RE Official Information Act request CDHB 10227

I refer to your email, dated 18 November 2019, requesting information under the Official Information Act from Canterbury DHB in relation to the Detailed Business Case and Programme Business Case for the redevelopment of the Christchurch Hospital Campus as mentioned in the CEO update dated 18 November 2019. Specifically:

1. All correspondence from the Clinical Leaders Group, or any correspondence from individual clinicians on behalf of the group, to CDHB management regarding the redevelopment of the Christchurch Hospital campus and the two business cases in 2019 up to the submission of the business cases.

Please refer to Appendix 1 (attached) for correspondence from the Clinical Leaders Group to Canterbury DHB Management and the Board regarding the redevelopment of the Christchurch Hospital Campus and the two business cases in 2019 up to the submission of the business cases.

Note: We have redacted information pursuant to section 9(2)(a) of the Official Information Act i.e. “…to protect the privacy of natural persons, including those deceased”. We have also not included correspondence previously released to Cate Broughton at the Press, CDHB 10139 at the end of July this year, which is available on our website: https://www.cdhb.health.nz/about-us/document-library/?_sft_document_type=official-information-act-response and which you will find relevant to your request.

I trust that this satisfies your interest in this matter.

You may, under section 28(3) of the Official Information Act, seek a review of our decision to withhold information by the Ombudsman. Information about how to make a complaint is available at www.ombudsman.parliament.nz; or Freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the Canterbury DHB website after your receipt of this response.

Yours sincerely

Carolyn Gullery
Executive Director
Planning, Funding & Decision Support
Kathleen Smitheram

From: Rob Ojala  
Sent: Thursday, 11 July 2019 6:31 p.m.  
To: David Metes; Mark Solomon  
Cc: [redacted]@xtra.co.nz  
Subject: FW: Follow-up letter, meeting notes and appendices from meeting between the Minister of Health and Canterbury DHB's CLG  
Attachments: Post-meeting letter, meeting notes [and Appendices 1 & 2] from meeting between Minister of Health and CLG 04-07-19.pdf; Pres for Minister fo Health meeting July 2019 Final.pdf

Kia Ora Te Mark and David,  
[and John by CC as I believe you are on leave]  

We had a constructive meeting with the Minister of Health on the 4th July 2019. This letter and additional information is a follow up to that meeting.  

Kind regards,  

Rob Ojala  
Chair CLG

From: Rob Ojala  
Sent: Thursday, 11 July 2019 6:28 p.m.  
To: 'david.clark@parliament.govt.nz' <david.clark@parliament.govt.nz>  
Cc: [redacted]@parliament.govt.nz  
Subject: Follow-up letter, meeting notes and appendices from meeting between the Minister of Health and Canterbury DHB's CLG  

Dear Dr Clark,  

Please find enclosed a letter from CLG following our meeting with you on the 4th July 2019. I have included some meeting notes [although these are not exhaustive]and associated appendices as a reflection on that meeting – and some additional information to provide further context.  
Also included is a copy of the presentation.  

Yours sincerely  

Rob Ojala  
Chair,  
CDHB Clinical Leaders Group
Dear Minister

Follow-up to your meeting with the Canterbury Clinical Leaders Group

Thank you for taking the time to travel to Christchurch last week to meet with the Clinical Leaders Group.

We are acutely aware of the current pressures and challenges faced by the New Zealand health system. However, there is no other DHB in New Zealand that continues to work in earthquake-damaged, not-fit-for-purpose facilities with staff enduring the ongoing impacts of our country’s largest natural disaster and recent terror event.

As a group of some of your most senior clinical leaders in NZ, we have built strong and trusted relationships with management and the executive team. Further, we have developed a deep engagement with clinical groups across primary and tertiary services. These partnerships are how we have managed to keep services operating in Canterbury for the past 8 years when services in any normal system would have disintegrated. The level of innovation, discretionary effort and use of data to manage patient flow by the hour in our hospitals and our communities is unparalleled. This has been driven by our collective desire over the past 8 years to ensure that the people of Canterbury and the wider regions we serve would not have access to their care compromised.

The lack of understanding and engagement over a number of years by central agencies including the Ministry of Health regarding the health and social impacts on populations following large and ongoing disasters is incomprehensible. It has compromised funding; delayed critical facility decisions; placed every clinical and support team in this DHB under extreme and unrelenting pressure; and has left us continuously picking up the consequences and the consequential insinuations. In truth, it is astounding that 8 years on we still have no pathway forward with the Ministry of Health to deal with earthquake-damaged facilities and to deliver the physical capacity that is required just to sustain services. Regardless of what decisions are now made regarding facilities, service failure is almost inevitable.

The Canterbury Health system is only just continuing to work because of goodwill and enduring relationships that exist in Canterbury.
Minister, we acknowledge that you have inherited a health sector that has been chronically underfunded and many competing capital pressures. However it is clear that the longstanding criticality of Canterbury in the national context seems not to have been fully understood and broader implications of impairment missed. Canterbury has not been the same as every other DHB for over 8 years. This DHB and us, as clinical leaders, have gone to extraordinary lengths to just keep functioning and there has been a total lack of urgency and understanding from the agencies responsible for briefing government. Since we first wrote to you about this issue on 20th July 2018 little about that appears to have changed.

We need urgent and fast-tracked decisions regarding our facilities and an acknowledgement that Canterbury will not be business-as-usual for many years. Without this, it is important that you understand that Canterbury DHB will inevitably and dramatically be placed at risk of serious failure. Given the broad dependencies on our services by other DHBs this will have significant impact on services across the New Zealand health system. We, as clinicians, are not prepared to stand silently by while this happens.

Yours sincerely

Rob Ojala
Chair, CLG

Richard French
Vice Chair, CLG

Greg Robertson
Chief of Surgery

Hector Matthews
Executive Director
Maori and Pacific Health

Clare Doocey
Chief of Child Health

David Gibbs
Chair of Haematology/Oncology Cluster

Heather Gray
DON, Medical & Surgical

David Smyth
Chief of Medicine

Helen Skinner
Chief of Older Persons Health and Rehabilitation
Appendix 1 – Summary notes of meeting held in Christchurch on Thursday 4 July 9, 2019

The Minister of Health, Dr David Clark; Director General of Health, Dr Ashley Bloomfield; Chair of HRPG and CIC Evan Davies and the Clinical Leaders Group [CLG], Canterbury DHB met in on Thursday 4 July.

Key points:

The Clinical Leaders Group acknowledged there was pressure nationally in terms of demand on capital and signals of capacity constraint. With everyone signaling needs what makes this DHB any different?

We have an impending capacity crisis – other centres with capacity issues continue to have options – we have run out of capacity with no flex in the system and no room to move.

- We have managed demand on the hospital different to all other DHBs
  - This is reflected in the lowest rates of ED attendance and admission
  - If we were functioning at the national average we would admit an additional 13,000 patients annually
    - We would need at least 3 more wards now to match this number of patients.
    - Compared with similar DHBs such as Waitāmata and Auckland we would need considerably more than 3 wards due to their higher admission rates.
- We have gone to exceptional lengths to optimise capacity and flow
  - This is reflected in our length of stay [note LOS has AT&R data removed as this is an acute campus]
  - We currently run an extraordinary 183 patients through each bed every year – this was 140 patients just four years ago
- We are managing with fewer buildings
  - 40 buildings have been demolished post-quakes and many staff work in Portacoms
  - Eight buildings on the main campus remain quake-damaged – noting, that other centres are quake-prone – our buildings are damaged.
- Our population has already reached the levels predicted 2024
  - We are 50,000 ahead of government projections
  - Our Maori population is the sixth largest and second fastest growing in NZ.
  - [Not discussed at the meeting but included for information – refer appendix 2]
    - We have the fastest growing paediatric population
    - Our Asian population has increased by 64% [to 62,320 people] – that’s more than the entire population of Napier.
    - Our Pacifica population has also increased by 31% [to 14,460 people] more than the entire population of the Grey District.
- We fail – New Zealand fails.
  We provide care for people from the lower half of North Island and all of the South Island for a number of services.
  - We are the busiest trauma centre in New Zealand and the 5th largest in Australasia.
  - We are the second biggest provider of acute surgery and elective surgery in the country;
Second biggest provider of oncology services

One of only two providers of pediatric oncology, burns, spinal injury services, certain specialist mental health services, paediatric surgery, certain gynecological cancers and a tertiary provider of transplant services, stroke clot retrieval.

The Canterbury Health System has continued to operate because of

- The extraordinary discretionary and ultimately unsustainable efforts of staff
- The strong relationship based on trust and respect between clinicians, management and the executive team
- The strong relationships between primary, secondary and tertiary care providers
- A culture enabling of innovation which has allowed us to respond to the extraordinary challenges in ways that keep the system running to ensure people receive the treatment and care they need.
- Clinicians have an in-depth knowledge of the data, the performance of the entire system including where the pressure points are and where the opportunities lie [and indeed visibility of other centres performance]. Importantly we have a culture of no secrets.
- Hospital avoidance processes have resulted in 34,000 acute attendances being avoided, with people receiving specialised care in a primary care setting [often their own home].

The system

- The system is now brittle – there is no flex or buffer zone.
- We contend that a system facing these challenges would have imploded had it not been for the goodwill and enduring relationships within our health system.
- Our DHB now has the highest sick leave rates after having the lowest only a few years ago.
- 23% of sick leave is unpaid as staff have used all their entitlement but still need to take time off to recover.
- The community are increasingly wanting answers
- Changing plans and services due to delays etc is disruptive and a massive undertaking
- Head room/fat in the system is so wafer thin that any small degradation in service will have a disproportionate impact.
- Clinical leads are very aware of the challenges – and have managed this – but we are now deeply concerned by what we see
- Even with fast track approvals the build programme demonstrates a clear gap between new capacity and demand.
- System failure is inevitable – the degree of failure depends in part on the urgent provision of further capacity as our mitigating measures are exhausted.

Facilities

- Timelines for new facilities are already too late to match demand
- Only one option [Option 1] for the fast track of Towers 3 and 4 is seen as viable
Decanting options to address quake repairs under the elongated ‘Options 2 and 3’ etc are not seen as viable from an operational perspective and will create an even greater capacity shortfall.

Proposals for renovation – Concern, shared by the independent health planners, that renovating existing wards would yield poor results due to the need for a new seismic shear wall and other compliance issues. The result would be:
- Lower bed numbers than current wards, which would be operationally inefficient
- Low number of single rooms <25%
- Low number of ensuites
- Poor ‘line of sight’ and other clinical safety issues i.e. result not fit for purpose.
- Clinical support space squeezed out of the ward

Important to remember that the Acute Services Building [Christchurch Hospital, Hagley] was not a response to the quakes but was in train years prior to replace the outdated Riverside Building

The perception that Canterbury DHB has ‘had its share’—The reality is the new Christchurch Outpatients building, Burwood Hospital and Energy centre have all been funded by the DHB from reserves and insurance proceeds.

The Monro-Kellie Doctrine* – where patients with increasing brain pressure [eg head injury] remain relatively well as the body goes to extraordinary lengths to compensate – but once these mechanisms are overwhelmed, the patient very rapidly deteriorates. They have minutes to live if pressure is not relieved by neurosurgery.

*This concept was highlighted as a metaphor for the current clinical circumstance — seemingly performing well but with the compensatory mechanisms overwhelmed. The signs of system failure are apparent and will progress far more rapidly than in a system that has options.

Poor facilities are negatively and drastically impacting patient care

The current situation is not sustainable as clinical staff make do in not fit for purpose facilities. Clinicians described a number of clinical situation to illustrate the dire state of amenities:
- Infected dialysis patients side-by-side,
- Patients arresting in narrow toilet cubicles who unable to be extracted for resuscitation.
- Cardiac patients funnelling through our cath lab where other DHBs have 4-7 –[and apparently more announced shortly]
- Patients in infectious isolation in six-bedded multi-rooms with only a curtain to segregate them
- Ablutions opening into ward food preparation areas
- The fluent response to the Terrorist event of March 15 was only possible because the DHB is a high performing organisation – but the pressure from other centres to resume normal IDF activities shortly after, was a clear reflection of the impact capacity issues in this DHB have in respect to the national context.

Unsatisfactory communication & bureaucratic obfuscation
• Uncertainty remains about the congruence of the advice to the Minister coming from the DHB relative to other sources
• Extreme frustrations around the protracted campus planning process and the time and money lost in this respect. Importantly the opportunity cost is the quality of patient care which is negatively impacted due to delays. Tower 3 was originally projected at $75m but was deferred as concern about loss of competitive tension with the contractor might result in a $1m penalty – that facility is now thought to cost $150m+
• Lack of sharing information in the campus planning and Business case development – Sapere Demand Report and PWC business case given as examples – the former obtained only after it was released to the news media under the OIA
• A perception that the processes elsewhere have not required the same degree of scrutiny as the process in Canterbury, noting this process has lasted more than 3 years and well in excess of 300 meetings and 5 independent reviews of demand. The cost of clinicians and project team members attending so many meetings – almost one every 3 days with no tangible result is a gross waste of resources.
Appendix 2 – Canterbury’s population

Canterbury 2019 – not Canterbury 2009

• Canterbury was historically less diverse than much of New Zealand, characterised by a well-off, European population

• This historical perception continues to exist among some people: Canterbury’s population remains like it was in 2009. The earthquakes, rebuild and opportunities here have dramatically transformed our physical and socio-cultural environment into a dynamic and diverse place to live. The population is now significantly more diverse in terms of ethnicity, deprivation and health need.

The Population

• Over the past 10 years, Canterbury’s population has grown by 14%, however our population composition has changed considerably

• Our Maori population has increased by 31% (to 53,300)

• Our Pacifica population has increased by 31% (to 14,460)

• Our Asian population has increased by 64% (to 62,320)

• These populations have come with new challenges

![Projections for Canterbury by age group](image)

Canterbury’s population is growing faster than expected post-quakes

Over the past five years (compared with national)

• 21% faster growth in total population

• 58% faster growth in Maori

• 63% faster growth in Pacifica
DHB funded population, Stats NZ --- 2014/15 to 2018/19

Perception: Canterbury is largely European

- Facts: Canterbury has the second fastest growing Maori population by rate and by number
- Our non-Maori/Pacifica/Asian population is now 78% of the total (down from 82%)
- Our Maori population is the 6th largest nationally – larger than Maori populations in Auckland, Hawkes Bay, Lakes, Capital and Coast and Tairawhiti.

Perception: Canterbury has fewer children

- Facts: Our child population is the fastest growing in New Zealand – Under 15s are up 8% over 10 years; but Maori have increased by 23%, Pacifica by 35% and Asian are up 88%
- Canterbury has the fastest growing Maori child population by rate and second fastest by number

Deprivation

- Perception: NZDep shows Canterbury has 29% of least deprived (quintile 1) and 9% of the most deprived (quintile 5) people in New Zealand
- Facts: Proportionately, Canterbury people have the median proportion of CSC as comparator DHBs – below Waikato, Counties Manukau and Southern, but over 10% more than Auckland, Waitemata and Capital and Coast DHBs.
- Our children (0-14 years) are second most likely to have a CSC (5% fewer than Waikato and around 50% more than Waitemata and Auckland)
- Canterbury’s median household income is 2% ($1,761) above the national average ($90,800)
- Our median household income is 10.6% ($9,600) lower than greater Auckland and 25% ($23,000) lower than Capital and Coast

NZDep has failed to capture the key elements of deprivation in a post-earthquake, forced migration environment.
CLG meeting with Minister of Health

4th July 2019
Common Issues in Health Systems

• “Demand is overwhelming us”
• “We are at 95% occupancy”
• “Our facilities aren’t fit for purpose”
• “We have Seismic prone buildings”
Overview

- Demand
- Capacity
- Facilities - disabling and enabling
- Current state

Why is CDHB any different?
Our Demand
Our population

- Out population today is where it was projected for 2024
How are we reducing pressure on the Hospital?

• Examples
  • 34,000 managed via acute demand
  • COPD patients via COPD pathway – 150 fewer admissions PA
  • St John Nurse practitioners reviewing patients in home
    • Transport to hospital is 62% [lowest in NZ metros]
    • 30% of COPD patients NOT taken to hospital
  • “Outsourced/outplaced surgery”
  • Elderly advanced care directives
COMMUNITY FALLS PREVENTION

In six years, compared with expected (75+ years):
- 2,621 fewer ED attendances
- 766 fewer fractured NOFs
- 50,926 fewer NOF bed days
- 269 fewer deaths at 180 days

Agreed price (IDF) $815 per rehab bed day

$10.213M costs foregone in last 12 months
Cost: 7 FTE falls champion ($700k pa)
Admission avoidance – keeping people at home

Canterbury’s acute admission avoidance program enables specialist services, general practice, urgent and emergency services to support people to stay well and healthy in their own homes

If Canterbury performed at the national average:

• 13,000 more people would have required an acute medical hospital admission
ED presentations
Comparator DHBs (>300,000)
Age standardised per 100,000 (WHO Standard population)

Source: NNPAC, Stat NZ pop projections (to MOH)
Acute Medical Discharge Rate – all admissions
Comparator DHBs (>300,000)
Including 0 days stay, age standardised per 100,000 (WHO Standard population)

Note: includes 0 days stays which may distort the data due to the 3 hour rule
Acute Surgical Discharge Rate
Large DHBs (>300,000)
Age standardised per 100,000 (WHO Standard population)

Source: NMDS, Stat NZ pop projections (to MOH)
Capacity
Christchurch Hospital Inpatient Wards at a Glance at 10:04 am

260 / 202
Forecast ED Arrivals
12am to 12am / now to 12am

30
ED Overload Score:
No Overload

527
Occupied Beds
(ex. Children, ED, ICU, & GVI)

100%
Resourced Bed Occupancy
(ex. Children, ED, ICU, & GVI)

93%
Physical Bed Occupancy

16 / 2
Admissions / Discharges
(since 7am)

---

Monitored Alerts

| Influenza like illness | 11 | 4 | 9 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 4 | 0 | 0 | 1 | 6 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 57 |
| Norovirus like infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

---

Expected Discharges

<table>
<thead>
<tr>
<th>Today</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Capacity
Christchurch Hospital Inpatient Wards at a Glance at 10:04 am

Forecast ED Arrivals
12am to 12am / now to 12am

ED Overload Score:
No Overload

Occupied Beds
(ex. Children, ED, ICU, & GVU)

Resident Bed Occupancy
(ex. Children, ED, ICU, & GVU)

Physical Bed Occupancy

Admissions / Discharges
(since 7am)

260 / 202
30
527
100%
93%
16 / 2

Monitored Alerts

Influenza like illness
Norovirus like infection

Expected Discharges

Today

Capacity
How do we manage 95% occupancy?

• Not by cancelling surgery
• Not by diversion
• Not by keeping patients in ED
• Not by calling a crisis
How do we manage 95% occupancy?

- Admission avoidance
- By aggressively managing flow in the hospital
Our hospital flow

• Focus on planning discharges – all patients have an EDD
• 24/7 live dashboards showing capacity, resourcing and the tension between acute, elective and discharge activity so we can manage flow proactively avoiding bottlenecks
• Increased ward rounding by medical teams [eg twice daily]
• Expectation that we are all responsible for patient flow
• Board rounds in the morning by the multidisciplinary teams planning co-ordinated care
• Prioritise production inputs e.g Radiology for discharges
Acute Medical Bed Days – unstandardised Comparator DHBs (>300,000)
Crude rate per 100,000

Source: NMDS, Stat NZ pop projections (to MOH)
Flow – how many patients through a bed in one year?

• 140 [2014]
• 180 [current]
• National average for large DHBs
Our performance is reflected in national analyses

Central TAS Addressing Acute Demand Pressures indicates strong performance against key national metrics.
Our performance is reflected in national analyses

Central TAS *Addressing Acute Demand Pressures* indicates strong performance against key national metrics.

**Health System Improvement Opportunities — Canterbury**

- Potentially avoidable acute admissions
- Acute medical admissions
- Hospital acquired conditions
- Long stay (>3 weeks)
- Acute re-admissions (<3 days)

**Graph Key:**
- Yellow: Canterbury
- Green: Target

- **Potential bed day savings:** ✔️
- **11,625**
- **2,194**
- ✔️
Introduction

Background

Destravis was originally engaged in April 2016 to undertake site-wide planning to inform a Preliminary Business Case. In March 2019, Destravis was reengaged to deliver a Precinct Master Plan, building upon earlier planning work and considering the new inclusion of Cancer Services and Canterbury Health Laboratories and Gastroenterology. The Precinct-wide Master Plan also reviews the staging and decanting as a whole to maximise operation and minimise redundant works where possible.

This report consolidates the findings and outcomes of the site-wide planning process which sought to respond to short, medium, and long-term needs of the Canterbury District Health Board (CDHB) at the Christchurch Hospital considering their district, regional and national responsibilities.

Key drivers

The key drivers for the development of this Site Wide Master Plan are:

– Establishment of Canterbury Health Precinct Plan
– Te Papa Hauora.
– Required rectification works to existing buildings structure to meet legislative requirements post 2011 earthquake.
– Insufficient infrastructure to meet service demand as result of population growth.
– Aged building stock inadequate for emergency and post-disaster response.
– Impact to services distribution as result from new Acute Services Building with opportunity for strategic approach to occupation of vacant spaces.
– Recent changes to the Christchurch City Plan with opportunity for increased site yield.

Demand

Christchurch Hospital is the largest teaching and research hospital in the South Island providing a comprehensive range of emergency, acute, elective and outpatient services to more than 83,000 patients a year. CDHB principally serves the Canterbury region, which has a resident population of approximately 568,500 people.

The 2012 Detailed Business Case (DBC) and subsequent planning for the Acute Services Building (ASB) used population forecasts produced by Statistics New Zealand at a time when the movement of people following the Canterbury earthquakes was not fully understood. Actual population growth has exceeded these forecasts resulting in a higher population growth than was anticipated at the time the ASB was planned. As a result, the opportunity existed to plan infrastructure requirements to meet this growth in demand and to incorporate all services in a site wide master plan response. Projections informing the Master Plan will be reconfirmed during Program Business Case to include 2017/18 data.

Ernst and Young were commissioned in 2018 to review the clinical and capacity modelling underpinning the draft Christchurch Hospital Redevelopment Indicative Business Case (IBC). Their review highlighted the requirement to provide additional freeboard to allow for operational efficiencies and ability to meet peaks in demand whilst retaining patient safety and positive outcomes. This site wide Master Plan incorporates greater inpatient bed freeboard in response to this recommendation.

The short-term requirement to accommodate imminent growth is for the construction of Tower 3 on the ASB providing a further 160 inpatient beds to meet demand. The central podium and Tower 4 will accommodate medium-term demand, as well as additional surgical capacity.

The long-term focus of the Christchurch Hospital Precinct Master Plan proposes staged infrastructure development that will provide an increase in surgical and inpatient capacity within IL4 buildings to allow the closure of IL3 rated Parkside inpatient beds and operating theatres. Expansion of the Central Podium and construction of Tower 5 will be completed after the planning period.

The inpatient and surgical capacity will expand through the construction of Tower 3, ASB extension, a Central Podium...
F2020 - Scenarios of performance

Bed capacity and requirement

- Base F2020
- ADHB Dx F2020
- WDHB Dx F2020
- ADHB LOS incr F2020
- WDHB LOS F2020

Bed Demand
Post-ASB Capacity

Base – post Hagley
Medical Discharge Rates @ Auckland DHB
Medical Discharge Rates @ Waitemata DHB
LOS @ Auckland DHB
LOS @ Waitemata DHB
Facilities - disablers and enablers
Facilities – disabling

• 40+ buildings demolished or being demolished
• Eight major facilities on CHCH campus that are
  • Earthquake damaged
  • Earthquake prone
• More than half of chch campus unrepaired.
• Large number of staff in portacoms
• No other governmental agency in such damaged facilities
Facilities – enabling or disabling

• Limiting investment in older damaged facilities
Introduction
Background

Destravis was originally engaged in April 2016 to undertake site-wide planning to inform a Preliminary Development Parkside at Christchurch Hospital. In March 2019, Destravis was reengaged to deliver a Precinct Master Plan incorporating the earlier planning work and considering the new inclusion of Cancer Services and Canterbury Health Centre and Gastroenterology. The Precinct-wide Master Plan also reviews the staging and decanting as a whole to ensure the operation and minimise redundant works where possible.

This report consolidates the findings and outcomes of the site-wide planning process which sought to consider the short, medium, and long-term needs of the Canterbury District Health Board (CDHB) at the Christchurch Hospital site, considering their district, regional and national responsibilities.

Key drivers

The key drivers for the development of this Site Wide Master Plan are:

- Establishment of Canterbury Health Precinct Plan
- Te Papa Hauora.
- Required rectification works to existing buildings structure to meet legislative requirements post earthquake.
- Insufficient infrastructure to meet service demand as result of population growth.
- Aged building stock inadequate for emergency and post-disaster response.
- Impact to services distribution as result from new Acute Services Building with opportunity for staged approach to occupation of vacant spaces.
- Recent changes to the Christchurch City Plan with opportunity for increased site yield.

Demand

Christchurch Hospital is the largest teaching and research hospital in the South Island providing a comprehensive range of emergency, acute, elective and outpatient services to more than 83,000 patients a year. CDHB principally serves the Canterbury region, which has a resident population of approximately 568,500 people.

The 2012 Detailed Business Case (DBC) and subsequent planning for the Acute Services Building (ASB) used population forecasts produced by Statistics New Zealand at a time when the movement of people following the Canterbury earthquakes was not fully understood. Actual population growth has exceeded these forecasts resulting in a higher population growth than was anticipated at the time the ASB was planned. As a result, the opportunity existed to plan infrastructure requirements to meet this growth in demand and to incorporate all services in a site wide master plan approach.

Projections informing the Master Plan will be reconfirmed during Program Business Case to include 2017/18 data.

Ernst and Young were commissioned in 2018 to review the clinical and capacity modelling underpinning the draft Christchurch Hospital Redevelopment Indicative Business Case (IBC). Their review highlighted the requirement to provide additional freeboard to allow for operational efficiencies and ability to meet peaks in demand whilst retaining patient safety and positive outcomes. This site wide Master Plan incorporates greater inpatient bed freeboard in response to this recommendation.

The short-term requirement to accommodate imminent growth is for the construction of Tower 3 on the ASB providing a further 160 inpatient beds to meet demand. The central podium and Tower 4 will accommodate medium-term demand, as well as additional surgical capacity.

The long-term focus of the Christchurch Hospital Precinct Master Plan proposes staged infrastructure development that will provide an increase in surgical and inpatient capacity within IL4 buildings to allow the closure of IL3 rated Parkside inpatient beds and operating theatres. Expansion of the Central Podium and construction of Tower 5 will be completed after the planning period.

The inpatient and surgical capacity will expand through the construction of Tower 3, ASB extension, a Central Podium and future theatre provision and distribution, Option 10.
Options - delay

- Examining the feasibility of delaying CT4 by refurbishing Parkside et al
  - No agreed path to achieve this
  - Decanting steps to enable this is highly implausible
  - Meaningful degradation of service unavoidable.
Current State
Monro-Kellie Doctrine – Critical Brain pressure

- A small increase in volume leads to a marked increase in ICP.
- ICP controlled due to compensation.

Graph showing the relationship between ICP (mmHg) and volume, illustrating the critical brain pressure concept.
Monro-Kellie Doctrine - Critical Brain pressure

A small increase in volume leads to a marked increase in ICP

ICP controlled due to compensation

HARM
Clinical safety

• Aggressively managed by engaged staff
• Discretionary efforts
• Sick leave
  • From lowest sick leave DHB to the worst in just a few years
  • 23% of all sick leave is unpaid.
F2020 - Scenarios of performance

Bed capacity and requirement

Base – post Hagley
Medical Discharge Rates @ Auckland DHB
Medical Discharge Rates @ Waitemata DHB
LOS @ Auckland DHB
LOS @ Waitemata DHB
Managing Clinical safety

—the Bases are loaded

• Minimised demand ✔
• Minimised LOS ✔
• Maximised use of space ✔

• But in context of -
  • Loss of amenity ✗
  • Quake repairs ✗
  • Improbable decanting ✗
  • Growth ✗
  • Unsustainable Discretionary Efforts ✗

• Facilities redevelopments are too late to address this
Summary

• We are facing system failure
  • even with the approvals

• The compensatory mechanisms are fully engaged and obscure the risks.

• Our confidence in the process to deliver our facilities is low.

• We can no longer manage clinical risk with any confidence
Can we use parkside to provide capacity?
Can Parkside deliver capacity?

- Full refurb
- Massively disruptive to change hydraulics etc
- Decanting solution not apparent
Working in a building that is being refurbished is not desirable. To reaffix the Parkside exterior concrete panels from the inside and adding shear walls will require long periods of concrete drilling. Many staff have been working in these circumstances for many years, and will need to continue to do so for several more years.
Can Parkside deliver capacity?

- 22 beds [operationally poor – need higher nursing FTE]
- 4 single rooms [18%] with ensuites
- Higher numbers can be achieved but
  - The spaces around the beds poor
  - Reduced ablutions
  - Reduced support space
  - Reduced storage etc
ED – time from bed request to allocation

14 minutes
• The Minister of Health through the Ministry of Health is responsible for ensuring that DHBs carry out their duties. The risk carried by the Canterbury DHB Board is equally carried by the Minister and MOH.

• The Board cannot demand a faster solution to the problem than is possible physically to do. However, looking at the 2025 finish of the current IBC it does seem a long way from 2011.
From: Anne Scott
Sent: Monday, 15 October 2018 10:01 a.m.
To: David Meates
Subject: FW: david meates - icu status
Attachments: Scan-to-Me from hos1014mfd2.cdhb.local 2018-10-15 101317.pdf

From: Anne.Scott@cdhb.health.nz [mailto:Anne.Scott@cdhb.health.nz]
Sent: Monday, 15 October 2018 10:14 a.m.
To: Anne Scott <Anne.Scott@cdhb.health.nz>
Subject: david meates - icu status

As attached

Anne Scott
Supervisor / Secretarial Team Leader
Department of Surgery / 1st Floor / Hagley Outpatients
Christchurch Hospital
15th October 2018

Mr David Meates
CEO
Christchurch Hospital

Dear David,

I write to express my increasing concerns around the inability of ICU to support the necessary urgent/Non-deferrable elective/Elective Surgery requirements of Canterbury and often our regional neighbours due to significant facility constraints which reached a crisis last week and led to previously unheard of request by senior clinicians to divert IDF acute patient care away from ICU in Christchurch for a period of 10 days. This short term action has highlighted the necessity of an agreed threshold to prompt such a response, but more specifically the need for a medium term plan to bridge the gap between now and when we get new capacity as the current situation is clinically unacceptable.

Canterbury clinicians have accepted that on occasions our ICU will not have sufficient capacity to meet both the acute needs and the demands of planned surgical patients. Increasing the physical capacity of our ICU was a core driver of the new hospital building and it is recognised that as the second largest tertiary hospital in New Zealand which undertakes a range of complex surgery not undertaken elsewhere, we currently have an under-sized ICU which we have managed through some increases in bed numbers in recent times, the adoption of an “out-reach” model and having a higher threshold for access to ICU than is customary in other hospitals.

However with the ongoing delays to delivery of our new facilities, our population increasing much more quickly than anticipated and the implementation of Destination Policies (Spinal) or Hub and spoke models (vascular) we have reached a point of service failure where we cannot complete this month the surgical activity that clinically needs to be completed this month specifically because of the lack of physical capacity in ICU.

Whilst this might have occurred transiently in the past this has been problematic since May 2018 when a significant change has become apparent, with regular requirement for prioritising cases and often cancellations at the last minute which is distressing for patients, their families and for staff. The types of surgery that have been delayed/cancelled on the day include patients admitted acutely with cardiac problems, others with cancer on specific treatment timeline windows around radiotherapy or chemotherapy, others requiring major excisional and reconstructive procedures as well as a significant paediatric case load in Neurosurgery, Plastic Surgery and O&G.

Bed demand in ICU has regularly been above the physical bed space with patients being managed in PACU which, due to its dislocation from ICU, is a sub-optimal solution with inherent clinical risk.

While this is particularly challenging for those patients who have their surgery cancelled at the last minute, it is also having a significant effect on those providing the care with surgeons struggling to replan
a time for procedures to be undertaken/ rearrange the often multidisciplinary teams involved/or rearrange their future planned lists (often already booked well in advance with other patients with cancers etc).

Surgeons have expressed difficulty coping with the last minute cancellations, and have deferred early to avoid the tensions associated with preparing themselves to undertake complex procedures, only to have it cancelled at the last minute, or uncertainty as to whether it will occur that day. These same surgeons and their teams, have robustly helped the organisation as a whole, maintain a range of services, over the last 7 years, by operating across multiple sites (utilising both public and private operating facilities), balancing complexity, increased population and increasing regional flows, to deliver surgical care.

Compounding all of these issues is the continued uncertainty around the completion date for the Christchurch Hospital Hagley building, with HRPG advising that there is a 50/50 chance of earliest predicted delivery in October 2019 (now over 18 months later than planned). A paper to CDHB Board in February 2017 highlighted the increased fragility of services, the impact of facility delays on service delivery and the increased risk of service failure.

Just sustaining current service levels over this next 12 month period due to facility delays is going to be challenging in the extreme and will require some alternative actions to occur to avoid a repeat of last week’s situation when we had 15 patients facing multiple cancellations and an ICU operating well beyond capacity.

The recommendations from the Christchurch clinicians staffing, and caring for patients needing ICU level care are:

1) Action is taken earlier when there is a build-up of delayed cases. The only options currently available are diversion of acute cases to other tertiary level DHB’s, refusal to accept new complex IDF cases and transfer of patients if clinically possible.

2) The DHB enables the development of a bridging service by agreeing to the CDHB staffing 4 beds of St George’s ICU capacity which is currently only used intermittently for cardiac surgery.

3) The DHB notes that getting additional capacity at St George’s functional may take some months as staffing is also a constraint however, given the increasing demand and the uncertainty of the delivery of the Hagley Building we think taking action now is essential.

4) The DHB notes that we will still need to develop some other solutions to carry the DHB through between now and additional capacity becoming available.

5) The DHB accepts responsibility for clinicians managing patients in situations that are not optimal, or have by necessity changed to provide ongoing service within the constraints of our present environment.

The current circumstance is demonstrating that we are no longer able to absorb escalating demand without either some alternative structure in place or reduction of clinical service provision to our populations as well as the populations of our regional colleagues.

Yours sincerely

Greg Robertson
Chief of Surgery CDHB
From: Rob Ojala
Sent: Thursday, 24 October 2019 1:20 p.m.
To: David Meates, @xtra.co.nz; Mary Gordon (Executive Director of Nursing); Sue Nightingale
Cc: Pauline Clark; Angela Mills; Andy Savin; Kay Jenkins; Anna Craw
Subject: 2019 Campus Redevelopment BC Options Assessment - Decision form CLG
Attachments: Memo CLG 2019 Campus Redevelopment Business Case Options Assessment Decision October 2019.pdf

Dear All,

Please find enclosed the decision to endorse, with caveats, an option proposed in the campus redevelopment business case.

Regards,

Rob Ojala
Chair, CDHB Clinical Leaders Group
MEMO

To: CDHB Board - Dr John Wood (Chair), Ta Mark Solomon (Deputy Chair), Barry Bragg, Sally Buck Tracey Chambers, Dr Anna Crighton, Andrew Dickerson, Jo Kane, Aaron Keown, Chris Mene, David Morrell.  
David Meates, Mary Gordon, Sue Nightingale.

C.C.: Pauline Clark, Angela Mills, Andy Savin.

From: CDHB Clinical Leaders Group

Date: 24 October 2019

SUBJECT: 2019 Campus Redevelopment Business Case Options Assessment -CLG

1. The tranche one Christchurch Hospital campus redevelopment business case options have been assessed by the CDHB Clinical Leaders Group.

2. CLG acknowledge that the extensive damage to CDHB facilities in the 2010/11 earthquakes has created demand for out-of-cycle capital investment.

3. CLG note that the previous draft business cases (2016) and MOH advice about capital intentions all signalled that CDHB need for out-of-cycle was going to be significant.

4. CLG note that the 2012 DBC approved by cabinet signalled the need for further infrastructure requirement by 2022 to meet demand which has been superseded by significantly more rapid population growth, significantly greater earthquake related infrastructure damage (including 44 buildings that have been demolished) and legislative changes about building capacity.

5. CLG note that CDHB continues to be the only DHB in the country where critical health services are continuing to be provided out of both earthquake-damaged and earthquake-prone facilities and that it is now 8 years post the 2011 earthquakes.

6. CLG note the previous advice provided to Board, MOH and HRPG about the critical impacts that the ongoing delays around capital decision making is and will continue to have on the DHB’s ability to sustain service levels (including service failure)

7. CLG note the DHB’s preferred option (option1) is now fiscally and sequentially challenging, and is an inevitable outcome of the unnecessarily protracted process that surrounds this business case’s development.

In this context:
The Clinical Leaders Group have endorsed, with caveats, 1b as the only pragmatic and viable option to deliver appropriate bed and theatre capacity for the site. This includes the design of T4 and Central podium and enabling works.

The caveats are:
1. The explicit understanding that the new central podium and fourth tower (CT4) must be fast-tracked as part of tranche two in order to meet agreed demand.

2. The compromises in delaying repair and repurposing of Parkside, Clinical Services Block and the residual of Riverside are agreed contingent on capital approvals being achieved for Tranche two by 2021 at the latest. This would otherwise precipitate a need for additional capital into the above facilities to meet compliance and clinical requirements.