region. This is mostly patient choice, as they fear complications will not be able to be dealt with locally. • The key issue for the Lakes District Hospital maternity service is the distance from secondary and tertiary services. The closest hospital with full maternity services is two hours away at Southland Hospital. • Due to frequent back-ups with ambulance transfers women sometimes have to wait two hours for transport and then undertake a 2.5-hour drive to get to the Southland maternity unit. • While there are not high numbers of births at Lakes District Hospital, the workload for ante-natal and post-natal care has increased. Midwives currently pick up post-natal care after complications, which takes up considerable resources. Funding should not be based on birthing numbers. • The local midwives want greater support, and would value core registered nurses being regularly available to staff an open maternity ward.
Funding	• The PBF and rural adjustors need to be more transparent so people understand how they are applied.

Appendix 6: Conceptual Models – Acute Node Hospital

Introduction

Early work is under way by the Ministry of Health to explore a long-term nationwide view on future service configurations that balances degree of access with safe / efficient service provision volumes and that is affordable for New Zealand. This view interprets the *Trends in Service Design and Models of Care* report,[41] and considers how to enable clinical and financial sustainability. This nationwide view can then be considered at a regional, sub-regional and local level to develop solutions that can be implemented within communities across New Zealand.

Any decisions regarding the future service delivery configuration for Wakatipu need to be considered within the local and regional circumstances and should not be seen as setting a precedent for the health sector in terms of setting a direction for health service infrastructure for other isolated populations across New Zealand. This information is provided to support the considerations of the Wakatipu Review Panel.

Trends in Models of Care

The key trends in models of care are:

Greater focus on keeping people healthy, preventing illness and injury, better management of long-term conditions and improving quality of life. Greater levels of supported self-care, more care provided in the home, reducing demand for primary care and hospital services and increasing investment in home support

Increase in primary care and community-based services that will support people in their own homes and communities, reduce hospital demand and transfer care to alternative workforces providing lower intensity care. There will be a greater integration of multi-disciplinary teams in community-based settings, for example implementation of IFHCs and Whānau Ora centres as major settings in primary care

Planned access to acute surgical and maternity services and the development of sub-regional and regional clinical networks with larger hospitals to provide safe services, meaning that smaller provincial communities have access to clinical and financially sustainable acute services

The planned provision and consolidation of some specialty services into supra-specialist centres across New Zealand to maintain the critical mass of patient numbers needed for quality of care, and to ensure effective use of small numbers of highly specialised staff.

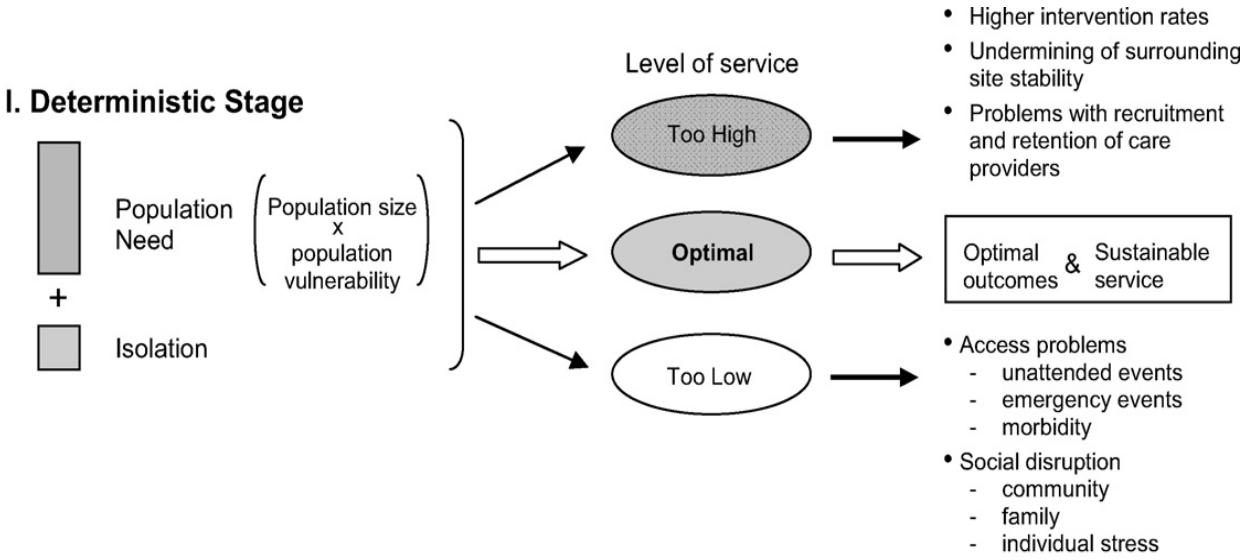
Through the long-term planning model these emerging trends in models of care can then be tempered by the particular nature of the population distribution in New Zealand, as well as population need, which is determined by age, sex, deprivation quintile, ethnicity, birth rate, historical utilisation and local factors.

Long-term Planning

There are two determinants which need to be balanced in developing future service configuration development. These are the degree of access for a catchment population and

[41] Ministry of Health. 2010. *Trends in Service Design and Models of Care*. Wellington: Ministry of Health.

the range of activity required for safe and efficient service provision. For a service to be safe and effective it must be premised on a system that is sustainable for the community, the workforce and within the available technology. It must also be affordable for the public in the long run.
The model below[42] acknowledges these two determinants and underlines the consequences of providing too high or low a level of service for specific populations.



It is possible to vary from the nationwide view, but if access and clinical safety / efficacy criteria are not both satisfied then a compromise is needed. Often that compromise will:

- carry a cost
- necessitate a change in models of care, or
- have health workforce implications.

Determining the appropriate population catchment for clinically safe and effective services for the New Zealand population is part of the work being completed to develop meaningful service planning.

The nationwide analysis has looked at New Zealand's unique population distribution with concentration in three major urban areas, and then scattered distribution across provincial areas with a number of pockets of small concentrations of population some with significant distances.

Evidence base searches for population sizes to sustain safe levels of activity for the workforce, or hospital configurations, focus on specialist services for large populations (greater than 250,000). This evidence base has limited application in the provincial New Zealand setting. Workforce ratios published by specialist colleges also have limited application, as population catchments are greater than 100,000 for most specialists.
Therefore the planning process has developed an approach to evaluating our population distribution and considering the options available when comparisons are made on a nationwide basis.

[42] Grzybowski S, Kornelsen J, Schuurman N. 2009. Planning the optimal level of local maternity service for small rural communities: a systems study in British Columbia. *Health Policy* 92(2–3): 149–57. DOI: 10.1016/j.healthpol.2009.03.007 (accessed 26 August 2011).

To enable this comparison to be made the level of service for a catchment population is evaluated based on the network of services utilised by that population. These service delivery networks include home support and self-care, IFHCs and Whānau Ora centres, local hospitals and major acute / specialised hospitals. The distribution of the network is critical in considering the catchment population as the adjacency of facilities impacts materially on clinical sustainability as populations move to different facilities.

Future Service Configurations

A nationwide view on access to acute surgical services access to services has been used as a marker to identify the relationship between catchment population and service delivery networks across New Zealand. This analysis has shown that most of New Zealand is able to access a 24-hour acute surgical service within 90 minutes of road travel. It has also highlighted groups of isolated populations that are greater than 25,000 people, but are more than 90 minutes from acute surgical services. This distribution creates a demand for an appropriate local service configuration to manage acute access to care.

Among those populations Wakatipu is unique in that it has significant forecasted growth in population. Other populations in New Zealand are declining towards smaller catchment populations, creating significant challenges of reconfiguration.

A possible model of care solution has been developed, referred to as an acute node, for isolated hospitals serving populations of over 25,000 that are generally characterised by a degree of remoteness. The node works in partnership with a neighbouring local or major acute hospital to provide a wider range of hospital services.

Appendix 7: Projected Change in Outpatient Attendances, 2010–2026

The following tables show projected changes in outpatient attendances between 2010 and 2026 by service type for the following hospitals:

- Lakes District Hospital
- Dunstan Hospital
- Gore Hospital
- Clutha Health First.

Lakes District Hospital

Outpatient attendances are expected to increase by 33 percent between 2010 and 2026. The greatest proportionate increases for services with large numbers of attendances are expected in health of older people, podiatry and professional nursing services. The greatest decreases are expected in orthopaedics first attendances and outpatient maternity services.

Projected Change in Outpatient Attendances, 2010–2026

Service	2010	2026	Change 2010–2026	% Change 2010–2026
Blood transfusions – Any health specialty	15	25	10	66.6%
Cardiology – First attendance	1	1	0	6.5%
Colonoscopy – Any health specialty	17	29	12	69.2%
Colonoscopy/gastroscopy – Any health specialty	1	2	1	99.0%
Community services – professional nursing services	2805	5352	2547	90.8%
Dietetics	76	72	-4	-5.7%
Disability support services	89	127	38	42.2%
Emergency department – Level 2	5203	5483	280	5.4%
Emergency department – Level 2 admitted	1035	1263	228	22.0%
Gastroscopy – Any health specialty.	10	19	9	90.0%
General medical – Subsequent attendance	1	1	0	-25.2%
General surgery – Subsequent attendance	112	176	64	57.3%
General surgery – first attendance	52	78	26	50.3%
Health of older people	223	522	299	134.1%
IV Chemotherapy – cancer – Any health specialty	38	74	36	95.2%
IV Chemotherapy – non-cancer – Any health specialty	11	9	-2	-14.6%
Neurology – Subsequent attendance	40	52	12	29.1%
Neurology – First attendance	34	47	13	38.4%
Occupational therapy	104	193	89	85.3%
Orthopaedics – Subsequent attendance	516	885	369	71.5%
Orthopaedics – First attendance	212	183	-29	-13.7%
Other medical	35	78	43	122.4%
Other surgical	7	10	3	42.6%
Outpatient maternity	1913	1664	-249	-13.0%
Paediatric medical outpatient – First attendance	62	79	17	27.0%
Paediatric medical outpatient – Subsequent attendance	195	305	110	56.6%
Physiotherapy	336	561	225	67.0%
Podiatry	123	276	153	124.6%
Social work	154	245	91	59.2%
Speech therapy	134	164	30	22.2%
Total	13554	17974	4420	32.6%

Dunstan Hospital

Outpatient attendances are expected to increase by 50 percent between 2010 and 2026. The greatest proportionate increases for services with large numbers of attendances are expected for cardiology, occupational therapy, health of older people, speech therapy and professional nursing services. The greatest decrease expected is for outpatient maternity services.

Projected Change in Outpatient Attendances, 2010–2026

Service	2010	2026	Change 2010–2026	% Change 2010–2026
Cardiology – First attendance	57	102	45	78.3%
Cardiology – Subsequent attendance	61	103	42	68.5%
Community services – Professional nursing services	9287	14744	5457	58.8%
Dietetics	82	107	25	30.6%
Disability support services	719	1121	402	55.9%
Emergency department – Level 2	835	1073	238	28.5%
Endocrinology – Subsequent attendance	17	21	4	20.7%
Endocrinology – First attendance	7	11	4	59.5%
Gastroenterology – Gastroscopy	69	93	24	35.0%
Gastroenterology – Subsequent attendance	72	83	11	15.0%
Gastroenterology – First attendance	98	124	26	26.6%
General medical – Subsequent attendance	10	12	2	18.6%
General medical First Attendance	55	75	20	35.6%
General surgery – Subsequent attendance	276	391	115	41.8%
General surgery – First Attendance	259	326	67	25.9%
Gynaecology – Subsequent attendance	49	51	2	4.3%
Gynaecology – First Attendance	97	95	-2	-1.7%
Health of older people	102	162	60	59.3%
IV Chemotherapy – cancer – Any health specialty	622	824	202	32.6%
Occupational therapy	695	1120	425	61.1%
Oncology – Subsequent attendance	336	480	144	42.8%
Oncology – First Attendance	40	62	22	54.5%
Ophthalmology – Subsequent attendance	82	110	28	34.5%
Ophthalmology – First attendance	13	18	5	40.9%
Oral chemotherapy oversight – cancer – Any health specialty	260	334	74	28.4%
Orthopaedics – Subsequent attendance	663	972	309	46.6%
Orthopaedics – First attendance	185	274	89	47.9%
Other medical	333	502	169	50.9%
Outpatient maternity	70	45	-25	-35.5%
Paediatric medical outpatient – First attendance	87	105	18	20.4%
Paediatric medical outpatient – Subsequent attendance	145	208	63	43.8%
Physiotherapy	3110	4476	1366	43.9%
Respiratory – Subsequent attendance	15	20	5	32.9%
Respiratory – First attendance	13	21	8	63.8%
Speech therapy	120	191	71	58.9%
Total	18941	28456	9515	50.2%

Gore Hospital

Outpatient attendances are expected to increase by 5 percent between 2010 and 2026. The greatest proportionate increases are expected for 'other medical' services, emergency department level 2 services and paediatric medical outpatient services. The greatest decreases are expected for general surgery and neurology.

Projected Change in Outpatient Attendances, 2010–2026

Service	2010	2026	Change 2010–2026	% Change 2010–2026
Emergency department – Level 2	6061	6342	281	4.6%
Emergency department – Level 2 admitted	265	302	37	13.8%
General surgery – Subsequent attendance	152	146	-6	-4.0%
General surgery – First Attendance	96	92	-4	-4.0%
Neurology – Subsequent attendance	84	77	-7	-8.7%
Neurology – First attendance	65	61	-4	-6.0%
Orthopaedics – Subsequent attendance	51	53	2	3.4%
Orthopaedics – First attendance	73	80	7	9.5%
Other medical	121	146	25	20.5%
Other surgical	1	1	0	-49.8%
Paediatric medical outpatient – First attendance	74	84	10	13.0%
Paediatric medical outpatient – Subsequent attendance	267	294	27	10.2%
Total	7310	7676	366	5.0%

Clutha Health First

Outpatient attendances are expected to increase by just over 10 percent between 2010 and 2026. The greatest proportionate increases for services with large numbers of attendances are expected for paediatric medical outpatient services, oncology / chemotherapy and occupational therapy. The greatest decreases expected are for gynaecology, gastroenterology and general medical services.

Projected Change in Outpatient Attendances, 2010–2026

Service	2010	2026	Change 2010–2026	% Change 2010–2026
Community Services – professional nursing services	5051	5517	466	9.2%
Dietetics	117	126	9	7.4%
Emergency department – Level 2	145	153	8	5.3%
Gastroenterology – Subsequent attendance	73	62	-11	-14.8%
Gastroenterology – First attendance	68	68	0	0.3%
General medical – Subsequent attendance	81	97	16	20.4%
General medical – First attendance	39	35	-4	-11.2%
General surgery – Subsequent attendance	172	177	5	3.0%
General surgery – First attendance	171	167	-4	-2.3%
Gynaecology – Subsequent attendance	86	77	-9	-11.0%
Gynaecology – First attendance	93	74	-19	-20.0%
Health of older people	973	1113	140	14.4%
IV Chemotherapy – cancer – Any health specialty	68	82	14	20.3%
Occupational therapy	763	912	149	19.5%
Oncology – Subsequent attendance	89	123	34	38.3%
Oncology – first attendance	11	14	3	28.1%
Oral chemotherapy oversight – cancer – Any specialty	21	34	13	61.0%
Orthopaedics – Subsequent attendance	120	138	18	15.0%
Orthopaedics – First attendance	133	148	15	11.0%
Other medical	285	333	48	16.9%
Paediatric medical outpatient – First attendance	45	54	9	19.0%
Paediatric medical outpatient – Subsequent attendance	175	249	74	42.5%
Social work	187	174	-13	-6.7%
Total	8966	9926	960	10.7%

Appendix 8: CT volumes for Lakes District Hospital and Dunstan population[43]

	CT Scan Data provided by Southern DHB 2010/11			
	Per Year			Per Week (average based on annual figure)
	Emergency	Outpatient/Other	Total (DHB figures)	Total
Lakes District Hospital	138	313	451	9
Dunstan Hospital	128	756	884	17

	CT Scan Data provided by National Health Board 2010/11 (source from inpatient data only)	
	Per Year	Per Week (average based on annual figure)
	Total (NHB figures)	Total
Lakes District Hospital	260	5
Dunstan Hospital	447	9

	DHB figures	NHB figures
LAKES:DUNSTAN	1 : 1.9	1 : 1.7

NB. These ratios indicate that the figures supplied are proportionately approximately the same.

[43] Data sourced from Dunedin and Southland Hospitals and the National Health Board (inpatient CT scan estimates).