Board Agenda

Location:	Board Room Level 1 Hockin Building Waikato Hospital Pembroke Street HAMILTON		
Date:	28 November 2018	**Time:**	1pm

Board Members	Ms S Webb (Chair) Professor M Wilson (Deputy Chair) Ms S Christie Ms C Beavis Mr M Gallagher Mrs MA Gill Ms T Hodges Mr D Macpherson Mrs P Mahood Ms S Mariu Dr C Wade
In Attendance	Mr K Whelan, Crown Monitor Ms T Thompson-Evans, Chair Iwi Maori Council Mr D Wright, Interim Chief Executive and other Executives as necessary

Next Meeting Date:	23 January 2019	
Contact Details:	Phone: 07 834 3622	Facsimile: 07 839 8680
	www.waikatodhb.health.nz	

Our Vision: **Healthy People. Excellent Care**

Our Values:

People at heart – **Te iwi Ngakaunui**
Give and earn respect – **Whakamana**
Listen to me talk to me – **Whakarongo**
Fair play – **Mauri Pai**
Growing the good – **Whakapakari**
Stronger together – **Kotahitanga**

Board Agenda

Item

1. Apologies

2. **INTERESTS**
- 2.1 Schedule of Interests
- 2.2 Conflicts Related to Items on the Agenda

3. **MINUTES AND BOARD MATTERS**
- 3.1 Board Minutes: 24 October 2018
- 3.2 Committees Minutes:
  - 3.2.1 Iwi Maori Council: 8 November 2018
  - 3.2.2 Maori Strategic Committee: 21 November 2018

4. **INTERIM CHIEF EXECUTIVE REPORT**

5. **QUALITY AND PATIENT SAFETY**
- 5.1 Patient Story (Consumer to attend at 1.30pm)

6. **FINANCIAL PERFORMANCE MONITORING**
- 6.1 Finance Report

7. **HEALTH TARGETS**

8. **HEALTH AND SAFETY**
- 8.1 Health and Safety Service Update (quarterly report due in January)

9. **SERVICE PERFORMANCE MONITORING**
- 9.1 Chief Data Officer Directorate (report due in January)
- 9.2 Interim Chief Operating Officer (report due in January)
- 9.3 Mental Health and Additions Service (report due in January)
- 9.4 Strategy and Funding (report due January)
- 9.5 People and Performance (report due in February)
- 9.6 Facilities and Business (report due in February)
- 9.7 IS (report due in February)

10. **PROFESSIONAL ADVISORY REPORTS**
- 10.1 Chief Medical Officer (report due in January)
- 10.2 Chief Nursing & Midwifery Officer (report due in April)

11. **DECISION REPORTS**
- 11.1 Equity Focussed Reporting
- 11.2 Information Services Disaster Recovery Project
- 11.3 Naming of Youth Room – Chiefs Chill Out Zone

12. SIGNIFICANT PROGRAMMES/PROJECTS

12.1 Creating our Futures
- 12.1.1 Mental Health and Addictions System
- 12.1.2 Waikato DHB Mental Health and Addictions Facilities and Service Redevelopment Project Indicative Business Case

12.2 CBD Accommodation Project (bimonthly report, due January)
12.3 Regional eSPACE Programme (quarterly report, due January)
12.4 National Oracle System (no report this month)
12.5 Medical School (no report this month)

13. PAPERS FOR INFORMATION

No papers

14. PRESENTATIONS

No presentations

15. BOARD MEMBER ITEMS

15.1 The Living Wage Update (report due in February)

NEXT MEETING: 23 January 2019

Board Agenda

Waikato District Health Board

RESOLUTION TO EXCLUDE THE PUBLIC
NEW ZEALAND PUBLIC HEALTH AND DISABILITY ACT 2000

THAT:

(1) The public is excluded from the following part of the proceedings of this meeting, namely:

Item 16: Minutes – Various
- (i) Waikato District Health Board for confirmation: Wednesday 24 October 2018 (Items taken with the public excluded)
- (ii) Audit and Corporate Risk Management Committee – verbal update to be received: Wednesday 28 November 2018 (All items)
- (iii) Midland Regional Governance Group – to be received: Friday 5 October 2018
- (iv) Midland Regional Governance Group – to be received: Friday 2 November 2018

Item 17: All of Government Microsoft Negotiations – Public Excluded
Item 18: Patient Transfer Services – Public Excluded
Item 19: Waikato DHB Mental Health and Addictions Facilities and Service Redevelopment Project Indicative Business Case – Public Excluded
Item 20: Human Resource Information System Renewal – Public Excluded

(2) This resolution is made in reliance on Clause 32 of Schedule 3 of the NZ Public Health & Disability Act 2000 in that the public conduct of the whole or the relevant part of the meeting would likely result in the disclosure of information for which good reason for withholding exists under sections 6, 7 or 9 (except section 9(2)(g)(i)) of the Official Information Act 1982.

(3) Pursuant to Clause 33 (1) of Schedule 3 of the NZ Public Health & Disability Act 2000 the general subject of each matter to be considered while the public is excluded, and the reason for passing this resolution in relation to each matter, are as follows:

GENERAL SUBJECT OF EACH MATTER TO BE CONSIDERED		REASON FOR PASSING THIS RESOLUTION IN RELATION TO EACH MATTER	SECTION OF THE ACT
Item 16 (i-iv):	Minutes – Public Excluded	Items to be adopted/confirmed/ received were taken with the public excluded	As shown on resolution to exclude the public in minutes
Item 17:	Microsoft Negotiations – Public Excluded	Negotiation will be required	Section 9(2)(j)
Item 18:	St John contract – Public Excluded	Negotiation will be required	Section 9(2)(j)
Item 19:	Facilities and Service Redevelopment Indicative Business Case – Public Excluded	Negotiation will be required	Section 9(2)(j)

Item 20:	HRIS Renewal – Public Excluded	Negotiation will be required	Section 9(2)(j)

(4) Pursuant to clause 33(3) of the NZ Public Health & Disability Act 2000 Ms Te Pora Thompson-Evans who is the Chair of the Iwi Maori Council is permitted to remain after the public have been excluded because of her knowledge of the aspirations of Maori in the Waikato that is relevant to all matters taken with the public excluded.

(5) Pursuant to clause 33(5) of the NZ Public Health & Disability Act 2000 Ms Te Pora Thompson-Evans must not disclose to anyone not present at the meeting while the public is excluded any information she becomes aware of only at the meeting while the public is excluded and she is present.

16. MINUTES – PUBLIC EXCLUDED

16.1 Waikato District Health Board: 24 October 2018
To be confirmed: Items taken with the public excluded

16.2 Audit & Corporate Risk Management Committee: 28 November 2018
Verbal update: All items

16.3 Midland Regional Governance Group: 5 October 2018
To be confirmed: Items taken with the public excluded

16.4 Midland Regional Governance Group: 2 November 2018
To be confirmed: Items taken with the public excluded

17. ALL OF GOVERNMENT MICROFSOFT NEGOTIATIONS – PUBLIC EXCLUDED

18. PATIENT TRANSFER SERVICES – PUBLIC EXCLUDED

19. WAIKATO DHB MENTAL HEALTH AND ADDICTIONS FACILITIES AND SERVICE REDEVELOPMENT PROJECT INDICATIVE BUSINESS CASE – PUBLIC EXCLUDED

20. HUMAN RESOURCE INFORMATION SYSTEM RENEWAL – PUBLIC EXCLUDED

RE-ADMITTANCE OF THE PUBLIC

THAT:

(1) The Public Is Re-Admitted.
(2) The Executive is delegated authority after the meeting to determine which items should be made publicly available for the purposes of publicity or implementation.

Waikato District Health Board

Interests

SCHEDULE OF INTERESTS AS UPDATED BY BOARD MEMBERS TO DECEMBER 2018

Sally Webb

Interest	Nature of Interest *(Pecuniary/Non-Pecuniary)*	Type of Conflict *(Actual/Potential/Perceived/None)*	Mitigating Actions *(Agreed approach to manage Risks)*
Chair and Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Member, Chief Executive Performance Review Committee, Waikato DHB	Non-Pecuniary	None	
Member, Hospitals Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Community and Public Health Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Audit & Corporate Risk Management Committee, Waikato DHB	Non-Pecuniary	None	
Member, Sustainability Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Chair, Bay of Plenty DHB	TBA	TBA	
Member, Capital Investment Committee	TBA	TBA	
Director, SallyW Ltd	TBA	TBA	

Crystal Beavis

Interest	Nature of Interest *(Pecuniary/Non-Pecuniary)*	Type of Conflict *(Actual/Potential/Perceived/None)*	Mitigating Actions *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Deputy Chair, Hospitals Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Community and Public Health Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Chair, Chief Executive Performance Review Committee, Waikato DHB	Non-Pecuniary	None	
Director, Bridger Beavis & Associates Ltd, management consultancy	Non-Pecuniary	None	
Director, Strategic Lighting Partners Ltd, management consultancy	Non-Pecuniary	None	
Life member, Diabetes Youth NZ Inc	Non-Pecuniary	Perceived	
Trustee, several Family Trusts	Non-Pecuniary	None	
Employee, Waikato District Council	Pecuniary	None	

Sally Christie

Interest	Nature of Interest *(Pecuniary/Non-Pecuniary)*	Type of Conflict *(Actual/Potential/Perceived/None)*	Mitigating Actions *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Chair, Hospitals Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Thames Coromandel District Council	TBA	TBA	
Partner, employee of Workwise	Pecuniary	Potential	

Note 1: Interests listed in every agenda.
Note 2: Members required to detail any conflicts applicable to each meeting.

Martin Gallagher

Interest	Nature of Interest *(Pecuniary/Non-Pecuniary)*	Type of Conflict *(Actual/Potential/Perceived/None)*	Mitigating Actions *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Member, Hospitals Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Audit & Corporate Risk Management Committee, Waikato DHB	Non-Pecuniary	None	
Member, Chief Executive Performance Review Committee, Waikato DHB	Non-Pecuniary	None	
Deputy Mayor, Hamilton City Council	Pecuniary	Perceived	
Board member Parent to Parent NZ (Inc), also provider of the Altogether Autism service	Pecuniary	Potential	
Trustee, Waikato Community Broadcasters Charitable Trust	Non-Pecuniary	Perceived	
Wife employed by Wintec (contracts with Waikato DHB)	Pecuniary	Potential	
Member, Hospital Advisory Committee, Lakes DHB	Pecuniary	Potential	

Mary Anne Gill

Interest	Nature of Interest *(Pecuniary/Non-Pecuniary)*	Type of Conflict *(Actual/Potential/Perceived/None)*	Mitigating Actions *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Member, Hospitals Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Sustainability Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Chief Executive Performance Review Committee, Waikato DHB	Non-Pecuniary	None	
Employee, Life Unlimited Charitable Trust	Pecuniary	Perceived	
Member, Public Health Advisory Committee, Bay of Plenty DHB	Pecuniary	Potential	
Member, Disability Support Advisory Committee, Bay of Plenty DHB	Pecuniary	Potential	
Member, Health Strategic Committee, Bay of Plenty DHB	Pecuniary	Potential	

Tania Hodges

Interest	Nature of Interest *(Pecuniary/Non-Pecuniary)*	Type of Conflict *(Actual/Potential/Perceived/None)*	Mitigating Actions *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Chair, Maori Strategic Committee, Waikato DHB	Non-Pecuniary	None	
Deputy Chair, Community and Public Health Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Chief Executive Performance Review Committee, Waikato DHB	Non-Pecuniary	None	
Member, Iwi Maori Council, Waikato DHB	Non-Pecuniary	None	
Director/Shareholder, Digital Indigenous.com Ltd (contracts with Ministry of Health and other Government entities)	Pecuniary	Potential	
Director, Ngati Pahauwera Commercial Development Ltd	Pecuniary	None	
Director, Ngati Pahauwera Development Custodian Ltd	Pecuniary	None	
Director, Ngati Pahauwera Tiaki Custodian Limited	Pecuniary	None	

Note 1: Interests listed in every agenda.

Note 2: Members required to detail any conflicts applicable to each meeting.

Trustee, Ngati Pahauwera Development and Tiaki Trusts (Deputy Chair)	Pecuniary	None
Member, Whanau Ora Review Panel	Non-Pecuniary	None
Trustee and Shareholder, Whanau.com Trust	TBA	TBA

Dave Macpherson

Interest	**Nature of Interest** *(Pecuniary/Non-Pecuniary)*	**Type of Conflict** *(Actual/Potential/Perceived/None)*	**Mitigating Actions** *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Member, Hospitals Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Audit & Corporate Risk Management Committee, Waikato DHB	Non-Pecuniary	None	
Member, Maori Strategic Committee, Waikato DHB	Non-Pecuniary	None	
Councillor, Hamilton City Council	Pecuniary	Perceived	
Deputy Chair, Waikato Regional Passenger Transport Committee	Non-Pecuniary	Potential	
Member, Waikato Regional Transport Committee	Non-pecuniary	Potential	
Member, Future Proof Joint Council Committee	Non-pecuniary	None	
Partner is an occasional contractor to Waikato DHB in "Creating our Futures"	TBA	Potential	

Pippa Mahood

Interest	**Nature of Interest** *(Pecuniary/Non-Pecuniary)*	**Type of Conflict** *(Actual/Potential/Perceived/None)*	**Mitigating Actions** *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Member, Community and Public Health Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Iwi Maori Council, Waikato DHB	Non-Pecuniary	None	
Chair, Waikato Health Trust	Non-Pecuniary	None	
Life Member, Hospice Waikato	TBA	Perceived	
Member, Institute of Healthy Aging Governance Group	TBA	Perceived	
Board member, WaiBOP Football Association	TBA	Perceived	
Husband retired respiratory consultant at Waikato Hospital	Non-Pecuniary	None	
Member, Community and Public Health Committee, Lakes DHB	Pecuniary	Potential	
Member, Disability Support Advisory Committee, Lakes DHB	Pecuniary	Potential	
Member/DHB Representative, Waikato Regional Plan Leadership Group			

Sharon Mariu

Interest	**Nature of Interest** *(Pecuniary/Non-Pecuniary)*	**Type of Conflict** *(Actual/Potential/Perceived/None)*	**Mitigating Actions** *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Chair, Audit & Corporate Risk Management Committee, Waikato DHB	Non-Pecuniary	None	
Chair, Sustainability Advisory Committee, Waikato DHB	Non-Pecuniary	None	

Note 1: Interests listed in every agenda.
Note 2: Members required to detail any conflicts applicable to each meeting.

Member, Community and Public Health Advisory Committee, Waikato DHB	Non-Pecuniary	None
Director/Shareholder, Register Specialists Ltd	Pecuniary	Perceived
Director/Shareholder, Asher Business Services Ltd	Pecuniary	Perceived
Director, Hautu-Rangipo Whenua Ltd	Pecuniary	Perceived
Owner, Chartered Accountant in Public Practice	Pecuniary	Perceived
Daughter is an employee of Puna Chambers Law Firm, Hamilton	Non-Pecuniary	Potential
Daughter is an employee of Deloitte, Hamilton	Non-Pecuniary	Potential

Clyde Wade

Interest	**Nature of Interest** *(Pecuniary/Non-Pecuniary)*	**Type of Conflict** *(Actual/Potential/Perceived/None)*	**Mitigating Actions** *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2
Chair, Community and Public Health Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Deputy Chair, Audit & Corporate Risk Management Committee, Waikato DHB	Non-Pecuniary	None	
Member, Maori Strategic Committee, Waikato DHB	Non-Pecuniary	None	
Member, Sustainability Advisory Committee, Waikato DHB	Non-Pecuniary	None	
Member, Board of Clinical Governance, Waikato DHB	Non-Pecuniary	None	
Shareholder, Midland Cardiovascular Services	Pecuniary	Potential	
Trustee, Waikato Health Memorabilia Trust	Non-Pecuniary	Potential	
Trustee, Waikato Heart Trust	Non-Pecuniary	Potential	
Trustee, Waikato Cardiology Charitable Trust	Non-Pecuniary	Potential	
Patron, Zipper Club of New Zealand	Non-Pecuniary	Potential	
Emeritus Consultant Cardiologist, Waikato DHB	Non-Pecuniary	Perceived	
Cardiology Advisor, Health & Disability Commission	Pecuniary	Potential	Will not be taking any cases involving Waikato DHB
Fellow Royal Australasian College of Physicians	Non-Pecuniary	Perceived	
Occasional Cardiology consulting	Pecuniary	Potential	
Member, Hospital Advisory Committee, Bay of Plenty DHB	Pecuniary	Potential	
Son, employee of Waikato DHB	Non-Pecuniary	Potential	

Professor Margaret Wilson

Interest	**Nature of Interest** *(Pecuniary/Non-Pecuniary)*	**Type of Conflict** *(Actual/Potential/Perceived/None)*	**Mitigating Actions** *(Agreed approach to manage Risks)*
Board member, Waikato DHB	Non-Pecuniary	None	Refer Notes 1 and 2

Note 1: Interests listed in every agenda.
Note 2: Members required to detail any conflicts applicable to each meeting.

SCHEDULE OF INTERESTS FOR CHAIR IWI MAORI COUNCIL AS STANDING ATTENDEE AT BOARD

Te Pora Thompson-Evans

Interest	**Nature of Interest** *(Pecuniary/Non-Pecuniary)*	**Type of Conflict** *(Actual/Potential/Perceived/None)*	**Mitigating Actions** *(Agreed approach to manage Risks)*
Member, Community and Public Health Advisory Committee, Waikato DHB **Member, Iwi Maori Council Representative for Waikato-Tainui, Waikato DHB** **Iwi: Ngāti Hauā** **Member, Te Whakakitenga o Waikato** **Trustee, Ngāti Hauā Iwi Trust** **Trustee, Tumuaki Endowment Charitable Trust** **Director, Whai Manawa Limited** **Director/Shareholder, 7 Eight 12 Limited**	Non-Pecuniary	None	Refer Notes 1 and 2

Note 1: Interests listed in every agenda.

Note 2: Members required to detail any conflicts applicable to each meeting.

Waikato District Health Board

Minutes and Board Matters

WAIKATO DISTRICT HEALTH BOARD

Minutes of the Board Meeting held on Wednesday 24 October 2018 at 1.00pm in the Board Room, Hockin Building at Waikato Hospital

Present:
Ms S Webb (Chair)
Professor M Wilson (Deputy Chair)
Ms S Christie (attendance by phone)
Mr M Gallagher
Ms M A Gill
Ms T Hodges
Mr D Macpherson
Mrs P Mahood
Ms Mariu
Dr C Wade

In Attendance:
Ms T Thompson-Evans (Chair, Iwi Maori Council)
Mr D Wright (Interim Chief Executive)

ITEM 1: APOLOGIES FOR ABSENCE

Apologies for absence were received from Ms C Beavis.

ITEM 2: INTERESTS

2.1 Register of Interests

No changes to the Register of Interests were noted.

2.2 Interest Related to Items on the Agenda

No conflicts of interest were foreshadowed in respect of items on the current agenda. There would be an opportunity at the beginning of each item for members to declare their conflicts of interest.

ITEM 3: MINUTES OF THE PREVIOUS MEETING AND MATTERS ARISING

3.1 Waikato District Health Board Minutes: 26 September 2018

Resolved
THAT
The part of the minutes of a meeting of the Waikato District Health Board held on 26 September 2018 taken with the public present was confirmed as a true and accurate subject to one amendment.

3.1.1 Māori Strategic Committee: 19 September 2018
Ms Hodges, chair of the Māori Strategic Committee updated Board members on the findings of the DNA survey. The Māori Strategic Committee recognised that a coherent organisation wide approach was required to address DNA rates. It was noted that the Waikato DHB Board would continue to monitor this each month until the inequity was eliminated.

Resolved
THAT
The Board accepted the minutes of the last meeting with this amendment.

3.2 Committee Minutes:

3.2.1 Iwi Māori Council: 4 October 2018
3.2.2 Māori Strategic Committee: 17 October 2018

Resolved
THAT
The Board noted the minutes of these meetings.

ITEM 4: INTERIM CHIEF EXECUTIVE REPORT

Mr D Wright presented this agenda item. The report was taken as read. Of note:

- DHB Budget Issues – a workshop had been held to discuss the DHB's $56m deficit. An approach had been agreed. The Chief Executive had discussed this proposed approach with the Director General of Health. A response from the Director General of Health is awaited.

- Elective Services Patient Flow Indicators (ESPI) Compliance – Waikato DHB continues to maintain good compliance.

- Chief Operating Officer – interviews for this role had been held.

- Update on Complaint related to Toilets on Ward 14 – the complaint had been investigated and resulted in new processes being introduced DHB wide.

Resolved
THAT

The Board

1) Received the summary of an investigation related to a complaint on toilets in Ward 14 and improvements made.
2) Noted the formal complaint process continues.

- Hauroa iHUB – an update was provided to show the number of interventions provided during the 6 week period that the Hauora iHUB has been in operation. Three monthly updates will be provided in the future. A question was raised about utilising volunteer services to assist with any questions that passers-by might have.

Resolved
THAT
The Board received the report.

ITEM 5: QUALITY AND PATIENT SAFETY REPORT

5.1 Using Consumer Stories

Ms M Neville presented the Quality and Patient Safety report that focussed on 'Using Consumer Stories'. It was noted:

- The Consumer Council were comfortable with the approach.
- Board Members considered it important that the stories were driven by the consumers themselves not chosen by the management of the services.
- Focus to be on how services and systems can be improved.
- A suggestion that market research is carried out.
- Any koha received is treated with respect.

Resolved
THAT
The Board adopt the proposed approach and guideline to consumer stories as part of the overarching consumer engagement framework.

ITEM 6: FINANCIAL PERFORMANCE MONITORING

6.1 Finance Report

Mr A McCurdie attended for this item. The financial results summary for the month of September 2018 was presented to the Board. The report was taken as read. It was noted:

- An unfavourable year to date variance to budget of $2.5m, however this includes:
  - $1.7m relating to the NZNO MECA and nursing acuity not yet been accrued due to lack of clarity;
  - Clinical supplies unfavourable by $3.6m impacted by transition to NOS;
  - at least $1m of adjustments still to come through as result of unit of measure and bill of material aspects;

- The DHB is taking a collaborative approach with the Ministry of Health to achieve some early and longer term gains.

Resolved
THAT
The Board received the Finance Report for the month of September 2018.

6.2 Asset Performance Indicator Update

Mr A McCurdie attended for this item. District Health Boards are required to provide asset performance information on utilisation; condition and functionality. It was noted that:

- Information provided in the report covered owned and leased assets.
- The DHB has some older buildings that require replacing. These will be discussed in the DHB's Campus Plan that will be presented at a future meeting.
- The Board requested an additional API to reflect the level of version currency of key IS systems. This will be included in future reports.

Resolved
THAT
The Board noted the update of Asset Performance Indictors as at September 2018.

ITEM 7: HEALTH TARGETS

Dr D Tomic attended for this item.

The Health Targets report was tabled for the Board's information. The report was taken as read. It was noted:

- Faster Cancer Treatment – a question asked if the volume target has changed. This would be double-checked and a response will be provided.
- Better help for smokers to quit – this target is not showing any progress. Consideration should be given to outcomes.
- Immunisation performance is still an issue. Changes in service delivery will not be in place until December. It was suggested that the approach needs to change rather than different variations of the same thing. Another suggestion was that Waikato Tainui have some events coming up at which there will be a Hauora tent. This might give an opportunity for screening services to be done.

Resolved
THAT
The Board received the report.

ITEM 8: HEALTH AND SAFETY

Mr G Peploe presented the Health and Safety Services Update Report. The report was taken as read. It was noted:

- DATIX Incidents reported an increase in behaviour (including violence and aggression) incidences. Staff are trained in controlling aggressive behaviour. A breakdown of where assault numbers are occurring was requested for the next Health and Safety report i.e. OPRS, ED or Mental Health. The Board members would like to know what steps are being taken to address these issues.
- The annual Influenza Programme 2018 results showed that 4963 staff were immunised – 66.3%. The Board requested that management look into the reasons why midwives are choosing not to be immunised.

Resolved
THAT
The Board received the report.

ITEM 9: SERVICE PERFORMANCE MONITORING

9.1 Chief Data Officer Directorate (report due in November
9.2 Interim Chief Operating Officer (report due in November)
9.3 Mental Health and Addictions Service (report due in November)
9.4 Strategy and Funding (report due January)
9.5 People and Performance (report due January)
9.6 Facilities and Business (refer to item 18 in public excluded)
9.7 IS Performance Monitoring (due in February)

ITEM 10: PROFESSIONAL ADVISORY REPORTS

10.1 Chief Nursing and Midwifery Officer

Mrs S Hayward attended for this item. The report was taken as read. It was noted:

- This report focussed on nursing and not midwifery.
- Post nurses strike – the DHB are working to implement the Care Capacity Demand Management programme to ensure full implementation by 2021.
- 68 new nurses started last month. Noting that the nurses had come from Auckland, Australia and some were returning to nursing. Board members asked to be kept updated on where the new nurses are coming from.
- An additional 150 nurses still required to be recruited.
- A more flexible approach regards is being used to attract people back into nursing roles such as varying hours and days and also providing assistance to get their Annual Practicing Certificate.
- Currently around 7½% to 8% of nurses are Māori. Talks are being held with the nursing schools to try to attract more Māori into the nursing profession.

Resolved
THAT
The Board received the report.

10.2 Chief Medical Officer (report due in January)

ITEM 11: DECISION REPORTS

11.1 Equity Focussed Reporting (report due in November)

11.2 Waikato DHB Final Annual Plan 2018/19

Mr W Skipage and Mrs K Fromont attended for this item.

It was noted:

- Iwi Māori Council comments had been included.
- It was requested that references to Māori and Pacifica are separate and not grouped together.

Ms Webb thanked the team for their work putting the Annual Report together.

Resolved
THAT
The Board
1) Received the report.
2) Approved the 2018/19 Annual Plan and Statement of Performance Expectations.
3) Noted the System Level Measure Improvement Plan.

11.3 Delegation of Agreements over $10m per annum for signing

Mr R Webb attended for this item. The paper was taken as read.

The Crown Funding Agreement and PHO Service Agreements Version 5.1 were due for signing. As the value of these agreements are above the Chief Executive's delegated financial authority, additional delegation by the Board to the Chief Executive was required.

Resolved
THAT
The Board
1) Delegated authority to the Interim Chief Executive to sign both PHO Services Agreements Version 5.1.
2) Delegated the authority to the Interim Chief Executive to sign the 19th Omnibus Variation to the Crown Funding Agreement.

11.4 Building Research for Waikato DHB

Professor Lawrenson gave a presentation to the Board members that explained that Waikato DHB is aiming to become a leading centre for research, innovation and health improvement. To assist the DHB achieve this status four key objectives had been identified:

- Invest in research that addresses the health needs of New Zealanders;
- Creating a vibrant research environment in the health sector;

- Building and strengthening pathways for translating research findings into policy and practice;
- Advancing innovative ideas and commercial opportunities.

The recommendations noted were:

- Agree Waikato DHB research priorities.
- Each Division appoints a research lead to support Clinical Unit Leaders/operations/nurse directors in its clinical governance framework.
- Build a Waikato Research, Innovation and Improvement Hub (Virtual hub initially but eventually co-located).

Resolved
THAT
The Board:
1) Noted the update on research being undertaken with the DHB.
2) Approved the proposed direction going forward.

ITEM 12: SIGNIFICANT PROGRAMMES/PROJECTS

12.1 National Oracle System

Mr N Hablous, Ms A Morley and Mr A McCurdie gave a presentation to update the Board on the National Oracle System from both a local perspective and a national perspective.

Resolved
THAT
The Board received the presentation.

12.2 Creating our Futures (report due in November)
12.3 CBD Accommodation Project (bimonthly report, due November)
12.4 Regional eSPACE Programme (quarterly report, due January)
12.5 Medical School (report due in November)

ITEM 13: PAPERS FOR INFORMATION

13.1 State Sector Model Standards – Management of Conflict of Interest

Mr G Peploe attended for this item. The State Services Commission had issued new model standards for the management of conflict of interest in the State Sector.

Resolved
THAT
The Board received the report.

ITEM 14: PRESENTATIONS

There were no presentations this month.

ITEM 15: BOARD MEMBER ITEMS

15.1 Living Wage – (refer to item 19 in public excluded).

NEXT MEETING

The next meeting is to be held on Wednesday 28 November 2018 commencing at 1.00 pm at in the Board Room in the Hockin Building, Waikato hospital.

BOARD MINUTES OF 24 OCTOBER 2018

RESOLUTION TO EXCLUDE THE PUBLIC
NEW ZEALAND PUBLIC HEALTH AND DISABILITY ACT 2000

THAT:

(1) The public be excluded from the following part of the proceedings of this meeting, namely:

Item 16: MINUTES OF THE WAIKATO DISTRICT HEALTH BOARD MEETING HELD ON: WEDNESDAY 26 SEPTEMBER 2018 (ITEMS TAKEN WITH THE PUBLIC EXCLUDED)

Item 17: FUNDING: EQUITY REQUIREMENTS AND LEASING OPTIONS – PUBLIC EXCLUDED

Item 18: YEAR END MATTERS AND 2017/18 ANNUAL REPORT – PUBLIC EXCLUDED

Item 19: THE LIVING WAGE – PUBLIC EXCLUDED

Item 20: BEATTIE VARLEY REPORT – PUBLIC EXCLUDED

(2) The general subject of each matter to be considered while the public is excluded, and the reason for passing this resolution in relation to each matter, are as follows:

GENERAL SUBJECT OF EACH MATTER TO BE CONSIDERED	REASON FOR PASSING THIS RESOLUTION IN RELATION TO EACH MATTER	SECTION OF THE OFFICIAL INFORMATION ACT
Item 16: Minutes	Items to be adopted/ confirmed/ received were taken with the public excluded	As shown on resolution to exclude the public in minutes
Item 17: Funding: Equity Requirements and Leasing Options – public excluded	Negotiations will be required	Section 9(2)(j)
Item 18: Year End Matters and 2017/18 Annual Report – Public Excluded	Negotiations will be required	Section 9(2)(j)
Item 19: The Living Wage – Public Excluded	Negotiations will be required	Section 9(2)(j)
Item 20: Beattie Varley Report – Public Excluded	Negotiations will be required	Section 9(2)(j)

(3) This resolution is made in reliance on Clause 32 of Schedule 3 of the NZ Public Health & Disability Act 2000 in that the public conduct of the whole or the relevant part of the meeting would likely result in the disclosure of information for which good reason for withholding exists under sections 6, 7 or 9 (except section 9(2)(g)(i)) of the Official Information Act 1982.

(4) Pursuant to clause 33 of Schedule 3 of the NZ Public Health & Disability Act 2000 the Chair of the Iwi Māori Council (or their proxy) is allowed to remain after the public has been excluded because of their knowledge of the aspirations of the Iwi Māori Council specifically and Māori generally which are relevant to all matters taken with the public excluded.

ACTION LIST

(Relates to Items to be reported to the Board and not implementation of substantive decisions)

Agenda Item	Action Agreed	Name of Executive Director Responsible for Action	Month action to be reported to the Board
8	Next Health and Safety Report to include a break down of OPR, ED and Mental Health	Gil Sewel	
19	Living Wage update requested	Gil Sewel	November 2018

WAIKATO DISTRICT HEALTH BOARD

Minutes of the Iwi Māori Council / Joint Board Hui

Held: Thursday 8th November 2018 at 9.30am

Venue: Board Room, Hockin Building

Present:	Ms T Thompson-Evans	Chair
	Ms T Moxon	Te Rūnanga o Kirikiriroa Trust (Deputy Chair)
	Mr G Tupuhi	Hauraki Māori Trust Board
	Ms M Balzer	Te Rūnanga o Kirikiriroa Trust
	Ms K Hodge	Raukawa Charitable Trust
	Ms K Gosman	Tūwharetoa Māori Trust Board
	Ms P Taiaroa	Whanganui
	Ms C Brears	Maniapoto Māori Trust Board
	Ms T Ake	Tūwharetoa Māori Trust Board
	Dr K McClintock	Waikato-Tainui
	Ms S Turner	Maniapoto Māori Trust Board - alternate
	Ms S Webb	Waikato DHB Board Chair (arr. 12:00pm)
	Ms Pippa Mahood	Waikato DHB Board member
	Ms S Greenwood	Minute taker

Other attendees: Ms J Eketone, Ms J Crittenden, Ms P Mahood, Mr T Peni, Ms T Te Akau in support of Tuwharetoa Maori Trust Board.

For Item 10 Strategic Agenda Items: Creating our Futures Workshop: Ms V Aitken, Ms V Endres, Mr G O'Brien (Staff) Mr T Sewell, Ms J Proffit (IMC appointees to the Creating our Futures Programme Board)

ITEM 1 KARAKIA: Mātua Hemi Curtis

ITEM 2 MIHIMIHI: Mātua Hemi Curtis & Board Chair in support

ITEM 3 APOLOGIES

Ms L Elliott, Ms T Hodges, Mr D Astle, Mr P O'Brien, Mr T Turner, Mr A Chase, Mr E Topine

Dr McClintock noted her leave at prior to agenda Item 10 workshop. Noted that she had forwarded her concerns to IMC in writing and wished for these to be tabled with the Interim Executive Director.

Kaituku Mōtini/Moved: Raukawa
Kaitautoko Mōtini/Seconded: Te Rūnanga o Kirikiriroa
Ko matou e tautoko

ITEM 4 REGISTER OF INTERESTS

Members reminded to update or add to the register

ITEM 5 CHAIR REPORT

Reviewed and passed along with minutes and other governance items.

ITEM 6 UPDATES

Hauora iHub

Update from the CEO's paper to the last board meeting was tabled and noted

Midland Iwi Relationship Board

Update on progress of the Midland Iwi Relationship Board. MOU and TOR tabled for noting with a view for 6th/7th Dec 2018 to sign with Midland DHBs.

ITEM 7 KERRIDGE & PARTNERS (10.00am – 2 hrs)

Vicky McLean and Tim Scanlon from Kerridge & Partners as the contracted organisation in the procurement of a permanent Chief Executive for the DHB. Iwi Māori Council members on behalf each member Iwi expressed their aspirations, qualities and challenges in the search for the next CE of the Waikato DHB.

ITEM 8 MINUTES AND ACTIONS

Taken as read.

Amendment from Tania Hodges pg 34, item 7.1 via email correspondence:

"The Chair of MSC discussed that IMC determine who their reps are on MSC. Rarely is there a full complement of committee members including the IMC reps and it is an important committee for IMC to have a presence on. Examples were given of frequent double commitments for some of the members. Recommendation from Chair of MSC was for IMC to have a proxy that could just come anytime as the chances of have the full complement was rare. Discussion resulted in Arama Chase as the proxy because he could Skype / Zoom / Conference call in with Sally in Hauraki if he didn't want to travel and that he was interested."

Remove the statement: "Chair of the MSC noted the continual absence of Glen Tupuhi.

ITEM 9 GOVERNANCE

MSC minutes taken as read.

Chair Report, Previous IMC Minutes, and Governance moved together.

Kaituku Mōtini/Moved: Maniapoto Māori Trust Board
Kaitautoko Mōtini/Seconded: Te Rūnanga o Kirikiriroa
Ko matou e tautoko

ITEM 10 STRATEGIC AGENDA ITEMS

Non-scheduled agenda discussion raised at the beginning of hui that there may not be the right support for our IMC Chair as representative while attending CoF and other mental health hui. A motion was tabled concerning the model of care, facilities business case and support for the Chair. Further discussion to be held. Members were asked to submit concerns to the Chair and reminded of the process to bring kaupapa to IMC via the agenda. The item was moved however discussion is to be had and addressed appropriately.

Creating our Futures Workshop

Interim Executive Director Ms V. Aitken noted the same presentation given as to the Board in October. Summarised as below. Full hui notes held with Te Puna Oranga.

- Recap given on engagement with IMC and reflected the importance of the relationship with IMC and the input that has evolved.
- Noted that the Business case is for actue and sub-acute inpatient services that is one part of the larger project Models of Care.
- Indicative business case remains high level and as such no details for solutions as these are very much in development.
- Noted Māori statistics in occupancy, morbidity and mortality rising out of Mental Health and Addictions as a whole. Noted high regional forensic Māori population
- 100 bed Waikeria mental health hub noted, IMC expressed concern in this space
- Noted that the Indicative business case is a place holder and not a final decision
- Noted that the Model of Care will be developed in partnership and strong input from the Iwi Māori Council
- Noted that the business case is indicative and not end point

IMC noted:

- That the Model of Care needs to be healing
- Community involvement needs to at the forefront
- Recognition at all times to the history of Māori in the Mental Health failures to protect their wellbeing
- Noted the Board Chairs recommendation that the Business Case have a Foreword that outlines Kaupapa Māori perspectives and that Kaupapa Māori must be reflected in the whole business case. That Māori want to be involved from the first stage and throughout. That the Clinical Director will be approached to author a culture change and shift to Kaupapa Māori processes to acknowledge that sentiment expressed by IMC that the business case is building orientated.

ITEM 11 TE PUNA ORANGA UPDATE REPORT

Puna Waiora - Tamati Peni attended and presented kooorero in how else Te Roopu Puna Waiora can engage rangatahi into the programme. Noted they will attend the Tainui games to promote the Kaupapa. Report due to IMC in February 2019.

Ki Te Taumata o Pae Ora – Māori Health Strategy discussed briefly. IMC noted information given that this strategy will be completed by the end of November and presented to MSC in the first instance. This has been the major focus for the Rautaki team in Te Puna Oranga (Māori Health Service).

ITEM 12 IMC WORK PLAN

Priority Programme of Work - progress report to be discussed at next IMC hui in December.

ITEM 13 GENERAL BUSINESS

Models of Health - The Tribunal Hearing evidence to be filed at the end of November. Lady Moxon advised starting principles and requested a letter of support from IMC members. Principles noted as:

- Indigenous legislation
- Quantum Settlement
- Apology
- Māori Mana Motuhake
- Funding percentage of Vote Health based on Māori population
- A Funding agency

Members to confirm support for a letter.

CE appointment – Board Chair advised selection process and workshop with IMC members and potential candidates. IMC agreed to do this with Consumer Council. Noted the careful management due to confidentiality. One representative per iwi will participate in the workshop process.

Hui closed at 2.15pm

Next meeting held on: Thursday 6th December 2018

Action 1 being progresses

Action 2 Joint IMC/Board hui dates are 29/5/19 and 30/10/19

8.2 Immunisations team in Strategy and Funding to present once they have drafted a Māori strategy around Māori imms and screening and how these will be operationalised. Suggested that they attend the Tainui games.

Meeting Minutes

Meeting name:	Māori Strategic Committee (MSC)		
Location:	Board Room, Hockin Building		
Date:	21/11/2018	**Time:**	10:00AM
Chairperson:	Ms T Hodges	**Minutes by:**	Ms J Crittenden
Attendees:	Ms T Hodges, Dr C Wade, Ms T Thompson-Evans, Ms M Balzer, Ms S Christie, Mr G Tupuhi,		
Additional Attendees:	Mr D Wright, Ms L Elliott, Mr H Curtis, Ms J Eketone, Ms R Poaneki, Ms L Were, Ms J Sewell, Ms J Crittenden, Mr G Howard (first half of the meeting only)		
Apologies:	Ms T Moxon, Mr D Macpherson, Mr A Chase		

Item No.	Details
1.	**KARAKIA/MIHI** Mr H Curtis
2.	**APOLOGIES** Apologies received and noted above.
3.	**MINUTES OF MSC MEETING HELD** 17 October 2018 Minutes accepted as true and correct. **Moved:** Ms M Balzer **Seconded:** Ms T Thompson-Evans
4.	**MĀORI DNA INEQUITY ELIMINATION UPDATE** Mr G Howard attended and presented this agenda item. Key points discussed included: • Three areas of action: i. Patient Service Centre – growing single point of contact, working on greater visibility. ii. Outpatient Admin Process Change – have new flag for Māori patients in iPM. iii. Paediatric Business Case – 2 new roles agreed by Executive Group. • Communication highlighted as the biggest root cause for DNAs. • Numerous other community-based projects discussed as setting where patient contact details are collected and updates, and patients are encouraged to attend appointments. • Consumer council offered to help co-design these improvements to ensure they meet whānau needs. **Action:** • Report on Māori DNA actions monthly to MSC. • Mr G Howard to determine whether the immunisation coordination centre updates patient contact details in iPM or if they only update the NIR.
5.	**MSC UPDATE** Ms L Elliott updated the committee on Te Puna Oranga's work towards radically improving Māori health. Key points discussed included: • Puna Waiora have a full team, ready to launch on 1 February 2019. • Equity focused report ready for November Board. • Oranga Kaimahi Facebook page is live. • CCP/HSP workshops happening now with many engaged senior clinicians in attendance.

	• Template for Māori Health Plans being developed.
	• Working with new HR Executive on Māori equity KPIs and proactive recruitment/retention of Māori:
	  o Implement Māori equity KPIs throughout the organisation.
	  o Hire all Māori who apply (interview to find the right role for them, rather than to decide whether or not to hire them).
	• Importance of actively recruiting Māori graduates from nursing and medical school discussed.
	• Suggestion that nurses have a forum to discuss their work and the future of nursing.
	
	Action:
	• Explore disability data option to measure inequities faced by Māori living with disability (Māori tāngata whaikaha).
	• Implement Māori equity KPIs throughout the organisation.
	• Hire all Māori who apply (interview to find the right role for them, rather than to decide whether or not to hire them).

6.	**END OF YEAR REVIEW AND CONTENT WORK PLAN FOR 2019** **NOTE: this item was initially skipped to discuss ITEM 7, but was returned to before the end of the meeting.** Ms T Hodges led this agenda item. Key points discussed included: • Everyone agreed on the value of MSC and valued ongoing monthly meetings. • MSC is continuing to gain momentum and beginning to see fruits. • Suggestion was made to collaborate more closely with HAC and CPHAC to ensure reduced duplication and increased pace of work. • Greater focus on prevention and health literacy suggested. • Increased project focus to drive Māori health improvement. • Support for the strategic leadership and Treaty partnership MSC gives was expressed. **Action:** • All members to email Ms J Sewell with a few top suggestions for next year's work plan before 30 November 2018.
7.	**KI TE TAUMATA O PAE ORA – IWI MĀORI HEALTH STRATEGY** Ms J Eketone presented this agenda item. A draft document was presented for discussion. Key points discussed included: • This document has been prepared alongside the Te Puna Oranga team's engagement with the Care in the Community Plan and Health System Plan. • KTTOP is a strategic document, with key measures, while the HSP will give the actions and roadmap to achieve these desired outcomes. • KTTOP is the driver for the HSP and TPO team continues to influence the HSP to maintain alignment. • Members expressed happiness with the inclusion of the fourth "P" – Pono – in the measurement framework. • The requirements for operationalisation of KTTOP were discussed, with the measures section (wahanga tuatoru) needing further context and shaping to align to the rest of the document. • Must ensure measures relate to radical improvement in Māori health. • The first two sections (wahanga) of KTTOP were seen as great background work and agreed as ready for circulation. • Request for more contemporary references to be added to KTTOP. • TPO and Ms J Sewell in particular were acknowledged for the work that went into this document. • Treaty partnership at an operational level was discussed, with Te Puna Oranga (Māori Health Service) suggested as a key treaty partner to all DHB services, akin to the relationship IMC has with the Board. • Capacity of TPO was highlighted as a potential issue, with other groups (e.g. Te Roopuu Tautoko) being brought into workstreams as needed.

	Action: • Circulate the first two sections of KTTOP to HSP project team and other key stakeholders (e.g. HR) to drive system planning. • Update the measures section (wahanga tuatoru) of KTTOP to align with the first two wahanga.
8.	**GENERAL BUSINESS** • Congrats to Ms M Balzer - As part of the 2019 Kiwibank New Zealander of the Year Awards, was the recipient of a Local Heroes Medal. • Congrats to Ms J Sewell - New position as Service Manager of Thames Hospital starting 7 January 2019. • Have a wonderful Christmas and New Year and everybody take a good break. Thank you all for your commitment to the kaupapa for radical improvement in Māori health.
9.	**KARAKIA WHAKAMUTANGA** Mr H Curtis

Actions

	Details	Completed	Who
1.	Report on Māori DNA actions monthly to MSC.		Mr G Howard
2.	Mr G Howard to determine whether the immunisation coordination centre updates patient contact details in iPM or if they only update the NIR.		Mr G Howard
3.	Explore disability data option to measure inequities faced by Māori living with disability (Māori tāngata whaikaha).		TPO
4.	Implement Māori equity KPIs throughout the organisation.		TPO/HR
5.	Hire all Māori who apply (interview to find the right role for them, rather than to decide whether or not to hire them).		TPO/HR
6.	All members to email Ms J Sewell with a few top suggestions for next year's work plan before 30 November 2018.		Ms J Sewell
7.	Circulate the first two sections of KTTOP to HSP project team and other key stakeholders (e.g. HR) to drive system planning.		Ms L Elliott
8.	Update the measures section (wahanga tuatoru) of KTTOP to align with the first two wahanga.		Ms J Sewell
9.	Commissioning stocktake on government position on commissioning, relevant government review recommendations, literature and current WDHB position	February 2019	Ms L Elliott

Meeting Ended: 11:45am
Next Meeting: 20 February 2019

Waikato District Health Board

Chief Executive Report

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 4

INTERIM CHIEF EXECUTIVE'S REPORT

Purpose	For information.

Chief Advisor Allied Health Scientific and Technical

This week we welcome Claire Tahu as the newly appointed Chief Advisor for Allied Health Scientific and Technical. This is a newly created position and Claire will overview our second biggest workforce in the Waikato DHB.

Chief Operating Officer (COO)

As you will recall from my last report we were interviewing for a replacement COO. Following the interview process the panel agreed that we did not have a suitable candidate so we decided not to appoint.

Grant Howard has been the Interim COO since November 2017. He will step down from the role on 7 January 2019 to return to his substantive role of Senior Consultant in ICU.

I would like to take this opportunity to thank Grant for the work he has done in the COO role over the last 13 months.

With the impending appointment of a permanent Chief Executive in February, it would be prudent not to re-advertise the COO role until a Chief Executive has been appointed.

I will put in place some interim arrangements to cover the COO role post 7 January.

Business Case for TeleHealth

At the September Board meeting there was a presentation from Dr Ruth Large (Clinical Director: Information Services and Virtual Healthcare) on progress with the implementation of telehealth following the decision not to continue with HealthTap. It was requested at that point that the Board be advised of when a business case for the further development of telehealth would be submitted.

Just to keep the Board up-to-date on this subject I can advise that IS expenditure will be re-prioritised during the rest of the 2018/19 year to enable services to take up/expand their telehealth service. This work will be calculated not to run ahead of the planning work implicit in the Health System Plan. Once the Plan is completed the direction for later years will be determined and if necessary a business case will be compiled to support it.

In brief, there will not be a hiatus while we await our HSP but we will continue to pragmatically expand the service in the interim.

Plan to create a financially sustainable organisation

Proposed way forward.

This is not a quick fix and it will probably be a three year timescale to get back to a financially sustainable position, but we need to move to control our costs. To do this we first need to understand our costs and cost drivers. Information would suggest that Waikato DHB is amongst the top six DHBs for FTE per head of population, so although a crude figure it would suggest that, despite the call from services for 500 more staff this year, we appear to be reasonably well staffed compared to a number of other DHBs. This then raises the question; are we using the staff in the right areas or do we have more staff in areas where perhaps they are not required?

It is important that we understand our cost structure and to do this it is proposed:

1) We engage with the Ministry of Health to work with us on understanding our current financial issues and possible solutions.
2) We seek to have a review of our current resource structures. This would be done by setting up a small project team, consisting of an external contractor with significant health services expertise matched by internal financial and clinical expertise. All members of the team will be expected to be working members putting in effort collectively and individually as decided by the team. Two staff from the Waikato DHB Change Team will be available to support the project and the project team will also be able to retain other support as necessary.
3) The project team would review cost structures and FTE establishment of all services, clinical, non-clinical and all corporate services. They would have access to all information they required to undertake the review.
4) A Terms of Reference will be developed for the project team.
5) The project team would report monthly to a small Governance Group which would consist of the Chief Executive, Chair of the Board's Sustainability Advisory Committee, Chief Medical Officer, Chief Nursing and Midwifery Officer, Chief Financial Officer, Crown Monitor and a representative from the Ministry of Health Leadership Team.
6) It is expected the project team would complete the first stage of the review to understand our cost structure and where savings might be possible within four months.
7) Any immediate discreet actions identified from the review would be implemented as soon as possible/practical.
8) Following the outcome of the review, a second phase would commence which would be to develop the Turnaround Plan that details how we improve the DHB's financial sustainability. This may include some staff from the project review team but may also require additional expertise and additional internal resource.

The detailed Turnaround Plan will be completed by June 2019.

Plan to create decanting space

The Board are aware that a number of our current wards require upgrading and in some cases require to have piped gasses to the wards, M16 being one of these wards.

Currently we have no spare useable space to decant current services to. This was discussed at the September Board meeting.

A paper will be presented at the Board meeting to create decanting space that will allow us to deal with the M16 issues and create further decanting space.

At the January Board meeting a paper will be presented that will include a ward upgrade plan over the coming years.

Service Pressure Bids

Andrew McCurdie and I are currently working with services on their service pressure bids. Some bids have been deferred and others have been reduced in scope. A number of Service Pressure bids have been approved and are being implemented.

Relationship meeting with Pinnacle

Following a Chair to Chair discussion, the Chairs, Chief Executives and other senior staff from Pinnacle and Waikato DHB met to discuss how we can strengthen the relationship between the two organisations.

This was a positive meeting and a joint statement was agreed between the organisations.

Outcome statement from meeting with Waikato DHB and Pinnacle

A meeting was held on 12 November 2018 between the Chair and Chief Executive of Waikato District Health Board (WDHB), the Chair of Pinnacle Incorporated (Pinnacle) and Chief Executive of Midlands Health Network. The following points were agreed by both parties as a summary of the meeting:

1. The meeting was a productive one that addressed a number of outstanding historical matters and, importantly, focused on the future of the relationship between WDHB and Pinnacle.

2. Both parties are committed to participating in a proactive relationship that will address opportunities and problems in a collaborative manner.

3. The principles that underpin the ongoing relationship were agreed as follows:

    - Openness and honesty by both parties

    - A focus on partnership and co-design in service development

    - A win-win approach to discussion with no blame acceptance of each party's point of view

    - A focus on the issues, goals and opportunities for the future rather than the problems of the past.

4. The parties reached agreement on a number of issues although some historical matters remain unresolved; the parties hold different views about the responsibility for and resolution of an historical overspend of Flexible Funding in Waikato.

5. The parties agreed that there should be an agreed metric for contribution to Pinnacle management cost from income received from the DHB that is endorsed by the Midlands Alliance Leadership Team (ALT). The parties will work together on a proposal for ALT.

6. The parties agreed to work together to advance the roll-out of the Health Care Home model of care in Waikato.

7. The parties agreed on the importance of following proper process with reasonable consultation in the event of changes to contracts or funding.

8. The Boards of Pinnacle and WDHB will meet at key times as required, for example to discuss the draft Health System and Care in the Community Plans once these plans have been drafted.

9. The monthly Strategic Relationship Meetings between the Chief Executives (and other relevant executives) will continue and will provide the opportunity to resolve issues/problems. If required, external facilitation will be considered to assist with the resolution of issues that prove problematic to resolve in the course of usual business and relationship meetings.

10. The Chairs and Chief Executives will meet as required to assess progress in the relationship.

Waikato DHB and Pinnacle Incorporated look forward to a strong working relationship as we endeavour to eliminate health inequity for Maori and improve the health of our population.

Living Wage Deep Dive Paper

The following points will be addressed in a Deep Dive paper on the Living Wage:

- Strategic alignment – how a Living Wage solution lines up with our strategic imperatives.
- Current state internal and external landscape – what we currently have in place; what we need to deliver our strategy and live our values; what the Government is planning in their Living Wage proposal with pros and cons.
- Approach/philosophy on lower paid workforce in line with our values and strategy.
- Options for moving forward, with risks, mitigations, benefits and costs.
- Recommendation and request for support.

The paper will be submitted in February 2019.

Recommendation
THAT
The Board receives this report.

DEREK WRIGHT
INTERIM CHIEF EXECUTIVE

Waikato District Health Board

Quality and Patient Safety

Waikato District Health Board

Finance Performance Monitoring

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 6.1

FINANCE REPORT

Purpose	For information

The financial result summary is attached for the Board's review.

Recommendations
THAT
The Board receives this report.

ANDREW MCCURDIE
CHIEF FINANCIAL OFFICER

WAIKATO DISTRICT HEALTH BOARD
YEAR TO DATE FINANCIAL COMMENTARY

Waikato DHB Group	Year to Date			Group Budget
Result for October 2018	Group Actual $m	Group Budget $m	Variance $m	Jun-19 $m
Revenue - CFA	428.2	424.9	3.3 F	1,269.2
Revenue - other	77.4	75.9	1.5 F	229.7
Operating Expenses	(490.0)	(487.2)	(2.8) U	(1,468.2)
IDCC	(26.2)	(28.0)	1.8 F	(86.8)
DHB Surplus/(Deficit)	**(10.6)**	**(14.4)**	**3.8 F**	**(56.1)**
Note: $ F = favourable variance; ($) U = unfavourable variance				

Waikato DHB Group	Year to Date			Group Budget
Result for October 2018	Group Actual $m	Group Budget $m	Variance $m	Jun-19 $m
Funder	10.4	(0.3)	10.7 F	24.9
Governance	(0.6)	(0.4)	(0.2) U	(1.5)
Provider	(20.2)	(13.6)	(6.6) U	(79.5)
Waikato Health Trust	(0.2)	(0.1)	(0.1) U	(0.0)
DHB Surplus/(Deficit)	**(10.6)**	**(14.4)**	**3.8 F**	**(56.1)**
Note: $ F = favourable variance; ($) U = unfavourable variance				

VOLUMES

Episodes

Acute

October 2018	2019 Actuals	2019 Plan	*Variance to Plan %*	2018 Actuals	*Variance to Prior Year %*
Surgical & CCTVS	6,336	5,851	*8.29%*	5,839	*8.51%*
Internal Medicine	6,540	6,601	*-0.93%*	5,955	*9.82%*
Regional Services	1,594	1,574	*1.29%*	1,525	*4.52%*
Child Health	2,104	1,882	*11.79%*	1,907	*10.33%*
Womens Health	3,039	3,016	*0.75%*	2,928	*3.79%*
TOTAL	**19,613**	**18,924**	***3.64%***	**18,154**	***8.04%***

Elective

October 2018	2019 Actuals	2019 Plan	*Variance to Plan %*	2018 Actuals	*Variance to Prior Year %*
Surgical & CCTVS	5,735	5,496	*4.35%*	4,985	*15.05%*
Internal Medicine	217	326	*-33.44%*	214	*1.40%*
Regional Services	24	16	*50.04%*	12	*100.00%*
Child Health	233	261	*-10.87%*	245	*-4.90%*
Womens Health	547	418	*30.74%*	365	*49.86%*
TOTAL	**6,756**	**6,518**	***3.66%***	**5,821**	***16.06%***
Total Episodes Acute + Elective	**26,369**	**25,442**	***3.64%***	**23,975**	***9.99%***

Case Weighted Discharges

Acute

October 2018	2019 Actuals	2019 Plan	*Variance to Plan %*	2018 Actuals	*Variance to Prior Year %*
Surgical & CCTVS	10,702	10,274	*4.17%*	10,032	*6.69%*
Internal Medicine	5,760	5,933	*-2.92%*	5,510	*4.53%*
Regional Services	1,796	1,948	*-7.79%*	1,902	*-5.58%*
Child Health	2,479	2,344	*5.78%*	2,345	*5.71%*
Womens Health	1,728	1,715	*0.80%*	1,668	*3.65%*
TOTAL	**22,466**	**22,213**	***1.14%***	**21,457**	***4.70%***

Elective

October 2018	2019 Actuals	2019 Plan	*Variance to Plan %*	2018 Actuals	*Variance to Prior Year %*
Surgical & CCTVS	7,494	7,840	*-4.42%*	7,460	*0.45%*
Internal Medicine	139	232	*-40.28%*	161	*-13.97%*
Regional Services	41	33	*23.71%*	20	*104.52%*
Child Health	188	216	*-12.74%*	195	*-3.49%*
Womens Health	470	407	*15.54%*	347	*35.65%*
TOTAL	**8,331**	**8,728**	***-4.54%***	**8,183**	***1.81%***
Total CWDs Acute + Elective	**30,797**	**30,941**	***-0.47%***	**29,640**	***3.90%***

Bed Days					
October 2018	**2019 Actuals**	**2019 Plan**	***Variance to Plan %***	**2018 Actuals**	***Variance to Prior Year %***
Waikato Inpatient Bed Days	70,152	69,668	*0.70%*	69,668	*0.70%*
Waikato Other Bed Days	41,576	37,322	*11.40%*	37,322	*11.40%*
T-Hospital Bed Days	10,772	11,385	*-5.38%*	11,385	*-5.38%*
TOTAL	**122,500**	**118,375**	*3.48%*	**118,375**	*3.49%*

October 2018	**2019 Actuals**	**2018 Actuals**	**Variance to Prior Year %**
ED Attends	40,144	38,875	*3.26%*

MONTHLY COMMENTS

This report includes commentary on current year to date performance for the Waikato DHB Group compared to the budget to October 2018.

Delivery Plan Performance

Episodes are up on plan and prior year. However, CWDs whilst up from the prior year are reflecting as unfavourable against plan. These in combination represent a higher volume of lower complexity patients than planned. Analysis reveals that the shift is not exclusive to any particular service, rather is reflective of a general variance from plan.

We continue to accelerate the work required to allow for more meaningful volume variance analysis and extrapolation into related cost variance analysis. Whilst we have a detailed Price Volume Schedule as our key planned volume document, the level of detail here is not conducive to organisation wide analysis. In addition, a number of aspects require conversion in order to derive an organisation activity measure, such as caseweight equivalents for emergency department events and non caseweighted bed days. In addition, to be meaningful, we will accrue a caseweighted equivalent for patients not yet discharged at each month end – particularly relevant for long stay patients. Once we have this in place at both a planned and actual level, we will be able to better explain volume variances as well as average length of stay variances and the mix impact between planned and actual.

Financial Performance YTD Comment:

For October 2018 we have a favourable year to date variance to budget of $3.8m. This includes $2.8m relating to prior year adjustments and washups.

Operating revenue is $4.7m favourable which includes the following variances:

- $5.9m favourable - funding related to NZNO MECA and pay equity, reimbursement of NOS costs and prior year wash-ups. Direct cost offsets amount to $4.7m.
- $1.2m unfavourable - mainly acuity funding yet to be received.

Operating expenditure is $0.9m unfavourable which includes:

- nursing personnel (employed and outsourced) costs unfavourable ($3.7m). The month of October includes an adjustment for costs related to the NZNO MECA settlement. These costs have been separately identified in the analysis below. The balance of the nursing variance relates to 18/19, and is in line with new acuity based staffing levels in place earlier than budget. In most areas we are running at full matrix for additional beds and acuity levels, which have now been separately identified.
- clinical supplies unfavourable $3.0m which includes mix of activity and timing of Pharmac savings. Adjustments have been made in October to correct clinical supply costs for NOS related valuation issues. Clinical supplies reporting was significantly impacted by NOS changes, but we now have a basis for reporting these costs on an ongoing basis. Final NOS impacts are expected to correct in November, including related to processes for receipting of goods.
- savings plan to date is $5.0m unfavourable.
- unfavourable variances offset by favourable variances arising from vacancies, delayed start to building maintenance plan, timing of costs and depreciation.

Our best estimate at this stage for forecast remains unchanged from budget.

We recognise that the capital expenditure spend as per the Capital Expenditure report (YTD spend of $12,982k) doesn't agree with the Treasury Purchase of Assets amount of $13,049k. This is due to NOS issues that are being worked through. We also recognise that this reflects a very slow start to the capital plan. This is due to a number of factors, including the impact of an "annual" capital plan (which we are very actively moving to a pro-actively managed rolling capital plan) and a shortage of resources, especially IS resources, which is being worked through. We have added in a new Asset Performance Indicator (API) to reflect the age of clinical assets compared to the suppliers expected life expectancy.

Provider:

The Provider is unfavourable to budget $6.6m - see detail for explanations. Variances include:

1. Revenue is unfavourable $3.5m due mainly to unfavourable internal revenue ($3.1m - eliminates against Funder) and timing variances relating to side arm contracts ($1.2m), partly offset by the recovery of NOS costs ($1.0m).
2. Employed personnel cost is favourable to budget $4.9m mainly due to favourable variances relating to Medical, Allied and Management, Administration and Support costs (offset in outsourced services), offset by an unfavourable Nursing variance. Further analysis below.
3. Outsourced personnel cost is unfavourable to budget $6.7m - partly offset in employed personnel cost and NOS costs recovered in other government revenue.
4. Outsourced services is favourable to budget $1.6m - analysis below.
5. Clinical Supplies is unfavourable to budget $3.0m due to the mix of activity and timing. We are also working through the potential impact of the transition to NOS on these costs.
6. Infrastructure and non clinical supplies is unfavourable to budget $1.8m - analysis below.
7. IDCC is favourable to budget $1.9m. This relates mainly to a favourable depreciation variance as a result of the timing of capitalisation of assets.

Funder and Governance:

The result for the Funder is $10.7m favourable to budget. This is mainly as a result of favourable internal provider payments ($3.1m) (eliminates against Provider), additional CFA funding relating to pay equity, NZNO MECA settlement and prior year electives ($3.3m), favourable IDF revenue ($1.8m) and a favourable provider payment variance ($2.4m). Governance is close to budget.

Waikato Health Trust

The result for the Waikato Health Trust is close to budget.

RECOMMENDATION(S):

That this report for the period ended October 2018 be received.

ANDREW McCURDIE

CHIEF FINANCIAL OFFICER

WAIKATO DISTRICT HEALTH BOARD
YEAR TO DATE FINANCIAL COMMENTARY

Opinion on Group Result:		
The Waikato DHB YTD Revenue Variance resulted from:	**Variance $m**	**Impact on forecast**
Revenue	**$4.7 F**	
CFA Revenue		
CFA revenue is favourable to budget mainly due to:		
• CFA revenue $3.3m favourable includes $1.5m favourable variance for funding received from MoH for NZNO MECA settlement (offset by nursing personnel additional cost $1.3m). Other favourable variances include additional pay equity funding (offset in NGO payments), and a variance arising from prior year under accrual of elective revenue $0.6m.	$3.3 F	Neutral
Crown Side-Arm Revenue		
• Crown side-arm contracts $1.2m unfavourable to budget which includes Ministry of Health funding yet to be received for acuity costs related to the NZNO MECA (1.4m), with other offsets.	($1.2) U	Neutral
Other Government and Crown Agencies Revenue		
Other Government and Crown revenue is favourable to budget mainly due to:		
• Reimbursement of costs associated with the implementation of National Oracle Solution (NOS) $1.0m favourable (offset in Outsourced Personnel $1.5m).	$2.6 F	Neutral
• Trauma service $0.3m unfavourable due to a timing difference for funding received against an annual ACC contract.		
• Reimbursement of haemophilia costs $0.2m favourable in line with actual costs incurred (clinical supplies).		
• Inter District Flow (IDF) income from other DHBs $0.6m favourable. Volumes by speciality and by DHB continue to fluctuate compared to budget.		
• Inter District Flow (IDF) income relating to 2017/18 $1.3m favourable. This is as a result of the annual wash up of IDF activity across all DHBs. The final adjustment is not known until coding of all activity across all DHBs is completed. This variance is partly offset by an unfavourable variance on the IDF outflow wash up ($0.7m), which is included in NGO payments.		Favourable
Other Revenue		
Other revenue is on budget	$0.0 F	Neutral

The Waikato DHB YTD Expenditure Variance resulted from:	Variance $m	Impact on forecast
Operating expenditure including IDCC	**($0.9) U**	
Personnel (employees and outsourced personnel total)	**($2.0) U**	
Employed personnel are favourable to budget mainly due to:		
• Medical personnel are favourable to budget by $4.1m. This includes a higher than expected vacancy level, including delayed implementation of investment requests. This favourable variance is partly offset by outsourced personnel unfavourable variance of $1.7m.	$4.8 F	Neutral
• Nursing personnel are unfavourable to budget by $2.2m. This variance, along with the unfavourable outsourced personnel cost for nursing of $1.5m, includes higher final settlement of the NZNO MECA compared to budget of $1.3m (offset by CFA revenue favourable $1.5m). Other variances include costs of a transferred contract, of $0.4m (offset in NGO providers). The variance also includes the impact of new acuity based staffing levels in place earlier than budget. In most areas we are running at full matrix for additional beds and acuity levels. This includes unfavourable annual leave movement, outsource costs, and overtime. We also have a higher level of mental health inpatient services.		Unfavourable
• Allied Health personnel are favourable to budget by $0.9m. The net favourable variance between employed and outsourced is $0.8m favourable and is as a result of higher than expected vacancy levels.		Neutral
• Management, Administration and Support personnel are favourable to budget by $2.0m. Variances are spread across the DHB including clinical support, and are mainly as a result of higher than expected vacancy levels. Part offset in outsourced personnel ($1.0m).		
Outsourced personnel are unfavourable to budget mainly due to:		
• Medical costs are $1.7m unfavourable due to higher than planned use of locums to cover vacancies (offset by medical personnel underspend $4.1m). This is mainly across Waikato Hospital, Community Hospitals, and Mental Health and Addiction.	($6.8) U	Neutral
• Nursing costs are $1.5m unfavourable. As for nursing personnel this is due to the impact of new acuity based staffing levels in place earlier than budget, and a higher level of mental health inpatient services.		Unfavourable
• Allied Health costs are $0.1m unfavourable to budget. The net favourable variance between employed and outsourced is $0.8m favourable and is as a result of higher than expected vacancy levels.		
• Management, Administration and Support costs are $3.4m unfavourable largely due to contractor costs of $1.5m for the implementation of the new NOS ERP solution ($1.0m of this cost is offset by additional other government revenue), and contractor costs of $0.9m for the patient flow project. The balance of $1.0m covers management, administration and support vacancies (offset in favourable employed personnel variance of $2.0m).		Neutral

The Waikato DHB YTD Expenditure Variance resulted from:	Variance $m	Impact on forecast
Outsourced services	**$1.6 F**	
Outsourced services are favourable to budget mainly due to:		
• Outsourced Clinical Services are $0.1m favourable to budget. Outsourced services to meet our elective initiatives are favourable. This is partly offset by an unfavourable variance in outsource costs for meeting ESPI compliance, including the areas of cardiology and radiology.	$1.6 F	Neutral
• Outsourced corporate service costs are $0.3m favourable to budget which includes delays in the implementation of Crown initiated information system changes such as IaaS.		
• Spend against allocated strategic funding is $1.3m favourable to date. This includes initiatives related to health system transformation and health equity, and is expected to be a timing difference.		
Clinical Supplies	**($3.0) U**	
Clinical supplies are unfavourable to budget mainly due to:		
• Treatment Disposables, Instruments and Equipment - unfavourable to budget by $0.6m. This includes MoH coding changes of $0.5m (offset in pharmaceuticals). The adjusted variance is $1.1m unfavourable. This variance is due to mix of activity (includes total episodes up on budget, despite CWDs being below budget). This includes theatres at 107% of budget. High cost areas also include haemophilia costs over budget by $0.2m (offset by other Government revenue $0.2m).	($3.0) U	Unfavourable
• Diagnostic and Other Supplies - on budget.		
• Implants and prosthesis - unfavourable to budget by $0.5m includes monthly fluctuations for volume and mix of procedures.		
• Pharmaceuticals - unfavourable to budget by $1.9m. This includes MoH coding changes of $0.5m (offset in treatment disposals). The adjusted variance is $1.4m. This includes timing of savings expected as a result of PHARMAC taking over further hospital drug procurement. We are seeking clarity from Pharmac on these savings.		Neutral
Infrastructure and non-clinical supplies	**($1.8) U**	
• Favourable variances include a delayed start to building maintenance plan ($1.3m), budgeted surgical services project costs actually included in prior year ($0.6m), delayed commencement of information services projects ($0.6m), and utilities costs under budget for winter months ($0.4m).	$3.2 F	Neutral
• Savings allocation - $5.0m unfavourable variance in infrastructure relates to centrally held savings plan not specifically allocated.	($5.0) U	Unfavourable
NGO Payments	**$2.4 F**	
External Provider payments are favourable to budget mainly due to:		
• Net favourable variances amounting to $3.1m arise due to costs not being incurred in line with CFA revenue received, MoH and accrual adjustments relating to prior year funding, and a contract transfer (offset in nursing costs). The most significant permanent difference to date is disability support costs over accrued in prior years by $0.8m. Favourable variances are partly offset by unfavourable variance to budget for pay equity (offset by CFA revenue).	$2.4 F	Neutral
• IDF out payments for 2017/18 are $0.7m unfavourable. As for IDF in receipts, this relates to the annual wash up of IDF activity across all DHBs. This final adjustment is not known until coding of all activity across all DHBs is completed. Variance is offset by a favourable variance on the IDF inflow wash up ($1.3m), which is included in Other Government and Crown Agencies Revenue.		Unfavourable

The Waikato DHB YTD Expenditure Variance resulted from:	Variance $m	Impact on forecast
Interest, depreciation and capital charge	**$1.9 F**	
Interest charge is on budget.	$0.0 F	Neutral
Capital charge is close to budget.	($0.1) U	Neutral
Depreciation is favourable to budget due mainly to:		
● Slower than planned capital spend and the timing of capitalisation of assets.	$2.0 F	Neutral

TREASURY

Opinion on Group Result:

Cash flows are favourable to budget as detailed below.

YTD Actuals Oct-17 $'000	Waikato DHB Cash flows for year to October 2018	Year to Date Actual $'000	Year to Date Budget $'000	Year to Date Variance $'000	Budget Jun-19 $'000
	Cash flow from operating activities				
457,128	Operating inflows	502,780	503,226	(446)	1,497,840
(425,914)	Operating outflows	(481,307)	(481,264)	(43)	(1,484,968)
31,214	**Net cash from operating activities**	**21,473**	**21,962**	**(489)**	**12,872**
	Cash flow from investing activities				
529	Interest income and proceeds on disposal of assets	370	404	(34)	1,187
(8,643)	Purchase of assets	(13,049)	(39,102)	26,053	(117,094)
(8,114)	**Net cash from investing activities**	**(12,679)**	**(38,698)**	**26,019**	**(115,907)**
	Cash flow from financing activities				
0	Equity repayment	0	0	0	(2,194)
(2,886)	Interest Paid	(299)	(276)	(23)	(826)
(59)	Net change in borrowings	(100)	18,453	(18,553)	116,821
(2,945)	**Net cash from financing activities**	**(399)**	**18,177**	**(18,576)**	**113,801**
20,155	**Net increase/**(decrease) in cash	**8,395**	**1,441**	**6,954**	**10,766**
856	Opening cash balance	(2,973)	(2,973)	0	(2,973)
21,011	**Closing cash balance**	**5,422**	**(1,532)**	**6,954**	**7,793**

Cash flow variances resulted from:	Variance $m	Impact on forecast
Total Net cash flow from Operating Activities	**($0.4) U**	
Operating inflows	**($0.4) U**	
• The unfavourable inflow variance arises as a result of a difference between cash receipts budget assumptions against actuals.	($0.4) U	Neutral
Operating outflows	**$0.0 F**	
Operating cash outflows for payroll costs are unfavourable mainly due to:		
• Personnel costs are unfavourable against budget mainly due to unfavourable employed and outsourced personnel cost variance which includes NZNO MECA settlement payments. The remaining variance arises from the actual timing of pay runs as compared to the phasing of the budget.	($3.6) U	Unfavourable
Operating cash outflows for non-payroll costs are favourable mainly due to:		
• The favourable operating cash flow variance arises mainly from a favourable increase in payables against budget of $4.2m offset by an unfavourable operating non payroll expense variance of $0.8m. The remaining variance arises due to the timing of payment runs.	$2.8 F	Neutral
• GST cash movement is favourable due to timing variances on GST transacted.	$0.8 F	Neutral

Cash flow variances resulted from:	Variance $m	Impact on forecast
Net cash flow from Investing Activities	**$26.1 F**	
• Interest charge is on budget.	$0.0 F	Neutral
• Purchase of assets is slower than planned for the year. This is as a result of deferred timing of spend.	$26.1 F	
Net cash flow from Financing Activities	**($18.6) U**	
• Cash flow from financing activities is unfavourable due to the deferment of planned finance leases and budgeted deficit support not received.	($18.6) U	Neutral

The cash flow statement budget has been calculated on the same basis as the income statement budget. The main difference to actual cash transactions is that the cash flow budget nets off GST payments to the IRD against GST inputs and outputs.

The statement of cash flow (above) is based on the cash book values derived from the general ledger. The following forecast statement of cash flows is based on bank account balances.

WAIKATO DISTRICT HEALTH BOARD (EXCLUDING WAIKATO HEALTH TRUST)
CASHFLOW FORECAST (GST INCLUSIVE) $000

As at 31-Oct-18	Oct-18 Actual	Nov-18 Forecast	Dec-18 Forecast	Jan-19 Forecast	Feb-19 Forecast	Mar-19 Forecast	Apr-19 Forecast	May-19 Forecast	Jun-19 Forecast	Jul-19 Forecast	Aug-19 Forecast	Sep-19 Forecast	Oct-19 Forecast
OPERATING ACTIVITIES													
Cash was provided from:													
MoH, DHB, Govt Revenue	5,142	4,594	6,811	3,780	2,800	6,039	4,252	4,708	6,811	6,966	4,680	4,564	4,680
Funder inflow (MoH, IDF, etc)	144,979	141,045	132,214	137,084	132,214	132,214	137,084	132,214	132,214	136,162	136,162	141,032	136,162
Donations and Bequests	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Income (excluding interest)	3,279	2,747	2,387	2,520	2,280	2,520	2,280	2,760	2,280	2,440	2,581	2,463	2,581
Rents, ACC, & HealthPac (General Accou	3,432	3,628	3,533	3,484	3,436	3,481	3,440	3,775	3,433	3,698	3,736	3,549	3,702
	156,832	152,014	144,945	146,868	140,730	144,254	147,056	143,457	144,738	149,266	147,159	151,608	147,125
Cash was applied to:													
Personnel Costs (incl PAYE)	(53,058)	(48,967)	(56,639)	(47,788)	(50,022)	(46,726)	(46,168)	(54,771)	(45,654)	(57,518)	(50,171)	(47,443)	(53,372)
Other Operating Costs	(30,203)	(39,026)	(37,218)	(30,620)	(35,520)	(39,122)	(37,820)	(38,974)	(33,420)	(25,250)	(32,096)	(24,848)	(28,820)
Funder outflow	(53,071)	(56,511)	(50,173)	(51,051)	(50,463)	(54,585)	(50,297)	(51,739)	(50,173)	(52,268)	(55,657)	(51,673)	(51,516)
Interest and Finance Costs	(19)	(23)	(21)	(21)	(21)	(21)	(18)	(13)	(18)	(23)	(23)	(23)	(38)
Capital Charge	0	0	(18,483)	0	0	0	0	0	(18,711)	0	0	0	0
GST Payments	(7,962)	(7,210)	0	(13,710)	(9,000)	(7,210)	0	(14,420)	(7,210)	(7,210)	(7,210)	(7,210)	(7,210)
	(144,313)	(151,737)	(162,534)	(143,190)	(145,026)	(147,664)	(134,303)	(159,917)	(155,186)	(142,269)	(145,157)	(131,197)	(140,956)
OPERATING ACTIVITES	**12,519**	**277**	**(17,589)**	**3,678**	**(4,296)**	**(3,410)**	**12,753**	**(16,460)**	**(10,448)**	**6,997**	**2,002**	**20,411**	**6,169**
INVESTING ACTIVITIES													
Cash was provided from:													
Interest Income	66	75	75	75	75	75	75	75	75	75	75	75	75
Sale of Assets	0	0	0	0	0	0	0	0	0	0	0	0	0
	66	75	75	75	75	75	75	75	75	75	75	75	75
Cash was applied to:													
Purchase of Assets	(3,893)	(7,000)	(7,000)	(3,500)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)
Investment in NZHPL (FPSC)	0	0	0	0	0	0	0	0	0	0	0	0	0
	(3,893)	(7,000)	(7,000)	(3,500)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)
INVESTING ACTIVITIES	**(3,827)**	**(6,925)**	**(6,925)**	**(3,425)**	**(6,925)**	**(6,925)**	**(6,925)**	**(6,925)**	**(6,925)**	**(6,925)**	**(6,925)**	**(6,925)**	**(6,925)**
FINANCING ACTIVITIES													
Cash was provided from :													
Capital Injection	0	0	0	0	40,000	10,000	0	20,000	10,000	0	0	0	0
Finance Lease received	0	0	0	0	0	0	0	0	0	0	0	0	0
EECA loan received	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	40,000	10,000	0	20,000	10,000	0	0	0	0
Cash was applied to:													
Capital Repayment	0	0	0	0	0	0	0	0	(2,194)	0	0	0	0
Finance lease repaid	0	0	0	0	0	0	0	0	0	0	0	0	0
EECA loan repaid	0	(26)	0	0	(26)	0	0	(15)	0	0	(15)	0	0
Working capital facility repaid	0	0	0	0	0	0	0	0	0	0	0	0	0
FINANCING ACTIVITIES	**0**	**(26)**	**0**	**0**	**39,974**	**10,000**	**0**	**19,985**	**7,806**	**0**	**(15)**	**0**	**0**
Opening cash balance	(10,999)	(2,309)	(8,984)	(33,498)	(33,244)	(4,490)	(4,824)	1,005	(2,394)	(11,961)	(11,888)	(16,826)	(3,339)
Overall increase/(decrease) in cash	8,690	(6,675)	(24,514)	254	28,754	(334)	5,829	(3,399)	(9,567)	73	(4,938)	13,487	(756)
CLOSING CASH BALANCE	(2,309)	(8,984)	(33,498)	(33,244)	(4,490)	(4,824)	1,005	(2,394)	(11,961)	(11,888)	(16,826)	(3,339)	(4,095)
Closing Cash Balance represented by:													
General Accounts													
Cheque Account	0	0	0	0	0	0	0	0	0	0	0	0	0
NZ Health Partnerships Ltd	(2,309)	(8,984)	(33,498)	(33,244)	(4,490)	(4,824)	1,005	(2,394)	(11,961)	(11,888)	(16,826)	(3,339)	(4,095)
Long-term Loans													
Finance Leases	0	0	0	0	0	0	0	0	0	0	0	0	0
EECA Loan	(143)	(117)	(117)	(117)	(91)	(91)	(91)	(76)	(76)	(76)	(61)	(61)	(61)
	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	(2,452)	(9,101)	(33,615)	(33,361)	(4,581)	(4,915)	914	(2,470)	(12,037)	(11,964)	(16,887)	(3,400)	(4,156)
Working capital facility	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(85,299)	(85,299)	(85,299)	(85,299)
	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(82,974)	(85,299)	(85,299)	(85,299)	(85,299)

BALANCE SHEET

Opinion on Result:

There are no material concerns on the balance sheet.

Prior Year June 2018 $'000	Waikato DHB Group Financial Position	As at October 2018 Actual $'000	Budget $'000	Variance $'000	Budget Jun-19 $'000
79,945	Total current assets	90,485	87,432	3,053 F	78,872
(197,999)	Total current liabilities	(218,204)	(225,609)	7,405 F	(208,093)
(118,054)	**Net working capital**	**(127,719)**	**(138,177)**	**10,458 F**	**(129,221)**
722,564	Term assets	721,244	745,270	(24,026) U	787,735
(22,150)	Term liabilities	(21,542)	(25,423)	3,881 F	(32,080)
700,414	**Net term assets**	**699,702**	**719,847**	**(20,145) U**	**755,655**
582,360	**Net assets employed**	**571,983**	**581,670**	**(9,687) U**	**626,434**
582,360	**Total Equity**	**571,983**	**581,670**	**(9,687) U**	**626,434**

Balance Sheet variance's resulted from:	Variance $m	Impact on forecast
Net Working Capital:		
Net working capital is favourable to budget mainly due to:		
Current Assets		
• Total accounts receivable and accrued debtors is higher than budgeted by $4.6m mainly due to an unbudgeted accrual of NOS recoveries $4.5m. The remaining variance is as a result off the timing of cash received compared with budget assumptions.	**$3.1 F**	Neutral
• Prepayments are lower than budgeted by $1.2 due to payment timing assumption variances actual against budget.		
• Other unfavourable variances across a number of areas $0.3m.		
Current Liabilities		
• Cash held with New Zealand Health Partnership Limited is higher than budget by $7.0m. This is represented as a $7.0m favourable variance in Current Liabilities. This is due mainly to the unfavourable variance relating to operating activities ($0.5m) and financing activities ($18.6m) offset by a favourable investing variance from activities ($26m).	**$7.4 F**	Neutral
• Payroll liabilities are $1.9m favourable mainly due to the timing of budget assumption relating to pay runs.		
• Income in Advance $0.6m favourable to budget mainly due to the timing of budget assumptions relating to funds received against actuals.		
• GST $0.8m unfavourable to budget mainly due to timing variances on GST transacted.		

Balance Sheet variance's resulted from:	Variance $m	Impact on forecast
Current Liabilities (continued		Neutral
• Accrued Creditors and Accounts Payable $2.9m unfavourable mainly due to unbudgeted accrual of Keezz ($0.6m) and NOS costs, and higher operational expenses which is evident in the results for the month ($0.8m) and the timing of payments.		
• Other Current Liabilities are favourable to budget $1.6m mainly due to the Finance Lease being deferred.		
Net Term Assets:	**($24.0) U**	
Net Fixed Assets are under budget mainly due to slower than planned capital spend $26.1m, offset by favourable YTD depreciation $2.0m. Please see attached for latest forecast of capital spend for the year for further detail.	($24.1) U	Neutral
Investment in HealthShare has increased by $0.1m due to the share of profits for the 2017/18 year.	$0.1 F	Favourable
Non Current Liabilities:		
Non Current Liabilities are favourable mainly due to deferment of budgeted finance leases.	**$3.9 F**	Neutral
Equity:		
Unfavourable variance driven mainly by budgeted MoH deficit support not received $13.8m and the favourable result variance of $3.8m. The remaining favourable variance relates to Waikato Health Trust Partially Reserved Funds movements.	**($9.7) U**	Neutral

CAPITAL EXPENDITURE AT 31 October 2018 ($000s)

Capital Plan					Cash Flow Forecast					Full Project Forecast		
Activity	Total Prior year Board Approvals	New Approvals FY18/19	Transfers During 18/19	Total Board Approved Capital Plans	Prior year expenditure for active Projects	Total Expenditure Forecast FY 18/19 (Actual + Planned)	Actual Expenditure YTD from 1 Jul-18 to 31 Oct 18	Approved and Planned Expenditure 01 Nov 18 - 30 Jun 19	Approved and Planned Spend Subsequent Years	Total Planned Expenditure (Actual + Forecast to Project completion)	Total Planned Expenditure Versus Total Board Approved	Total Commitments
Under $50K Subtotal	0	3,974	0	3,974	0	3,974	1,388	2,587	0	3,974	0	1,581
												-
Clinical Equipment Subtotal	16,972	41,719	0	58,690	11,406	35,297	5,270	30,026	0	46,703	11,987	5,151
Property & Infrastructure Subtotal	32,251	13,417	0	45,668	13,525	16,836	1,883	14,953	6,307	36,668	9,000	4,362
IS Subtotal	18,123	14,706	0	32,829	13,345	10,104	4,237	5,866	0	23,449	9,381	2,240
Corporate Systems & Processes Subtotal	10,042	320	0	10,362	3,788	6,546	146	6,400	0	10,334	28	146
Regional Subtotal	8,216	1,264	0	9,480	1,043	7,678	57	7,621	0	8,721	759	9
MOH Subtotal	0	0	0	0	0	0	0	0	0	0	0	-
												-
Trust Funded Subtotal	0	0	0	0	0	0	0	0	0	0	0	2
REPORT TOTALS	**85,603**	**75,400**	**0**	**161,003**	**43,107**	**80,435**	**12,982**	**67,453**	**6,307**	**129,849**	**31,154**	**13,492**

Waikato DHB
CAPITAL EXPENDITURE AT 31 October 2018 ($000s)

Project Activity	Total Budget	Total Spend to Date	Planned Future Spend	Under/ (over) Spend
CLINICAL EQUIPMENT				
Under $50K Subtotal	3,974	1,388	2,587	-
Dialysis Machine - Model 5008S -17	527	-	527	-
Dialysis, Hemofiltration Unit	364	-	364	-
Computer Information Sys. - Oncology (Ecilpse & Aria) -1	250	-	250	-
Linarc Accelerator	5,000	-	5,000	-
Blood Culture Analyzer	250	-	250	-
Radg. Unit, (Xray General Ed Room 1)	350	-	350	-
Easy Diagnost (Mcc Room 5)	350	-	350	-
Radg. Unit, Mobile Xray Machine -Mobile	300	-	300	-
Radg. Unit, Trauma Diagnost (Ed Resus)	700	-	700	-
Dual Head Gamma Camera - Hawkeye Infinia	730	-	730	-
Intellivue	364	-	364	-
Mp30 Intellivue	322	-	322	-
Monitor, Cardiac Multi-Parameter	282	-	282	-
Mammotest Breast Biopsy System	680	-	680	-
Monitor, Multi-Parameter	1,053	-	1,053	-
Datex As/3 Monitor 0E3867	320	-	320	-
Pump, Roller, Perfusion System	290	-	290	-
Scanners, Ultrasonic, Cardiac (Ie33)	250	202	48	(0)
Heart Lung Machine, Stockeret S111	303	-	303	-
Heart Lung Machine	315	-	315	-
Respiratory Function Equipment	299	-	299	-
Electophysiology Equipment	285	-	285	-
Maclab Muse & Haemodynamic System	690	-	690	-
Apex Pro Telemetry System (Including Installation	573	-	573	-
Toshiba Digital Image Processing (Cath Lab 2)	1,143	-	1,143	-
Toshiba Digital Image Processing (Cath Lab)	1,204	-	1,204	-
ICU Monitoring System	1,122	-	1,122	-
Monitoring System Upgrade - Network Project	625	-	625	-
S/5 Aespire 7900 Anaesthetic Machibe E11246	612	-	612	-
Physiologic Monitor Module, Multiparameter	456	-	456	-
Incubators, Infant	294	-	294	-
Incubator/Radiant Warming Unit, Infant, Mobile	330	-	330	-
Monitor, Bedside, Fetal	468	-	468	-
Replacement Theatre Lights OT 20-25	286	235	51	(0)
Renal Dialysis (CCD) machines x4 Prismaflex	564	601	-	(37)
New MCC Theatre (Ceasar Theatre) - clinical equipment components	1,313	1,099	215	(1)
Mobile Dental Unit Replacements - level 2	600	117	483	(0)
Digital Mobile X-Ray Project	1,246	1,246	-	(0)
X-ray general (Radiology ED Room 1)	350	0	350	(0)
X-ray general (Radiology MCC Room 5)	350	-	350	-
Mobile Image Intensifier - Waikato	300	275	25	-
Heart Lung Machines	1,493	1,493	-	0
Vascular & Interventional Replacement	1,750	-	1,750	-
General X-Ray replacement Thames	700	-	700	-
Biochemistry main Analysers	300	-	300	-
Liquid Chromatography Mass Spectometry Analyser	600	545	54	1
Rural Laboratories - biochemistry Analysers (x4)	720	-	720	-
Ultrasound (replacement)	825	20	805	(0)
L8 Menzies Surgical Assessment Unit (Acute)	1,561	1,712	-	(151)
Oncology Facility Development (Interim Facility_ Scoping	450	30	-	420
Other Clinical Items <$250K	8,224	1,280	6,900	45
Unplanned Clinical Items - Bucket	6,155	-	6,155	0
New Clinical Items - required due Activity Growth	3,063	-	3,688	(625)
Projects Removed to be Capitalised	7,820	7,821	24	(25)
Other Clinical items - Reserve funding	4,999	-	4,999	(0)
Savings required	(6,081)	-	(18,442)	12,361
Clinical Equipment Subtotal	**62,664**	**18,065**	**32,613**	**11,987**
Mental Health Facility - Scoping -part 2	2,973	54	2,919	0
Multi level carpark 3 or 4 levels (related to Mental health / Med school)	250	-	250	-
Gallagher Building - Med Store & CSES Clinic	406	402	-	4

Project Activity	Total Budget	Total Spend to Date	Planned Future Spend	Under/ (over) Spend
Gallagher Building - Racking System	362	522	-	(160)
Gallagher Building - Converyor System	348	356	-	(8)
Waiora Level 1 - ED Acute Observation Unit	650	-	650	-
Waiora Level 1 - Development of MCC L1 Shell space (for other decants from Waiora L1 : atten	750	-	750	-
Waiora Level 1 - Seismic Works *** part of $2m in Capital Plan	500	-	500	-
Waiora Level 4 - Workspace open plan / decant from Waiora L3 (Includes item removed from be	650	-	650	-
Waiora Level 4 - Sleep space expansion	300	-	300	-
Waiora Level 2, 3 & 4 - Decant space development in ERB3 for Waiora L2, L3 & L4	600	-	600	-
Waiora L3 - Laboratory / Histology / Molecular Biology co location	250	-	250	-
Waiora L1, Menzies L8, OPR5 Kitchen Impact : Kitchen & Food Delivery - Refurbishment & extra	1,500	-	1,500	-
Hamilton Consolidation of CBD facilities - 9th Floor	850	850	-	0
Hamilton CBD - Collingwood Street Development - Ground Floor (Clinical)	9,124	2,760	6,365	(0)
Hamilton CBD - Collingwood Street Development - First Floor	5,584	549	5,035	1
Tokoroa / Te Kuiti / Taumarunui Pregnancy Support Facilities (Fitout of leased premises)	300	-	300	-
Regional Renal expansion on Campus (Is equipment on Clinical Plan??)	550	230	320	(0)
Hague road carpark - Seismic and Beam support	2,032	-	2,032	-
Urology to L8 Menzies	320	22	298	(0)
Tokoroa & Taumarunui Birthing Unit Upgrades (Stage 1 17/18)	300	-	300	-
Waikato Hauora iHub	321	291	30	(0)
Ward Block A & Environs	250	-	250	-
Waikato switchboard upgrades core buildings	866	181	685	(0)
Infrastructure Replacement Pool (17/18)	510	547	-	(37)
Infrastructure Replacement Pool (15/16)	600	745	-	(145)
Infrastructure Replacement Pool (16/17)	641	205	436	-
Infrastructure Replacement Pool (18/19)	600	-	600	-
Project Management Resource to deliver BAU Critical Infrastructure projects (2 FTE Equivalent)	250	-	250	-
Cooling Tower Dosing System Upgrades (2-plus)	300	-	300	-
Lomas Chillers	390	240	150	0
Fire Protection Upgrade to meet compliance requirements	425	-	425	-
Thames - PHO enabling works	500	-	500	-
Seismic Assessments & Remediation (all campus's not itemised elsewhere)	500	-	500	-
Waikato Distribution Boards	250	213	37	-
Electrical Systems Improvement	6,714	5,969	745	-
Carpark safety improvement (Nets / Cages)	550	-	550	-
Other P&I Projects Budgeted <$250K	4,626	1,179	3,413	34
Projects removed to be capitalise	276	94	-	182
Less: Proceeds on sale of property (206 Collingwood St)	(1,500)	-	(1,500)	-
Savings required	-	-	(9,129)	9,129
Property & Infrastructure Subtotal	**45,668**	**15,408**	**21,260**	**9,000**
Information Systems				
ISSP - Clinical and corporate Platform SQL Server consolidation	365	275	90	(0)
IMPACT Patient Flow Tool	1,534	1,656	-	(122)
SQL Server 2016 upgrades / Citrix XenApp vS VDI	500	47	453	(0)
ISSP - Data Warehouse Upgrade (Data Warehouse Phase 1)	387	329	58	0
ISSP- Clinical Photography and Image Management	397	182	215	0
ISSP - Communication Room Remediation Lifecyle	368	54	314	0
ISSP - Paging System Replacement	290	296	-	(6)
ISSP - Network Remediation Work Package 2015/2016	399	405	-	(6)
ISSP - WiFi Rollout	487	487	-	0
ISSP - Network Remediation Lifecycle Work Plan 16/17	282	277	5	(0)
LAN / WLAN - IMPLEMENT: Install WAPs (extend Wi-Fi coverage)	997	292	706	(1)
LAN / WLAN - UPGRADE: Wireless LAN Controllers (Address core capacity constraints)	263	248	15	0
LAN / WLAN - UPGRADE: Distribution Switches	750	-	750	-
LAN / WLAN - UPGRADE: Access Switches	1,519	-	1,519	-
NIPS - IaaS Implementation	1,557	1,291	266	(0)
Disaster Recovery Solution	1,800	-	1,800	-
DeskTop WorkPlan 16/17	288	186	102	(0)
End User Devices (<$2k) - now capitalised	1,740	983	756	1
Rollout of devices at point of care (Investment in circa 500 tablets)	491	2	489	(0)
ISSP - Mobile office Productivity & Management	392	189	203	(0)
Tablet rollout (Year 2 of 4 year plan)	500	-	500	-
ISSP - MS Licensing True-Up	476	129	347	-
ISSP - Other Licensing True-Up	349	83	266	-
ISSP - MS Licensing True-Up -2	400	-	400	-
ISSP - Other Licensing True-Up 2	266	-	266	-

Project Activity	Total Budget	Total Spend to Date	Planned Future Spend	Under/ (over) Spend
ISSP - Enterprise Business Intelligence Tool	305	282	23	(0)
Business Intelligence Data & Reporting	453	54	399	0
Enterprise Service Bus (ESB) Phase II	263	-	263	-
Enterprise Messaging/Communication Solution	350	-	350	-
ISSP - SharePoint Work Pan 16-17	401	455	-	(54)
ISSP - Rapid Logon	359	39	320	0
ISSP - Toolsets (IS Toolsets 15/16)	507	507	-	(0)
ISSP - Netscaler Infrastructure	301	340	-	(39)
Sharepoint 15/16	350	285	65	(0)
Win 10 Upgrade	500	69	431	(0)
Mobility & Mobile Apps	371	24	347	1
Patient IS capabilities - Observations Platform	361	32	328	1
ISL merge ANZ version with European version	500	-	500	-
EBI Tool implementation phase 2 (Qlik Sense Licences)	450	-	450	-
Archiving Tool Implementation	378	-	378	-
Office 2016 upgrade	300	5	295	(0)
Windows 2008r2 to 2016 Server upgrades	800	-	800	-
Security Defence in depth	500	70	430	-
Clinical Workflow Integration Work Plan	358	399	-	(40)
Clinical Workstation Core Component Workplan	513	603	-	(90)
Database Replacements	301	99	202	0
iPM upgrade to V10 - after 16/17	484	575	-	(91)
Cat1-5 In-House Developed Applications Work Plan	330	380	-	(50)
Life cycle - cat 3 -5 Off shelf Apps Workplan(eg PaceArt)	259	247	12	(0)
Oral Health system	852	929	-	(77)
eCWB Infrastructure	254	238	16	-
HealthViews access to Primary Encounters (GP to Workstations)	306	304	2	-
eOrders	469	253	38	179
Anaesthesia Information System - Implementation	600	-	600	-
Observations Platform (eVitals) - implementation	700	-	700	-
Nutrition & Food Management	932	88	844	(0)
Other IS Projects Budgeted <$250K	7,886	3,318	5,134	(566)
Projects to be Capitalised	1,408	575	-	833
Savings required	(7,070)		(16,581)	9,511
IS Subtotal	32,829	17,582	5,866	9,381
Corporate				
HRIS Lifecycle Upgrade 15_16	529	51	478	-
Costpro Upgrade	313	243	70	(0)
HRIS remediation	4,218	-	4,218	-
SmarthHealth devices	320	-	320	-
incl Mobile printing for IOS	600	389	211	(0)
Clinical Device Platform	491	70	422	(1)
SCEP racking - hospital wide	400	-	400	-
PeopleSoft Global Remediation	478	478	-	(0)
MECA and Rule Management	289	289	-	0
PLA and Leave Rule Updates	361	361	-	0
Payroll Process Improvements	480	631	-	(151)
National Patient Flow Phase 3 16/17 & 17/18 & 18/19	385	305	79	1
Other Corporate Projects Budgeted <$250K	1,498	1,117	208	173
Savings required	-		(6)	6
Corporate Subtotal	10,362	3,934	6,400	28
MOH & Trust Funded				
HSL - eSpace Programme	6,014	-	6,014	-
National Oracle Solution - Elevate	3,929	1,100	2,070	759
PACS review	392	-	392	-
Telestroke Pilot	321	7	314	-
Other MOH & Trust Funded Projects Budgeted <$250K	872	-	872	-
Savings required	(1,727)		(1,727)	-
(Funded by MOH)	(321)	(7)	(314)	-
MOH & Trust Subtotal	9,480	1,100	7,621	759
Total Projects	**161,003**	**56,089**	**73,760**	**31,154**

WAIKATO DISTRICT HEALTH BOARD
EXECUTIVE TRAVEL
October 2018

Travel costs include airfare, accommodation, taxis/shuttles and meals. Travel relating to training or conferences does not include the event registration fees. Travel related to approved CME is also not included.

Travel charges originating from the WDHB travel agent (Tandem Travel) are processed one month in arrears once data is available. In addition, the agent takes an average of 45 days to charge pass on costs such as accommodation. For this reason, costs reflected in this report for current month may relate to prior months' travel.

Travel costs - Executive Group	Month			Year to Date			
September 2018	Domestic $	International $	TOTAL $	Domestic $	International $	TOTAL $	Comment
AITKEN VICKI	943.37	-	943.37	1,107.67	-	1,107.67	
AYDON LYDIA	35.00	-	35.00	35.00	-	35.00	
CARDWELL CHRIS	-	-	-	-	-	-	
CHRYSTALL MAUREEN	264.96	-	264.96	1,284.55	-	1,284.55	
ELLIOTT LORAINE	-	-	-	506.04	-	506.04	
HABLOUS NEVILLE	381.16	-	381.16	558.90	-	558.90	
HAYWARD SUE	-	214.80	214.80	683.17	1,559.78	2,242.95	Int Travel - Quality & Safety in Healthcare
HOPGOOD GARY	317.38	-	317.38	742.44	-	742.44	
HOWARD GRANT	-	-	-	927.18	-	927.18	
MALONEY TANIA	141.44	1,605.14	1,746.58	1,451.94	1,605.14	3,057.08	Int Travel - Learning Set - Melbourne
McCURDIE ANDREW	801.40	-	801.40	801.40	-	801.40	
NEVILLE MO	-	581.70	581.70	575.08	1,487.19	2,062.27	Int Travel - Health round table, Sydney
SEWELL GILL	-	-	-	-	-	-	
TAHU SUE	-	-	-	-	-	-	
TAPSELL REES	-	-	-	667.27	-	667.27	
TER BEEK MARC	-	-	-	60.00	-	60.00	
WRIGHT DEREK	540.45	-	540.45	1,463.71	-	1,463.71	
Grand Total	**3,425.16**	**2,401.64**	**5,826.80**	**10,864.35**	**4,652.11**	**15,516.46**	

Interim CE Travel Expenditure Derek Wright

Travel costs for the period to 31 October 2018				
Date(s)	Cost ($) (exc GST)	Purpose	Nature	Location
21 February 2018	40.91	Late charge prior year Taxi Fare Health Commissioner	Taxi	Wellington
8 June 2018	45.12	Meet & Welcome new MoH Director General	Taxi	Wellington
June 2018	72.17	3 x meetings in Wellington with MoH in June 2018	Hamilton airport parking x3	Hamilton
18-19 June 2018	40.54	MoH - WDHB annual plan and Budget meeting, meeting Dept. Corrections	Taxi	Wellington
6 August 2018	77.13	Meeting CE and Chair of Counties Manukau DHB	Mileage and parking	Auckland
7 August 2018	70.00	Presented to APEX conference	Mileage	Auckland
9 August 2018	577.38	National DHB CE meeting	Parking, airfare , taxi	Wellington
24 September 2018	513.32	Allied Health Partnerships Meeting	Airfare, Taxi	Wellington
11 October 2018	27.13	National DHB CE meeting	Taxi	Wellington
	1,463.71			

Waikato District Health Board

Health Targets

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 7.1

HEALTH TARGETS REPORT

Purpose	For information.

Most Recent Results

The most recent official results on the (former) Health Targets were presented previously as we have been informed by the MOH that there are significant reporting delays at the Ministry and ratings for The Shorter Stays in ED and Improved Access to Elective Surgery target will only be available after the 22 November 2018.

Table 1- Health targets performance summary

HEALTH TARGETS		16/17 Target	2016/17 Q1 results	2016/17 Q2 results	2016/17 Q3 results	2016/17 Q4 results	17/18 & 18/19 Target	2017/18 Q1 results	2017/18 Q2 results	2017/18 Q3 results	2017/18 Q4 results	2018/19 Q1 results	Target achieved	Most recent result
Shorter stays in emergency departments		**95%**	89.3% 19th ✗	87.6% 20th ✗	88.4% 20th ✗	86% 20th ✗	**95%**	82% 20th ✗	89% 20th ✗	86% 19th ✗	84% 19th ✗	80.4%	X	83.2% Oct-18
Improved access to elective surgery		**100%**	108% 7th ★	106% 10th ●	110% 3rd ★	114% 2nd ★	**100%**	111% 5th ★	104% 8th ●	105% 6th ★	105% 7th ★	Unavailable	√	100% Oct-18
Faster Cancer Treatment (FCT)	Achievement	**85%**	81.4% 5th ★	85.9% 4th ★	86.1% 5th ★	86% 2nd ★	**90%**	98% 1st ★	98% 2nd ★	97% 3rd ★	96% 3rd ★	93% 8th ●	√	94% Oct - 18 Provisional
Better Help for Smokers to quit	Primary Care	**90%**	87% 12th ●	86% 13th ●	87% 12th ●	88% 15th ✗	**90%**	88% 14th ●	89% 12th ●	88% 14th ●	87% 16th ✗	85% 17th ✗	X	85% 18/19 Q1 result
	Maternity	**90%**	93% 12th ●	96% 4th ★	98% 4th ★	95% 8th ●	**90%**	94% 8th ●	97% 4th ★	99% 3rd ★	87% 14th ●	89% 13th ●	X	87% 17/18 Q4 result
Increased immunisation (8 months)		**95%**	92.3% 13th ●	92% 15th ✗	90% 16th ✗	89% 15th ✗	**95%**	88% 15th ✗	90% 15th ✗	89% 14th ●	88% 14th ●	87% 16th ✗	X	89% Oct-18 3 mth rolling
Raising Healthy Kids		**95%**	47% 11th ●	79% 6th ★	84% 9th ●	81% 14th ●	**95%**	76% 19th ✗	100% 1st ★	100% 1st ★	100% 1st ★	100% 1st ★	√	100% 6 mths Aug 18

Key: DHB rating		
★ Good	● Average	✗ Below average
Top third of DHBs	Middle group of DHBs	Bottom third of DHBs

Target: Shorter Stays in Emergency Departments (ED)

Table 2 - DHB quarter results 2017/18 2018/19

Q1 17/18	Q2 17/18	Q3 17/18	Q4 17/18	Q1 18/19
82.1%	88.8%	85.8%	83.6%	80.4%

Table 3 - Emergency Department Q1 results by site and by clinical unit

	Numerator: The number of ED presentations with a length of stay of less than six hours	Denominator: Total number of ED presentations	Percentage of patients admitted, discharged or transferred from ED in less than six hours
DHB total:	23787	29583	80.4%
Waikato	15790	20988	75.2%
Taumarunui	1400	1456	96.2%
Thames	3458	3886	89.0%
Tokoroa	3139	3253	96.5%

		Maori			Pacific		
DHB	Individual ED Facilities	Numerator: Number of Patient Presentations to ED with Length of Stay < 6 Hours	Denominator: Number of Patient Presentations to the ED	Percentage of Patient Events Admitted, Discharged or Transferred from ED within 6 hours	Numerator: Number of Patient Presentations to ED with Length of Stay < 6 Hours	Denominator: Number of Patient Presentations to the ED	Percentage of Patient Events Admitted, Discharged or Transferred from ED within 6 hours
Waikato DHB	Combined DHB total:	7634	9213	82.9%	640	779	82.2%
	Waikato	4845	6307	76.8%	468	601	77.9%
	Taumarunui	668	682	97.9%	10	10	100.0%
	Thames	701	758	92.5%	62	65	95.4%
	Tokoroa	1420	1466	96.9%	100	103	97.1%

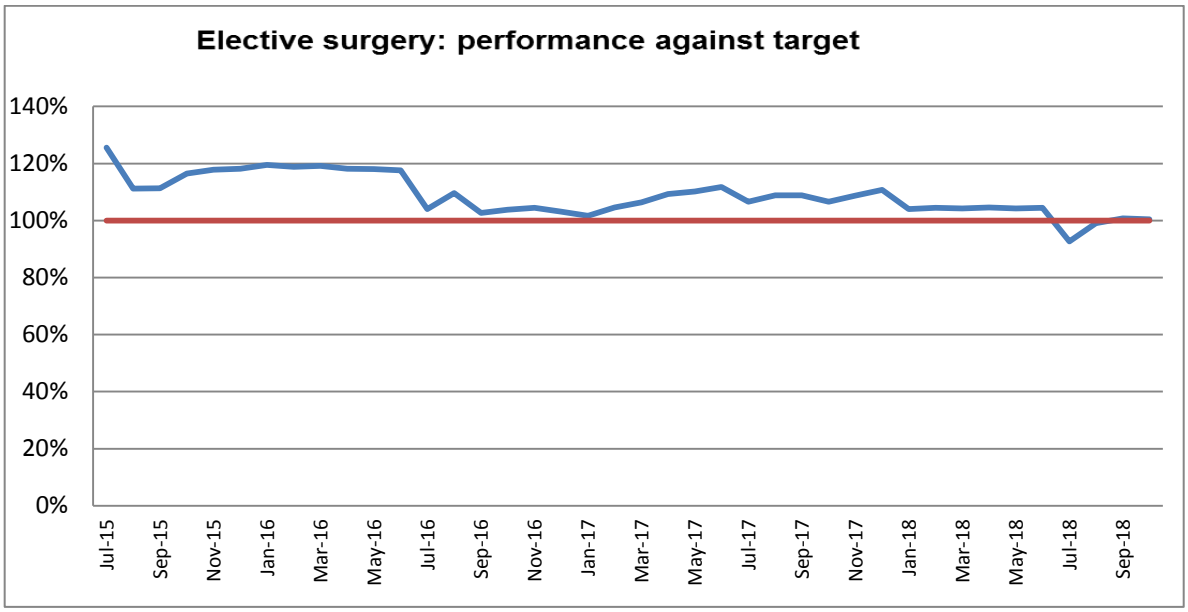
Target: Elective Surgery

Table 4 – Elective Surgery Results by Quarter

Quarter	Q1 16/17	Q2 16/17	Q3 16/17	Q4 16/17	Q1 17/18	Q2 17/18	Q3 17/18	Q4 17/18
Result	102.6%	103.1%	106.3%	111.8%	111%	104%	105%	105%
Ranking	7	10	3	2	5	8	6	7

Graph 1 below provides the most recent result of 100.4%.

Graph 1 - Waikato DHB's elective surgery performance up to Oct 2018



Target: Faster Cancer Treatment (FCT)

Table 5 - Summary of achievement against the FCT health target from July 2018 to October 2018

FCT 62 DAY HEALTH TARGET									
DHB Current Target	DHB Q1 Result 16/17	DHB Q2 Result 16/17	DHB Q3 Result 16/17	DHB Q4 Result 16/17	DHB Q1 Result 17/18	DHB Q2 Result 17/18	DHB Q3 Result 17/18	DHB Q4 Result 17/18	DHB Q1 Result 18/19
90%	81.4% 5th ranking	86.1% 5th ranking	85.9% 5th ranking	86.4% 2nd ranking	96.6% 3rd equal ranking	96.6% 3rd equal ranking	99.0% 3rd ranking	95.5% 3rd ranking	94% TBC
FCT VOLUME TARGET									
DHB Current Target	DHB Q1 Result 16/17	DHB Q2 Result 16/17	DHB Q3 Result 16/17	DHB Q4 Result 16/17	DHB Q1 Result 17/18	DHB Q2 Result 17/18	DHB Q3 Result 17/18	DHB Q4 Result 17/18	DHB Q1 18/19
25%	17%	19%	19%	22%	14%	14%	14%	18%	18%

Graph 2 - Historical achievement against the FCT health target by month

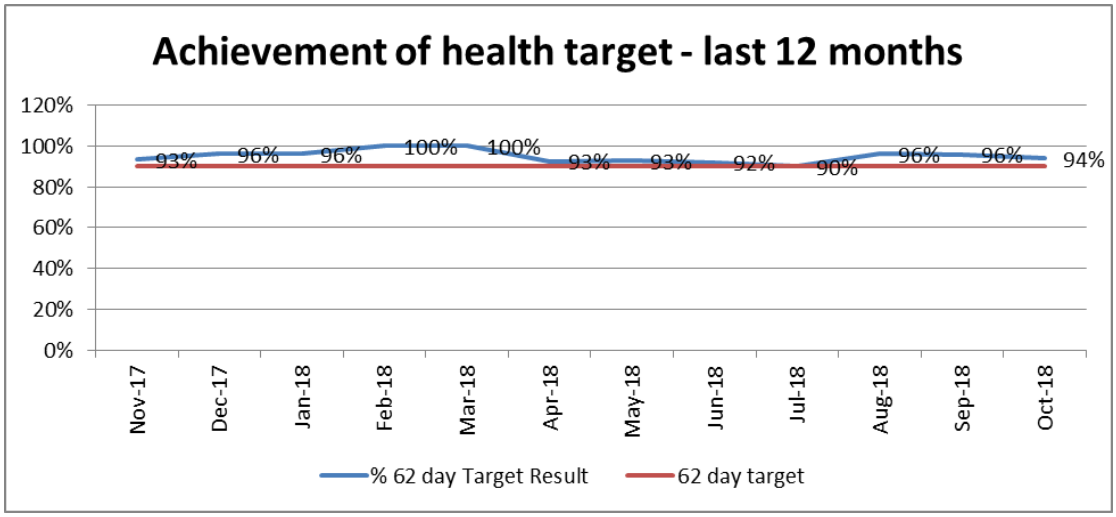


Table 6

Local FCT Database	Jul-18	Aug-18	Sep-18
Number of records submitted	29	28	25
Number of records within 62 days	26	27	24
% 62 day Target Result	94%	96%	96%
% Volume Target Met	17%	17%	16%

Target: Increase in 8 month olds fully immunised

Table 7 – Eight month Milestone Immunisation Results by Quarter

Quarter	Q4 16/17	Q1 17/18	Q2 17/18	Q3 17/18	Q4 17/18	Q1 18/19
Result	**89%**	**88%**	**90%**	**89%**	**88%**	**89%**
Māori	**86%**	**82%**	**86%**	**83%**	**82%**	**83%**
Ranking	**15**	**15**	**15**	**14**	**14**	**16**

Graph 3 - Waikato DHB's fully immunised rates for 8 month olds (rolling three month result)

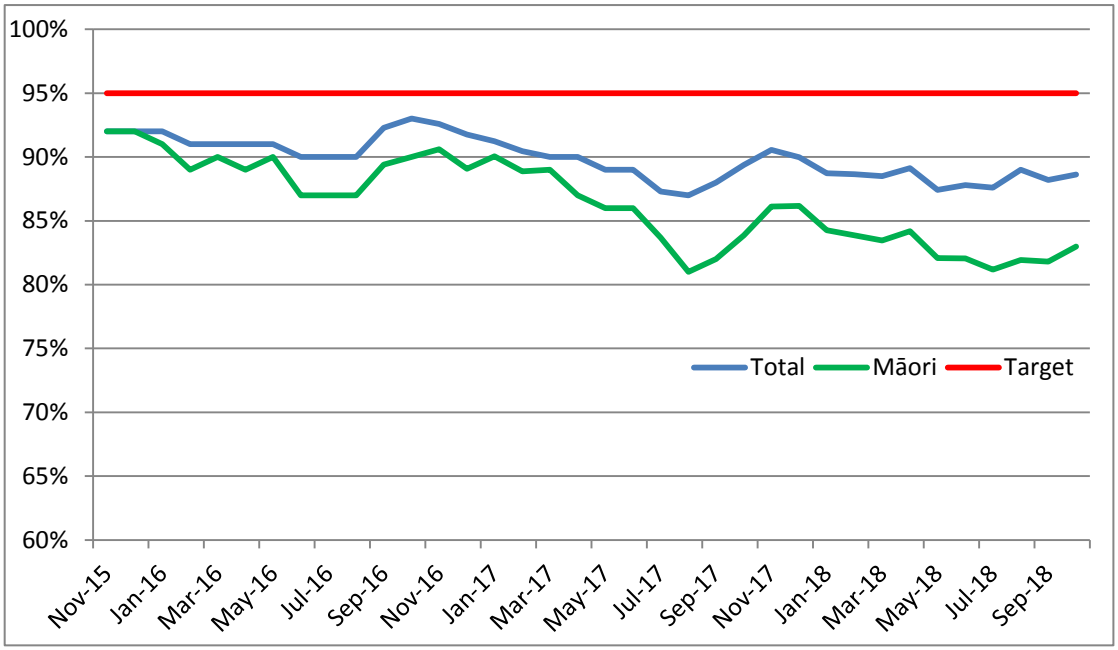


Table 8 - Waikato DHB 8 month old immunisations ethnicity breakdown from Aug 2018 to Oct 2018

Ethnicity	Number eligible	Fully immunised	Result	Increase needed to meet target (95%)
NZ European	527	483	92%	18
Māori	505	419	83%	61
Pacific	59	52	88%	5
Asian	168	163	97%	0
Other	102	89	87%	8
Total across ethnicities				92
Total	1,361	1,206	89%	87

Target: Better help for smokers to quit - primary care

Table 9 – Quarterly Results

	Q2 17/18	Q3 17/18	Q4 17/18	Q1 18/19
Total	89%	88%	87%	85%
Total Ranking	12	14	16	17
Māori		87%	85%	81%
Māori Ranking		13	15	18

Ethnicity splits only provided from Q3 17/18

Target: Better help for smokers to quit - maternity

Table 10 – Quarterly Results

	Q2 17/18	Q3 17/18	Q4 17/18	Q1 18/19
Total	97%	99%	87%	89%
Total Ranking	4	3	14	13
Māori	97%	98%	83%	86%
Maori Ranking	8	2	13	15

Caution must be exercised when iinterpreting results as the sample population is extremely small

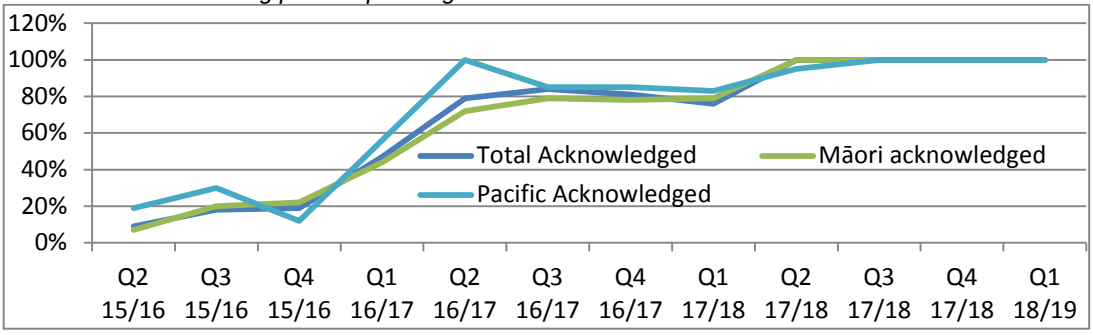
Target: Raising healthy kids

Table 11 – 2018/19 Q1 Raising Healthy Kids Results (target 95%)

		Waikato					National
		2017/18 Q1	2017/18 Q2	2017/18 Q3	2017/18 Q4	2018/19 Q1	2018/19 Q1
		Six mths Aug 17	Six mths Nov 17	Six mths Feb 18	Six mths May18	Six mths Aug 18	Six mths Aug 18
Total	Referral Sent	77% (93)	100% (144)	100% (142)	100% (158)	100% (169)	99% (1,460)
	Referral Sent and Acknowledged	**76% (91)**	**100% (144)**	**100% (142)**	**100% (158)**	**100% (169)**	**98% (1,439)**
Māori	Referral Sent	79% (36)	100% (69)	100% (70)	100% (79)	100% (85)	99% (504)
	Referral Sent and Acknowledged	**79% (36)**	**100% (69)**	**100% (70)**	**100% (79)**	**100% (85)**	**98% (497)**
Pacific	Referral Sent	87% (13)	95% (12)	100% (14)	100% (14)	100% (12)	100% (425)
	Referral Sent and Acknowledged	**83% (12)**	**95% (12)**	**100% (14)**	**100% (14)**	**100% (12)**	**99% (422)**

Note that the numbers in brackets in the table are the actual numbers of children in each of the categories.

Graph 4 - Results for 'Raising Healthy Kids' health target
Data for a 6 month rolling period up to Aug 2018



Recommendation
THAT
The Board receives this report.

TANYA MALONEY
INTERIM EXECUTIVE DIRECTOR, STRATEGY AND FUNDING

DAMIAN TOMIC
CLINICAL DIRECTOR, STRATEGY, FUNDING AND PRIMARY CARE

GRANT HOWARD
INTERIM CHIEF OPERATING OFFICER

Waikato District Health Board

Health and Safety

Waikato District Health Board

Service Performance Monitoring

Waikato District Health Board

Professional Advisory Reports

Waikato District Health Board

Decision Reports

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 11.1

EQUITY FOCUSED REPORT

Purpose	For noting.

Background
Equity focused reporting is provided to the Board on a quarterly basis to inform and prioritise ongoing improvement efforts with the goal to achieve (DHB priority 1.1): Radical improvement in Māori health outcomes by eliminating health inequities for Māori.

This report is a joint initiative from Te Puna Oranga (TPO) and the Chief Data Officer and includes the findings from the ongoing reporting and an update on improvement work underway and planned.

Previous reports highlighted areas of significant inequity and triggered the start of improvement work to address the inequity (e.g. for Outpatient DNA rates).

Changes since last report
Since the last report in August, a number of changes have been made to the report to better highlight priority areas and to report on progress made to reduce inequities:

1. Re-grouped performance measures to highlight those where a strong statistical difference exists between Māori and non-Māori.
2. Included commentary on improvement activity underway or planned from the accountable business owner (see 'Accountability' section) for these performance measures.
3. Added one new measure: Mental Health average Length of Stay.
4. Merged all measures into one standard format.

Accountability
The data used for equity-focused reporting is supplied by the Operational & Performance team (for internal measures) and the Strategy and Funding team (for primary and community health measures). The key accountable people for data collection and reporting are:

Chief Data Officer	Marc ter Beek
Director - BI & Production Planning	Neil Hall
Director - Health Intelligence	Regan Webb

This data is then interpreted with the assistance of Te Puna Oranga (Māori Health Service) by accountable business owners for the performance measures to comment on what is being done to address the inequities in their service as highlighted by the data. The key accountable people for interpretation and initiatives are:

Executive Director - Te Puna Oranga	Loraine Elliott
Chief Operating Officer	Grant Howard
Executive Director - Mental Health	Vicki Aitken
Executive Director – Strategy & Funding	Tanya Maloney

November KPI report – key findings
Trends from the last report have not changed, with inequities continuing for: (Appendix I).

- Outpatient DNA rate: the rate for Māori remains significantly higher than for non-Māori. Work is underway to identify causes and implement changes.
- Renal admissions: Māori are four times more likely to be admitted to hospital than non-Māori.
- Respiratory admissions: Māori are more likely to be admitted to hospital than non-Māori.
- 8-month immunisations: Non-Māori infants are significantly more likely to have their 8-month immunisations completed.
- Long stay and Long stay bed days: Whilst Māori are still more likely than non-Māori to experience a long (>20 days) stay in hospital, the difference appears to be getting smaller.

Activity underway
Project work has commenced to address the inequity in outpatient DNA rates. As reported to Māori Strategic Committee in September, a patient survey was conducted to gather the reasons for patient non-attendance to an outpatient appointment. These findings are used to inform the design of new business processes in the outpatient clinics. Under leadership from the Service Manager Day Procedure Centre and Services, a project to implement changes is now underway.

The revised policy for ethnicity data collection was sent for EG endorsement and will be published on the intranet in due course. The updated policy includes the expectations for ethnicity data collection, the adoption of Māori prioritised ethnicity and outlines processes for appropriate quality data collection.

Next steps
Equity-focused key performance indicators (KPI) will be included under a specific category on the organisation-wide KPI dashboard (in design). A proposal for the dashboard will come to the Board for decision in a future meeting and it is considered that either the DHB strategic framework, or the 'STEEEP' framework adopted by Health Quality and Safety Commission are suitable for achieving a 'balanced' set of measures.

Further, with the increased use of 'QlikSense' based reports, ethnicity will be available to users as one of the standard data filters. This will help increase the people's understanding of causes for inequities in performance.

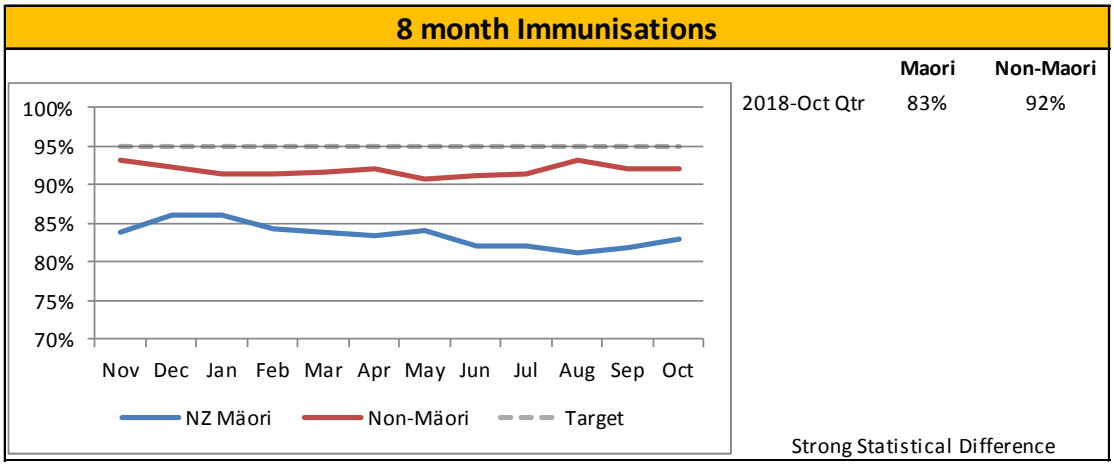
Recommendation
That
The Board receives the report..

LORAINE ELLIOTT
EXECUTIVE DIRECTOR MĀORI HEALTH

MARC TER BEEK
CHIEF DATA OFFICER

Appendix I: Equity Focused Report - November 2018

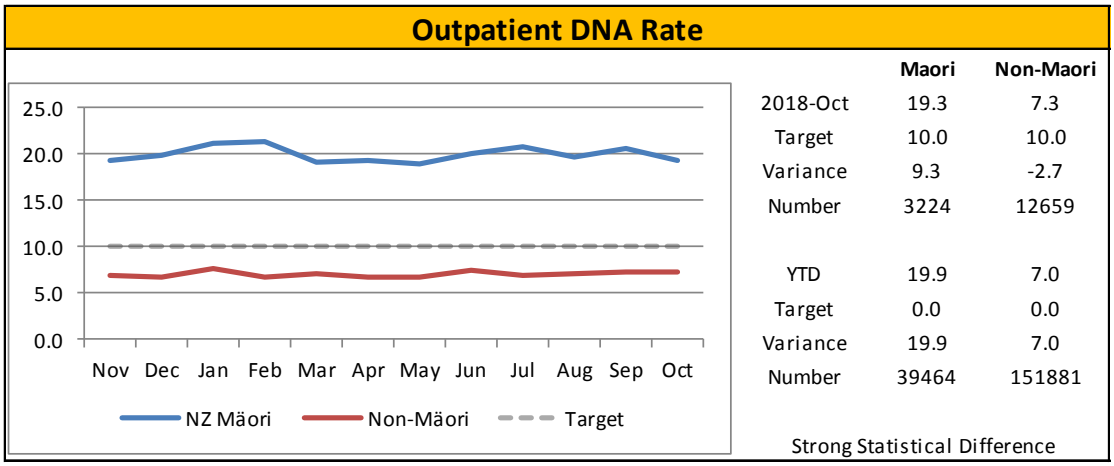
Measures with strong statistical difference



NEW Definition: The percentage of 8-month old infants who have received full immunisations. This is one of the Health System Targets as defined by the Ministry of Health.

Work underway (interim Executive Director Strategy & Funding):
Work is underway to improve Māori babies' immunisations by eight months. The current actions to improve immunisation include the following:

- Reallocation of funding from a PHO to fund a new service within the National Immunisation Register team at Waikato DHB from 1 January 2019. The service will proactively follow up all babies who are delayed in receiving their vaccinations (a "missing events" service);
- Requesting PHOs to remind general practices to check immunisation status of all children at the every visit and immunise if needed;
- Engagement with Oranga Tamariki and Family Start providers to ensure all children enrolled with Family Start are fully immunised;
- Funding additional 0.5 FTE hospital based registered nurse vaccinator to provide/support opportunistic immunisations in outpatients, emergency departments and rural hospitals;
- Promoting immunisations at the Tainui games;
- Working with the National Immunisation Advisory Centre to access their health education resources and distribute to Hapu Wananga and Lead Maternity Carers and support a community development pilot increase vaccinations in Māori communities;
- Working with local pharmacy services and the Pharmacy Council to establish a pharmacist led early childhood vaccination service;
- Immunisation will be offered in southern community hubs as the hubs launch.

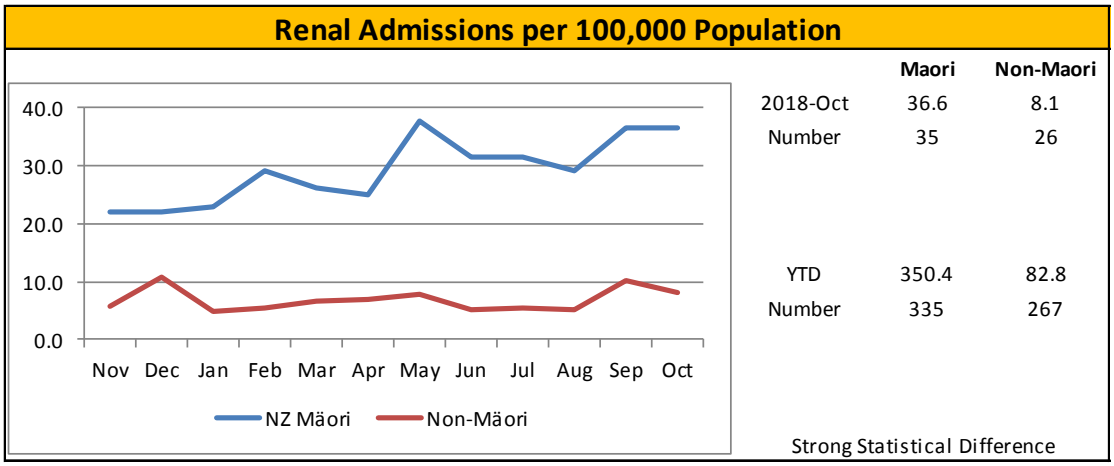


Outpatient DNA rate for Māori is significantly higher than for non-Māori, at almost three times the rate.

Work underway (interim COO):

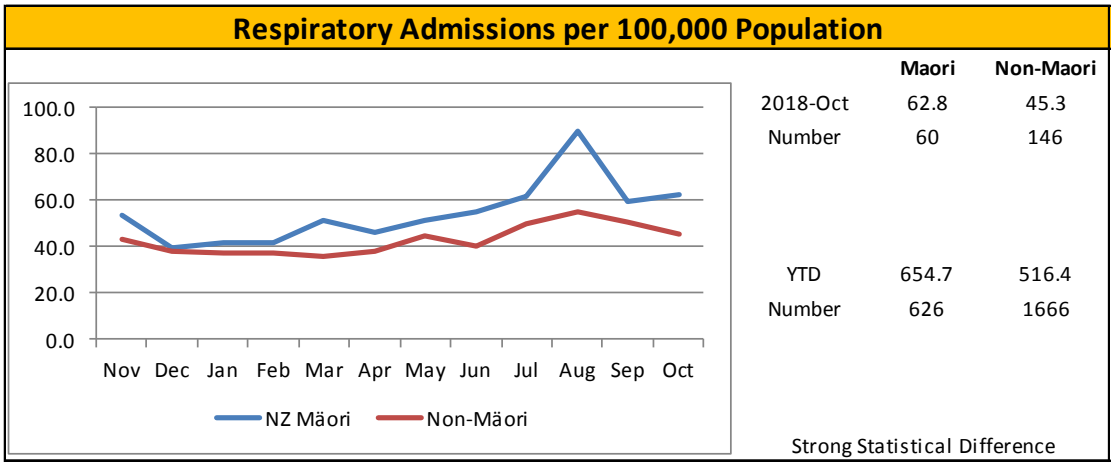
There are two approaches being worked on, general improvement of the outpatient booking process and a proposal to implement case management approaches in the highest risk clinics, in paediatrics. The following points cover improvements in the booking process.

- For a selected group of specialities we are assuming a high risk of DNA upfront and intervening earlier using Māori and FSA as the identifier for prioritisation;
- This means ringing to patient to ask when an appointment suits them (Asking not telling);
- These specialities are Plastics, Neurology, Gen Med, Dermatology;
- Referral Coordination Centre (RCC) now entering NZM in comment for waitlist referral so this enables booking clerks to see ethnicity and prioritise from the screen they work from (as currently iPM screen does not feature ethnicity column – we have requested an iPM change for ethnicity column to be included on waitlist screen, making it easier for the booking clerk team to do the right thing);
- Neurology booking clerks are ringing all future appointments for patients with ethnicity of Māori to confirm or reschedule appointment;
- Patient Service Centre (PSC) will use the Outpatient Automated Reminder System (OARS) error report (once the change has been implemented completed to include ethnicity) as a follow up for any patient who is Māori where their contact details are wrong and have generated an error on the report - by contacting NOK, GP etc to confirm current details (expecting the change to report to be done later this month);
- Started the conversations regarding equity with the booking clerk team which has generated interesting discussion on how to do things better.



Renal admission rate in Māori population is four times higher than in non-Māori population.

Work underway (interim COO / Executive Director Strategy & Funding):
The Renal Service will present their Clinical Service Plan (CSP) to the Hospitals Advisory Committee in December 2018 to commence discussion about challenges and limitations in the provision of renal services in the Midland Region.



Respiratory admission rate for Māori population are higher than non-Māori. The gap has widened in last few months (winter).

Work underway (interim COO / Executive Director Strategy & Funding):
Winter respiratory presentations are largely driven by seasonal infections and underlying chronic lung disease as well as poor social support and access to primary health care. Māori are over-represented in all of the above. Also Māori generally present about 8-10 years younger than NZ European depending on the underlying chronic lung disease (we have published Waikato data on this). Social factors contribute > 30% of COPD admissions (again, we have detailed data on this having done some work a couple of years ago for the Ministry).

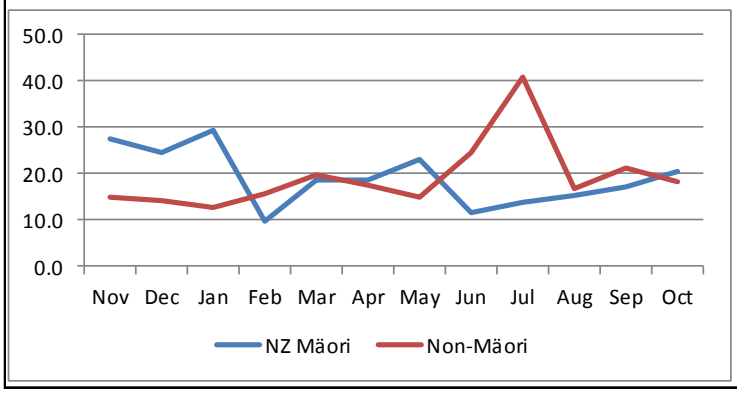
The effect of socio-economic factors are manifest at an early age with the majority of admissions to ICU under the age of 2 being Māori, and the majority of these children have bronchiolitis and a residential address corresponding to an area of high deprivation across the Waikato.

There is a widening of the gap every winter as all of the above factors come into play and narrowing during summer as people usually manage a bit better.

We do not have any programs in place specifically addressing Māori but the COPD home-based care pilot target those with poor social support and help to increase access to primary health care which helps indirectly.

Measures with limited or no statistical difference

Mental Health Length of Stay



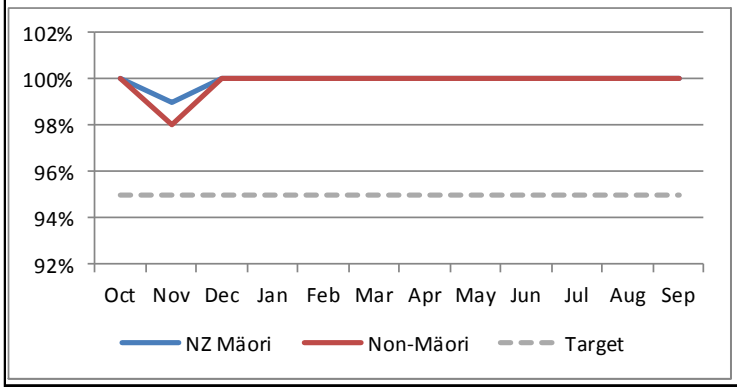
	Maori	Non-Maori
2018-Oct	20.6	18.3
Number	49	98
YTD	19.0	19.2
Number	536	975

No Statistical Difference

NEW - Definition: Average length of stay for patients discharged from Mental Health service in the month. Includes discharges from wards 34, 35, 36, 38, MHOPR1, (excludes Forensic wards).

Overall, the length of stay for Māori and Non-Māori patients is the same at 19 days. The monthly figures can swing either way, but this is not indicative of a trending or statistically significant difference between Māori and Non-Māori mental health patients.

Raising Healthy Kids



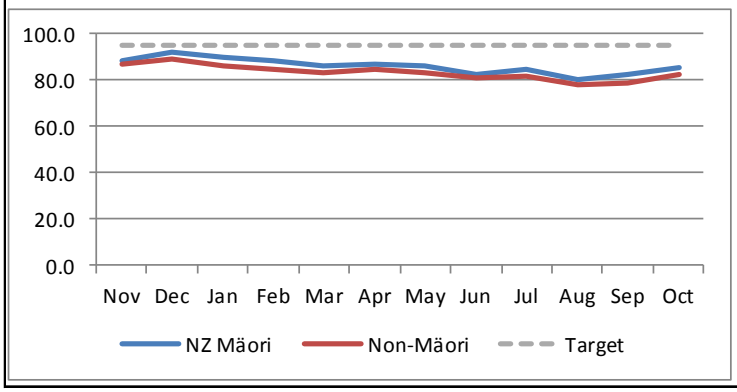
	Maori	Non-Maori
2018-Sep	100%	100%

No Statistical Difference

Definition: The percentage of obese children identified in the B4 School Check programme who are offered a referral to a health professional for clinical assessment and family-based nutrition, activity and lifestyle interventions. This is one of the Health System Targets as defined by the Ministry of Health.

All Māori and Non-Māori obese children receive the same service level. Waikato DHB is performing very well on this measure.

ED < 6 hours

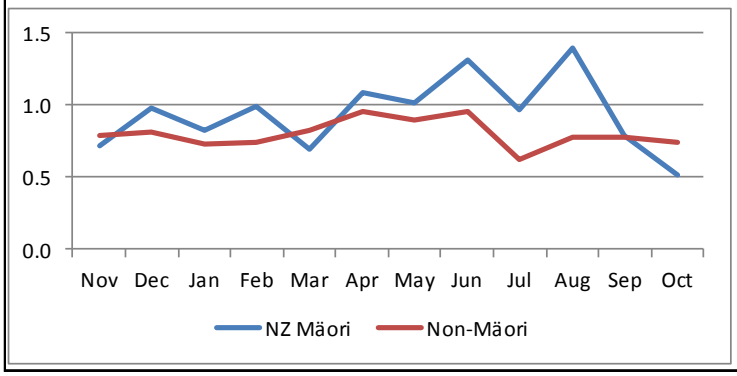


	Maori	Non-Maori
2018-Oct	85.2	82.5
Target	95.0	95.0
Variance	-9.8	-12.5
Number	2852	6981
YTD	86.1	83.4
Target	0.0	0.0
Variance	86.1	83.4
Number	33869	82417

Statistical Difference

Māori are more likely to be discharged from ED within 6 hours.

Number of long stay patients (>20 days length of stay) per 100 discharges

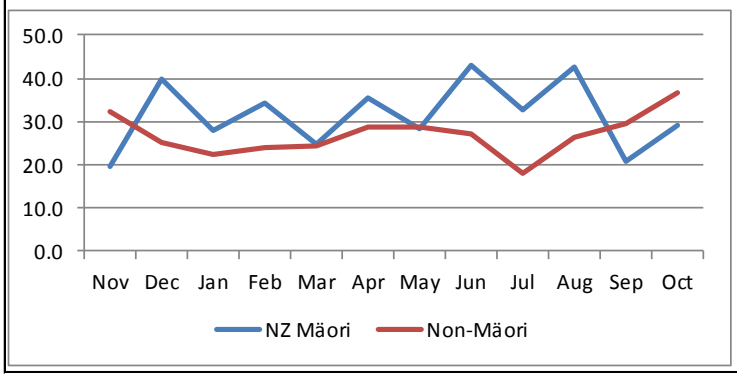


	Maori	Non-Maori
2018-Oct	0.5	0.7
Number	11	48
YTD	0.9	0.8
Number	227	582

Statistical Difference

Māori are more likely to experience a long hospital stay (>20 days) than non-Māori. The difference that emerged earlier this year appears to reverse in September and October.

Number of long stay patient bed days (>20 days los) per 100 discharges

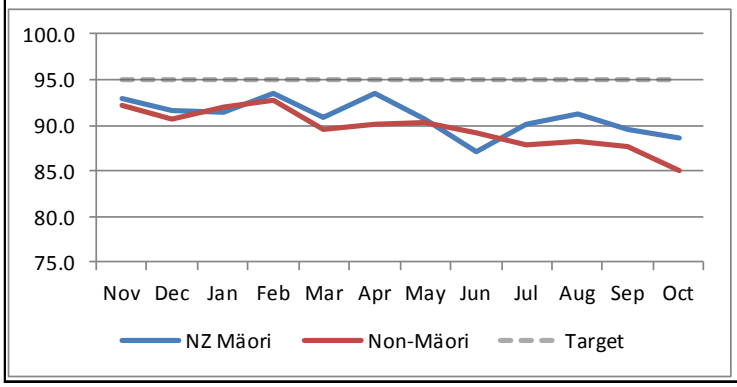


	Maori	Non-Maori
2018-Oct	29.0	36.7
Number	613	2375
YTD	31.6	27.0
Number	7576	19556

No Statistical Difference

When long staying (>20 days), Māori have a similar length of stay as non-Māori. Previous difference for this measure not notable anymore.

Better help for smokers to quit

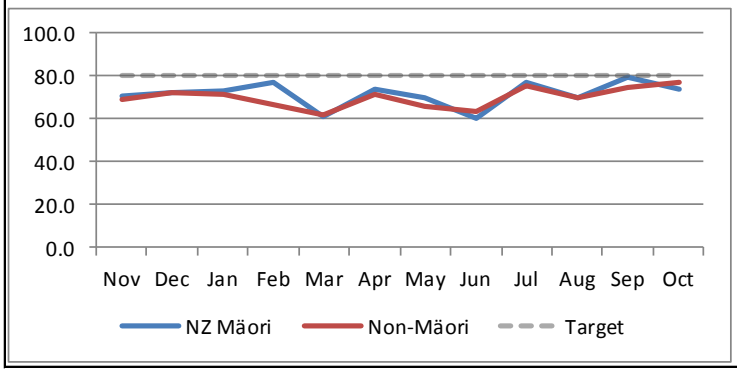


	Maori	Non-Maori
2018-Oct	88.7	85.0
Target	95.0	95.0
Variance	-6.3	-10.0
Number	291	319
YTD	90.9	89.7
Target	0.0	0.0
Variance	90.9	89.7
Number	5699	6895

No Statistical Difference

There is no difference in rate of smoking advice provided to smokers. Performance is declining for both groups.

Waiting Time for acute theatre < 24 hrs

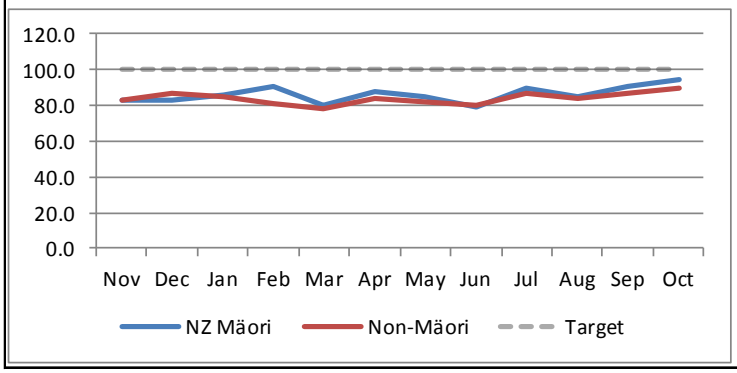


	Maori	Non-Maori
2018-Oct	74.1	76.7
Target	80.0	80.0
Variance	-5.9	-3.3
Number	220	563
YTD	71.2	69.9
Target	0.0	0.0
Variance	71.2	69.9
Number	2750	7165

No Statistical Difference

There is no difference in proportion of patients waiting less than 24 hours for acute theatre.

Waiting Time for acute theatre < 48 hrs

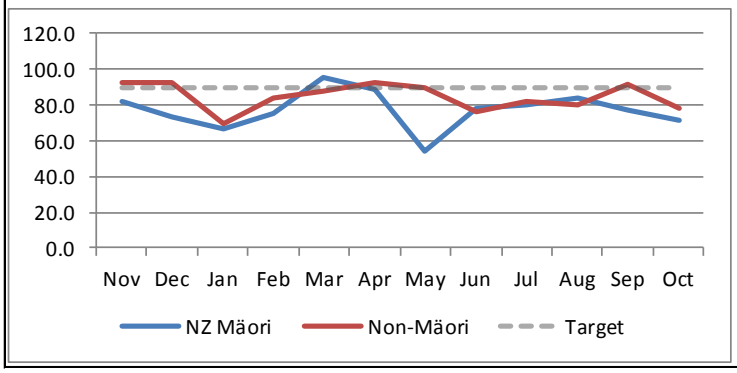


	Maori	Non-Maori
2018-Oct	94.5	90.1
Target	100.0	100.0
Variance	-5.5	-9.9
Number	220	563
YTD	86.1	83.8
Target	0.0	0.0
Variance	86.1	83.8
Number	2750	7165

No Statistical Difference

There is no difference in proportion of patients waiting less than 48 hours for acute theatre. Performance improving for both groups.

Mental health post discharge follow up - % seen in 7 days

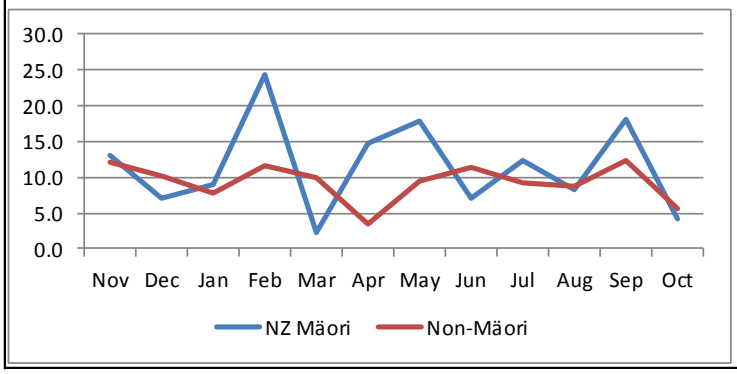


	Maori	Non-Maori
2018-Oct	71.1	78.0
Target	90.0	90.0
Variance	-18.9	-12.0
Number	38	41
YTD	77.9	84.9
Target	0.0	0.0
Variance	77.9	84.9
Number	340	524

Statistical Difference

There is no difference in proportion of Mental Health patient follow ups seen in 7 days.

Mental health 28 day readmission rate

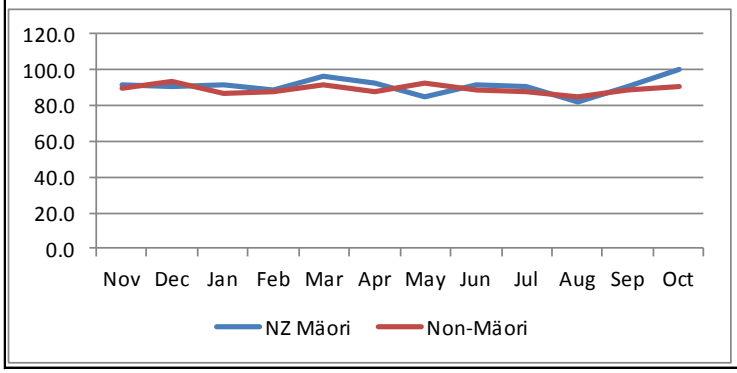


	Maori	Non-Maori
2018-Oct	4.3	5.7
Number	2	4
YTD	11.4	9.4
Number	63	79

No Statistical Difference

There is no difference in 28 day readmission rate between Māori and non-Māori.

Faster Cancer Treatment - DTT to first treatment <= 31 days

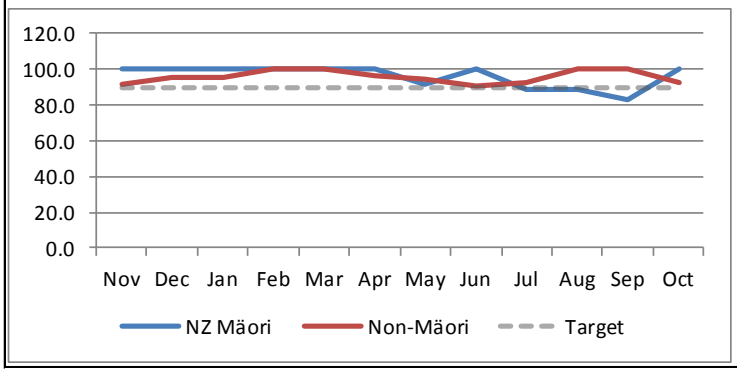


	Maori	Non-Maori
2018-Oct	100.0	90.2
Number	12	61
YTD	90.2	89.2
Number	275	1264

No Statistical Difference

There is no statistical difference in the proportion of Māori and non-Māori patients treated within 31 days from decision to treat.

Faster Cancer Treatment - Referral received to first treatment <= 62 days



	Maori	Non-Maori
2018-Oct	100.0	92.9
Target	90.0	90.0
Variance	10.0	2.9
Number	7	14
YTD	95.2	95.7
Target	0.0	0.0
Variance	95.2	95.7
Number	84	279

No Statistical Difference

There is no statistical difference in proportion of patients waiting less than 62 days from referral.

Proposed new measures to be added in future reports

Future proposed Measures	Type	Timing
Mental health recovery plans	Usage	Included on next report.
Mental health HoNos matched pairs	Usage	Included on next report.
Mental Health seclusion hours	Usage	Included on next report.
Number of long wait patients on outpatient waiting lists	Access	Not fit for purpose. Consider alternative measure, e.g. average wait time.
Number of long wait patients on OPRS outpatient waiting lists	Access	
Number of long wait patients on inpatient waiting lists	Access	
Mental health inpatient bed occupancy	Usage	Change to measure showing bed day consumption.
Average length of stay (Specialty excl AoD)	Usage	Utility of measure to be confirmed with service.
Mental health community contract positions filled	Usage	Not fit for purpose, no useful data available.
Mental health follow up - numbers seen in 7 days	Usage	Remove, duplicate with current measure.

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 11.2

INFORMATION SERVICES DISASTER RECOVERY PROJECT

Purpose	For approval.

The purpose of this paper is to seek approval of the Information Services Disaster Recovery Project business case.

The DHB has the majority of its Cat 1 solutions configured as Highly Available (HA) with automated failover between primary and secondary servers (exceptions being instances where the vendor does not support HA), and has robust data backup and restore processes in place enabling the restoration in the event of an major / prolonged outage. The DHB has Business Continuity Plans (BCP) in place to ensure a level of continued operation in the event of an outage, and an overarching CIMS process for the management of a disaster event. Both are tested on a regular basis (eg the Black Start tests).

While the DHB has geographically diverse HA circuits connecting the Hamilton hospital campus to the All of Government (AoG) datacentre, there remains a risk of telecommunication outage impacting the ability to access mission critical applications. To illustrate; over the last six months there have been five unplanned outages to one of the two circuits connecting the DHB to the AoG Datacentre, earlier this year access to both datacentres was interrupted by the power outage at the Chorus Caro Street Exchange, last year we experienced internet and cellular outages due to the Spark Broadsoft fault, and prior to that the Spark and Vodafone cellular outage impacted the Hamilton hospital campus due to a 'shared back haul' outage.

Through the Business Impact Assessment it has been determined that for a subset of Cat 1 and Cat 2 solutions, the DHB's ability to accommodate outages through its Business Continuity Plans has significantly reduced over time as a result of the increased reliance on IS delivered solutions. This is further expatiated by the significant growth in the volume of data stored by some solutions (eg Labs, Radiology, Clinical Documents Repository, Patient Management). This results in the elapsed time to complete a full restore of all data, which would occur in the event of a storage failure, taking a number of weeks to complete.

The DHB, reflected within the IS Service Level Agreement set by the Executive Group, has set the target that 100% of P1 events (critical business impact or key service areas are unable to work) are resolved within four hours for all Cat 1 and Cat 2 solutions. Within the context of the DHB's current disaster recovery capability this target cannot be met for all Cat 1 and Cat 2 solutions, which is reported as an enterprise risk (Datix Risk 501).

DHB Obligations
The DHB has a number of obligations to ensure it has an appropriate Business Continuity Plan and Disaster Recovery Plan in place. In summary these are:

1. Civil Defence Emergency Management (CDEM) Plan and Civil Defence Act set the requirement for the health sector to:

    - …provide services that, to the greatest extent possible, meet the needs of patients and clients and their communities during and after an emergency, even when resources are limited, while ensuring that responses do not create or exacerbate inequalities for particularly vulnerable or hard-to-reach populations…
    - maintain an emergency management structure for the health and disability service providers that enables a consistent and effective response to emergencies at the local, regional, and national levels, and that supports, to the greatest extent possible, the protection of the general population, health and disability services workers, and health and disability services clients; and
    - ensure that health and disability services are as resilient to the consequences of hazards and risks as is reasonably practicable.

2. New Zealand Information Security Manual (NZISM)

    - …ensure business continuity and disaster recovery processes are established to assist in meeting the agency's business requirements, minimise any disruption to the availability of information and systems, and assist recoverability…"

3. Operational Policy Framework

    - Have policies, processes and procedures to "… minimise the adverse impact of internal emergencies and external or environmental disasters on the provider's consumers, staff and visitors".

Business Impact Assessment and Option Analysis
The Business Impact Assessment identifies a suite of up to 40 IS delivered solutions (inclusive of enabling infrastructure) where the DHB is not able to sustain minimal operational capability in the event of an extended outage of these solutions.

The proposed disaster recovery solution is to deliver an automated failover solution for these. Options considered for the purpose of the business case were:

- Option 1: Do Nothing
- Option 2: Produce a disaster recovery plan leveraging existing infrastructure (ie reliance on single AoG Datacentre and Telecommunications remains)
- Option 3: Reduce the risk associated with a single Datacentre through further investment in Telecommunications resiliency
- Option 4: Implementation of an offsite DRaaS (Disaster Recovery as a Service) service solution, through an AoG Infrastructure as a Service (IaaS) provider
- Option 5: Implementation of an onsite Disaster Recovery Datacentre (with IaaS and non-IaaS options)
- Option 6: Self contained onsite IaaS Datacentre, through an AoB IaaS provider.

Options 1 to 3 have not been costed as they deliver minimal failover or resiliency improvement.

The investment profile of options 4 to 5 are:

	One-Off	5 Year Opex	TCO (5yr)
Option 4	$4.04m	$10.48m	$14.52m
Option 5a (AoG IaaS)	$5.78m	$10.09m	$15.87m
Option 5b (Owned)	$5.65m	$2.38m	$8.03m
Option 6	$6.98m	$10.09m	$17.07m

While option 5b does not align to the DIA AoG IaaS mandate due to the significant opex cost differential it is the preferred option. The capital costs for option 5a are included within the IS Capital Plan (investment spread across three years). The Ministry of Health preferred option is option 4 (remote AoG IaaS DR data centre) or Option 5a (onsite AoG IaaS), which are more expensive and, in the case of option 4, do not address the telecommunication risk.

The recommendation is to progress option 5b. However, it is recognised that we may be directed to implement one of the AoG IaaS options.

Approval Pathway
As the investment decision exceeds both the $1m total cost of ownership threshold and the $500k capital threshold, this business case is required to be approved by the Digital Advisory Board of the Ministry of Health, and the Midland Regional Capital Committee.

In the event that either of these approval gateways results in a requirement for a material change to the business case it will be resubmitted to the Waikato DHB Board for approval.

The paper refers to a number of appendices which are significant in size. If a Board member wishes to the read appendices they will be available at the Board meeting.

Recommendation
THAT
The Board:

1. Notes the contents of this paper.
2. Notes the operational and capital investment required.
3. Notes that Waikato DHB may be directed to implement one of the AoG IaaS based options, with resulting Opex cost uplift
4. Approves the Information Services Disaster Recovery Project business case.

GEOFF KING
CHIEF INFORMATION OFFICER

Waikato District Health Board

IS1806-005 Information Services Disaster Recovery Project

Business Case

Prepared by:	Chris Fisher - Programme Manager
Date:	19 November 2018
Version:	1.0
Status:	Final Version

Document Control

1.1 Document Information

	Position
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Version	Issue Date	Changes
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0.2	23/10/2018	First consult draft – DR Working Party and ISLT
0.3	24/10/2018	Re draft
0.4-0.11	7/11/2018	Further drafts
1.0	19/11/2018	Final Version

1.3 Document Distribution and Review

Role	Name	Status
Executive Group	Neville Hablous	Distributed
Chief Information Officer	Geoff King	Distributed
Clinical Director Information Services	Ruth Large	Distributed
Chief Finance Officer	Andrew McCurdie	Distributed
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Director Procurement	Alicia Lane	Distributed
Director Quality and Risk	Mo Neville	Distributed
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IS Architecture	Steve McMillan	Distributed
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Ministry of Health	Brenda Hynes & Digital Portfolio Team	Distributed

1.4 Document Sign-off

Role	Name	Approval & Date
CIO & Project Executive	Geoff King	Sign Date:
ED Chief Executive Office	Neville Hablous	Sign Date:

Contents

2 Executive Summary

2.1 Scope and rationale

Waikato DHB dependency on information systems is considerable and with the exponential digitisation of healthcare tools & processes, is continuing to increase. Increasingly services are finding that without key technology, a significant reduction in operational effectiveness would occur. The number of applications and solutions within Waikato DHB is also increasing (currently ~720), as well as the significant increase in the number of interfaces between solutions, locally, regionally and nationally.

Waikato DHB Information Services (IS) manages much of this complex portfolio of systems, hundreds of suppliers, service providers and partners. IS has been directed by the Waikato Board to propose the Information Services Disaster Recovery (ISDR) Project to implement a capability that would mitigate the impact of a disaster event.

At present, there is little to no disaster recovery capability at Waikato DHB. Should a disaster cause the loss of critical information systems (e.g. through failure of critical server(s), loss of the datacentre, or loss of telecommunications), the time required to recover information systems would be unacceptable to the impacted services (as identified within the Business Impact Assessment), as it is likely to be days/weeks or possibly months (particularly where the restoration of large amounts of data is required).

This risk is currently scored 15 - 'extreme' in the Waikato DHB organisational risk register, as a result of conclusions formed from significant contributing organisations in this field including NZ Ministry of Civil Defence and Emergency Management, District and Local Councils, in addition to a Waikato DHB Business Impact Assessment (Appendix 1), a suite of risk management workshops and recent events.

The DHB has an obligation, as established through HISO 10029 (Health Information Security Framework), NZISM (New Zealand Information Security Framework), and the National Civil Defence Emergency Management Plan to have a Business Continuity Plan and Disaster Recovery solution. Through the National Civil Defence Emergency Management Plan the expectation is set that *"DHBs are responsible for continuing their services and managing any increased demand during & after a civil emergency."*

This ISDR project business case describes how the proposed capability will mitigate the DR risk to an appropriate & acceptable level and enable the DHB to reduce the time between a disaster event occurring and the critical functionality being restored.

The investment objective of this IS DR Project is to:

"Improve the readiness of Waikato DHB to support critical clinical and emergency management operations during a disaster event by June 2020".

The benefits of delivering such an improvement are:

1. To improve clinical/patient outcomes during a disaster event (response & recovery).

2. A more robust emergency management capability.

These benefits will be measured by IS ability to sustain service on critical clinical and corporate solutions to 99.5% during a disaster event, resulting in the reduction of the organisational risk from *15 (extreme) to 6 (minor).*

Business requirements (Appendix 1 - Business Impact Assessment) identified a range of Waikato DHB operational services that require 'close to zero' as the allowable outage, including during a disaster.

Each option presented entails a variation in the following deliverables as a standard suite of components of the DR solution: recommended solution that meets these requirements includes:

- a DR Plan, workforce capability and service management enhancements;
- Critical business applications and solutions available to 99.5% (1day 19hours of outage per year);
- Disaster Recovery solution;
- Secondary Data Centre onsite; and
- Robust application, infrastructure & network configuration

In assessing the options for the DR solution, each option varies in risk coverage and defined support model, i.e. the benefits each solution provides vs the cost of that benefit. In this business case multiple solutions have been assessed and have been distilled down to the following:

- **Option 4**: Limited risk mitigation. This option entails a fully outsourced 'offsite' infrastructure DR solution (supported and run by our AoG IaaS partner):
    - Benefit: this covers a limited mitigation response in that 99.5% service of critical applications will be available during a disaster response and recovery, but not in the event of a network failure:
    - Risk: Does not mitigate the Telecommunications risk
    - Cost:
        - Project costs (CAPEX and One off OPEX): **$4.04M** (incl. 40% contingency)
        - Ongoing OPEX: **$10.48M** (including 20% contingency)
        - TCO 5 Years: **$14.52M**
- **Option 5**: Standard Risk Mitigation (**recommended**). This option entails a small datacentre be installed on Hamilton Campus, network linked to the primary data centre in Takanini:
    - Benefit: this covers a standard risk mitigation response in that 99.5% service of critical applications will be available during a disaster response and recovery, including protecting against telecommunication outage.

- Cost: There then two support model options for this solution as follows:

  a. The outsourced option (i.e. supported) as per the existing IaaS contract cost estimates are as follows:
     - Project costs (CAPEX and One off OPEX): **$5.78M** (incl. 40% contingency)
     - Ongoing OPEX: **$10.09M** (including 20% contingency)
     - TCO 5 Years: **$15.87M**

  b. The internal support option (Waikato DHB self-supported - **recommended**):
     - Project costs (CAPEX and One off OPEX): **$5.65M** (incl. 40% contingency)
     - Ongoing OPEX: **$2.38M** (including 20% contingency)
     - TCO 5 Years: **$8.03M**

- **Option 6**: Advanced Risk Mitigation. This option entails a independent container based datacentre, with fully outsourced support (through AoG IaaS provider) and extra network resiliency:

  - Benefit: this covers an advanced risk mitigation response in that 99.5% service of critical applications will be available during a disaster response and recovery, including during network failure, building collapse and incl. advanced DR network resiliency:

  - Cost:

    - Project costs (CAPEX and One off OPEX): **$6.98M** (incl. 40% contingency)
    - Ongoing OPEX: **$10.09M** (including 20% contingency)
    - TCO 5 Years: **$17.07M**

It is recommended, that Option 5b 'Standard Risk Mitigation' and 'Internal support option' is the recommended option as it presents the best value for money.

Whilst option 5b does not align to the DIA AoG IaaS mandate, due to the significant opex cost differential, it is the preferred option. The MoH preferred options are option 4 (remote AoG IaaS DR data centre) or Option 5a (onsite AoG IaaS DR data centre), which are both more expensive and, in the case of option 4, do not address the telecommunication risk.

Discussions with the ministry are ongoing. However, there is a risk that the DHB may be directed to implement one of the AoG IaaS based options, with resulting Opex cost uplift.

The Information Services Capital Plan has $5.8M planned over 3 years (18/19 – 20/21). This project is expected to deliver the solution within 18 months and therefore some reprioritisation of the IS Capital Plan may need to be considered to enable an accelerated delivery.

Note: During the consultation process for this business case the project team have embraced, where possible, all feedback. Most feedback questions require further planning and design which is earmarked for the next stage after endorsement of this business case.

The IS DR project will embrace an 'agile/iterative' approach to design and key stakeholders, including the Ministry of Health, will be integrated into this process to ensure that detailed requirements (including the IS DR plan) and detailed solution design meets the applicable standards, requirements and recommendations.

2.2 Problem statement

The most suitable way to express the problem statement is to explore the risk profile relating to disaster events of the Waikato DHB under current arrangements. DATIX is Waikato DHB's organisational risk management repository, the following is a risk summary related to the Full Risk Statement at Appendix 3:

2.2.1 Risk Description:

DATIX #501 - Risk: DR/Service Continuity - Loss of or reduction in capability / capacity to provide IT services following a disaster / outage.

Whilst the DHB has robust data backup processes, the absence of a viable and proven DR Plan would result in potential significant delays in recovering ICT services following a catastrophic disaster impacting all DHB IS services (e.g. loss of connectivity to the outsource data centre). This would result in the DHB relying on manual services to provide patient care for an indeterminate time.

1.1.1.1 Likelihood: 'Possible'

The likelihood of a disaster event that effects the IT infrastructure is considered in the risk statement as 'Possible' in that although there are many active elements of IT Continuity of Service planning and processes, it is still considered possible that an 'unplanned outage' could occur based on a number of factors.

- **Natural Disasters and National Emergencies**. Natural disasters are inevitable and recent events such as the Christchurch earthquakes of 2010 remain present in the organisational thinking. Risk assessments conducted and summarized by various authorities, as well as that identified within the Waikato DHB Emergency Management Plan are firm foundations for the Likelihood rating of '*Possible'.*
    - The Hamilton City Council *"Overview of Natural Hazards for the Hamilton City Council":*
      "Earthquakes pose the greatest risk in terms of potential loss of human life, social disruption, economic cost and infrastructure damage."
- **Unnatural Disasters.** The threat of a human initiated disaster event is considered possible examples of which can include:
    - terrorism,

- cyber-crime; and
- accidental damage – e.g. road works.

> **"***over the last 6 months there have been 5 unplanned outages to one of the two circuits connecting the DHB to the AoG Datacentre, earlier this year access to both datacentres was interrupted by the power outage at the Chorus Caro Street Exchange, last year we experienced internet & cellular outages due to the Spark Broadsoft fault, & prior to that the Spark & Vodafone cellular outage to the Hamilton hospital campus due to a 'back haul' outage." CIO Waikato DHB*

- **Internal Infrastructure Failure.** There is also notable risk within the existing environment that it will take a number of years of 'catch up' investment before all systems are current and operate under appropriate support and maintenance arrangements.

1.1.1.2 Consequence: 'Extreme'

'Extreme' in the organisational DATIX risk register relates to a 'service or business interruption' as follows:

"Permanent loss of core service or facility, disruption of service leading to a significant knock on effect across the Health economy"

The consequences in a disaster event that adversely affects Information Services' capacity to support the organisational disaster response and/or disrupts clinical services could result in loss of human life, as clinical services would not have critical information systems they rely on daily in operations.

1.1.1.3 Risk Conclusion

With a '*Possible'* likelihood that a Disaster event will occur to *'extreme'* consequences in that a significant degradation of Waikato DHB services would occur, the risk rating is the highest of all IS related risks in the Waikato DHB risk register scored at *'15'* and it is this current risk that remains the primary driver behind this Business Case.

2.3 The need for change

The need for change from this investment is organisational/operational risk mitigation.

2.3.1 Key spending objective

The Waikato DHB, Information Services, DR Project, key spending objective is to:

"Improve the readiness of Waikato DHB to support critical clinical and emergency management operations during a disaster event by June 2020".

2.3.2 Spending Objective Measures

A successful implementation will be measured by:

1. Suitable evidence that a suite of critical 'High Availability' applications, systems and associated data, can be maintained confidently to the Waikato DHB IS Service Level Agreement (SLA) of 99.5% availability, including during a disaster event (response and recovery)

   Insofar as the disaster event has disrupted critical information services infrastructure, including where complete telecommunications failure is considered a possible scenario and therefore requires mitigation.

2. The DATIX Risk 501: *DR/Service Continuity - Loss of or reduction in capability / capacity to provide IT services following a disaster / outage,* is reduced from a risk consequence rating from 15 'extreme' to 6 'minor'.

2.3.3 Likely Cost estimate

CAPEX & One off OPEX	IS Professional Services	$820,630
	IT External Labour	$1,136,875
	IT Hardware (including DC build)	$1,556,000
	IT Software	$500,000
	Vendor Services	-
	Contingency (40%)	$1,605,402
	Total	**$5,618,907**

OPEX	Year 1	$409,773
	Year 2	$390,064
	Year 3	$397,065

	Year 4	$404,207
	Year 5	$411,491
	Contingency (20%)	$397,205
	Total	**$2,383,232**

NOTE: Excludes depreciation and capital charge

Full cost calculations are provided in Appendix 6 – Schedule of Costs.

2.4 Management – planning for successful delivery

The Waikato DHB applies a project delivery framework based on Prince2 (The Waikato Way) and expects to deliver the final solution within project delivery policy guidelines. The Waikato DHB's change management approach is based on PROSCI's ADKAR framework.

The Waikato DHB is 80% through a significant infrastructure project involving many of the considerations in the business case. The project management mechanisms design for the IaaS transition project will be reflected in the management case for this business case.

3 Introduction

Waikato DHB Information Services must maintain a level of service that enables critical operations to function during a disaster event. This includes IS and organisational partners that support that service level. At present there is no capability to provide that level of service and as such this business case proposes to develop a DR capability that will enable critical information service during a disaster response and recovery.

Should a disaster cause the loss of critical information systems (e.g. through failure of critical server(s), loss of the datacentre, or loss of telecommunications), the time required to recover information systems would be unacceptable to the business, as it is likely to be days/weeks or possibly months (particularly where the restoration of large amounts of data is required).

The result of disrupted Information Services could include:

- diminished clinical outcomes
- potential to cause patient injury or harm
- significant reduction in the DHB's ability to meet legislative obligations and compliance standards
- reputational damage through adverse publicity, undermining public confidence
- significant increase in costs to restore information continuation
- loss of revenue after the disaster
- an increase in the number and significance of complaints and claims.

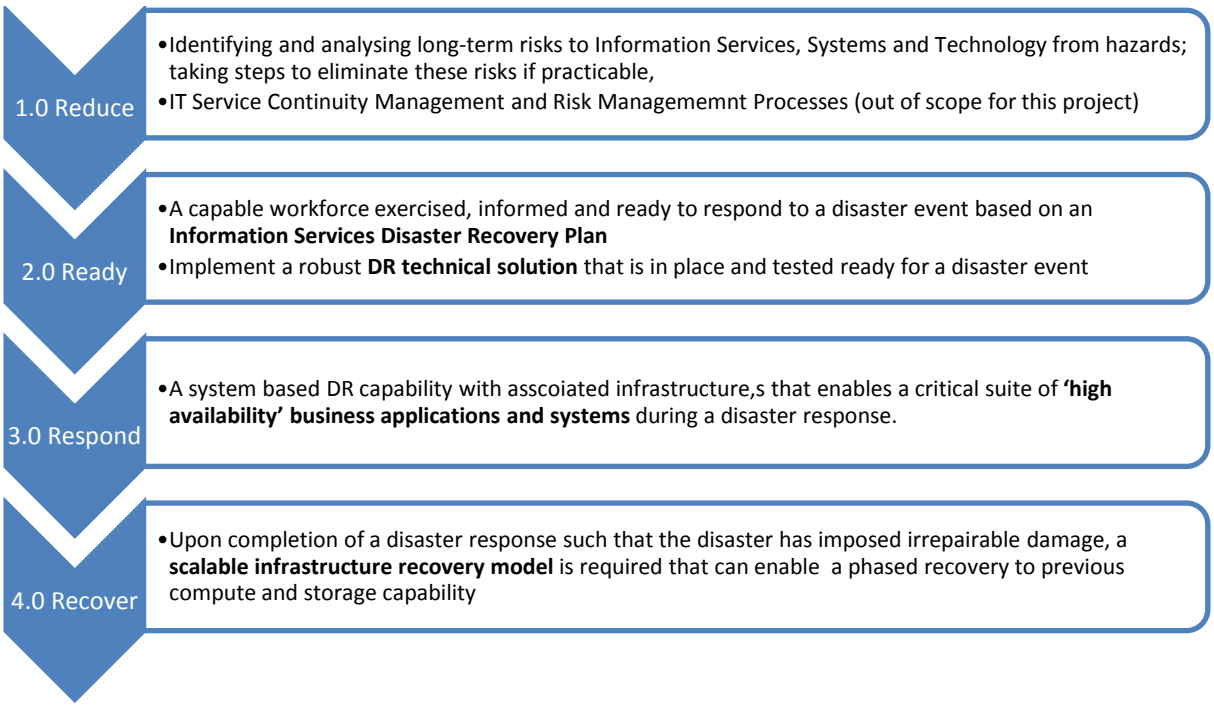
According to the National Civil Defence Emergency Management Plan 2015:

> *"DHBs are responsible for continuing their services and managing any increased demand during & after a civil emergency."*

In addition, the primary Waikato DHB policy document, that demonstrates compliance to this requirement, is the Waikato DHB Emergency Management Plan 2106 – 2019. This publication, carries into operation the business model that breaks disaster response down into 4 stages called the '4 Rs' of emergency management.

- **Reduction** – Identifying and analysing long-term risks to human life and property from natural or manmade hazards; taking steps to eliminate these risks where practicable and where not, reducing the likelihood and magnitude of their impact.
- **Readiness** – Developing operational systems and capabilities before an emergency happens. These include self-help and response programmes for the general public, as well as specific programmes for emergency services, utilities and other agencies.
- **Response** – Actions taken immediately before, during or directly after an emergency, to save lives and property, "prevent the spread of disease as well as help communities to recover.
- **Recovery** – Activities beginning after initial impact has been stabilised in the response phase and extending until the community's capacity for self-help has been restored.

Therefore the scope foundation business model of this business case is directly aligned to the Waikato DHB Emergency Management Plan as follows:



The IS DR 'solution' for Waikato DHB is more than the provision of technical capability to supply critical data and applications during and after a disaster event. It includes the readiness and capability of the IS workforce to support clinical and civil emergency responses, with minimal disruption in conjunction with the provision of infrastructure that is robust and designed to mitigate the broadest risk profile and provide the fastest recovery to critical services in the event of a disaster.

The following aspects of the IS DR solution will be considered as part of this initiative:

- **An IS DR Plan** is a key element to the framework as it outlines how IS plans to respond to a disaster. The Business Impact Assessment (Appendix 1) has been completed and formed The Waikato DHB initial requirements, but will be needed to be revisited periodically along with the DR Plan. This will contain:
    - **Processes & Procedures** that will outline how the workforce will enact a DR response.
    - **DR Testing Capability** will provide Waikato DHB with assurance that we can do what we plan to do, and processes and systems will work.
    - **Workforce Capability & Communications.** IS will need to be explicit on what is expected of people that will be involved in the DR event. This includes many non-technical people across the business, in addition to IS technical resources that will restore the systems.
    - **Governance & Oversight.** DR capability will benefit from governance forums, policies and standards. These will provide control and guidance.

- **System Software** Waikato DHB has identified critical system software that is a prerequisite to restoring business applications and as a result are considered critical for recovery.

- **Business Applications** have been prioritised based on the business impact assessment, which will dictate within the DR plan, what order they will be restored after a disaster. Other software considerations include:

    - Key applications will require some 'remediation' in order for them to be categorised as 'Highly Available'. 'High Availability' applications are considered critical to operations during a disaster response.

    - Other Tiers will still be required to be restored as soon as is possible, however in general these are a consideration under the DR Plan to be re-enabled as part of the disaster recovery effort (not response).

- **DR Infrastructure System:** would require a number of capabilities including:

    - Backup Capability: Backups will be automatically sent from the Primary DC to the DR Site, scheduled on a per application basis. Backup's verification and testing will be spot checked under the simulation and live DR Site testing as per DR Plan.

    - Failover Capability: The Waikato DHB failover capability, including the speed to failover, will in part determine the overall DR capability. Failover is determined by technology solution, and in many cases is business application specific.

    - Failback Capability Dependent on the disaster, the ability of Waikato DHB to return to normal business operations may be severely compromised.

- **Facilities & Infrastructure** As part of this initiative Waikato DHB investigate a most suitable DR site that is of the highest tier practicable. This site should have enough compute and storage capability to take into account, short, medium and long term response requirements. The location of this site should be as close as possible to the clinical customers (see network considerations). If housed within a campus building it should be of the highest grade.

- **Network.** One of the key risk considerations in IS DR is network failure. Waikato DHB currently maintains dual DTSL links between Takanini and Waiora. One of the dual links runs along the main Highway 1 between Auckland and Hamilton, which is host to some of the most heavy and constant road works in the country. In the past 6 months there have been five (5) unplanned outages on links between Waiora campus and Takanini that could not be attributed to WDHB activity. Network outage is a key driver behind the considerations of the IS DR Solution.

- **Vendor Knowledge & Capability** Hardware and software vendors will be contributing technical resources, technical knowledge and more than likely other

capability that will enable the DR site. It is important to ensure that there is sufficient engagement, resources and understanding to support the build.

4 The Strategic Case – Making the Case for Change

4.1 Strategic Context

There are a number of strategic and operational business drivers that require Waikato DHB to develop DR capability including:

- Waikato DHB Strategic Context
- Waikato DHB Emergency Management Plan
- Waikato DHB Information Services, Service Level Agreement
- Ministry of Health Strategies and Plans
- National Compliance Requirements, including civil defence

4.2 Organisational context overview

4.2.1 Alignment with organisational strategy and policy

Developing an IS DR capability aligns to the Waikato DHB strategic direction in that it will enable Waikato DHB information and technology to enable civil defence actions and clinical services during disaster response and recovery.

Although improving IS DR capability of Waikato DHB enables the whole organisation, three strategic objectives have been identified as being directly addressed through this proposed initiative.

4.2.1.1 Safe, quality health services for all

Safe, quality health services are required whether operating during normal operating conditions or during a disaster event. Therefore the DR plan and associated technology solution must enable 'fit for purpose' services during a disaster event.

4.2.1.2 People centred services

In order to provide DR capability Information Services will be required to leverage the expertise of communities, providers, agencies, and specialists in the design of DR Information services to support health and care services during a disaster response.

A culture of professional cooperation to deliver services during a disaster will be at the heart of the DR plan.

4.2.1.3 Effective and efficient care and services

Greater infrastructure resilience allows staff access to the critical tools they need to do their jobs, and therefore creates a more sustainable workforce.

Information Services must be designed to meet the challenges of a disaster event in order to be effective and efficient without compromising the care delivered.

A level of innovation will be required to meet the unique challenges of the Waikato in order to achieve excellence in health and care services, during a disaster event.

4.2.2 The Waikato DHB Emergency Management Plan

The Emergency Plan for 2016-19 provides key plans, strategies and information to guide Waikato DHB's comprehensive emergency management planning.

The overarching goal of the Waikato DHB Emergency Planning Service is 'resilient health services in the Waikato DHB area'. The Waikato DHB Health Emergency Plan 2016-19 includes planning Responsibility for the co-ordination of healthcare resources in the Waikato rests with Waikato DHB.

4.2.3 Waikato DHB Information Services, Service Level Agreements

The IS SLA enables appropriate expectations around the delivery of IS services to the business to be established. It also provides a framework for measuring and monitoring delivery performance.

The Waikato DHB IS SLA targets are summarised in the following table:

2. Service Level Targets

Service Categories	SLT01 - Service Availability[1]		SLT02 - Service Desk Call Answering	SLT03 – Service Stability	SLT05 – Planned Outage Notification	SLT06 – Emergency Outage Notification
	99.5% Uptime *(during Hours of Service)*	Reasonable Endeavours	Call abandonment rate not to exceed 5%	No more than: • 2 x Priority 1 Incidents per month • 10 x Priority 2 Incidents per month	100% of Notifications are advised to the Waikato DHB at least 5 Working Days before the planned outage.	100% of Notifications are advised to the Waikato DHB as soon as IS become aware of the need for such outage or the occurrence of one.
Category One	X		X	X	X	X
Category Two	X		X	X	X	X
Category Three	X		X		X	X
Category Four		X	X		X	X
Category Five		X	X		N/A	N/A
VIP	X		X	X	X	X

Although these targets are in relation to everyday operations, it is important to note that for Category 1 - 3 services, should a 'major incident' (or disaster event) occur, they will be escalated to the Emergency Management Process via Duty Managers.

The SLA document also states:

"It is expected IS; will develop a Disaster Recovery plan to safeguard the organisation against significant data loss and service continuity impacts. Information Services will use best efforts to restore services in the event of a disaster."

4.2.4 National Health Emergency Plan

The National Health Emergency Plan purpose:

"…is to ensure that New Zealand health and disability services are positioned to effectively meet the health needs of the community during an emergency in an appropriate and sustainable manner."

Some relevant points within the plan include:

"DHBs are required to develop, maintain, exercise and operate a DHB health emergency plan and to ensure health care providers and supporting agencies (through contractual arrangements) have a corresponding ability to plan, maintain, exercise and continue the delivery of health services in an emergency."

In addition, it states:

"If the health aspects of emergencies are to be managed effectively, all health providers must undertake planning and preparedness activities that are sufficient for them to continue their usual business functions and to fulfil their operational roles in emergencies."

4.2.5 Ministry of Health Digital Health strategy

4.2.5.1 Health Information Security Framework

Health Information Security Framework (HISF) governs the selection, development and adoption of information and digital standards for the health and disability sector. In relating the relevance of this framework to the ISDR Project, it is important to note that in developing a DR technical solution designed store high availability computing and back data, that all of the relevant HISO standards will be considered in the detailed design process. However the most relevant of the component of the policy for Disaster Recovery is section 13 of the HISF, namely Business Continuity, which states:

4.2.5.1.1 Information Security Business Continuity Objective

Information security continuity must:

- be embedded in the organisation's business continuity management systems; and
- ensure availability of information processing facilities.

4.2.5.1.2 Information Security Business Continuity Policy requirements

Policy requirements include identification of:

- an acceptable loss of information security on health information and services
- an acceptable time frame for full recovery of information security
- procedures to recover and restore information security

- the triggers and threats which will cause the business continuity plan to be activated.

The specific policy and process requirements of the framework will be considered in the Waikato DHB ISDR Plan.

4.2.6 Government Security Communications Bureau NZ Information Security Manual

The Government Communications Security Bureau's *New Zealand Information Security Manual* (which the DHB is obligated to follow in accordance with HISO 10029 – Health Information Security Framework) states:

- That we should develop disaster recovery strategies, policies and standards.
- That we should develop, test and maintain disaster recovery plans.
- That information security is maintained in the event of a disaster.
- That we must determine recovery requirements for systems and implement appropriate measures to support them.
- That we test backup and restoration processes regularly to confirm their effectiveness.

4.2.7 Civil Defence Emergency Management (CDEM) Plan & Civil Defence Act

Civil Defence Emergency Management (CDEM) Plan & Civil Defence Act set the requirement for the health sector to

- …provide services that, to the greatest extent possible, meet the needs of patients and clients and their communities during and after an emergency, even when resources are limited, while ensuring that responses do not create or exacerbate inequalities for particularly vulnerable or hard-to-reach populations…
- maintain an emergency management structure for the health and disability service providers that enables a consistent and effective response to emergencies at the local, regional, and national levels, and that supports, to the greatest extent possible, the protection of the general population, health and disability services workers, and health and disability services clients; and
- ensure that health and disability services are as resilient to the consequences of hazards and risks as is reasonably practicable.

4.3 Investment Objective

The investment objective of the IS DR Project is to:

"Improve the readiness of Waikato DHB to support critical clinical and emergency management operations during a disaster event by June 2020".

4.4 Existing Arrangements and Business Needs

This table shows the current situation including associated impacts and challenges

Issue	Current State	Impacts and Challenges
Waikato DHB does not have a current IS DR Plan	• Waikato DHB does not have an Information Services DR plan • The workforce would work through the incident management process • Current staff are not systemically trained in what to do during an emergency/disaster event with regards to IS Services.	• Should a disaster occur, and Information Services are affected, IS staff would be required to bring together an 'ad hoc' plan. • Disruption to operations would surely occur as the workforce comes to grips with the pending disaster event without a trained a structured response capability in place. • 'Acceptable' outages under disaster conditions are undefined , existing SLAs need to embrace RTS when a disaster event occurs
Waikato DHB backs up data to a secondary data storage facility	• Data backups mean if primary storage fails secondary storage is available for lost storage • Current data back-ups occur in both primary and secondary Revera Data-centres, they may not be available should network outage occur • Due to the large sizes of individual systems and data associated there is a direct correlation to the time required to restore service from a backup.	• The majority of solutions supported by IS have very little margin for downtime. • Restoring data 'on mass' from backup would cause unacceptable delays to operations • As information is tightly integrated across many business and solution processes. Not having the availability of information will hamper most operations.
Waikato DHB does not have a secondary compute capability	• Should a disaster occur and the Takanini data centre fails or is disrupted, there is no secondary compute capability, • Most business applications and solutions will be lost and may require full recovery. • Most existing business and operating systems do not	• As in the Christchurch earthquake, patients were redirected to hospitals within the CDHB that were not affected. To note, dependant on the event it is anticipated that there would be a spike in patient demand. • Very few Information services or systems would be available. • Building new services via

	have 'high availability' in the sense that there capable of operating across multiple sites concurrently..	backups would take considerable time and with no current plan or priority service to patients would be limited in the during the response phase.
Waikato DHB does not have 'onsite' compute and storage capability	• Waikato DHB maintains dual DTSL network links between Takanini and Waiora campus • Should networks breached in a disaster event, Waikato DHB does not have the ability to service operational needs from within WDHB Campus	• Very few Information services or systems would be available should a breach of both network links occur.

This table shows the current and future states of IS service availability, and how an integrated DR solution may provide value for the Waikato DHB.

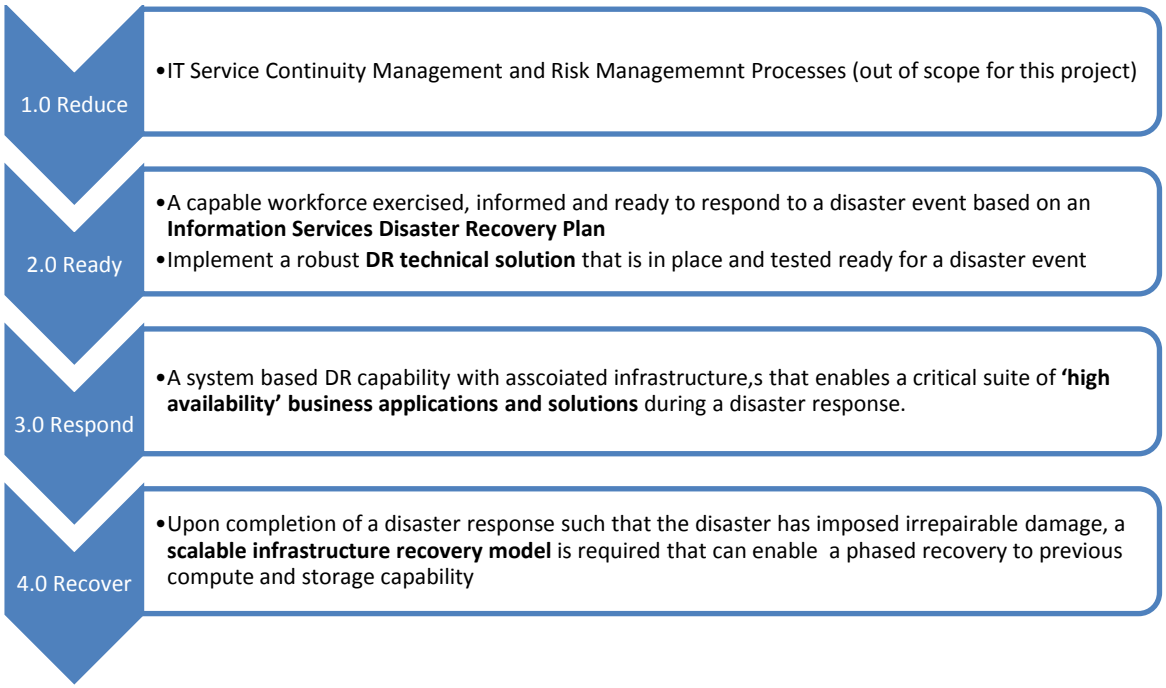
	Current State (details)		**Future State Recommendations**	
Area	**Observation**	**Implication**	**Recommendation**	**Value**
IS DR Plan & Workforce capability	• IS Service Continuity Plan (Panic Manual). Business has DR plans in place (manually-based procedures) to cope with major outage. • This plan does not take into consideration the new arrangements with Revera, or will not be relevant if a DR solution is delivered. • The workforce has limited, knowledge and there is no process in place to ensure the 'evolving workforce	• When a disaster occurs potentially uncoordinated communications will occur with less than optimal ability to support operations.	• A customised DR Plan is constructed, consulting with the business and Revera. • Once confirmed it is tested in simulation. An actual outage is scheduled and all SOP's and teams are tested.	• Have predictable outcomes. • Have centralised command and control • Business will get service in a well-defined manner • The increased operational intensity of an event is more manageable

	Current State (details)		Future State Recommendations	
Area	**Observation**	**Implication**	**Recommendation**	**Value**
	is trained and ofay with its contents' •			
Data Storage and back ups	• Current data back-ups occur in a secondary Revera Data-centre, would not be available should network outage occur	• In the event of the primary site not having connectivity there is a correlation that the secondary site would also not have connectivity. In the situation where the secondary site has connectivity to gain access to backups. Systems would be brought back online against current state SOPS.	• Backups would be housed within a secondary DR site, possibly on campus.	• Assured recovery capability. • More resilient data management
Business Apps and Systems	• Compute and storage is centrally housed in Revera/Takanini only.	• In the event that the solution is not available due to man-made or an act of god, service to patients and health professionals would be lost	• Solutions are de-centralised. • An active/active high availability arrangement is made in which the Primary Revera site has the largest volume of systems, and a limited number of mission critical services available within the DR Site. • Data is sent from the Primary site to the DR Site in an asynchronous manner.	• No loss of service to mission critical patient solutions during a disaster event. • Ability to recover in the short-term and also medium and longer term phasing in of services.

	Current State (details)		Future State Recommendations	
Area	**Observation**	**Implication**	**Recommendation**	**Value**
Data Centre	• Should a disaster occur and the Takanini data centre fails or is disrupted, there is no secondary compute capability,	• There is a risk that in the case that the solution is not available in Takanini and no solution is in place to restore service that the hospital will be not able to service patients for an extended period of time.	• Having a secondary DR Site physically situation within Campus	• A more geographically diverse DC configuration. • Improved DC redundancy.
Networks	• Should a network outage occur during a disaster event, Waikato DHB does not have the ability to service operational needs from Waiora • Should a network outage occur between Waiora and the Rural Hospitals, they would lose critical IS systems.	• With no network connectivity into Revera and all solutions centralised WDHB would not be able to provide IS services	• With a DR Site physically installed within Campus, there would be independence of network and outside communication deficiencies	• No loss of critical systems during disaster event, • Independent of network failures for critical systems.

4.4.1 Potential Business Scope and Key Service Requirements

An IS DR solution will be founded upon the Waikato DHB 4 R's as follows:



4.4.2 Key Service Requirements

The table below represents potential business scope and key service requirements

Service Requirements	Scope Assessment	
	In Scope	**Out of Scope**
A IS DR plan and 'ready' workforce	- An IS DR Plan - Associated Standard Operating Procedures - A trained and tested workforce capability	- Operational Business Continuity plans - Organisational emergency management planning and training outside of IS (although heavily interdependent)
'High Availability' Systems and Business Applications	- Operationally prioritised, business applications required to be 'high availability' where possible - Information Services prioritised infrastructure systems also required to be 'high availability' - All other applications/systems	- Cat 4 and Cat 5 systems that are not currently supported by Information Services - third party supported applications (PACs)

	tiered and assessed for medium/long term recoverability	
A DR system	Systems that provide: - An active/active High Availability arrangement is in place for critical systems where possible - Near seamless 'fail over' during a disaster event, and - 'fail back' once a disaster response has completed	- Delivery of new infrastructure required to enable future projects including implementations of new systems or upgrades of existing systems e.g. PeopleSoft Upgrade. These other projects will utilise approved or future planned capital budgets - Relocation of the regional PACS/RIS solution (procured through a pre-existing As a Service contract with Philips), which will remain hosted within the Spark Caro Street data centre
Primary data centre redundancy	- A secondary compute and storage site for HA applications and systems - UPS to the secondary facility	
Network robustness	- Network redundancy assurance for: - Takanini/Wairau links - Links to Rural Hospital Sites	

4.5 Main Benefits

The main benefit of an IS DR capability is mitigating existing organisational risk. When aiming to reduce the risks there are two areas that this initiative will aim to improve. Clinical and emergency management outcomes during a disaster event:

4.5.1 Benefit#1 Improved clinical/patient outcomes during a disaster event (response and recovery).

(An IS DR solution would minimize disruption to clinical operations during a disaster event).

4.5.1.1 Outcome # 1 Improved Information Service and Systems READINESS to respond to a disaster event

A capable workforce and infrastructure ready to respond to a disaster event

4.5.1.2 Outcome # 2 improved availability of critical Business Applications and Systems during a disaster RESPONSE

A suite of critical business applications and systems are to be available should a disaster event occur and while full recovery information services and systems are yet unachievable.

4.5.1.3 Outcome # 3 Reduced RECOVERY times for information services and systems.

Reducing the time from which a full recovery of information services and systems will occur.

4.5.2 Benefit#2 A more resilient Waikato DHB organisational disaster response.

4.5.2.1 Outcome # 4 improved ability to communicate and coordinate during a disaster event

Critical communication channels will remain online during a disaster event

4.5.2.2 Outcome # 5 improved disaster related patient 'surge' management capability

During a disaster event, there is a strong possibility that emergency patient numbers will 'surge'.

4.5.2.3 Outcome # 6 improved flexibility in information service provision during a disaster

Critical services may be performed in unorthodox circumstances or environments

4.6 Risk Considerations

4.6.1 GCDO Risk Assessment

At Appendix 4 the GCDO risk assessment rates this project as HIGH, the main reason for this rating is the size and complexity of the project and its deliverables, but mainly because we are yet to achieve consensus from all stakeholders. This Business Case is designed to achieve that consensus.

4.6.2 Main Risks

Risk	Consequence (H/M/L)	Likelihood (H/M/L)	Comments and Risk Management Strategies
Main Business Risks			
DR Planning and process change could create or add to 'change fatigue' within the workforce	M	M	Prepare and implement a change management plan that embraces this risk
The Project exceeds the estimated costs.	M	M	Include contingency funding to cover the possibility of exceeding project development effort.
Internal resources are not available to conduct the required work	H	M	Engage the external support for this project where possible with internal 'touch points' where organisational IP is required
Main Technical Risks			
Some applications cannot be upgraded to 'High Availability'	H	M	The suite of high availability applications will require a thorough design review. Applications which cannot be configured for automated high availability (either active/ active, or automated fail over), will be configured for active / passive availability, with SOP's in place for DR failover.
Upgrading critical applications to 'high availability' causes performance issues	H	M	Significant testing will be required, to ensure the solution perform as required.

4.7 Key Constraints and Dependencies

The following constraints and dependencies have been identified at this time. Both will be closely monitored over the duration of the project.

Constraints	Notes
Project funding	Project costs have been calculated based on an activity based costing method, cost estimate by partners and best practices known at the time of developing this business case
Limited foundation level 'High Availability' Business Applications and Systems	The Business Impact Analysis (Appendix 1) has identified a priority list of applications and systems that should be considered Highly Available this is a limited suite of a potential 720+ applications at the time of writing this business case. It is considered the 'bare minimum' requirement and is related to finding a balance of Disaster resilience vs. cost.
Key resources are unavailable for training or development work	Key core resources (Infrastructure engineers) may become involved in support calls which take precedence over new project work. Project(s) of higher priority will reduce availability of key implementation resources
Dependencies	**Notes and Management Strategies**
The IaaS project	This project is dependent on the successful deliver of the IaaS project and will require a similar resource base for completion. It is considered a fitting 'extension of the IaaS project that a DR capability is developed. The IaaS Project Manager, already assigned resources and the project team at, will continue the process of delivery of the IaaS in collaboration with the IS DR capability.
All projects	All projects will be influenced by the DR project in that architectural decisions made here may very well require a shift in project approach to embrace 'high availability' or the ensure 'redundancy and resilience' in all future designs. Architectural design standards will also be updated to reflect this for new designs going forward.

5 The Economic Case – Exploring the Preferred Way Forward

This economic case provides an overview of critical success factors, the long list investment options considered and the initial options assessment. The economic case includes the assessment of the shortlisted options, their non-monetary benefits, costs and risks. The preferred option's value for money is also assessed.

5.1 Critical Success Factors

Generic Critical Success Factors	Broad Description	Project Critical Success Factors
Strategic fit and business needs	How well the option meets the agreed investment objectives, related business needs and service requirements, and integrates with other strategies, programmes and projects.	The DR Plan and solution is aligned to the performance requirements set in the SLA The DR solution addresses, to an acceptable level, the DATIX risk 501.
Potential value for money	How well the option optimises value for money (i.e. the optimal mix of potential benefits, costs and risks).	The DR solution, enables high availability only for those 'critical' applications and systems as set out in the business case, and there only the 'bare minimum' requirement to address the existing risk profile associated with DR
Supplier capacity and capability	How well the option matches the ability of potential suppliers to deliver the required services, and is likely to result in a sustainable arrangement that optimises value for money.	In this instance the relationship with Revera and contract already established as seen as the basis for engagement to support the establishment and operation of the DR solution. Negotiations to add 'DR' to the service catalogue established through the DIA agreement are underway. Third party suppliers to critical systems will be engaged to establish a separate DR arrangement where the application is not housed within.
Potential	How well the option can be met	The Capital Plan for 18/19 financial

Generic Critical Success Factors	Broad Description	Project Critical Success Factors
affordability	from likely available funding, and matches other funding constraints.	year has 'DR Implementation' as a line item, in addition an 'OPEX budget' is in place for IaaS and therefore the Ongoing costs are expected to be embraced within that budget
Potential achievability	How well the option is likely to be delivered given the organisations ability to respond to the changes required, and matches the level of available skills required for successful delivery.	• The ISDR Project Plan will embrace the required project management principles as per the Waikato Way Project Management Policy. • The partnership with Revera in relation to the IaaS project has been very successful to date and a natural extension of that project delivery paradigm.

5.2 Long-List Options and Initial Options Assessment

5.2.1 Problem Context

In relation to the Problem/Risk statement in section 2.2 of this document, it is clear that a number of disaster scenarios could cause the disruption of Information Services. In particular the following scenarios have been reviewed as part of the options identification:

1. Workforce capability/capacity is degraded,
2. Compute and storage failures within existing un-disrupted facilities,
3. Voice network and Power outages (Waikato DHB utilities and telecomm provider),
4. Data Network failures (public and dedicated DSL links) including connectivity to the Rural hospital sites,
5. Primary Data Centre Failure ('s Services at Takanini),
6. The Main Hospital Building and associated facilities suffers damage that affects Information Services.

5.3 Options Identification

The table below summarises the dimension-values recorded during the options analysis of the proposed solution.

Service Scope (what)	Do Nothing	Do Minimal	Int#1 Voice Power	Int#2 Voice, Power, Network	Int#3 Voice, Power, Network, Datacentre	Int#4 "Full Monty" Voice, Power, Network, Datacentre, Building Infrastructure
Service Solutions (How) DR Plan, Workforce Capability	RTS Plan Workforce IP, SLA, Current WF, In heads	DR SOP Basic Training	DR Strategy Lite BC, DR SOP, Training	DR Strategy Lite BC, DR SOP, Training, Operations	DR Strategy, Full Bus Transit	Emergency Exercise, Fully Tested, Seamless, Constant Emergency Training
Apps(DRA)	Currently CAT1 (DRA) within DC, Server Based recovery	Teir 0>>SYST, Teir1>>(RDA) CF	Tier 0 & 1	Tier 0, 1 & 2	Tier 0, 1, 2, 3	all 720 applications
DR Systems	Data Backups (Off Site)	People Powered Recoveries	Offsite Recovery - Simulation	Internal DR System	On Site Internally Serviced local POD	DRAAS
Infrastructure IT	Takanini Secondary	Internal Backup Takanini	Revera Only seondary Offsite Backup	2nd Provider Offsite Backup	Takanini WDHB onsite, Takanini WDHB Offsite (T-Sites)	Shipping Container POD
Networks	Dual Links Takanini - Waiora	Additional Internet not Takanini, Connected Health	Dual Provider		Dual Links to Secondary Revera DC	Multiple Links, Multiple Internet (Takanini and Waiora)
Delivery (Who)	All Internal Waikato DHB staffed	totally outsourced	hybrid (as per IaaS)			
Implementation (When)	6-12 months	12 -18 Months	18-24 Months	24 Months +		
Funding	Waikat DHB CAPEX	Central Government	multiple DHB shared services	PPP		

Green: Preferred Way Forward
Amber: Carry Forward

The long-list table above reflects the options within each dimension that were considered and analysed to arrive at the identified short list of options including the preferred way forward.

Long-list options were therefore couched and reviewed against the range of potential service scope as follows:

1. **Status Quo/Do nothing** (as per existing DR capability)

2. **Do bare minimum** (address storage and compute failures, within existing infrastructure and responses). Produce a DR Plan leveraging existing infrastructure (i.e. reliance on single AoG Datacentre & Telecommunications remains).

3. **Low risk mitigation** option (address storage and compute failures, within existing infrastructure and responses, voice network/power outage). Reduce the risk associated with a single Data Centre through further investment in Telecommunications resiliency.

4. **Limited risk mitigation** (DR solution to cover power/ voice/data centre option) Implementation of an offsite DRaaS (Disaster Recovery as a Service) service solution.

5. **Standard risk mitigation:** (DR solution to cover power/ voice/data network/ data-centre responses) Implementation of an onsite DR Datacentre (with IaaS & non-IaaS options)

6. **Advanced risk mitigation:** (DR solution to cover power/ voice/data network and main building damage). Self-contained onsite IaaS Datacentre.

This table is a high level indicator of how the options address different disaster event technical consequences.

Scenario (Failure)	IS workforce	Power and voice	storage & compute	Data Centre	Fixed Data Network	Waiora Site damage
Option 1 do nothing	😐	😐	😐	👎	😐	😐
Option 2 Do Minimum	😐	😐	👍	👎	😐	😐
Option 3 Low Risk	👍	👍	👍	👎	😐	😐
Option 4 Limited Risk	👍	👍	👍	👍	😐	👍
Option 5 Standard Risk	👍	👍	👍	👍	👍	😐
Option 6 Advanced risk	👍	👍	👍	👍	👍	👍

key	👎	option does not adddress &/or no existing DR capacity in place
	😐	option barely addresses &/or there is a minimal existing capability
	👍	Option addreses

5.4 Long-list options assessment

In considering the key investment objectives there must be a trade-off between cost of the IS DR solution and the outcomes that can be achieved from it.

Subsequent to the evaluation, the options were ranked in the following order:

1. Preferred-Way-Forward :
   a. Option # 5: Standard risk mitigation

2. Options to carry forward:
   a. Option # 4: Limited Risk Mitigation
   b. Option # 6: Advanced Risk Mitigation

5.5 The Short-Listed Options

Of the full list of option permutations above (long list Options), the following options were selected and carried forward for further analysis.

Option 4	**Secondary (offsite DRaaS) Data Centre to house the DR solution (medium risk mitigation)**
Description	1. DR plan implemented and workforce ready 2. Critical/High Availability applications running as backup in 'active/active' mode ready for failover should a disruption to the primary datacentre occur

	3. A secondary offsite datacentre to house and support the DR solution 4. The DR site would be a tier 1 data centre 5. Existing network resiliency (2 x DTSL Network links) internet connectivity (also through Takanini) 6. A third network connection to the secondary data centre 7. UPS power management strategy is part of the datacentre service *AS PER ESTIMATE AT APPENDIX 2*
Advantages	1. it is the lowest cost option see project submission 2. It is a standard DR option common to many organisations 3. Will have critical information services available at a secondary site, and does enable information services should there be significant damage to the Waiora site. (Where networks remain un-disrupted).
Disadvantages	4. This option does not address the scenario where a full or significant telecommunications failure has occurred. 5. It is has a higher total cost of ownership than other options.
High Level Costs	CAPEX: $4.04M OPEX over 5years: $10.48M TCO: $14.52M
Conclusion	Although this is a 'go to' position with many organisations, including DHB's, This option does not address the risks associated with an unplanned fixed data network outage. This is a regular issue within existing network arrangements as unplanned outages are more common than acceptable. Should a disaster event occur that disrupts network connectivity to the Takanini data centre, Waikato DHB would not have access to information services.

As Option 5 is the preferred way forward, this option has been split up into two possible of delivery and support mechanisms:

a. The outsourced model as per the IaaS services already established through.

b. The internally sourced and supported model as per the more traditional service delivery model.

Option 5	**DR data centre situated onsite (Standard risk mitigation)**
Description	1. DR plan implemented and workforce ready

	2. Critical/high availability applications running as backup in 'active/active' mode ready for failover should a disruption to the primary datacentre occur 3. A secondary on-site Waiora datacentre to house and support the DR solution 4. Existing network resiliency (2 x DTSL Network links) internet connectivity (also through Takanini) 5. UPS/HVAC configuration is suitable to support, DR solution requirements inside Data Centre site
Advantages	1. Staff onsite to support DR event 2. Solution is closer to users 3. No loss of service in short term for mission critical services 4. As the event goes on the service within the DR Site can be expanded 5. The response to the DR Event is more controlled by the personal on the ground during via the DR Plan 6. Covers the scenario of complete data network failure 7. More immediate problem solving to clinical services during a disaster
Disadvantages	1. DR site would not be a tier 1 data centre. It is possible that should an onsite Data Centre sustain damage, as would the DR compute and storage capability. 2. Solutions would need to be made HA ready across multiple sites, some complexity in managing the technology across multiple sites
High Level Costs	<u>Option 5.A Outsourced support model</u> CAPEX: $5.78M OPEX over 5years: $10.09M TCO:$15.87M <u>Option 5.B Internal support model</u> CAPEX: $5.65M OPEX over 5years: $2.38M TCO:$8.03M
Conclusion	The solution in this option covers most of the risk options, other than Waiora site damage.

	Important notes: • Addresses the inherent risk of Waiora becoming isolated from its primary data centre and not being able to provide Information Services during a disaster event until network damage is remediated. • This option does not mitigate the risk of Waiora site damage, however if significant damage to the site has occurred there would probably be limited services from the building at that time. • In the event that such a disaster has occurred it is deemed that the need for the HA applications would be minimal as clinical operations would only be dealing with the most critical/emergency cases. • The IS DR Plan must consider minimal staff availability also consideration of automatic failover may exclude need for manual intervention. • As the Internally supported model 5.B is considerably greater value for money, it is the preferred way forward. • Whilst option 5b does not align to the DIA AoG IaaS mandate, due to the significant opex cost differential, it is the preferred option. The MoH preferred options are option 4 (remote AoG IaaS DR data centre) or Option 5a (onsite AoG IaaS DR data centre), which are both more expensive and, in the case of option 4, do not address the telecommunication risk. • Discussions with the ministry are ongoing. However, there is a risk that the DHB may be directed to implement one of the AoG IaaS based options, with resulting Opex cost uplift.

Option 6	**Purchase and install 'mobile data centre' (DR capable shipping container) (advanced risk mitigation)**
Description	1. DR plan implemented and workforce ready 2. Critical/high availability applications running as backup in 'active/active' mode ready for failover should a disruption to the primary datacentre occur 3. House mobile data centre within Waiora Campus 4. Existing network resiliency (2 x DTSL Network links) internet connectivity (also through Takanini) 5. UPS and HVAC facilities are part of the container specifications
Advantages	1. Staff onsite to support DR event 2. Solution is closer to users 3. No loss of service in short term for mission critical services 4. As the event goes on the service within the DR Site can be expanded

	5. The response to the DR Event is more controlled by the personal on the ground during via the DR Plan 6. Reduce risk of Waiora becoming an island 7. Increase the overall availability of service to the Health Professionals 8. If a building/networking is damaged some flexibility will be allowed to move physical location as required. 9. Less expansion restrictions in comparison to internally housed space limitations
Disadvantages	1. DR site would not be a tier 1 data centre. 2. Solutions would need to be made HA ready across multiple sites, some complexity in managing the technology across multiple sites 3. The cost to house shipping container on site would be the highest of the options. 4. Not currently embraced in the Waikato DHB facilities plans, council laws would also need significant consideration (organisation trying to remove temporary/portable accommodation)
High Level costs	CAPEX: $6.98M OPEX over 5 Years:$10.09M TCO: $17.07M
Conclusion	This option covers most of the risk identified in this business case, including site damage. As portable/shipping container style data centres, can be moved to connect wherever needed (within limitations), this option • addresses the risk of Waiora becoming isolated from its primary data centre and not being able to provide Information Services during a disaster event until network damage is remediated. • Also addresses the less likely risk of Waiora site damage, however if significant damage to the site has occurred there would probably be limited services from the building at that time. In the event that such a disaster has occurred it is deemed that the need for the HA applications would be minimal as clinical operations would only be dealing with the most critical/emergency cases.

1	**DO nothing option**
Description	Stay with the current status quo
Advantages	1. No additional cost

	2. No internal resource impact
Disadvantages	1. We do not address the inherent risk 2. In the scenario where we are disconnected from the solutions we will not be able to provide any IT services
High Level costs	None
Conclusion	Not mitigating the disaster risk would have significant negative effect on Health Professionals and the services they provide to patients.

5.6 The Preferred Option

Based on the above evaluation, option 5 was selected as the preferred option.

Option Description	Benefits	Costs ($)
Option 5.B: Standard Risk Mitigation is the preferred option as the distance between Waiora and our primary data centre Takanini () is over 100km causing significant concern of the risk of fixed data network disruption. This solution would be delivered and supported by an internal workforce. It covers most of the risk at the most affordable option.	Improved clinical outcomes during a disaster event (response & recovery) • Critical Information Services will be available against the most probable of technical disruptions during a disaster (fixed data network breach) Improved effectiveness of the Waikato DHB organisational emergency response: • A range of communication and coordination information services will be available	CAPEX: $5.65M OPEX over 5 years: $2.38M TCO:$8.03M

	for emergency service management even when fixed data networks have failed	

As noted previously, the MoH preferred options are option 4 (remote AoG IaaS DR data centre) or Option 5a (onsite AoG IaaS DR data centre), which are both more expensive and, in the case of option 4, do not address the telecommunication risk. Discussions with the ministry are ongoing. However, there is a risk that the DHB may be directed to implement one of the AoG IaaS based options, with resulting Opex cost uplift.

5.7 Assumptions and scope underlying the economic assessment

The following assumptions underpin this project to date:

1. It is assumed that the Business Impact Assessment at Attachment 1 remains relevant as it has been over 12 months since the assessment. A revisit of that assessment will occur as part of the IS DR Planning and detailed design phase.
2. It is assumed that suppliers of critical applications are able to work with WDHB in a DR capacity to enable IS to meet DR service level agreements.
3. DR will be a joint effort between the Waikato DHB, Revera and other vendors/service providers, and the Business Owners for the effected solutions.
4. Inter-supplier relationships are good and suppliers are able to cooperate to achieve the desired outcomes of this project.
5. Viable options will need to be assessed on an 'application by application' basis it is assumed that a method for DR high availability can be accomplished.
6. It is assumed that despite the absence of Business Continuity Planning in a number of areas throughout Waikato DHB that these business units are able to articulate their business need during for IS to support them during a disaster event. Including being able to articulate what is essential to determine and define the tier 1 business application category.
7. It is assumed that in a large complex environment with such projects as the Windows10 rollout and the IaaS Migration, that the DR project can implement a solution within expected project timeframes to reduce the critical nature of the existing risk.
8. As this IS DR Project hinges on the Waikato DHB relationship with Revera, it is assumed that the Department of Internal Affairs will facilitate the update of the catalogue for the purposes of DR.
9. The Waikato DHB IS service delivery agreements (SLAs) with the DHB business are not impacted by the implementation of the DR solution.
10. The DIA contract with the AoS IaaS provider meets all DHB requirements from the perspective of; performance and resiliency, SLAs, security, privacy, and criticality.

11. All new initiatives will include provision, within the Capex/Opex budget for that initiative, for the DR costs for any short term temporary environments and for the 1st year's Opex costs for permanent environments. Post the 1st year the IS Opex budget will be increased to cover any on-going capacity requirements.
12. Internal and external resources will be made available, when required. Given the scale, speed and complexity of this project, and given the resources constraints within the DHB, external resources will be required to augment the DHB project team required to work alongside the Revera project team so as to successfully migrate and optimise in scope applications and their associated infrastructure.
13. The discovery phase and high level analysis has provided accurate cost estimates to complete the proposed implementation plan.

The following Key assumptions have been developed in consultation with the following stakeholders and Reference organisations

- Waikato DHB information services specialists and management
- Waikato DHB Change team
- Waikato DHB Emergency Management
- Waikato DHB Chief Operating Officer
- Waikato DHB IS service excellence
- Waikato DHB IS software development
- Waikato DHB IS Architecture
- Waikato DHB IS PMO
- Waikato DHB Chief Information Officer
- Ministry Of Health Digital Portfolio
- Department of Internal affairs
- Revera
- Reference organisations currently using the proposed technology

5.8 Scope

The approach of the project is intended to be a partnership between Waikato DHB and to develop the DR capability to a point where it is simply another line item in the /Waikato DHB SLAs.

The following is an indicative list of products that will be required to deliver the IS DR project successfully.

WDHB • Standard Project Management Governance documentation. • Detailed Design DR Network • IS Disaster Recovery Plan • IS Support Framework & SOPs • SLA, catalogue & contract review	• Detailed Business Requirements Document • Detailed Design DR Architecture • Detailed Design DR Network • Site Survey • Detailed Design DR Physical Site

• Education Collateral/Training • High Availability Software remediation • Specific solution relating to EIMS • Enable/interface with Revera Solution DR Design and Build • Testing/Collaborative Exercise • Benefits realisation/risk review	Build • Disaster Recovery Plan • Establish DR physical site • Implement DR solution • GO Live 'second DR site' • Support Framework • Operationalize

5.9 Benefits

5.9.1 Monetary Benefits

There are no direct Monetary Benefits anticipated in the IS DR Project.

5.9.2 Expected business benefits

The following are the expected business benefits of this initiative.

5.9.3 Benefit#1 Improved clinical/patient outcomes during a disaster event (response and recovery).

(An IS DR solution would minimize disruption to clinical operations during a disaster event).

5.9.3.1 Outcome # 1 Improved Information Service and Systems READINESS to respond to a disaster event

A capable workforce and infrastructure ready to respond to a disaster event

5.9.3.2 Outcome # 2 improved availability of critical Business Applications and Systems during a disaster RESPONSE

A suite of critical business applications and systems are to be available should a disaster event occur and while full recovery information services and systems are yet unachievable.

5.9.3.3 Outcome # 3 Reduced RECOVERY times for information services and systems.

Reducing the time from which a full recovery of information services and systems will occur.

5.9.4 Benefit#2 A more resilient organisational disaster response.

The Disaster Management response will be more resilient to the effects of the disaster event including potential information and communications disruption.

5.9.4.1 Outcome # 4 improved ability to communicate and coordinate during a disaster event

Critical communication channels will remain online during a disaster event

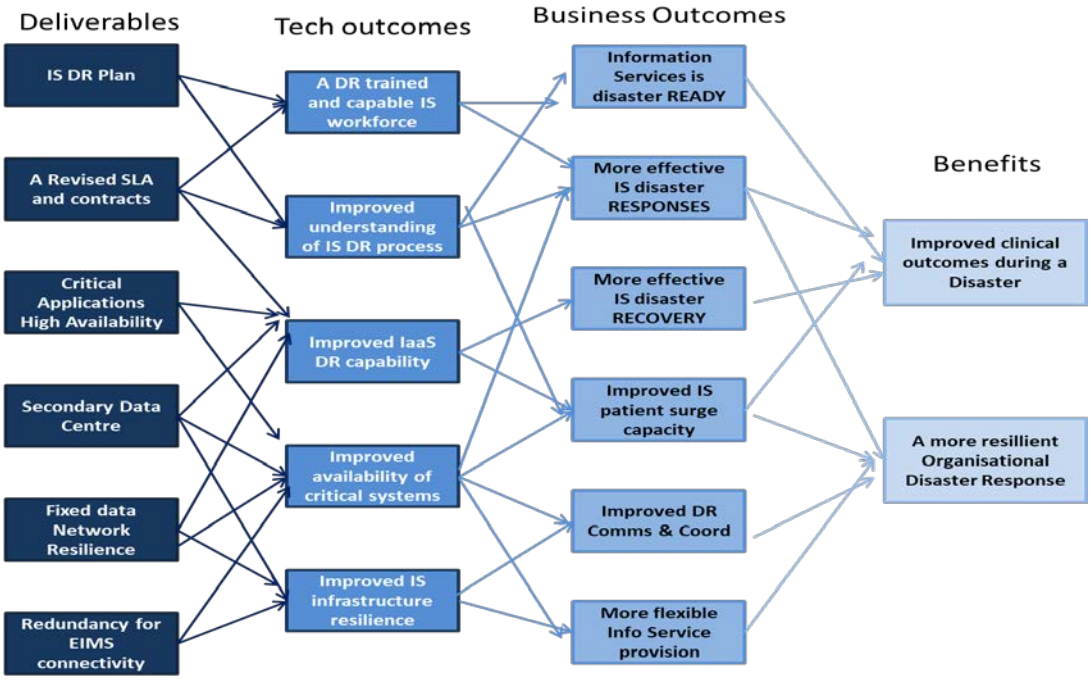
5.9.4.2 Outcome # 5 improved disaster related patient 'surge' management capability

During a disaster event, there is a strong possibility that emergency patient numbers will 'surge'.

5.9.4.3 Outcome # 6 improved flexibility in information service provision during a disaster

Critical services may be performed in unorthodox circumstances or environments

The following diagram shows the relationship between the capabilities that will be delivered by the project and resultant business outcomes and benefits.



5.10 Risk and Uncertainty

5.10.1 Risk assessment

Stakeholders have identified and evaluated the key risks that might create, enhance, prevent, degrade, accelerate or delay the achievement of the investment objectives. The results of this assessment are detailed below.

Risk assessment and risk management strategies

Risk	Consequence (H/M/L)	Likelihood (H/M/L)	Comments and Risk Management Strategies
Planned benefits of the solution are not achieved	H	L	Avoid – final product procurement must be based on robust requires and technical design principles related to the benefits and outcomes
DR solution assumptions related to risk factors are	H	L	All risk factors relating to the solution design have been

tested during the design phase and deemed invalid (*i.e. Network redundancy does not fully mitigate the risk of a significant earthquake event)*			validated and accepted across all key stakeholders.
Project risks not yet fully tested regarding the impacts on applications and whether all vendors can meet the requirements of the IS DR plan	H	M	Avoid- Vendors will be required to be involved in the solution design and a significant process of application remediation we will required prior to establishing 'High Availability'
Workforce is not geared to support he DR solution, making the IS DR plan and associated KPI's unachievable	H	L	Avoid – workforce is trained enabled to support this new service offering
Waikato DHB has an 'accelerated project delivery' regime in place with significant infrastructure projects running concurrently this could cause project delays with resource being spread too thin	M	H	Reduce – IS has introduced a significant change in resource management capability within IS resource availability will be monitored carefully over the life of this project.
Other application project upgrade and rollouts may delay DR project the High Availability requirement is not prioritised to align with project management dates	M	H	Reduce – architects, project managers will be required to embrace high availability within IS DR project deadlines where practicable.
Cost estimates in this business case are not accurate	M	M	Accept: - Apply appropriate level of contingency on the basis of cost estimate accuracy
Timelines identified may be exceeded	M	L	Accept: - Apply appropriate level of planning and scheduling

5.11 Attributes of the preferred Option

Description	1. DR plan implemented and workforce ready 2. Critical/high availability applications running as backup in 'active/active' mode ready for failover should a disruption to the primary datacentre occur 3. Develop a Data Centre on Campus within Waiora Campus 4. Existing network resiliency (2 x DTSL Network links) internet connectivity (also through Takanini) 5. UPS and HVac facilities
Source of funding	the Waikato DHB IS Capital Project budget
Transformation timeframe	The full transformation from the current state to the future state is expected to take 18 months.
Product Whole life	5 years
Primary procurement aspects	Preferred supplier arrangements
Preferred infrastructure development partner	TBC
Project sponsor	Neville Hablous (Executive Director, Office of the CEO)
Director IS Business Services	Andrew Smith
Director Development and Operations	Chris Marra
Business owner	Geoff King
Senior Architect	Steve McMillan
Program Manager	Chris Fisher

6 Commercial Case - Preparing for the Potential Deal

The commercial case for the ISDR project differs greatly between the two most preferred options 5.A or 5.B, as follows:

6.1 The outsourced support model (5.A)

Under the outsourced model the existing relationship with Revera would be leveraged and expanded to embrace the DR solution. Some preliminary engagement has been completed with Revera. A business impact assessment, risk review and architectural concept document were delivered as part of the engagement with Revera who created a submission (Appendix 2).

Under this option the DR solution would be expected to be delivered as an extension of the existing arrangements with Revera. At present the Waikato DHB is migrating the existing data centre from Caro Street to Takanini. This process is approximately 80% complete at the time of writing this BC. The arrangements at the project management level have been productive to date and the operational governance component will continue once the project has completed its migration.

Within the existing agreement with Revera there is provision for a POD this component of the service was deemed out of scope of the IaaS project and was to be reconsidered as part of this IS DR Business case.

6.2 The internally sourced support model (5.B)

Under the Internally sourced support model, everything would be purchased and implemented through the Waikato DHB standard procurement processes. In fact the *Preferred Panel Suppliers for IT Services (4703-17)* is suitable to source the elements *required* for the DR solution, which will be procured using the 3 quote process, outlined in the panel guidelines.

As this process would simply be an extension of existing IS project/procurement management process, it will require minimal commercial strategy other than that normally carried out to meet the 'value for Money' principles inherent in the *Preferred Panel Suppliers for IT Services (4703-17)* process and under the Waikato DHB procurement policy.

6.3 Risk Allocation

The risk allocation for this engagement would be as per the existing arrangements within Waikato DHB procurement policy.

6.4 Payment Mechanisms

As per the existing arrangements the standard payment mechanisms will be utilized to pay against approved purchase orders, Waikato DHB already has a number of key relationships with suppliers in this space supporting our network and infrastructure. These relationships will be further leveraged to optimise costing and payment mechanisms will reflect the nature of these agreements and relationships.

7 The Financial Case Affordability and Funding Requirements

7.1 Financial costing approach

- Detail costing is based on the resources required (both Waikato DHB and vendor) and preferred vendor product pricing, see Appendix 6 - Schedule of Costs.
- The costs are split into capital and operating expenses based on the International Public Sector Accounting Standards (IPSAS)
- The Net Present Value (NPV) calculation result: -$7.5M (See Appendix 7 NPV Calculation for the preferred option)

Key Financial Information:					
Costs	**$'000**	**Budgeted**	**Key Indicators:**		
Capital cost:	-2,894		Net Present Value	-7,514	$'000
Opex Current Year (- increases deficit/ + increases surplus)			Period of NPV	5	Years
Incremental Costs $'000	0		Interest Rate used	6	%
Benefits $'000	0		Payback:	No Payback	Years
Net Impact on Opex $'000	0		Internal Rate of Return	0.0	%
Opex Next Year (- increases deficit/ + increases surplus)			Average Life of Assets	5.0	Years
Incremental Costs $'000	-1,485		(for depreciation)		
Benefits $'000	0		Total Impact on Opex	-7,880	$'000
Net Impact on Opex $'000	-1,485		For Period of	5	Years

7.2 The key assumptions and notes

- Vendor estimates for pricing is based existing catalogue costs Vendor pricing is quoted in NZD only.
- The costing does not include any annual escalation. This cost will be re-evaluated subject to change based on the outcome of the contract negotiations which are currently not in progress.
- An escalation of pricing, on FTE and DR costs has not been taken into account
- Multiyear vendor license subscriptions have only been estimated at the stage.
- Prices exclude GST
- The costs from The Waikato DHB IaaS provider (Revera) for standing up servers (compute, store and backup) for this project within the POD will be capitalised up to the Go Live date in line with the accounting standards.
- The depreciation will only be calculated against the container DR solution(Physical)
- The finance costs represent the capital charge of 6%

- The discount rate used in the NPV is 6% (same as the capital charge)

7.3 Cash Flow

Planned cashflow is identified in the NPV calculator below:

NPV Calculation	Year 0 2019	Year 1 2020	Year 2 2021	Year 3 2022	Year 4 2023	Year 5 2024	
	$'000 (- Outflows / + Benefits)						
Capital Cost							
IS Services	-1,303	-654					-1,957
Hardware	-506	-300					-806
Software	-250	-250					-500
Building Asset	-300	-450					-750
Contingency	-535	-1,071					-1,606
							0
							0
							0
							0
							0
							0
							0
							0
Total Capital Cost	**-2,894**	**-2,725**	**0**	**0**	**0**	**0**	**-5,619**
Incremental Operating Cost							
							0
Workforce (2 FTE)		-343	-350	-357	-364	-372	-1,786
Training		-27					-27
Licensing		-200					-200
Contingency		-79	-79	-79	-80	-80	-397
							0
							0
							0
							0
							0
Total Operating Cost	**0**	**-649**	**-429**	**-436**	**-444**	**-452**	**-2,410**
Benefits							0
Savings on Existing Opreational Costs							0
							0
							0
							0
Total Benefits	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Net Cashflows	**-2,894**	**-3,374**	**-429**	**-436**	**-444**	**-452**	**-8,029**

7.4 Overall affordability

The Waikato DHB Chief Finance Officer statement of affordability is at Appendix 5.

8 Management Case: Planning for Successful Delivery

8.1 Project Management Planning

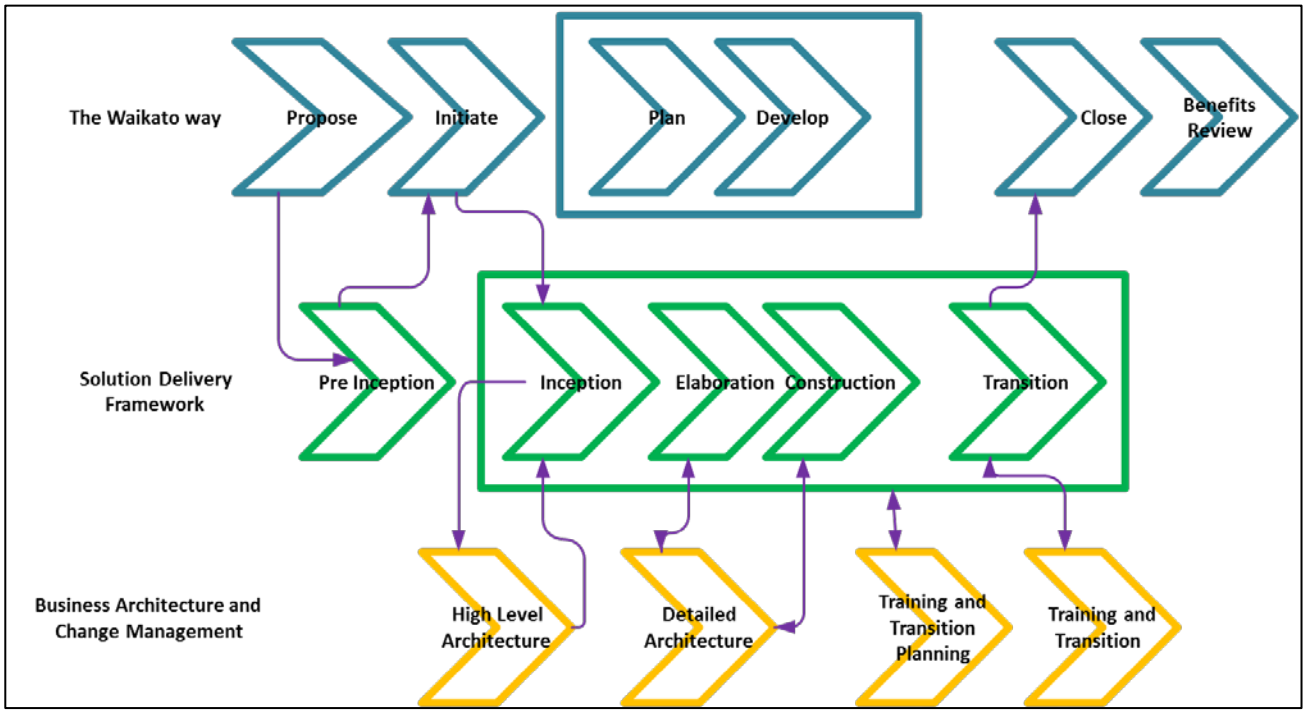
8.1.1 Programme management arrangements

The proposed project is an integral part of the Infrastructure programme, which comprises a portfolio of projects focused on improving infrastructure performance.

Through management of the programme, the Programme Manager ensures that projects continue to contribute to programme outcomes through delivery of planned outputs, via efficient and effective management of resources, monitoring of interdependencies between projects and managing changes within and among projects.

8.1.2 Project management arrangements

Upon approval of this investment proposal, a project will be established to deliver the required services. The project will be managed by following the continuously improving solution delivery framework which is based on Prince 2 (the Waikato way), as shown below:



Waikato DHB Solution Delivery Framework

The relevant project management arrangements are proposed to be as follows:

An effective project management structure will be established to ensure implementation success. The project management structure will provide direction, management, control and communication. Defined roles and responsibilities that bring together the various experience and skills required have been drafted.

This project involves extending partnerships with suppliers, this will enable flexibility and make available a broad base of skills for a specific period of time after which Waikato DHB in-house resources assisted by an integration development partner will be enabled to deliver on the development product backlog.

8.1.3 Proposed Governance Arrangements

Project governance is the management framework within which project decisions are made. The project governance plan document outlines the function of the project board and clarifies

the roles, responsibilities and expectations of members.

The project governance plan forms part of the Project Initiation collection of documents, which, for the IS DR Project, includes the following:

- Business Case
- The Project Initiation Documentation (yet to be completed)
- Project governance plan (See Appendix 8: ISDR Project Governance Plan)

The objective of the project board is to govern and provide high-level, unified direction to the ISDR Project. The board represents three interest groups (business, user and supplier). It recognises that their interests overlap and they should therefore work as a team.
Ideally, roles should be assigned to individuals who can stay with the project throughout its life.

The project executive is the key decision maker because he is ultimately accountable to the business and to DHB executive for the successful delivery of the scope and soft/hard benefits of this project within the defined budget and schedule.

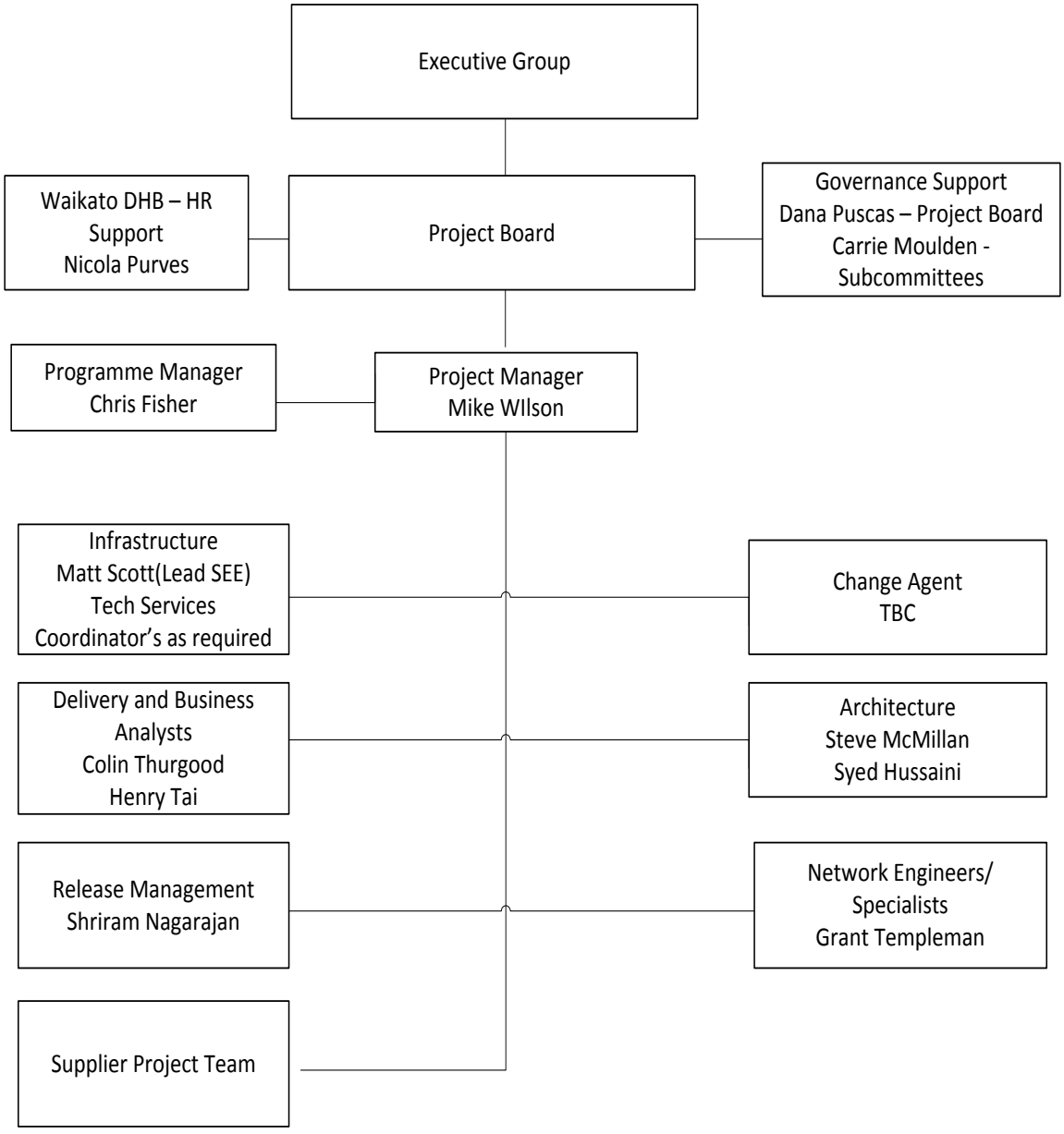
8.2 Project, technical and security risk assurance

The Waikato DHB service excellence team will provide project assurance and security assurance will be conducted by the Manager, Information Security. Independent security assurance maybe sought as directed by the project board. Technical assurance will be provided by the DHBs IS development specialists who are not involved in the project and independent GCIO approved services providers.

The WDHB security team will be involved in every aspect of the approval of this business case and the definition of the final security solution as it pertains to this project.

8.3 Project Roles and Responsibilities

Figure 1: Proposed Project Organisation



See Appendix 9 ISDR Project Governance Plan for all roles and responsibilities

8.4 Description of Delivery Phases

The Waikato IS PMO has a proven track record of delivering projects successfully and in particular infrastructure projects and Government mandated projects. Project phases are adopted in alignment of the Waikato DHB Project Management policy – 'The Waikato Way'.

The project is proposed to run in a standard PRINCE2/waterfall delivery and is estimated to take approximately 1.5 years. A full project initiation document including all detailed plans will be delivered as part of the project initiation phase. The following is an indicative list of project phases/deliverables and their associated delivery dates.

Task Name	Duration (Days)	Start	End
Single Stage Business Case (SSBC)Approval	28	9/8/18	29/11/18
SSBC Design	18	23/8/18	17/9/18
Approvals In Place	58	10/9/18	29/11/18
Initiation Phase	33	14/11/18	20/1/19
Design Phase o IS DR Plan o Solution design	200	28/12/18	4/10/19
Develop Phase o Data Centre o Critical Apps HA ready o Compute and storage o Network build o DR solution tested	248	27/5/19	11/5/20
Close Phase	25	11/5/20	15/6/20

8.5 Change Management Planning

Waikato DHB have adopted the Prosci (Professional Science) ADKAR research based change management methodology which will be leveraged to deliver the change management requirements for this project.

Whilst the reasons for the change are expressed in this business case, it is only shared by a small subset of the people who will eventually be involved in the change implementation and who will be engaged to refine the strategy and plans. A tailored change management strategy will be developed for this enterprise project; it will address the following relevant questions during the discovery phase of the project:

- What is the perceived need of this change among affected operational and management staff?
- What lessons can be learned from the process and results of previous change management processes?
- Is there a shared vision in the organisation with regard to the need of this project?
- Determine the quantum of change that is anticipated to be happening in parallel to the changes this project needs.
- Develop an impact map who are impacted and how they will be impacted. For the business case stage the following high-level map has been created:

8.6 Benefits Management Planning steps

- Benefits management activities will be integrated into project management activities as much as possible.
- Appropriate project benefits are identified, quantified and managed.
- Benefits management will be undertaken throughout the project lifecycle and operations, with regular reviews to ensure benefits are on track to be realised to the expected level and sense checked with stakeholders to ensure they are still desirable and worthwhile.
- Roles and responsibilities for all benefits management activity will be documented, with sufficient evidence that individuals have accepted the responsibilities and activities assigned to them.
- Benefits realisation management will be evidence based driven by actual and real information.
- The Project Board will work to ensure that the approved Business Case and corresponding benefits remain aligned and valid throughout the project lifecycle.
- As far as practicable benefits will be specific and isolated so that their realisation can be directly attributed to the implementation of the API-Led integration tool proposed in this business case.
- Benefits have an amount of time, money, resource and activity allocated to them for adequate identification, quantification, planning and measurement.
- Benefits will be managed as continuous activity with responsibility assigned for their management review, reporting and capturing of lessons learned.

8.6.1 Benefit#1 Improved clinical/patient outcomes during a disaster event (response and recovery).

(An IS DR solution would minimize disruption to clinical operations during a disaster event).

8.6.1.1 Outcome # 1 Improved Information Service and Systems READINESS to respond to a disaster event

A capable workforce and infrastructure ready to respond to a disaster event

8.6.1.2 Outcome # 2 improved availability of critical Business Applications and Systems during a disaster RESPONSE

A suite of critical business applications and systems are to be available should a disaster event occur and while full recovery information services and systems are yet unachievable.

8.6.1.3 Outcome # 3 Reduced RECOVERY times for information services and systems.

Reducing the time from which a full recovery of information services and systems will occur.

8.6.2 Benefit#2 A more resilient organisational disaster response.

8.6.2.1 Outcome # 4 improved ability to communicate and coordinate during a disaster event

Critical communication channels will remain online during a disaster event

8.6.2.2 Outcome # 5 improved disaster related patient 'surge' management capability

During a disaster event, there is a strong possibility that emergency patient numbers will 'surge'.

8.6.2.3 Outcome # 6 improved flexibility in information service provision during a disaster

Critical services may be performed in unorthodox circumstances or environments

8.7 Benefit Profiles

8.7.1 Benefit#1 Improved clinical/patient outcomes during a disaster event (response and recovery).

Improved clinical/patient outcomes during a disaster event (response and recovery).	
Type	Effectiveness
Monetary	Non-monetary
Measurability	Qualitative
Impact	Benefit
Beneficiary	New Zealander
Government Agencies	N/A
Agency Strategy	Effective & efficient care and services
All of Government Strategy	Delivering better public services

8.7.1.1 Measure 1 – Improved clinical/patient outcomes during a disaster event

Description	Information Services is Disaster Ready
Measure Owner	Geoff King, CIO
Measure (include any calculation formulae)	1. The Waikato DHB Information Services, Service Level Agreement availability metrics. 2. The Waikato DHB organisational risk register
Tolerances	As identified in the revised Waikato DHB SLA and associated supplier agreements

Baseline value, source and date	1. The Waikato DHB Information Services SLA does not currently include a metric for availability during a disaster event (response and recovery). 2. The DATIX risk #501: *DR/Service Continuity - Loss of or reduction in capability / capacity to provide IT services following a disaster / outage* - is currently scored at 15 (extreme)
Target value for measures	1. The Waikato DHB Information Services SLA includes 99.5% availability for critical clinical applications, including during a disaster event (response and recovery) 2. The Waikato DHB Information Services SLA includes acceptable return to service metrics for all other information services that have been disrupted by a disaster event 3. The DATIX risk #501: *DR/Service Continuity - Loss of or reduction in capability / capacity to provide IT services following a disaster / outage* - is reduced in score from 15 (extreme) to 6
Assumptions	That on completion of the test exercise for Information Services readiness, that the CIO will be able to review and commit to new SLA's with Waikato DHB.
Specific actions required to achieve this measure	Develop an IS DR Plan Develop IS DR standard operating procedures Identify and adjust DIA/ IaaS catalogue Review /Waikato DHB SLA Enable and work with Revera to set up and implement new DR technical solution Remediate software where required to be made 'High availability' Test the solution and workforce readiness Review SLA's for all commercial partners Review Waikato DHB Information Services SLA

	End of project report includes 'benefits realisation' and DATIX risk review	
Dates targets will be met	Planned Dates	% of End Value
	June 2020	100%

8.7.2 Benefit#2 A more resilient organisational disaster response.

A more resilient organisational disaster response	
Type	Effectiveness
Monetary	Non-monetary
Measurability	Qualitative
Impact	Benefit
Beneficiary	Single Agency
Government Agencies	N/A
Agency Strategy	The Waikato DHB Emergency Management Plan
All of Government Strategy	National Emergency Health Plan

8.7.2.1 Measure 1 – improved resilience of the disaster response capability

Description	Reduced risk of emergency communications and disaster management ops centre being disrupted during a disaster event
Measure Owner	Trevor Ecclestone (Manager Emergency Management)
Measure (include any calculation formulae)	1. Information Communication System availability during a disaster event. 2. This risk of disruption to essential emergency communications and disaster management picture (EMIS) during a disaster response recovery

	3. IS is able to support the aims and objectives of the Mass Casualty Plan, for the duration of such operations are required. 4. The Waikato DHB IS SLA includes provision to support the continuity of EIMS during a disaster event.
Tolerances	As identified in the revised Waikato DHB SLA and associated supplier agreements
Baseline value, source and date	1. The Waikato DHB Information Services SLA does not currently include a metric for availability during a disaster event (response and recovery). 2. The DATIX risk #501: *DR/Service Continuity - Loss of or reduction in capability / capacity to provide IT services following a disaster / outage* - is currently scored at 15 (extreme)
Target value for measures	1. The Waikato DHB Information Services SLA includes 99.5% availability for critical clinical applications (including EIMS) and communication systems including during a disaster event (response and recovery) 2. High availability applications and systems are rated to support the requirements of the Waikato DHB Mass casualty plan. 3. The DATIX risk #501: *DR/Service Continuity - Loss of or reduction in capability / capacity to provide IT services following a disaster / outage* - is reduced in score from 15 (extreme) to 6 (Moderate)
Assumptions	
Specific actions required to achieve this measure	Include EIMS, and Critical Communications Platforms in the IS DR Plan. Include Mass Casualty requirements in the IS DR Plan Design the emergency management solution and enable 'high availability' of the critical disaster management applications and communication systems.

	Implement design Test the solution and workforce readiness Review SLA's for all commercial partners Review Waikato DHB Information Services SLA End of project report includes 'benefits realisation' and DATIX risk review	
Dates targets will be met	Planned Dates	% of End Value
	June 2020	100%

8.8 Risk Management Planning

An initial Criticality Risk assessment of this system (integration software development tool) was conducted by Waikato DHB's IS Service Excellence team. The assessment determined implementation risk to be LOW.

Risks identified in the course of developing this Business Case will form the basis on an on-going risk register. Project risk management will follow the standard Prince2.

8.8.1 Risk register

Ref	Risk	Impact	Likelihood	Mitigation
1	If change management is not effectively applied, change resistance may be higher than anticipated and require additional time and resources to be overcome.	Low	High	Engage dedicated change agent early in the project. Prepare and implement a change management plan
2	Project costs may exceed estimates if the complexity of the integrations to be built is greater than anticipated.	Medium	Medium	Appropriate contingency included in budget Appropriate planning and discovery Contractual arrangements clearly identify costs and appropriate risk sharing arrangements Partner with a skilled integrations development supplier to

				assist with any skills gaps. Provide the necessary technical Knowledge and skills to development staff
3	The implementation of the Midlands Region Clinical Workstation, MCP (and potential for an ESB to be provisioned within this solution) may significantly slow progress of this project.	High	Low	Ensure involvement in the eSpace governance group to identify, assess and manage conflicting priorities Use appropriate escalation or change request processes to manage any negative impact
4	Appropriate Waikato DHB resource may not be available as a consequence of a number of competing priorities which may prevent this project from achieving milestones in the planned time	High	Medium	Ensure dedicated resources are assigned Clear roles and responsibilities and project schedule Partnering with existing panel suppliers experienced in this type of delivery

8.9 Contract Management

In the case of option 5.A (Outsourced support model), once the contract is formalised a contract management plan will be developed by procurement, the business owner and IS contract manager. This will outline how the contract will be managed throughout its life and also will have elements of supplier management.

The contract manager is responsible for executing the plan with support from procurement and potentially other stakeholders.

The majority of the required services are currently provided within the AOG catalogue supplied by solutions. There may be some additional changes required to this catalogue that may be required to be added via the DIA to cover this new DR Solution.

However as per the recommended option 5.B (internal support model), the *Preferred Panel Suppliers for IT Services (4703-17)* already has a contract management process in place which will be extended to meet the IS DR project requirements.

9 Next Steps

This Single Stage business case seeks formal approval from the Waikato DHB Board & Ministry of Health to progress to detailed planning, design and implementation.

10 Appendices

10.1.1 Appendix 1 - Business Impact Assessment

10.1.2 Appendix 2 - High Level Design & Cost Estimates (Revera)

10.1.3 Appendix 3 - Full Risk Statement

10.1.4 Appendix 4 – QGDO Risk Assessment

10.1.5 Appendix 5 - CFO statement on affordability

10.1.6 Appendix 6 - Schedule of Costs

10.1.7 Appendix 7 - Net Present Value Spread Sheet

10.1.8 Appendix 8 – IS DR Project Governance Plan

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 11.3

NAMING OF YOUTH ROOM – CHIEFS CHILL OUT ZONE

Purpose	For approval.

This paper outlines a proposal to name a youth space in Waikids at Waikato Hospital the Chiefs Chill out Zone, following fundraising by the team and Waikids ongoing relationship with the Chiefs rugby team.

Background

Waikato Hospital often has young people who need to stay in hospital for long periods of time for ongoing treatment. This can be very boring, with nothing to do and nowhere to take their young visitors.

The Play Specialists in Waikids at Waikato Hospital wanted to raise money for a youth room where young people could hang out with their friends, read, watch TV and play games. It would be decorated to look more like a room in their home than a hospital ward.

The Chiefs rugby team took up the fundraising challenge and held a Chiefs vs Wales fundraising luncheon in June 2016 where Dr David Graham spoke to the audience and showed a video with two of our young patients talking about the importance of the room to them.

They also fundraised during the Chiefs vs Wales game with volunteers and buckets for money donations. They repeated this at their stand at Fieldays.

They raised $40,000 to decorate and fit out the room and provide some of the activities that the young people want in the room.

Proposal

We would like to honour their fundraising commitment by naming the room the 'Chiefs Chill out Zone.' It also recognises the long association that the Chiefs rugby team has had with Waikids since they became a franchise, including the players regularly visiting children in hospital.

The visits to the hospital bring a lot of joy and a bit of a boost, not only for the kids but also their families, the staff and the players.

The name Chiefs is well known in the Waikato. They are Waikato heroes for all ages and most definitely, Waikids heroes.

The relationship will be ongoing as part of the plan is to have the players come and spend time and chill out with youth in the room. This has benefits both for players and our Waikids.

The room would have an entrance way in the Chiefs branding, and a signed jersey on the wall, and possibly other mementoes, but no other branding, and it would not include Chiefs sponsors names.

Policies

The naming fits with our naming rights policy attached in Appendix 1.

That policy also states that proposals need to come to the Executive Group for approval before consideration by the Board. The Executive Group approved this proposal on 26 October 2018.

The furnishing and decorating of the room will align with all H&S, Infection Control and other Property and Infrastructure policies.

Recommendation
THAT
The Board approves the naming of the youth room in Waikids, the 'Chiefs chill out zone'.

LYDIA AYDON
EXECUTIVE DIRECTOR PUBLIC & ORGANISATIONAL AFFAIRS

Naming Rights of Waikato District Health Board Owned Facilities

Policy Responsibilities and Authorisation

Department Responsible for Policy	Media and Communications
Position Responsible for Policy	Executive Director Public Affairs
Document Owner Name	Lydia Aydon
Sponsor Title	Chief Executive
Sponsor Name	Nigel Murray
Target Audience	All staff
Committee Approved	Policy Committee
Date Approved	19 May 2016
Committee Endorsed	Waikato DHB Board
Date Endorsed	27 July 2016
Disclaimer: This document has been developed by Waikato District Health Board specifically for its own use. Use of this document and any reliance on the information contained therein by any third party is at their own risk and Waikato District Health Board assumes no responsibility whatsoever.	

Policy Review History

Version	Updated by	Date Updated	Summary of Changes
05	Lydia Aydon	May 2016	• Clarification of process for review and approval of naming request • Transfer to new template

Naming Rights of Waikato District Health Board Owned Facilities

Contents

Naming Rights of Waikato District Health Board Owned Facilities

1. Introduction

1.1 Purpose

Waikato District Health Board (DHB) facilities will usually be known by their function where this is evident and long term e.g. Acute Services Building, Thames Clinical Centre, Regional Renal Centre, Hague Road Carpark Building, Waikato Hospital.

However Waikato DHB may choose to recognise people or sponsors who supported the Waikato DHB, either through distinguished effort or substantial financial endowment, by naming facilities in their honour.

1.2 Scope

It is the responsibility of all Waikato DHB staff, managers and board members to comply with this policy.

2. Definitions

Facility / Facilities	Facility/Facilities in this context includes all buildings, portions of buildings, departments, wards, rooms, laboratories and roads owned by the Waikato DHB. It does not include leased buildings unless the leasor grants permission for Waikato DHB to name the leased building.

3. Policy Statements

The Waikato DHB Naming Rights of Waikato DHB Owned Facilities policy is that:

- Prior consent from an individual, or where appropriate their family, will be obtained before an individual's name is recommended to the board for consideration.
- The name used will normally be the family name or, in the case of a corporate entity, the shortest possible name.
- A name will be used only once unless the board determines otherwise.
- Where the name of a corporate entity is used the period of naming will be limited to the life of the corporate entity, or to the period originally specified by Waikato DHB whichever occurs sooner.
- In the event of demolition or destruction of a facility, its name or any parts of it will be the subject of fresh recommendations. No facility scheduled for demolition will be named.
- The board may cancel a name for whatever reason it deems appropriate provided that there is no resulting breach of contract.

4. Roles and Responsibilities

4.1 Records of building names

Property and Infrastructure will:

- develop and maintain a list of all facilities on Waikato DHB owned sites capable of bearing naming rights in terms of this policy
- maintain records of approved dedication and building names and the basis for granting naming rights.

4.2 Submission of naming request

A formal letter of request must be submitted by a direct report to the Waikato DHB chief executive and the executive director of public affairs, with a statement about the nature of the request. If staff themselves have suggestions, they should put them through their manager.

The letter needs to discuss:

- the importance of the name to the Waikato DHB
- the nature of the person's distinguished service, sponsorship, and/or nature of the corporate identity
- the nature of any proposed contractual relationship
- plans for any plaque, funding and maintenance
- other conditions, concerns, or impacts of the naming.

A résumé or discussion of the person(s)/corporate entity being honoured needs to be included.

Letter(s) of reference or recommendation should also be included. Petitions may also be submitted to show those in favour of the naming.

The chief executive will be given early advice on recommended nominees.

The executive director of public affairs will submit a naming recommendation to the Waikato DHB executive group who will, if it is appropriate, approve a recommendation to the board. The submission must have written approval of the person/ corporate entity after whom the naming is to take place. If the person is deceased, the approval of the immediate family/or the estate representatives will normally be expected to have been obtained. If there is no immediate family or estate representative and the person is deceased the naming process can proceed.

4.3 Review and approval of naming

Any submission on a naming request requires executive group approval before going to the Board.

The executive director of public affairs will undertake a review of all naming requests which do not require a functional name, and will then forward this to the Waikato DHB executive group for approval. When a naming request is approved by the executive group, the chief executive of Waikato DHB will submit the request to the board.

Final approval to grant naming rights, which do not require a functional name, rests with the board who will record in the relevant board meeting minutes each naming right granted over a facility.

5. Standards for naming

5.1 Naming opportunities

A facility will always be known by its function where this is evident. However, a facility may also be given a chosen name reflecting the fact that functions may change over time.

In cases where functions change within a facility:

- if the building has been named for the function the functional name will be deleted when the function changes
- if the building has been named after a person/corporate entity, that name will remain regardless of function.

An entire facility may be given a chosen name. Parts of buildings that may be named are wards, rooms, laboratories and other distinctive areas. This may require the installation of commemorative plaques.

As a general rule, a building holds more importance or represents greater Waikato DHB recognition than the naming of a portion of a building, such as a ward or a single room.

Naming of new buildings should occur prior to construction.

5.2 Buildings may be named for the following purposes

Honouring individuals:

- Naming honours people with a record of distinguished service to health and disability services within the region served by Waikato DHB.
- The Waikato DHB may consider honouring people who gave such distinguished service to health and disability services within the area served by Waikato DHB that their names should be recognised by a later generation.
- Naming a building in honour of a person who has given extraordinary distinguished service to health and disability services within the region served by Waikato DHB will not normally be considered until after that person's substantive formal relationship with the Waikato DHB ends.

Sponsorship and donations:

- The Waikato DHB may name a building or part of a building in recognition of sponsorship or a donation. Generally, naming rights in recognition of sponsorship would be granted where there is a minimum commitment of five years. (See Waikato DHB Sponsorship Policy).
- A plaque may be placed on a building, ward, or room to acknowledge a sponsor. The design, wording and location of the plaque require the approval of the executive director of public affairs.
- All named buildings are the property of the Waikato DHB. Naming rights carry no power of direction from the person/family/entity after whom the building is named to the Waikato DHB on any matter whatsoever (e.g. use of or the appearance of the building).

5.3 Involvement of Māori and cultural groups in naming:

- Waikato DHB shall invite the Kaunihera Kaumātua and Te Puna Oranga (Maori Health Services) to participate in the naming process of names/ingoa of facilities/buildings when the recommendation is for a name other than a functional one e.g Acute Services Building, Regional Renal Centre.
- Approval of names/ingoa of Waikato DHB facilities/buildings, other than functional ones, should be obtained from iwi by way of consultation with the Kaunihera Kaumātua.
- Where and when appropriate, Waikato DHB will invite other cultures to participate in the naming process.
- Waikato DHB will ensure that names which have been approved by the Kaunihera Kaumātua or other cultures will not be changed without their involvement in the process.

6. Audit

6.1 Indicators

- Waikato DHB facilities are named appropriately with correct approval.
- There is evidence that consultation by the executive director of public affairs has occurred regarding the naming of any new building

7. Associated Documents

- Waikato DHB Design and Construction policy (1781)
- Waikato DHB Sponsorship policy (0122)
- Principles for naming buildings/facilities, master copy held by executive director of public affairs

Significant Programmes/Projects

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 12.1.2

MENTAL HEALTH AND ADDICTIONS SYSTEM

Purpose	For information and discussion.

Background

The *Creating our Futures* model of care and business case was presented and discussed at a Board workshop on 10 October 2018. Board members raised questions about how the proposed rebuild of inpatient facilities (and wider model of care outlined in *Creating our Futures*) fitted within the wider system planning being undertaken for *Te Pae Tawhiti* (see attached Te Pae Tawhiti final draft). The Board also raised questions about how *Creating our Futures* fitted into the wider mental health and addictions system of care.

The Board was informed of the work currently being undertaken by Strategy and Funding in designing a system of care (and wellbeing) for mental health and addictions, and requested a paper depicting this system. Whilst the work to agree the volume and location of all services across the mental health and addictions system is incomplete, a draft presentation showing the proposed spectrum of services will be presented.

Te Pae Tawhiti and Creating our Futures Leadership

The Te Pae Tawhiti and Creating our Futures programmes have had separate programme boards and leadership structures over the last two and a half years. This separation was a result of the urgency in completing the business case required for the rebuild of Henry Rongomau Bennet Centre and the relatively slow pace of the Te Pae Tawhiti development. With the recent changes in Strategy and Funding, and the work to synthesize the numerous Te Pae Tawhiti work streams as well as the Creating our Futures model of care work, it is now our intention to bring the governance of Creating our Futures and Te Pae Tawhiti together under the joint leadership of the Strategy and Funding, and Mental Health and Addictions Executives.

Draft System Map for Mental Health and Addictions Care and Wellbeing

This presentation focuses on mental health and addictions treatment and support *services* but also acknowledges the protective factors (determinants of wellbeing) that enhance mental health and wellbeing and the role the healthcare system has in influencing those factors. The focus on *services* is intentional in that the primary purpose of the system map is to depict the services that will be provided or funded by the DHB. A glossary with service definitions is also attached. The system map, once

finalised, will provide the first step in developing an investment roadmap for the future.

This system map has not had wide input and should be considered a draft.

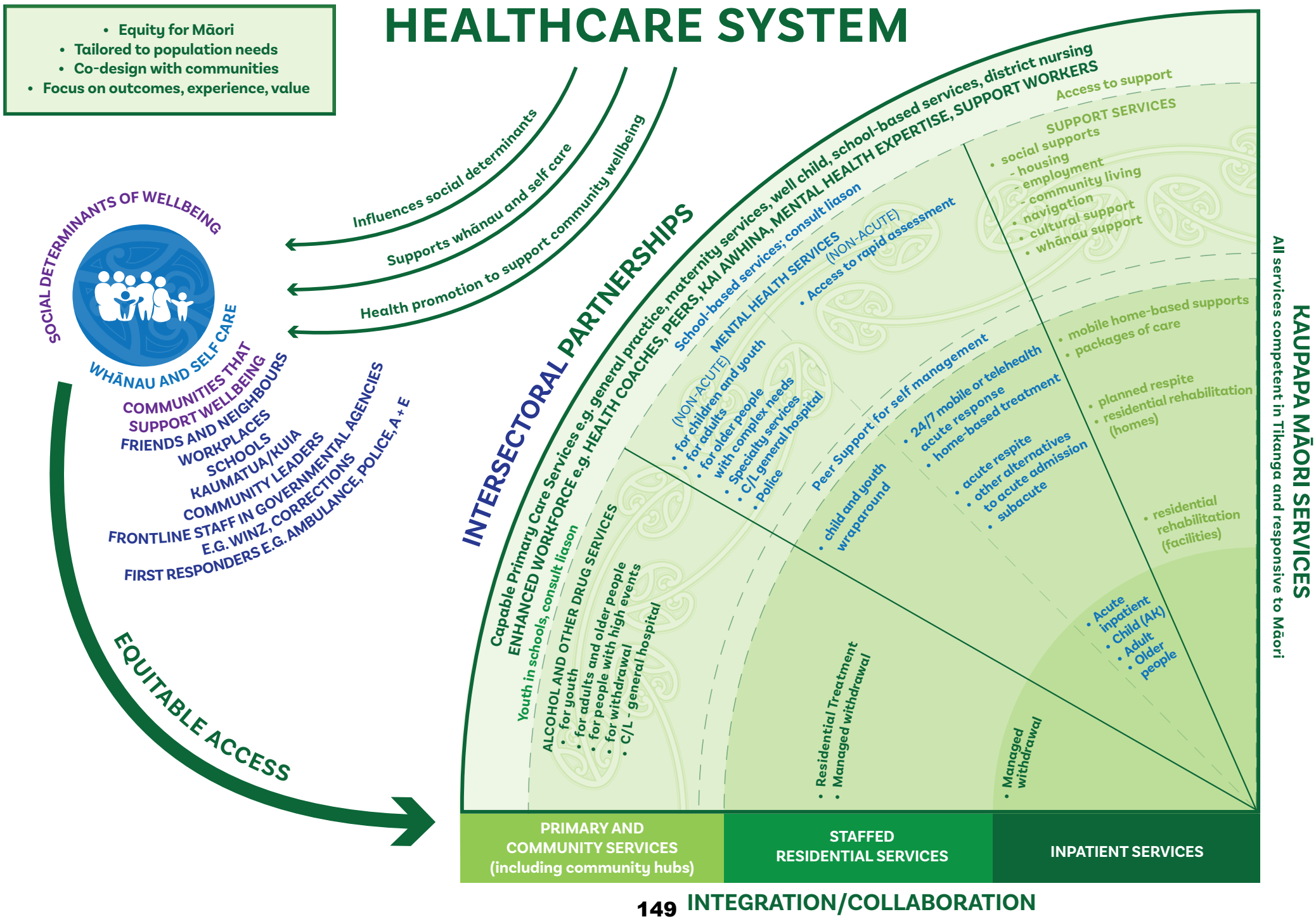
Radical Improvement in Māori Health Outcomes by Eliminating Health Inequities for Māori

The system map that will be presented has a specific focus on eliminating Māori health inequities and improving health outcomes for Māori. There is also a clear commitment to supporting kaupapa Māori providers and improving the responsiveness of all ('mainstream") providers to Māori.

Recommendation
THAT
The Board provides feedback on the draft Mental Health and Addictions draft system of care.

TANYA MALONEY
INTERIM EXECUTIVE DIRECTOR STRATEGY, FUNDING AND PUBLIC HEALTH

VICKI AITKEN
INTERIM EXECUTIVE DIRECTOR MENTAL HEALTH AND ADDICTION


• Equity for Māori
• Tailored to population needs
• Co-design with communities
• Focus on outcomes, experience, value
HEALTHCARE SYSTEM
Influences social determinants
Supports whānau and self care
Health promotion to support community wellbeing
SOCIAL DETERMINANTS OF WELLBEING
WHĀNAU AND SELF CARE
COMMUNITIES THAT SUPPORT WELLBEING
FRIENDS AND NEIGHBOURS
WORKPLACES
SCHOOLS
KAUMATUA/KUIA
COMMUNITY LEADERS
FRONTLINE STAFF IN GOVERNMENTAL AGENCIES E.G. WINZ, CORRECTIONS
FIRST RESPONDERS E.G. AMBULANCE, POLICE, A+E
EQUITABLE ACCESS
INTERSECTORAL PARTNERSHIPS
Capable Primary Care Services e.g. general practice, maternity services, well child, school-based services, district nursing
ENHANCED WORKFORCE e.g. HEALTH COACHES, PEERS, KAI AWHINA, MENTAL HEALTH EXPERTISE, SUPPORT WORKERS
Access to support
SUPPORT SERVICES
• social supports - housing - employment - community living
• navigation
• cultural support
• whānau support
School-based services; consult liason
MENTAL HEALTH SERVICES
(NON-ACUTE)
• Access to rapid assessment
(NON-ACUTE)
• for children and youth
• for adults
• for older people
• with complex needs
• Specialty services
• C/L general hospital
• Police
Peer Support for self management
• 24/7 mobile or telehealth acute response
• home-based treatment
• mobile home-based supports
• packages of care
• child and youth wraparound
• acute respite
• other alternatives to acute admission
• subacute
• planned respite
• residential rehabilitation (homes)
• residential rehabilitation (facilities)
Youth in schools, consult liason
ALCOHOL AND OTHER DRUG SERVICES
• for youth
• for adults and older people
• for people with high events
• for withdrawal
• C/L - general hospital
• Residential Treatment
• Managed withdrawal
• Acute inpatient
• Child (AK)
• Adult
• Older people
• Managed withdrawal
PRIMARY AND COMMUNITY SERVICES (including community hubs)
STAFFED RESIDENTIAL SERVICES
INPATIENT SERVICES
INTEGRATION/COLLABORATION
KAUPAPA MĀORI SERVICES
All services competent in Tikanga and responsive to Māori

HEALTHCARE SYSTEM FOCUS

- Equity for Māori
- Tailored to population needs
- Co-design with communities
- Focus on outcomes, experience, value

PLANNED SYSTEM CHANGES

INCREASED ACCESS

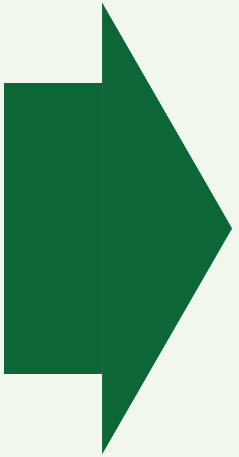
- Earlier (before crises)
- Consistent acrosss the district

RESPONSIVE SERVICES

- Māori responsive
- Closer to home
- Recovery focused
- Appropriate environments
- Partner with people/whānau to support wellbeing

MORE COMMUNITY SERVICES

- Kaupapa Māori
- Community acute
- Support for community living



Lower demand for inpatient services

MENTAL HEALTH AND ADDICTIONS SYSTEM MAP GLOSSARY

Acute mental health services	Mental health services specifically for people who are acutely unwell or in crisis and need to be seen urgently.
Addiction	Addiction is a psychological and physical inability to stop consuming a substance, drug, activity, even though it is causing psychological and physical harm.
Alcohol and Drug Treatment	Treatment is a term used to describe help, usually professional, that people get when they are experiencing alcohol and / or drug problems. Treatment includes a range of activities, such as 12 step support groups, counselling services, detoxification or residential programmes where the person stays for weeks.
24/7 mobile or telehealth acute response	Rapid access for people acutely unwell or in crisis to assessment by an experienced mental health professional, without needing to travel to them (delivered either in person or via telehealth).
Alternatives to acute admission	Staffed community-based services where people can safely stay for one or more nights when acutely unwell, with 24-hour 7-day on-site support to manage their distress and with daily access to clinical care. Home based treatment can also be an example of an alternative to acute admission.
Communities	The groups that people identify and associate with; the many places in which people live.
Consult liaison	Advice and support provided by specialist mental health or alcohol and other drug services to another service about the mental health or addiction needs of an individual /whanau e.g. consult liaison to primary care, general hospitals, or police.
Home based treatment	Access for people who are acutely unwell, living at home or in a community-based residential rehabilitation service, to mental health care delivered by an experienced mental health professional, without needing to travel to them (delivered either in person or via telehealth).
Kaupapa Māori Services	Services that are offered within a Māori cultural context, using Māori principles, knowledge, skills and values as a foundation and a framework.
Mainstream services	Health services that are responsive to Māori but are not delivered under a Māori framework.
Navigation	A service to assist people to find the social services or community resources to help them to live well within the community.
Non-acute mental health services	Mental health services that address a range of mental health needs and do not focus solely on the needs of people who are acutely unwell or in crisis.

Package of care	A range of supports specifically tailored to the needs of a particular person / whānau in order to support them to live well within the community.
Peer support	Service delivered by people who themselves have lived experience of mental health or addiction issues, who have received training to provide peer support, and who use their experience to enable recovery and wellbeing in others.
Primary care services	Generalist healthcare (to address any health issue) and that is the first level of contact with the health system. Examples include general practice teams, school-based health services, prison-based health services, maternity services, well-child services.
Primary and community services	Services that are delivered in primary care or other community settings, including generalist services (for any health issue), specialised health services (for a particular health issue such as alcohol and other drug use or mental health issues or support needs).
Recovery	The process of change through which people improve their health and wellness, live a self-directed life and strive to reach their full potential.
Residential rehabilitation (homes/facilities)	A place where people live for a period of time in order to receive support from qualified staff to develop their ability to live well within the community (can be located in hospital or community settings).
Residential treatment	A place where people live temporarily in order to receive treatment from addiction treatment practitioners to enable them to address alcohol or other drug issues
Respite (planned)	A staffed home in the community where people who have complex needs can stay for a limited and prior-agreed period of time away from their family.
Respite (acute)	A staffed home in the community where people who are acutely unwell can stay for a short period of time while receiving treatment.
Self-management	Actions and decisions people take to regain, maintain and improve their own health and wellbeing.
Social supports	Services delivered by staff qualified to support people to live well within the community, including getting and keeping housing and work and forming social, cultural and spiritual connections.
Specialty services	Mental health or alcohol and other drug services for a specific sub-group of the population e.g. people with co-existing problems (mental health and addictions), people with mental health problems and intellectual disability, women in the perinatal period, etc
Staffed residential services	Services located in home-like environments in the community in which people who receive the services live for

	a period of time: services delivered in these settings include treatment services, respite services, rehabilitation services.
Subacute services	A place where people can stay following an admission to an acute inpatient unit, when they no longer need hospital care but their life circumstances prevent a move to a accommodation in the community (can be located in hospital or community settings).
Whānau support	Services that support whānau to attend to their own self-care and to support family members with mental health or addiction issues to live well in the community.

MEMORANDUM TO THE BOARD
28 NOVEMBER 2018

AGENDA ITEM 12.1.1

WAIKATO DHB MENTAL HEALTH AND ADDICTIONS FACILITIES AND SERVICE RE-DEVELOPMENT PROJECT INDICATIVE BUSINESS CASE

Purpose	For approval.

The Waikato DHB Mental Health and Addictions Facilities and Service Redevelopment Project Indicative Business Case document is attached for the Board's approval.

The Indicative Business Case has been completed for Investment Ministers noting (as part of applying the Better Business Case process). The purpose of the Indicative Business Case is to provide an early indication of the preferred way forward for investing in the redevelopment of Waikato DHB MH&AS acute and subacute inpatient service developments. While the information and evidence presented in the attached case is indicative by nature. It does, however, provide decision makers with an early opportunity to consider the options being considered before more detailed evidence is gathered in the detailed business case.

While the focus of the Indicative Business Case is on the acute investment, the case for change is organised around the Creating Our Futures programme and Strategy and Funding whole of system models of care (Te Pae Tawhiti and Health Strategy Plan). The Project will be governed by the Te Pae Tawhiti / Creating Our Futures Programme Board and the Facilities Governance Board. In order to ensure delivery of the significant programme transformation change continued funding of the programme related work is required. With this in mind, we ask the Board consider and approve the rollover and continued funding for the additional programme resources requested in 28 March 2018 for another year (July 2019 – June 2020).

Recommendation
THAT
The Board:

1) Approves the Indicative Business Case submission to NZ Treasury and the Ministry of Health for presenting to Investment Ministers.
2) Endorses to proceed with developing the Detailed Business Case (due for submission in June 2019).
3) Approves the continued funding of the programme related work.

VICKI AITKEN, INTERIM EXECUTIVE DIRECTOR, MENTAL HEALTH AND ADDICTIONS
CHRISTOPHER CARDWELL, EXECUTIVE DIRECTOR, FACILITIES AND BUSINESS

Better Business Cases

Waikato DHB Mental Health and Addictions service

Facilities and Service Redevelopment Project

Indicative Business Case

Prepared by:	Waikato DHB Mental Health and Addictions service
Prepared for:	Ministry of Health and Investment Ministers for noting
Date:	19/11/2018
Version:	0.4 [Waikato DHB Board]
Status:	draft

E hanga te anga whakamua

Ko te hiahia me te whakaaro o te Waikato DHB ki te whakapaheko ōna tukua rātonga hauora hinengaro me te kiriwara hoki, ki roto i ngā hapori o Waikato. Ko te hanga ki te anga whakamua e whakatinana te kaha mo ngā rātonga hauora hinengaro me te kiriwara ki te urunga me te kounga o te tutuki ki te hunga whai pānga o ēnei rātonga kia rātou whānau whanui e whanake ake ētehi atu aranui e mahi i ngā mahi ki ngā tau e rima ka heke mai nei ki a mau te Ao Māori mo te iwi e haere ki ēnei rātonga me te iwi e whakatau ta rātou ake oranga.

Waikato District Health Board

Foreword [in draft]

Quite often when proposals are developed at an early stage the narrative that seeks to outline the strategic, economic or management case for investments speaks little to the values and aspirations of the service user. When actually, this is what makes the case compelling. More than ever there is an undeniable urgency for mental health and addictions facilities and services to be transformational in their design, implementation and reach. Because quite simply Māori mental health persists.

We know that from the Officer of the Director of Mental Health Annual Report 2016, a record number of people accessed specialist mental health services then. Other reports, publications and findings note that these rates are rising and feature Māori among those experiencing the heaviest burden of Mental unwellness. It is also outlined in documentation that Māori persistently face inequitable Mental Health outcomes resulting from inadequate early intervention, a workforce that doesn't reflect the population it serves, and greater experience of poverty and trauma compounded by the ongoing effects of colonisation.

The profile of Māori Mental unwellness clarifies why at an indicative high level (of even this small portion of the overall Creating our Futures project) it is integral that the transformational model of care that will give effect to the values and aspirations of Māori wellbeing is considered in the wider picture. It is beyond just quoting that Kaupapa Māori models will be considered or that Matauranga Māori will be called upon as appropriate.

In 1998, some 20 years ago, Sir Mason Durie penned a paper that sought to illustrate the trends in Māori health, examine health policies and concluded with suggested avenues for improved mental health for Māori. Sir Mason contextualises the wholesale discharge of patients into the community and makes a case for deinstitutionalisation. Although 20 years ago, many of the themes discussed still remain relevant. Of most outlined are the five strategies that he suggests:

1. Development of a secure identity through improved access to Māori resources
2. Active participation of Māori people in society and the economy
3. Improving the quantity and quality of mental health services so that Māori access and Māori outcomes are enhanced
4. Accelerated mental health workforce development and;
5. Autonomy and Control through

All these strategies are interrelated. For tangata whaiora and their whānau that will use Mental Health facilities such as those outlined in this indicative business case it is integral that we get this right, that we are transformational across our entire project and that the Model of Care yet to come considers the broader parameters of the Treaty of Waitangi by radically improving Māori health by eliminating health inequities for Māori.

Better Business Cases
Indicative Business Case Template

Document Control

Document Information

	Position
Document ID	
Document Owner	Derek Wright, Vicki Aitken, Dr Rees Tapsell
Issue Date	
Last Saved Date	
File Name	Waikato DHB MH&AS Facilities and Service Redevelopment Project

Document History

Version	Issue Date	Changes
V0.01	15/01/2018	Document initiation
V0.01	06/03/2018	Feedback from Dr John Crawshaw (MH Commissioner)
V0.02	21/05/2018	Submitted to MoH for National Asset Management Plan CIC meeting
V0.02	09/07/2018	PB and Advisory Group assessment and feedback
V0.03	10/10/2018	Waikato DHB feedback on Preferred Way Forward options
V0.03	23/10/2018	Provided to MoH for feedback on final draft

Document Review

Role	Name	Review Status
Endorse	Creating Our Futures Programme Board	23/10/2018
Endorse	MH Clinical Governance Forum	20/11/2018
Endorse	Iwi Māori Council	08/11/2018
Approve	Waikato DHB Board	28/11/2018
Submit	MoH and NZ Treasury for noting	01/12/2018

Document Sign-off

Role	Name	Sign-off Date
Senior Responsible Owner	Derek Wright, Interim Chief Executive Officer	
Project Executive	Vicki Aitken, Interim MH&AS Executive Director	
Project Executive	Chris Cardwell, Facilities and Business Executive Director	
Project Senior User	Dr Rees Tapsell, MH&AS Director of Clinical Services	
Project Director	Dr Virginia Endres, MH&AS Project Director	

Executive Summary

> *"…despite considerable effort to improve the HRBC environment, [the facility] did not meet a significant number of basic contemporary standards. Further, it was the view of the review team that the capacity of the service to develop new and potentially more efficient and effective models of service was being constrained by the need to deliver services in the existing facility.*
>
> *The review team believes that a contemporary service model involving the construction of new purpose built hospital and community facilities should be considered. This should provide a more efficient use of recurrent funds and provide a greater array of inpatient treatment options for [consumers] with increasingly complex and diverse needs" (Fjeldsoe et al, 2015).*

1. The Waikato District Health Board's (DHB) Mental Health and Addictions (MH&AS) service provides services to people with a severe mental illness and/or addiction disorder/s who are experiencing an episode of such severity that they require secondary / tertiary level assessment and intervention. Over recent years demand for mental health and addictions services has increased in terms of numbers, acuity and complexity of need, these services are under pressure and many needs are unmet.

2. Evidence shows that some New Zealanders are at a greater risk of mental distress and/or addiction related illness than others:

   - 1 in 3 Māori
   - 1 in 4 Pacific Peoples
   - 2 in 3 prisoners
   - 1 in 4 secondary school students

3. Māori have the highest prevalence of mental illness and/or addiction issues of any ethnic group in New Zealand. Findings from the MH Commissioners 2018 Monitoring and Advocacy Report highlights the following inequity and health outcomes for Māori:

   - 1 in 3 Māori will experience mental illness and/or addiction in any given year, compared to 1 in 5 non-Māori
   - the prevalence of a diagnostic criteria mental health illness and /or addiction at some time in life is 50.7% for Māori and 39.5% for non-Māori
   - Māori have the highest rate of suicide of any ethnic group
   - Māori have the highest rate of homelessness of any ethnic group

4. Any investment in services must focus on and achieve radical improvements in Māori health by eliminating inequities for Māori.

5. Mental Health and Addictions services have been prioritised by Waikato District Health Board (DHB) for investment in facilities and services in response to the below three problems:

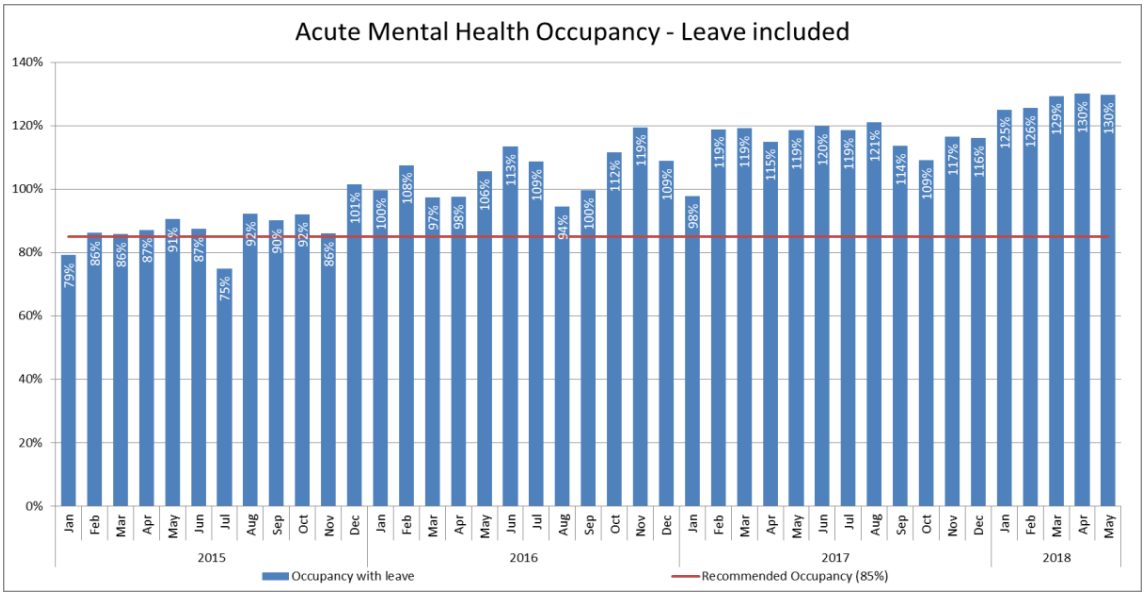
   a) Lack of an integrated and holistic model results in significant barriers to timely and appropriate care.

b) Current building, designed to fit an outdated institutional model, does not provide a safe, therapeutic and effective environment for service users and staff.

c) Existing service capacity and capability is not meeting the increasing acuity/complexity and demand which at times results in compromised and unsafe care.

6. Despite considerable effort to implement potentially more safe, effective and efficient models of care (and improve space), implementation is being constrained by the need to deliver services within the outdated institutional design of the existing Waikato DHB Henry Rongomau Bennett Centre (HRBC) facility. Essentially, the service has been trying to make the service model fit within environments which do not support contemporary standards. A number of independent inspections and reviews found the current facilities do not meet the standards of privacy; security and safety; and, provide challenges to staff providing care to acutely unwell service users.

7. As shown below, there is widening gap between service demand for acute inpatient services and current bed occupancy. Demand for services already exceeds capacity, with occupancy levels consistently over 100% – 120% (excludes rehabilitation leave), creating significant clinical and safety risk and issues.



8. In addition, the NZ Corrections increased capacity programme announcement of a new 100 bed *mental health* hub at Waikeria Prison in 2022 will significantly increase the Midland regional Puawai prison muster (and general MH&AS services) demand. The increase in prison bed numbers will significantly impact on MH&AS regional prison muster; potentially doubling demand for forensic inpatient beds and community resources; as well as increased impact on adult acute, community and alcohol and AoD resources. Initial model of care discussions between MH&AS and NZ Corrections have commenced with agreement in principle to a dual governance approach.

9. The following summarises the in-scope services for the purposes of the business case:

- Acute and sub-acute mental health inpatient requirements (consideration to outreach areas and specialty services)

- Repatriation of adolescent and youth inpatient services from Auckland DHB's Starship

- Appropriate co-location of High and Complex inpatient services

- Relocation of Electroconvulsive Therapy (ECT) services to medical area or community-based service

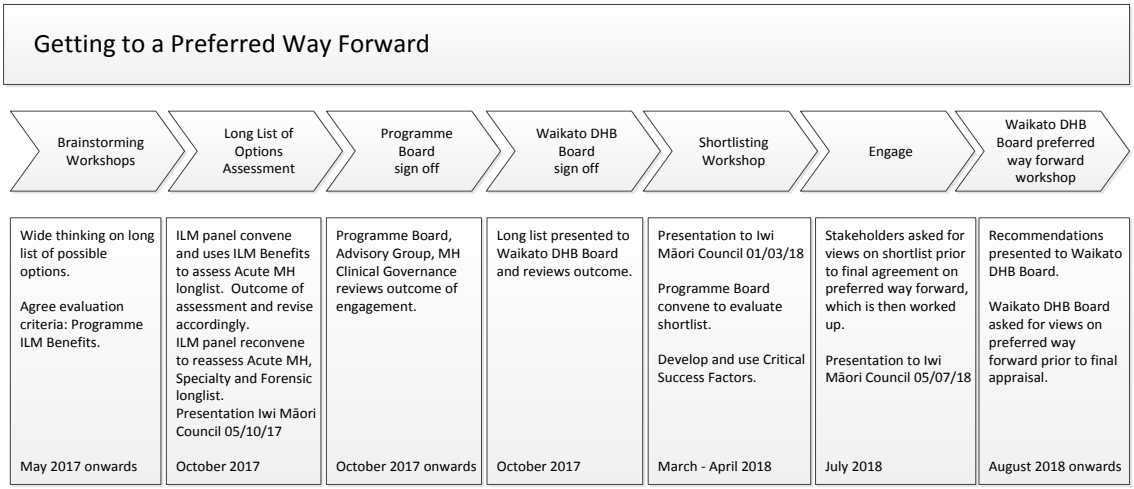
- Potential consolidation and co-location of Alcohol and other Drugs (AoD) acute inpatient services [relocation of detoxification beds; and Substance Addiction (Compulsory Assessment and Treatment) Act 2017 (SA(CAT)) legislative requirements]

- Increased Puawai forensic footprint to meet the NZ Corrections increased capacity programme (2022)[1] and reconfiguration of wards

- Possible community localities with Home Treatment and Respite requirements (to be identified within the Transformational Pathways Project)

Investment Options

10. A structured multi-criteria evaluation process was used to identify a range of long list scenario options to meet future requirements and then reduce the number of possible options to a short list.



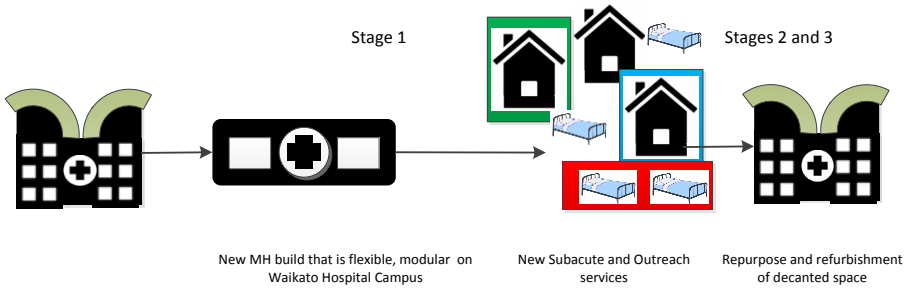
11. Based on Blueprint II and forecasted population projections out to 2043 the future scope for MH&AS services propose a range of services to provide sufficient capacity and capability to meet future demand (and short term flexibility). This projection provisionally includes requirement for an estimated 70 – 85 acute mental health beds, plus 34 specialty inpatient beds, plus 12 high and complex, and a total of 70 Puawai inpatient beds (including intensive care, sensory modulation, recreational space, tele-medicine services and staff/community education and training facilities. It should be noted that these are gross indicative bed numbers.

12. Overall, 17 scenario options (11 acute mental health; 3 specialty including joint ventures; and, 3 Puawai ideas) were developed by a wide range of stakeholders.

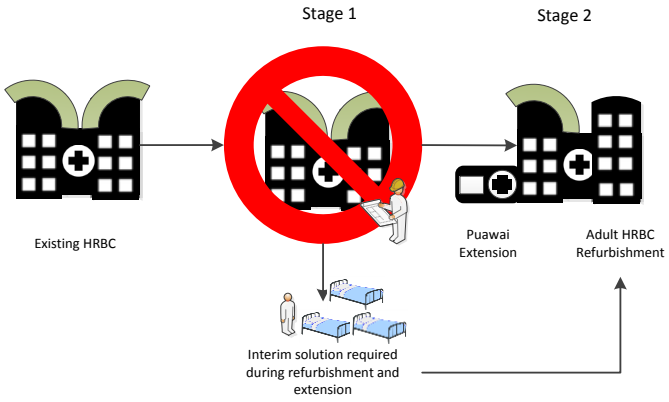
13. Based on the assessment analysis of the range of options, the highest scoring option was a new acute mental health build on the Waikato hospital site and locality subacute / outreach services. The estimated capital cost of the investment is approximately $[redacted]. The mental health construction costs are likely to be $[redacted] (costs of an average commissioned hospital) with additional fixtures and fittings (i.e., enhanced security, CCTV, duress alarms, whānau space, ensuite, bathroom doors that have weight limiting sensors etc),

[1] Refer to http://www.corrections.govt.nz/news/prison_capacity_programme_phase_2.html

with an additional estimated $[redacted] for site implications. Costings will need to also include the total commissioning costs and any future state operational costs.



14. A *do minimum* baseline option would require a refit of the current acute adult inpatient facility (requiring an interim solution for services during refurbishment), and potential increase in footprint to meet acute and prison muster demand.



15. Any preferred way forward identified will remain cognisant of the specific needs and service settings for Māori; and will use Māori frameworks and models of care that encompass a holistic approach to health and wellbeing (including, concepts of mana, tapu and mauri). Kaupapa elements include:
    - enhance cultural identity
    - equity of access and access to Maori healing pathways
    - support whānau
    - mana enhancing / mana protecting
    - reduce stigma and discrimination
    - increase trust

16. MH&AS service is committed to a detailed co-design process approach that up holds the principles of Partnership, Participation and Protection described in the Treaty of Waitangi. It will be a process that tautoko's Māori in their desire to improve their own health and wellbeing.

17. Facility design will incorporate design elements to achieve a green star rating (adoption of 4% of construction value and expected pay back over the life of the building).

18. Should the project proceed, it would result in the relocation of some services from their current site. Clearance impacts would likely displace current staff car parking and demolition of existing building (e.g., Ryburn building).

19. It is proposed that both these options are taken to Detailed Business Case, noting that the *do minimum* option is unfeasible due to a combination of service user and staff safety issues, impracticality of extension due to the physical structure and geographically constrained site. Furthermore, an interim decant solution will be required to accommodation service users to enable a refit of the existing facility.

20. A structured evaluation process was used to assess possible procurement options for delivery of the required facility/s and services. This evaluation is indicative only and subject to further analysis, including revalidation and confirmation of the subacute options in the Detailed Business Case (including any potential changes to the preferred investment options).

21. The recommended Procurement option for MH&AS inpatient facilities and services redevelopment is Early Contractor Involvement (ECI), where the ECI puts the team (Waikato DHB the client and consultants) together at the start of the planning process, even before the initial design, allowing us to achieve the best value for money out of the build.

22. While the focus of this business case is on the acute and subacute inpatient services [including, acute mental health, specialty, Puawai services] investment, the case for change is organised around the Creating Our Futures programme and the Strategy and Funding whole of system models of care (Te Pae Tawhiti).

Financial Considerations

23. The projected CAPEX cost of the investment is estimated between $[redacted] (inclusive of construction delay, commissioning and operationalising; and exclusive of costings for facility in isolation, pre-geotech and without concept design; and, additional site implications costs estimated at $[redacted] on a non-discounted nominal basis, requiring a two staged approach to the build.

			Wolstencroft 2017			RLB Jan 2018		
Description	**Bed Nos,**	**Project Cost**	**DHB onsite**	**Greenfield**	**70 beds w high and complex**	**DHB onsite**	**Greenfield**	**70 beds w high and complex**
Relocation of Adult MH	64 + 6 in shell	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Relocation of Adult MH plus H & CN	64+6+12	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Special Needs:	34 beds	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Special Needs: less 12 beds H & CN	22 beds	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Additional Forensic	20 beds	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Community (Rural) Based w Outreach	10 beds each	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Greenfield Site	70 + 34 special	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Additional Campus costs**			[redacted]		[redacted]	[redacted]		[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Preliminary estimate subject to detailed design and QS validation

*RLB - Rider Levett Bucknall cost management and quantity surveyors (independent assurance).

** Waikato Hospital campus implication costs as a result of the development.

*** Additional campus implications costs excluded, costing have not been ratified by RLB.

24. All figures are highly preliminary at this stage and will be subject to detailed testing in the Detailed Business Case stage.

25. Affordability remains a significant issue for Waikato DHB, given the current funding outlook. However, the alternative of no investment (or under investment) in these services will have a significant negative impact on access to services, clinical risk and compromised service user safety and outcomes, as well as on the broader DHB health system and population health.

Contents

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Introduction

26. This Waikato District Health Board (DHB) Mental Health and Addictions Facilities and Service Redevelopment Project indicative business case seeks approval from the Capital Investment Committee to obtain Ministerial approval to proceed with developing a Detailed Business Case to invest up to $[redacted] (indicative cost) in 2019 to 2026, based on the preferred way forward. The business case presents a compelling case for investing in change to ensure Mental Health and Addictions (MH&AS) service is safe, effective and efficient without compromising outcomes for service users and their whānau; and for staff; and, supports the regions' growing population needs, values and aspirations, now and into the future.

27. The purpose of this indicative business case is to provide an early indication of the preferred way forward for investing in the redevelopment of Waikato DHB MH&AS acute and subacute inpatient service developments. While the information and evidence presented here is indicative by nature. It does, however, provide decision makers with an early opportunity to consider the options being considered before more detailed evidence is gathered in the detailed business case.

28. While the focus of this indicative business case is on the acute and subacute inpatient [including, Acute, Specialty and Puawai services] investment, the case for change is organised around the Creating Our Futures programme (the Programme) and the Strategy and Funding whole of system models of care (Te Pae Tawhiti). The Programme focuses on the development of a new model of care that will inform what it is the service delivers; the environment/s needed; and, the resources required to support that delivery:

    - Transform service delivery in order to improve safety, effectiveness and efficiency.
    - Creating safe therapeutic environment that support holistic care at all times.
    - Building sustainable capacity and capability of services to meet future demand, values and need.

29. The remainder of this document provides an initial assessment of the capacity and capability of the Waikato DHB to implement the preferred way forward option/s.

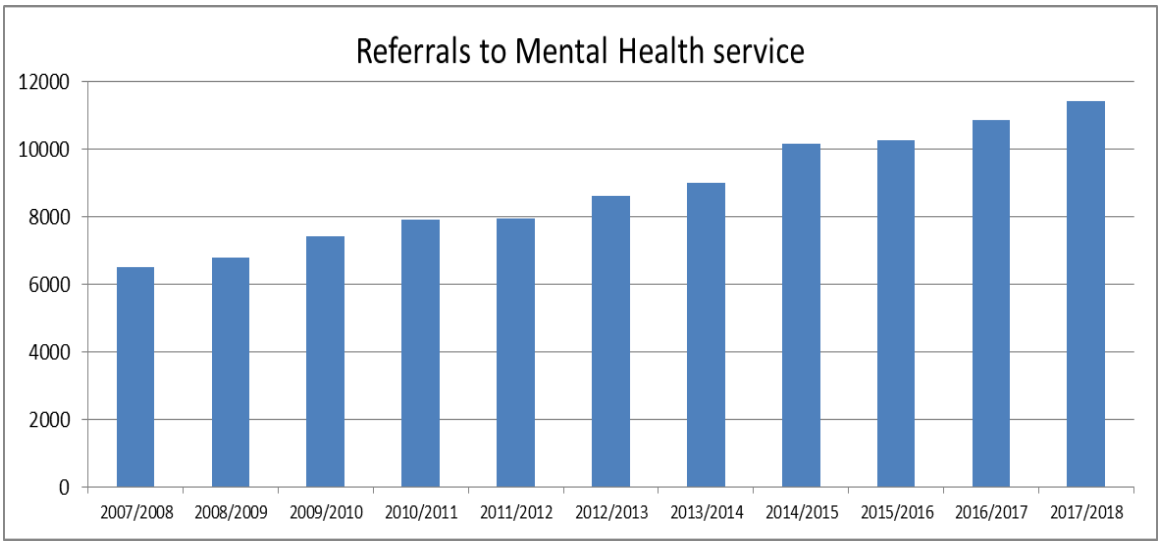
The Strategic Case – Making the Case for Change

> *"Every day we delay the development of more inpatient (and community) capacity is another day that we ask [patients] to put up with compromised care and staff to endure unacceptable levels of risk that they cannot mitigate on the shop floor." (Aitken and Tapsell, Waikato DHB Board workshop, August 2018).*

Strategic Context

30. MH&AS service provides services to people with a severe mental illness and/or addiction disorder/s who are experiencing an episode of such severity that they require secondary / tertiary level assessment and intervention. Over recent years demand for mental health and addiction services has increased in terms of numbers, acuity and complexity of need, these services are under pressure and many needs are unmet.

Figure 1 Referrals to MH&AS



31. Evidence shows that some New Zealanders are at a greater risk of mental distress and/or addiction relate illness than others:

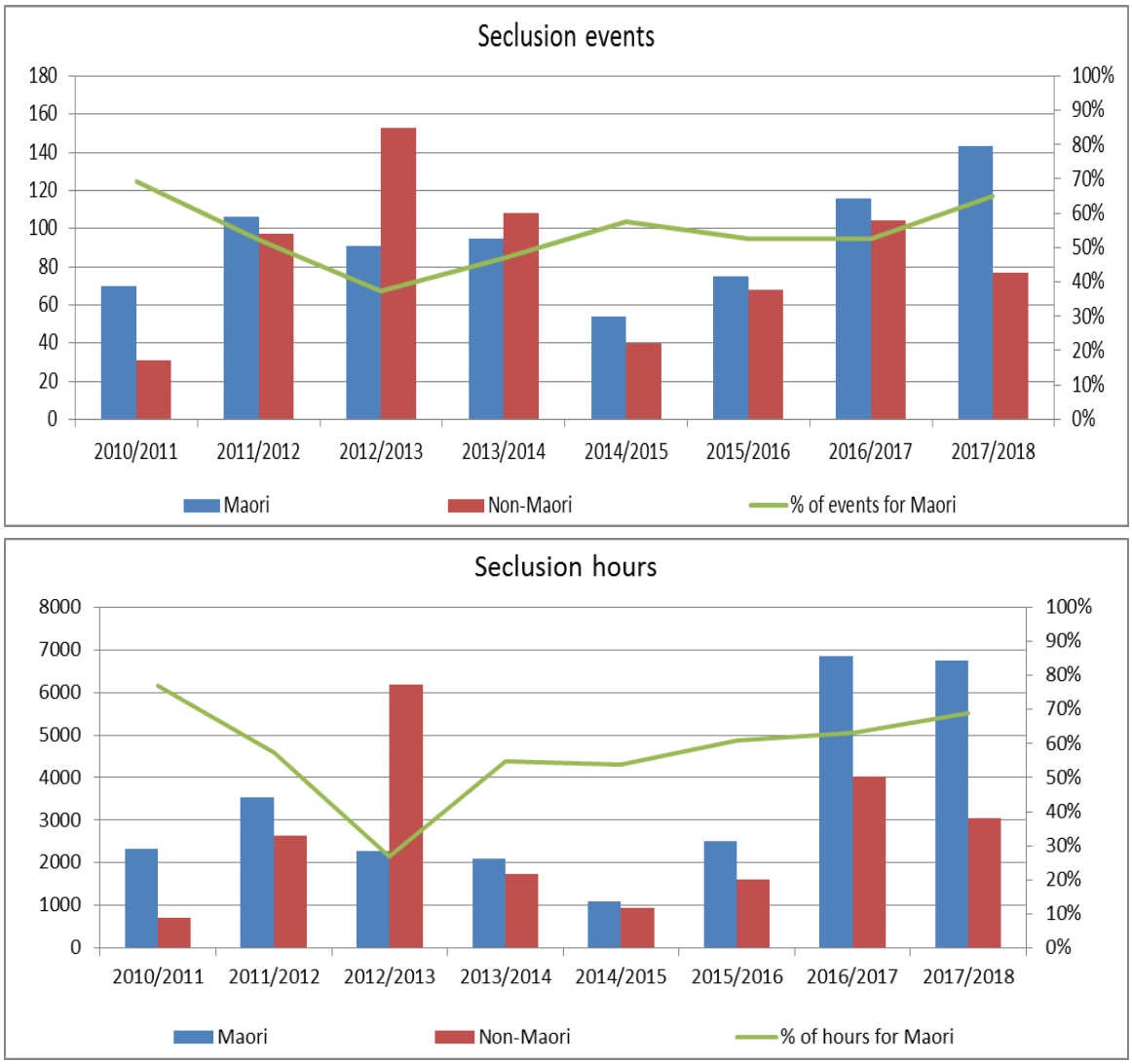
- 1 in 3 Māori
- 1 in 4 Pacific Peoples
- 2 in 3 prisoners
- 1 in 4 secondary school students

32. Māori have the highest prevalence of mental illness and/or addiction issues of any ethnic group in New Zealand. Findings from the MH Commissioners 2018 Monitoring and Advocacy Report highlights the following inequity and health outcomes for Māori:

- 1 in 3 Māori will experience mental illness and/or addiction in any given year, compared to 1 in 5 non-Māori
- the prevalence of a diagnostic criteria mental health illness and /or addiction at some time in life is 50.7% for Māori and 39.5% for non-Māori
- Māori have the highest rate of suicide of any ethnic group
- Māori have the highest rate of homelessness of any ethnic group

33. Not only are Māori over represented in our MH&AS service, the experience when in services is also different than that of non-Māori. Service performance is poorest for Māori; Māori experience high levels of coercion, restraint and seclusion; and, are likely to be both victims and perpetrators of violence in inpatient settings. Māori are 3.6 times more likely to be subject to a community treatment order and 3.4 times for an inpatient treatment compared to non-Māori. Māori are more likely to present to services with high levels of social disadvantage, including poverty, homelessness, experience of trauma and social chaos. Often services are available to people only once their condition deteriorates, and the dominant treatment options (medication and therapy) do not address the broader social factors that help people be well and support their recovery.

Figure 2 Seclusion events and hours for Māori and non-Māori over time 2010 – 2018FY



34. There is compelling evidence of disparity for Māori, with Māori experiencing poorer wellbeing outcomes and quality of care than other population groups. Areas of concern include:

- lack of early intervention options
- overrepresentation in admission, readmission, seclusion and compulsory treatment
- poorer physical health outcomes for Māori with serious mental health and/or addiction issues
- stagnation in seclusion reduction
- increasing prison population within the Waikato region
- progressive criminalisation of the mentally ill
- lack of services for high and complex need service users

35. The inequity and health outcomes for Māori are further compounded by current workforce issues including shortages; under-representation of Māori and Pacific health professionals; management of increased demand to staffing pressure. Currently the MH&AS service

workforce comprises 15% Māori and 85% non-Māori; these figures indicate an underrepresentation of Māori health professionals delivering care.

36. Any investment in services must focus on and achieve radical improvements in Māori health by eliminating inequities for Māori.

Organisational overview

Waikato DHB MH&AS service overview

37. The MH&AS service has responsibility for ensuring service access to the top three percent[2] of the population who are most severely affected by mental illness and/or addiction disorder/s who are experiencing an episode of such severity that they require secondary / tertiary service level assessment and intervention. Services include:

- Adult Mental Health and Addictions services
- Specialty services and Integrated Care Coordination services
- Mental Health Services for Older People
- Midland Regional Puawai Forensic services

38. The MH&AS service provides mental health, addictions and specialty services to the population of the Waikato and regional forensic services to the Midlands population. We collaborate with other health and Non-Government Organisations (NGOs), stakeholders and our communities to identify what mental health and addictions services are needed and how best to deliver these services. As at 30 June 2017, the Waikato DHB MH&AS services had 752 paid full time equivalents (FTE). These employees are central to the DHB's ability to deliver mental health and addictions services to the Waikato communities

39. MH&AS services are for people experiencing an episode of mental health and/or addiction difficulty of such severity that they require secondary / tertiary service level assessment and intervention. Services are delivered through the Waikato DHB's district by geographical sectors (North, Central, North Rural, South Central and South Rural). Henry Rongomau Bennett Centre (HRBC) is an acute mental health facility located on Waiora Waikato Hospital Campus, Hamilton. Adult inpatient services include low stimulus and secure inpatient services of 53 beds based in HRBC.

40. Puawai provides regional forensic psychiatric services to the Midland health region, covering the courts, prisons, and general mental health services within Waikato, King Country, Bay of Plenty, Whakatane, Rotorua, and Taranaki areas. Essentially forensic psychiatry is about legal issues pertaining to people who have or are thought to have a mental disorder. The services provided by Puawai include a secure inpatient service of 44 beds based in Hamilton (HRBC) [plus, co-location of Detoxification 2 beds, and High and Complex 3/4 beds]. Its community forensic service includes services to the prisons and courts in the region, as well as community mental health follow-up to community-based forensic services users living in Hamilton.

[2] Access data over time shows that demand for services exceeds the three percent threshold.

41. Mental Health Services for Older People (MHSOP) is a specialist team offering assessment, and interventions for people aged 65 years and over who are experiencing serious mental health disorders, dementia and serious behavioural and/or psychological symptoms and signs. MHSOP service is provided in both an inpatient and a community setting. The Older Persons and Rehabilitation Building facility was purpose built for health services related to older people and for rehabilitation. The building includes four wards and an outpatient clinic for the Older Persons and Rehabilitation service, as well as a ward and clinic area for Mental Health Services for Older People.

42. Acute MH&AS service is part of a continuum that supports wellbeing and recovery aspirations to enable people with long term and episodic conditions to stay well in their communities and at home. The Waikato DHB plans to spend $[redacted] in the 17/18 financial year on MH&AS services (Waikato DHB Provider Arm[3] $[redacted]; External Providers $[redacted]; and, Inter-District Flows $[redacted]), with provider arm hospital delivered inpatient services accounting for 30% (or $[redacted]) of that expenditure. Each quarter, the MH&AS service have a total caseload of approximately 5,000 service users (total appointments 50,000) with about 350 inpatient admissions in the Waikato district. Many more individuals access primary and community based services (approximately 15,000 people).

Existing Arrangements

43. People with lived experience, staff, community and social and health providers have reviewed and/or provided feedback on existing MH&AS service arrangements and have agreed the following current state problems:

Problem One – Model of Care *Lack of an integrated and holistic model results in significant barriers to timely and appropriate care.*

44. The implementation of a contemporary MH&AS model of care is, and has been, challenging, where systemic issues have hindered the implementation of the integrated care pathway. This issue is confounded by increasing demand for MH&AS services, in terms of numbers, acuity and complexity of need. Specific contributing factors include:

- lack of proactive and early interventions
- sub-optimal integration of mental health and addictions across the sector
- delivery of care is unplanned and reactive; and is inconsistent
- lack of predicable transition and transfer of care (push system of care)
- variable approaches and stigma resulting in inequity and lack of engagement

45. Recent evidence based model of care reviews include:

[3] Waikato DHB Provider Arm funds are used for providing acute adult, older persons and forensic inpatient care; and a range of community based services.

a. **Section 99 Inspection of Waikato DHB Mental Health and Addictions Services** (Crawshaw, 2016). In early 2015, there were a number of very difficult and serious events at Waikato DHB MH&AS services. Following these events, Dr Crawshaw, Director of Mental Health, used his statutory powers under section 99 of the Mental Health (Compulsory Assessment and Treatment) Act 1992 to inspect the services to ensure they were providing a good quality of care to people in the Waikato region. The purpose of the inspection was to examine how the services were functioning, and to enable the Director of Mental Health to determine whether any systemic issues contributed to those events.

   The inspection team acknowledged the direction of travel of the change as appropriate, and that it showed good strategic thought as to contemporary models of practice. The shift in the model/s of care through this time has been significant, and it needed to be - acknowledging that the transformational change is yet to be completed.

b. **Time for Change: evaluation of Health Waikato Adult Mental Health and Addictions Services** (Fjeldsoe, Aimer, Clapham-Howard and Kidd, 2009). In 2009, an independent review committee evaluated the standard of acute adult inpatient and community care services and provided 74 practical recommendations to improve the care provided. The *A Time for Change* Programme was undertaken to reset the service Model of Care 2009-2013.

Problem Two – Environments and Infrastructure ***Current building, designed to fit an outdated institutional model, does not provide a safe, therapeutic and effective environment for service users and staff***

> *"…despite considerable effort to improve the HRBC environment, [the facility] did not meet a significant number of basic contemporary standards. Further, it was the view of the review team that the capacity of the service to develop new and potentially more efficient and effective models of service was being constrained by the need to deliver services in the existing facility.*
>
> *The review team believes that a contemporary service model involving the construction of new purpose built hospital and community facilities should be considered. This should provide a more efficient use of recurrent funds and provide a greater array of inpatient treatment options for [consumers] with increasingly complex and diverse needs" (Fjeldsoe et al, 2015).*

46. Despite considerable effort to implement potentially more safe, effective and efficient models of care (and improve space), implementation is being constrained by the need to deliver services within the outdated institutional design of the existing Waikato DHB acute Henry Rongomau Bennett Centre (HRBC) facility. Essentially, the service has been trying to make the service model fit within environments which cannot support contemporary standards. A number of independent inspections[4] and reviews[5] of the Waikato DHB Henry Rongomau

[4] In early 2015, there were a number of serious events (SAC1 and SAC2) at the Waikato DHB Mental Health and Addictions service. Dr Crawshaw, alongside colleagues from the Ministry of Health and a consumer leader from Te Kupenga Net Trust, carried out this inspection in August 2015.

[5] In 2015 (and 2009) an independent review of the Henry Rongomau Bennett Centre (HRBC) Models of Care and Facility Infrastructure Review (Fjeldsoe, Meehan and Kingswell, 2015) was commissioned. The review noted a number of serious facility deficiencies.

Bennett Centre (HRBC) acute inpatient service found the current facilities do not meet standards of privacy, security and safety; and provide challenges to staff providing care to acutely unwell service users.

a) **Section 99 Inspection of Waikato DHB Mental Health and Addictions Services** (Crawshaw, 2016). A focus of the section 99 inspection was the examination and assessment of the Henry Rongomau Bennett Centre (HRBC) capital infrastructure. Overall, the findings of the inspection team were (in line with the Waikato 2013 DHB Business Case) that the current facilities do not meet contemporary standards, and therefore pose challenges to the teams providing care to acutely unwell service users; and, the confusing physical layout and lack of good sight-lines posed safety risks. The inspection team also remarked on the difficulty the service would face in effectively addressing these issues, given the physical structure of the unit and the constraints this posed. For instance, the narrowness of the corridors and the placement of bedroom doors present the real possibility of an effective barricading of corridors, as well as the potential for a service user to harm themselves or another person, out of staff line of sight.

   The inspection team did not undertake a detailed analysis of the facilities, because the Waikato DHB had already commissioned a full review of its adult mental health facilities in 2015. The Fjeldsoe (2015) report was completed during the section 99 inspection; and made similar findings.[6]

b) **Waikato DHB Mental Health and Addictions HRBC Improvement Plan** (Aitken, 2015). Following incidents at Henry Rongomau Bennett Centre (HRBC), the service made some alterations to the security and fencing, reconfigured the acute adult ward to an acuity step down model, Plan-Do-Study-Action quality audits undertaken, and changes to the Leave and AWOL processes.

c) **Waikato DHB Mental Health and Addictions Models of Care and Facility Infrastructure Review** (Fjeldsoe, Meehan and Kingswell, 2015). The primary focus of the independent review was the assessment of the Henry Rongomau Bennett Centre (HRBC) capital infrastructure. The assessment was aimed at determining the facility's suitability for development and its capacity to respond effectively and efficiently to existing and emerging models of service delivery for adults requiring acute inpatient care. The review found that advances in models of care was impeded, as the changing needs of those admitted becomes increasingly difficult to treat in facilities which were not designed for their current purpose. Specific contributing factors include:

   - HRBC facilities do not meet a significant number of basic contemporary standards which does not support contemporary models of care, and is unable to support future requirements of both demand and increasing co-morbidities; co-existing problems, and acuity.

   - Capacity of the service to develop new and potentially more efficient and effective models of service are being constrained by the need to deliver services in the existing facility.

   - Facility is linked to a series of service user and staff safety incidents (includes SAC1 and SAC2).

[6] See annex.

- Acute adult mental health bed occupancy levels are consistently over 100% – 120%, creating significant work flow pressures. Current acute demand is 13 – 18 beds greater than actual capacity, where at times of high occupancy; rehabilitation leave management is being used as a means of managing the occupancy level. Demand is Projected to increase in line with future demographic Projections (in addition, to the anticipated increase in the regional prison muster Projections).

- Acute inpatient facility is institutional in its design and is unable to support holistic interventions. Fundamental problems with layout and insufficient space result in problems with privacy, safety and security. Configuration does not meet the individual needs of service users e.g. unique cultural, values and / or vulnerabilities; age; gender; cognitive; spiritual, and geographic location.

- Inability to meet service user expectations: i.e., provision of single rooms with ensuite, natural light, indoor / outdoor access.

- Population growth without commensurate increase in beds.

- Extended length of stay for high and complex service users reduces the service's capacity to respond to acute demand and limits the rehabilitation focus.

- Lack of specific facilities for service users who, as a result of trauma or cognitive impairment, have challenging behaviours.

- Inability to effectively transition service users through supported accommodation at a sustainable rate.

- Environment exposes service users and whānau to potential risk of emotional and physical harm.

Fjeldsoe et al (2015) concluded that a redevelopment of the existing Henry Rongomau Bennett Centre (HRBC) acute facility would not address problems and would be unlikely to achieve significant improvements to the safe and effective treatment of those with the highest and most complex needs. The basic layout would still provide an institutional ambience and restrict the delivery of new and potentially more effective and efficient service options.

d) **Waikato DHB Functional HRBC Ward Design: Business Case** (Aitken, 2013). A business case was accepted by the Waikato DHB in principle subject to the ability of the organisation to realise the necessary capital funding.

47. In October 2016, the New Zealand prison population exceeded 9,900 for the first time. To meet the demands of this rise in prison numbers, the Department of Corrections has been exploring options to increase capacity at the country's prisons. The NZ Corrections increased capacity programme announcement of a new 100 bed *mental health* hub at Waikeria Prison in 2022 will significantly increase in the Midland Regional Puawai (and general MH&AS) demand. The increase in prison bed numbers will significantly impact on MH&AS regional prison muster; potentially doubling demand for forensic inpatient beds and community resources; as well as increased impact on adult acute, community and alcohol and AoD resources.

48. The Substance Addiction (Compulsory Assessment and Treatment) Act replaces the Alcoholism and Drug Addiction Act 1966, and provides for the compulsory assessment and treatment of individuals who are considered to have a severe substance addiction and who do not have the capacity to participate in treatment. It is anticipated that the numbers of people requiring this

legislation are likely to be few, but for individuals and their whānau, this is a last resort opportunity to intervene when they no longer have the capacity to do so themselves. While the impact of the Act for service demand is known, it is anticipated to increase demand for inpatient beds.

Table 1 AoD detoxification admissions

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Mental Health or AoD Admissions	7	21	23	36	38	20	40	45	79	77	386
Coded ED presentations	5	11	14	13	5	16	21	37	45	69	236
Total	**12**	**32**	**37**	**49**	**43**	**36**	**61**	**82**	**124**	**146**	**622**

*Admission under specialty Y43 (Y43 Substance Abuse Detox Med) or admitted to ward 38 (MH (W38) A&D Assess & Stabilisation), primary or other diagnosis related to methamphetamine

49. It is almost 20 years since the Henry Rongomau Bennett Centre (HRBC) acute adult inpatient service was designed and built. The characteristics, needs and expectations of those who use the inpatient service have changed significantly since that time. International evidence shows that advances in models of care are commonly impeded through existing outdated institutionally designed facilities unable to meet current purpose.

Problem Three – Capacity and Capability *Existing service capacity and capability is not meeting the increasing acuity/complexity and demand which at times results in compromised and unsafe care*

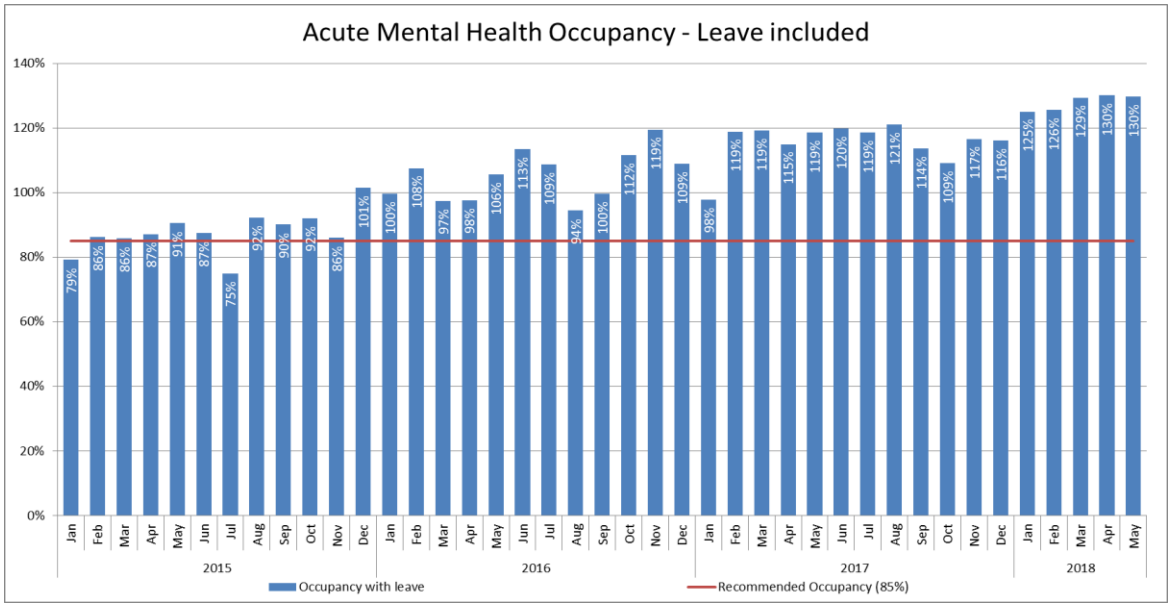
50. The Waikato DHB region's population growth and profile and associated increased in demand for services are overwhelming the MH&AS service capacity and capability. Current inpatient bed capacity includes:

Table 2 HRBC inpatient bed numbers

Service	Ward	Beds
Alcohol and other Drug service (detox)	Ward 38	2
Acute MH service	Ward 34	19
Acute MH service	Ward 35	21
Acute MH service	Ward 36	13
Puawai Midland Regional service	Puna Maatai	12
Puawai Midland Regional service	Puna Whiti	6
Puawai Midland Regional service	Puna Taunaki	7
Puawai Midland Regional service	Puna Awhi-rua	12
Puawai Midland Regional service	Puna Poi Poi	11
Mental Health Services for Older People	MHOPR1	15

51. Demand for acute inpatient services exceeds available capacity by 13 – 18 beds (see below graph). As a result, average occupancy exceeds 100% – 120% compared to a best practice target of 85%. The service user group served by acute inpatient services tend to present with high levels of co-morbidity (physical, AoD), brought in by Police and whānau who are unable to cope, with the majority subject to Mental Health Act (suicidality and assault). Approximately 50% of these service users are new (not known) to the service (suggesting late presentation to services).

Figure 3 HRBC acute inpatient ward occupancy over time (2015 – 2018) by month



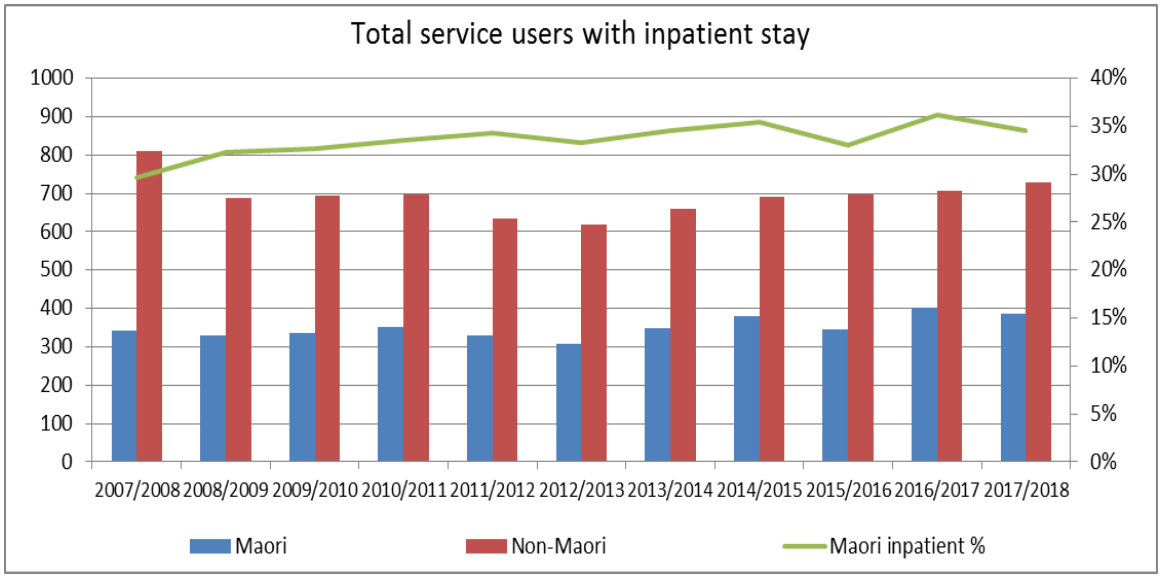
Inpatient occupancy levels are an effective barometer of community demand

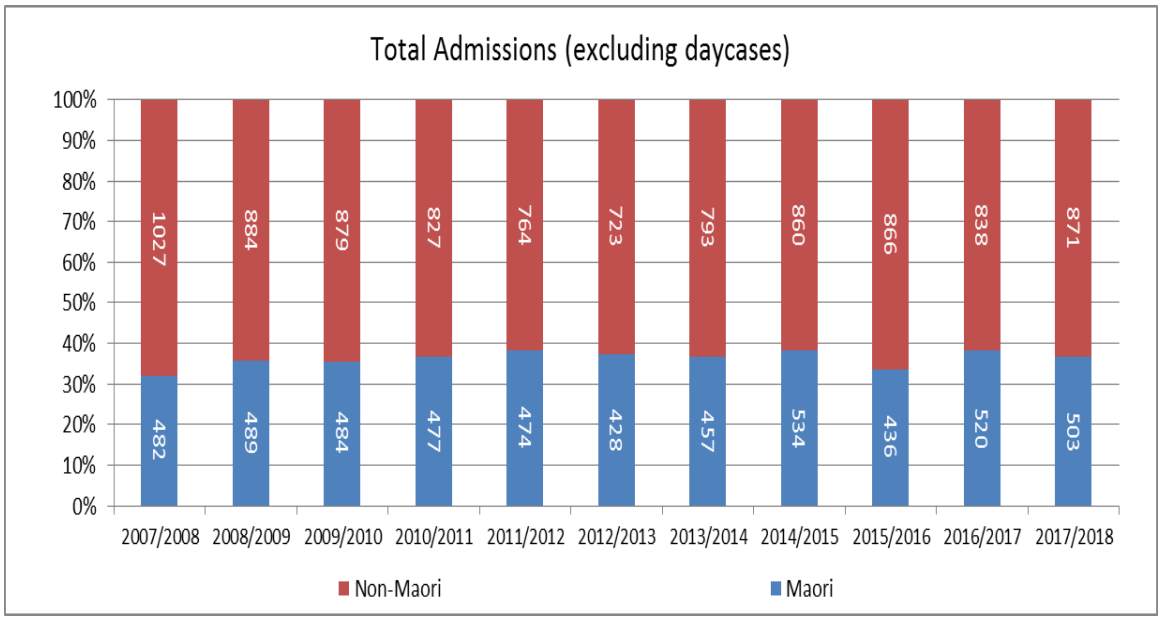
52. The consequences of over occupancy results in:

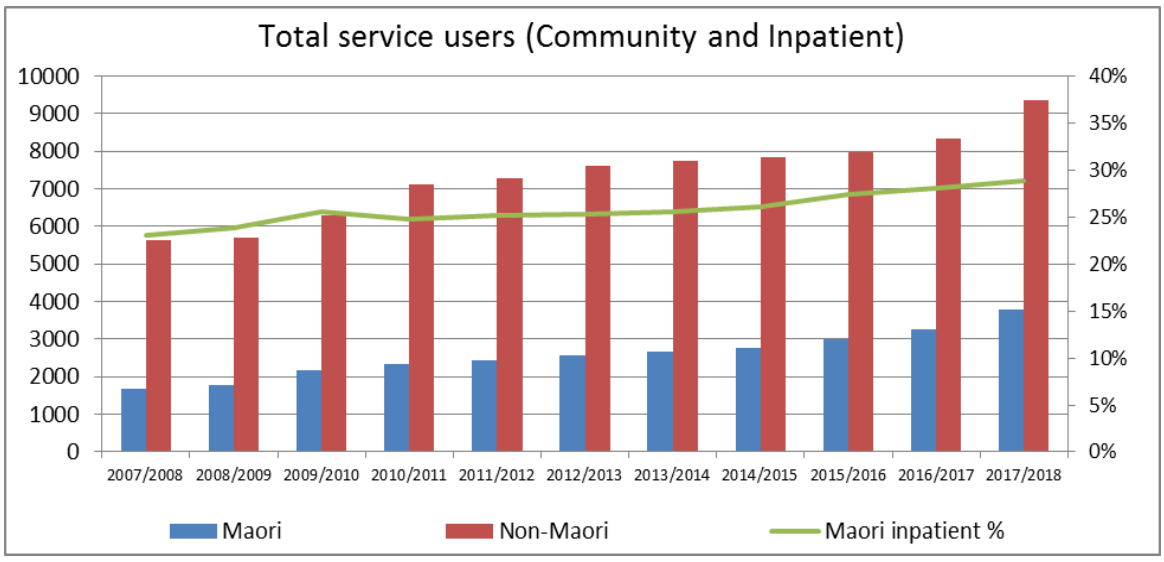
- unacceptable rates of seclusion
- staff / service user assaults
- reduced quality of care and unacceptable levels of risk (unable to mitigate)
- compromised care
- financial consequences

53. Adult community services are struggling to meet demand across our community settings. Demand for services continues to grow, with presentations largely of high and complex acuity. There appears to be a direct correlation between this demand on community mental health teams and the requirement for inpatient care, often for longer periods where individuals take a considerable amount of time to get well.

Figure 4 Māori and non-Māori inpatient and community service demand (2007 – 2018)



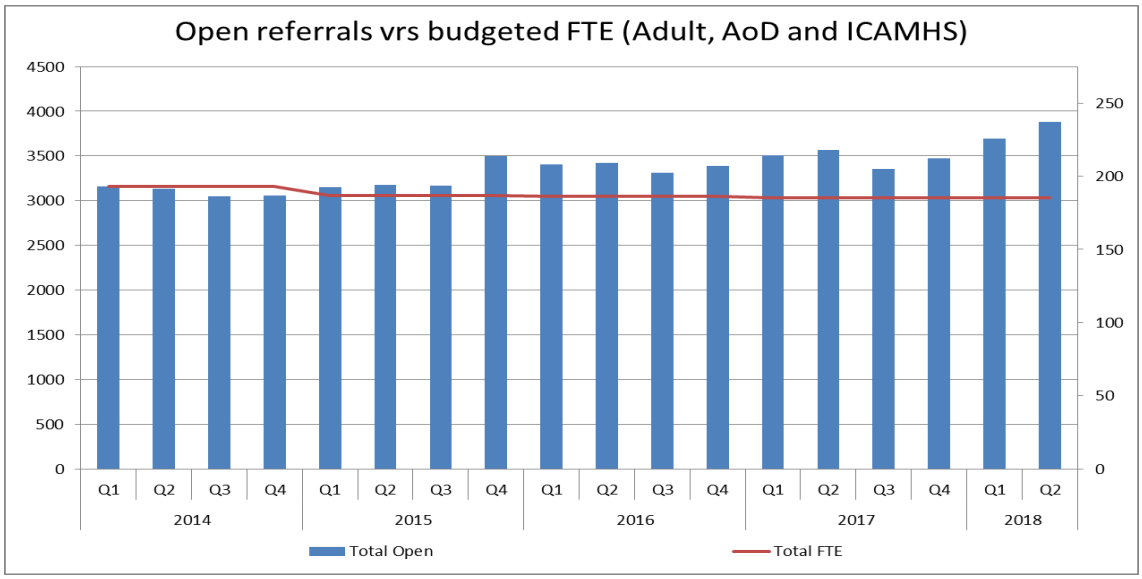


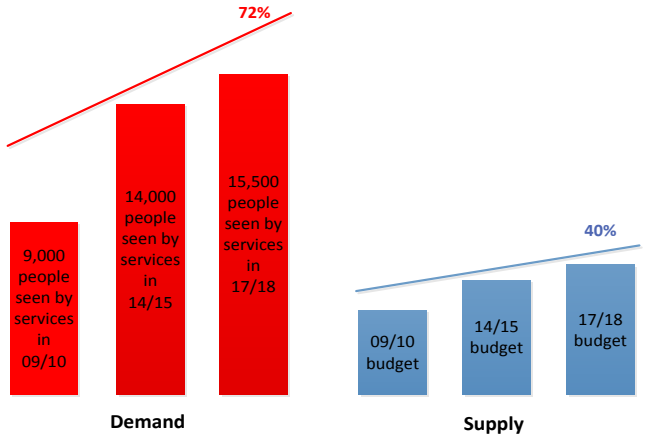


54. Ninety-one percent of MH&AS service users access services in the community.

55. Currently the service has limited visibility of a number of factors needed to effectively match capacity to demand.[7,8] Over the last 20 years, despite increasing demand and change in need, there has been no significant change in resource capacity.

Figure 5 Open referrals verses budgeted FTE





56. There is a high proportion of Māori (23%) living in the Waikato DHB region. Māori have higher overall rates of mental health illness and addiction/s disorders; have higher rates of co-morbidities and suicide rates compared to non-Maori. The burden of mental illness and addiction disorders is further compounded by the current issues of workforce shortages, underrepresentation of Māori health professionals. Currently the MH&AS service workforce comprises 15% Māori and 85% non-Māori (equating to an underrepresentation of Māori delivering care to Māori).

57. While all areas of our service are under significant stress, some areas are now having staff members who are visibly distressed by the workload and the limited ability to respond to referrals. The latest staff satisfaction survey[9] showed staff members felt pressured and concerned about caseload acuity, complexity and numbers; and low staff recruitment and retention rates; they were committed to providing the best care to service users and their whānau. Services work effectively and where possible, apply creative thinking to support one

[7] MH&AS Community Demand Report 2014- 2018; KPI Performance Dashboards

[8] MH&AS Preliminary Post Implementation Review Report, 2013

[9] MH&AS Staff Satisfaction Surveys Reports undertaken in 2016 and 2017

another, and deliver services. Enthusiasm for shaping change and improving outcomes for service users is paramount, and the majority of the workforce is very committed to striving for change, while also endeavouring to meet business as usual demands.

a. **Section 99 Inspection of Waikato DHB Mental Health and Addictions Services** (Crawshaw, 2016). The section 99 inspection found that MH&AS service and its leadership team have made significant improvement to the service since 2009, and that MH&AS service is well managed and led. Staff, despite the problems of morale and increased pressure, is dedicated to doing their best for people accessing the service. People accessing the services and their whānau can be assured that they can expect to receive good care.

Investment Objectives

58. Investment is required to address these current state problems. Key stakeholders have identified and agreed the following key investment objectives:

- **Investment Objective one:** To transform service delivery in order to improve safety, effectiveness and efficiency.
- **Investment Objective two:** To create safe and therapeutic environments that support holistic care at all times.
- **Investment Objective three:** To build sustainable capacity and capability service to meet future demand, values and need.

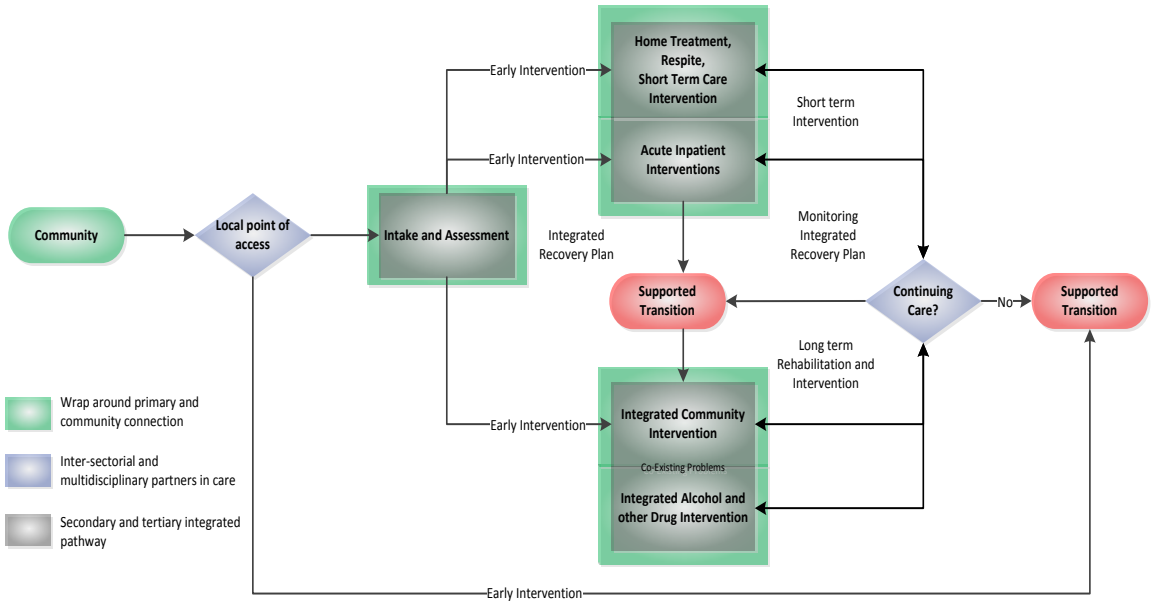
Business Needs – Meeting the Investment Objectives

59. Over the past 20 years (since deinstitutionalisation), Waikato DHB has evolved its model of care to enable the majority of mental health services to be delivered in the community, in line with national and regional mental health strategies. A number of the aforementioned reviews found evidence of improved service delivery over time. However, with the growing number of people accessing services for mental health and addiction issues, the MH&AS facilities and services are under pressure and there is increasing indication of unmet need. Often services are available to people only once their condition deteriorates, and the dominant treatment option (medication and therapy) do not address the broader social factors that help people be well and support recovery.

60. The overleaf diagram depicts the conceptual model of care pathway for MH&AS services for the future which focuses on more proactive and early intervention; joined up and integrated services, with maximised coordination and resource allocation.[10]

[10] The detailed development of this pathway will be delivered within the Pathway Transformational Project.

Diagram 1 MH&AS whole system pathway through services



61. As part of the Pathway Transformation Project, the MH&AS process pathways are under development (these pathways can be found in the accompanying appendix):

- Intake and Assessment
- Acute Inpatient
- Integrated Community
- Integrated Alcohol and other Drug

The subacute and outreach services pathways will be developed as part of the detailed business case once a preferred way forward is confirmed. Engagement with the Midlands Regional Clinical Governance regarding possible joint ventures for specialty services will commence during the detailed business case phase. Discussion regarding the subacute options has commenced with Waikato DHB Strategy and Funding, where an subacute long-list process will be undertaken. The development of possible long list option ideas will begin with an initial workshop with Māori Caucus members to ensure a Māori perspective. In addition, initial discussions between MH&AS service and NZ Corrections have commenced with agreement in principle to a dual governance approach to the development of forensic pathways.

62. As a sector, we need to invest in early and holistic interventions well before the impacts of mental illness and co-existing problems reach a more severe stage to reduce harm to service users and whānau, and long term costs. With support from other agencies, providers and other health professionals that span across the sector, we intend to engage and collectively work together to develop a systematic approach to health and social factors that will establish a clear view of what interventions are best used in each situation. The Creating Our Futures Advisory Group has initiated a process to identify and monitor primary and community initiatives that will support collective impact across the sector.

63. To enable this model and address problems associated with existing arranges, Waikato DHB is proposing consideration of adopting a Strategy and Funding commissioning framework to establish a flexible funding approach that enables closer to home care.

Alignment with Existing Strategies

64. The proposed investment aligns with existing mental health strategies and initiatives, as well as Waikato DHB's Funding and Strategy Health Strategic Plan. The Strategic Assessment Case, providing the Creating Our Futures Programme strategic alignment, was presented to the Capital Investment Committee on 08 June 2017 (endorsement for the Waikato DHB to proceed to the next stage was received on 20 July 2017).

Mental Health Strategies

65. The Creating Our Futures Programme of work is closely aligned to addressing many of the areas of concern identified within the *New Zealand's Mental Health and Addictions Service: the monitoring and advocacy report of the Mental Health Commissioner* (MH Commission, 2018). Alignment in terms of addressing:

- a lack of early interventions options
- low commitment by services to shared planning with [consumers] and their whānau
- coordination challenges within and between services
- high uses of compulsory treatment, especially for Māori
- stagnation in seclusion reduction
- poorer physical health outcomes for people with serious mental health and/or addictions issues
- disparity in outcomes for Māori and other populations

66. While the MH Commissioner's report has just been released (March, 2018), we too have listened to our Waikato community through our *Let's Talk hui,* and they have told us similar concerns.[11] A total of 750 people attended the hui (42% attendees identified as Māori). The valuable narratives from the hui will be used to inform the Programme's required response. The findings and recommendations from these hui can be found in the accompanying appendix. The key hui themes important to our Waikato community include:

- outcomes
- personal and whānau resources
- life circumstances
- community context
- integrated services
- working with Community
- working with people in need and whānau

[11] Refer to the Let's Talk hui engagement document.

67. Two models of care projects of work Te Pae Tawhiti (Strategy and Funding) and Creating Our Futures (MH&AS) are currently being brought together and synthesised to guide the future direction of MH&AS services and mental health and addiction care across the sector. These models of care aim to place people at the heart of their care to achieve equitable access and outcomes. The focus of these models is to increase the capacity and capability of the primary and community sector response to earlier intervention, with a greater emphasis on service integration across the continuum of care.

68. To enable the model of care, Waikato DHB is proposing greater flexible funding models to support strong and viable whānau and community with increased resources and support. It makes sense that MH&AS service has greater advocacy and monitoring of the commissioning and funding of early interventions and packages of care across the end-to-end system. A number of new ways of working, as part of the system transformation, required increased advocacy and funding[12] for:

- integration across organisational boundaries
- increasing investment in community-based services
- strengthening primary care

69. Initial discussions have commenced with Lakes DHB to explore joint specialty care ventures and the development of a demand model that takes into account the new model of care.

70. Any outcome from the Mental Health Inquiry 2018 will be used to guide the Programme response, once available.

Strategic Investment Programme

71. The Waikato DHB MH&AS Strategic Plan 2016 – 2021 and Creating Our Futures Programme 2016 – 2026 (the Programme) has been developed to progress wellness and the health system opportunities.

72. The programme of work to respond to this indicative business case forms the basis for the investment, and the need to challenge the status quo. As a service, we want to be part of a future where we work in partnership to build a new model that eliminates inequities and improves health outcomes for Māori. This will be based on, a model that is characterised by more convenience, better outcomes, higher quality, better value, and greater performance that could ever be achieved under the current system.

73. The focus of the Creating Our Futures programme is to progress and regain traction on improving our mental health and addictions model of delivery (as described in the MH Commission 2018 monitoring report p10) by:

- broadening the focus of service delivery from mental illness and addiction to mental well-being and recovery
- increasing access to health and other support services

[12] Further and ongoing discussions with Strategy and Funding; other Midlands DHB's; Hauora Waikato and other key stakeholders are required to enable this deliverable. These discussions will inform the whole approach to wellbeing and recovery change.

- ensuring that we have timely information about changing levels of need, current services and support, and evidence about best practice

- implementing a workforce strategy that enables the service to deliver better, more accessible services

- achieving the required changes through collaborative leadership, support by robust structures and accountabilities to ensure successful, transparent results.

74. Creating Our Futures is a significant programme of health system transformation in terms of redesigning of the model of care. Fundamentally, the redesign is focused on the system which involves better integration of care across organisational and service boundaries, increased investment in community-based services, and strengthening primary care. Central to this model is the approach to avoid inpatient admission if possible, and for care to be delivered closer to home.

75. With a focus on system integration, a number of projects and improvement initiatives are taking place. Each initiative has a specific goal, and all have the needs of the service users and whānau at its core. The outline of the Programme of work includes:

- Waikato DHB Business Case Development Project

- MH&AS Pathway Transformation Project

- Waikato DHB MH&AS Facilities and Service Redevelopment Project

- MH&AS Capacity and Capability business as usual / quality improvement initiatives

76. While this business case is focused on the facilities-based inpatient component of the Programme, Waikato DHB MH&AS service will continue to strengthen the acute continuum thorough the provision of closer to home community-based options and ensuring there are strong links with outreach, home and community-based care options and delivery models.

Main Benefits

77. Delivering the change required will not be a trivial exercise and will require partnership with our stakeholders and those with lived experience. Careful planning and consideration will be required to continue to explore and confirm the core components for understanding what it is the service delivers; and the environments required to support that delivery. Working together with our stakeholders and those with lived experience will be important as we focus on a system-wide approach to health and recovery related outcomes and aspirations.

78. The Waikato DHB is committed to working closely with other Crown entities and District Health Boards who can assist in the delivery. The timing is right to improve how we deliver services through to 2045 (and beyond).

79. Stakeholders have identified the following benefits of the proposed investment.

Table 3 Analysis of potential benefits that can be expressed in monetary terms

Main Benefits	Who Benefits	Direct / Indirect	Description
Improved access and health outcomes	DHB Community	Direct Indirect	Reduced lifetime costs per capita and burden on secondary and tertiary services due to earlier intervention Increased access to services before the impacts of mental health and addiction reach a more severe stage (sustainable population costs)
Improved experience and engagement	DHB Community	Direct Indirect	Increase early access to mental health care before the impacts of illness reach a more severe stage (sustainable population costs) Reduction in costs associated with barriers to transition and length of stay
Therapeutic and safe environments	DHB	Direct	New contemporary design that assists in avoiding the burden and risk of serious adverse events and complaints Reduction in costs associated with maintaining substandard facilities 2%-6% reduction in life time costs due to green design building[13]
Operational efficiencies and effectiveness gains	DHB	Direct	Increased in clinical productive hours and reduction in cost of non-clinical productive hours
Workforce gains	DHB	Direct	Reduction of staff turnover

[13] Environments utilise energy consumption and maintenance green design:

- Efficient HVAC – a NABERS 4.5 star
- LED lighting solutions
- viking warm roof – insulation reduces the load in HVAC systems and reduces the size of capital and operation costs of the HVAC plant
- passive solar louvres – reduces the load on the HVAC system (consideration of maintenance is required)
- maximise natural light, natural light in combination with LED lights with adaptive control can reduce the lighting load by as much as 80%
- rainwater harvesting tank – avoid emitting Carbon and reduce water consumption

Table 4 Analysis of potential benefits that cannot be reliably expressed in monetary or metric based terms (intangibles)

Main Benefits	Who Benefits	Direct / Indirect	Quantitative / Qualitative	Description and Possible Measures
Improved access and health outcomes	Service users Whānau Community	Direct Direct Indirect	Both Both Both	Functional status; Productivity; Wellbeing and healthy years of life; Quality of life Whānau wellbeing; reduced carer hours; productivity; community participation
Improved experience and engagement	Service users Whānau	Direct Direct	Qualitative Qualitative	Engagement and positive experience maximising the potential of service users and whānau
Therapeutic and safe environments	Service users Whānau Clinicians	Direct Indirect Direct	Both Both Both	Admission is an intervention and is planned as part of recovery oriented care
Operational efficiencies and effectiveness gains	Service users Clinicians DHB	Direct Direct Direct	Both Both Both	Positive health outcomes Increased clinical face-to-face time Enable holistic interventions to be delivered
Workforce gains	Service Users Clinicians	Direct Indirect	Both Qualitative	Workforce satisfaction Health Professional working at the top of their scope of practice

Main Risks

80. This indicative business case provides a compelling value proposition for actioning the current pressures on our mental health and addictions services. If we do not address the concerns raised here, we will continue to see more of the same challenges. The table below presents an initial risk analysis.

Table 5 Initial Risk Analysis

Main Risks	Consequence (H/M/L)	Likelihood (H/M/L)	Comments and Risk Management Strategies
Affordability Issues	H	L	Constrained funding environment likely to create affordability challenges for any service development activities. Focus will be on best long term value for money and maintenance on services that have been clinically prioritised for investment over others.
Development of the model of care	H	M	A key assumptions is the implementation of the Pathway Transformation within the next 2 - 3 years, including investment in the way services are delivered in the primary and community sector to support early intervention and closer to home care. If there is less capability/capacity in the community than anticipated the requirements for secondary and tertiary care will continue to escalate. The Waikato DHB Strategy and Funding are currently developing the funding road map that will support this new model of care.

Demand continues to overwhelm capacity	H	H	It is possible that despite the positive impact of CoF initiatives, demand for acute services and flow-on impact for rehabilitation services will continue to grow at a faster rate than general population growth. As part of the overall Programme. Flexibility in design will offer opportunity to create additional beds in the future, if needed.
Impacts of delays on current services	H	H	Any delays in the build are likely to result in heightened clinical risk in an already overstretched acute mental health service; a costly interim solution would be required to accommodate the anticipated increased prison muster (potential inability for interim solution to be appropriately gazetted). Any delays in submitting the business case through to the Capital Investment Committee could potentially result in missing out on crown funding.

81. A risk register has been developed and is being progressively updated (refer to appendix).

Optimism bias

82. Based on the nature of the investment proposal, the expected net benefits are currently unknown and will be reviewed in the respective detailed business cases. However, evidence indicates that adoption of contemporary service models, enhanced opportunity to keep people well in their communities and the right type of facilities that enhance recovery during an inpatient stay improve outcomes.

Key Constraints and Dependencies

83. The proposal is subject to the following constraints and dependencies, which will be carefully monitored during project.

Table 6 Key constraints and dependencies

Constraints	**Notes**
Government health funding	The ability to continue to deliver at current (or enhanced) levels to the growing Waikato population is subject to funding constraints.
Re/location of the build/s	Onsite Waikato Hospital campus constraints (availability of adequate space, geological soft fill, implications for current facilities, car parking), confounded by co-location with a 650 bed medical and surgical hospital on a constrained footprint with high physical foot traffic) Offsite green fields – timely consent processes, land lock, considerations of institutional model, access to medical services, increased OpEX costs
Current market competition for construction resource	Competition of market supply and demand – a number of large builds occurring during this period (NZ Corrections; PPP Waikato Schools)
Dependencies	**Notes and Management Strategies**
Waikato DHB Strategy and Funding Health Strategic Plan	As outlined under Risk, the proposed model of care is in development (the Creating Our Futures model of care commenced prior to the Te Pae Tawhiti project due to the urgency of meeting increasing inpatient facility demand and need to commence work on the business case. A process of synthesizing the models of care is underway. The *Let's Talk hui* engagement process to inform the model was a collaborative process between the two projects. In addition, the implementation of the models will be understood within the Health Strategic Plan and the CoF Advisory Group initiatives.
Government policy direction	Any changes to Government policy direction that followed the 2017 election may impact on the investment scope of the business case. For planning and management proposes it is assumed that regardless of Government, there will be a need for sustainable integrated service delivery across the continuum of care.

Broader sector engagement	The proposed model of care and business case describes a broader approach to mental health and addictions and assumes a collaborative and sector wide engagement to actioning a response.
NZ Corrections Capacity programme	The NZ Corrections increased capacity programme announcement of a new 100 bed mental health hub in Waikeria Prison in 2022 will significantly increase in the Midland Regional Puawai (and general MH&AS) demand.
SA(CAT)	The SA(CAT) legislation was introduced in 2018 and the impact now and into the future is unknown. Any changes to demand may impact on the scope of this business case. Ongoing close engagement regionally and nationally will need to occur.

Summary of the Case for Change for Acute Mental Health Services

Table 7 Summary of the existing arrangements and business needs[14]

Investment Objective 1	**To transform service delivery in order to improve safety, effectiveness and efficiency.**
Existing Arrangements	Lack of an integrated and holistic model results in significant barriers to timely and appropriate care.
Business Needs	To reduce inequity and improved health outcomes for Māori, through eliminating barriers and proactively intervening early before the impacts of mental health and co-existing disorders reach a more severe stage.
Potential Scope	- Focus on effective, proactive and early interventions utilising community development and prevention initiatives - Development of shared recovery and transition plan - Strengthen communities through productive partnerships; integrated, holistic and interagency provision of service user and whānau centred care - Flexible funding model to support strong and viable whānau and community within increased resource and support
Potential Benefits	- radically reduce equity and improve Māori health outcomes - improve the degree and sustainability of recovery and wellbeing - encourage and support participation and collaboration in recovery decisions - improve coordination, transition between services and providers
Potential Risks	New model of care does not bring about transformational change. Inability of the wider sector to understand and support the implementation of the model of care.
Constraints and Dependencies	Government health funding and policy; acute and non-acute service capacity and capabilities; evolution of community-led initiatives (e.g., local points of access)

Investment Objective 2	**To create safe and therapeutic environments that support holistic care at all times.**
Existing Arrangements	Current HRBC building, designed to fit an outdated institutional model, does not provide a safe, therapeutic and effective environment for services users, whānau and staff.
Business Needs	Contemporary fit-for-purpose inpatient facilities, with the necessary therapeutic space to manage and deliver holistic care. Spaces that are modular and flexible in order to meet changing demand, needs and values; now into the future. Health Professionals have the necessary space to

[14] See annex for summary of existing arrangements and business needs for each of the programme investment options.

	manage clinical risk, safety and de-escalation, and appropriate co-location, freeing up time to enable staff to focus on care.
Potential Scope	Construction of *fit-for-purpose* environments that use evidenced based design to support current and future models of care, values and needs. - Acute MH inpatient - Specialty inpatient services (needs (including, high and complex, MH older 65 years, youth, eating disorders cognitive impairment, peri-natal, AoD – SA(ACT) requirements) - Regional Puawai inpatient
Potential Benefits	- environments are therapeutic and safe, culturally appropriate, flexible and modular and contemporary in design with access to natural light and green spaces - create environments that engage proactive participation in managing risk - reduction of disutility (SAC 1/ SAC2, accreditation and clinical audit)
Potential Risks	Affordability issues. Protracted approval and development sequencing / timelines exacerbate current service issues and increase the potential interim solution risk. Competition of market supply and demand – a number of large builds occurring during this period (NZ Corrections; PPP Waikato Schools). New infrastructure becomes out-dated in 20 years' time.
Constraints and Dependencies	NZ Corrections capacity Programme Waikeria Prison *Mental Health Hub* Government health funding and mental health policy direction (capital infrastructure cost and competing investment).

Investment Objective 3	**To build sustainable capacity and capability of services to meet future demand, values and need.**
Existing Arrangements	Existing service capacity and capability is note meeting the increasing acuity / complexity and demand which at times results in compromised and unsafe care.
Business Needs	Cultivate a culture of excellence through authentic culturally responsiveness and values based training and feedback. Training and development plan for peer and professional workforce. Implement care coordination and holistic intervention work patterns across the service. Monitor capacity to match service user demand.
Potential Scope	- Professional Practice and Cultural Responsiveness (professional practice, essential skills, discipline and specialist skills programme) - Leadership, culture and values - Engagement (Let's Talk Hui, Recovery Planning) - Technologies (Acuity, Workload Assignment tool, Patient Journey Boards, Qliksense Apps business intelligence tool, Forms)
Potential Benefits	- Evidenced based practice throughout the care trajectory - Improved staff wellbeing (and reduced staff turnover and sick leave) - Increased capability and capacity of the consumer, peer-led, whānau workforce - Increased cultural competency of the workforce
Potential Risks	Demand continues to overwhelm capacity. Unplanned future clinical risk/s or challenges on the horizon. Competition between programme delivery and business as usual (BAU).
Constraints and Dependencies	The ability to continue to deliver at current (or enhanced) levels to the growing Waikato population is subject to funding constraints. Not managing BAU alongside the change programme.

The Economic Case – Exploring the Preferred Way Forward

84. This section of the business case provides an overview of the range of long list investment options that have been considered, describes the long list to short list options evaluation process and presents the outcomes.

85. Options were developed and assessed at a number of stages through the analytical phases that are summarised in this business case. These stages can be described as follows:

- Stage 1 – long list option development – a long list of 11 Acute Mental Health; 3 Specialty and 3 Puawai service options were developed by the Project team and/or advisory group members through engagement with strategic partners and key stakeholders during several workshops.

- Stage 2 – assessment of long list options – all 17 options were assessed qualitatively for their relative merits against the investment benefits and new model of care, compared to a *base case* option. The best performing options, or those where further analysis was deemed appropriate were advanced to the next phase.

- Stage 3 – revised and further assessment of long list options – 3 Acute Mental Health options (redeveloped options based on assessment); 3 Specialty Services; and 3 Puawai were assessed qualitative were developed by the Project team and subset of Advisory Group. The best performing options (and in relation to each other) were advanced to the next phase.

- Stage 4 – critical success factors assessment of short list options – 8 options were assessed qualitatively for their merits against the critical success factors and assessed through a cost-benefits analysis (quantitative and qualitative).

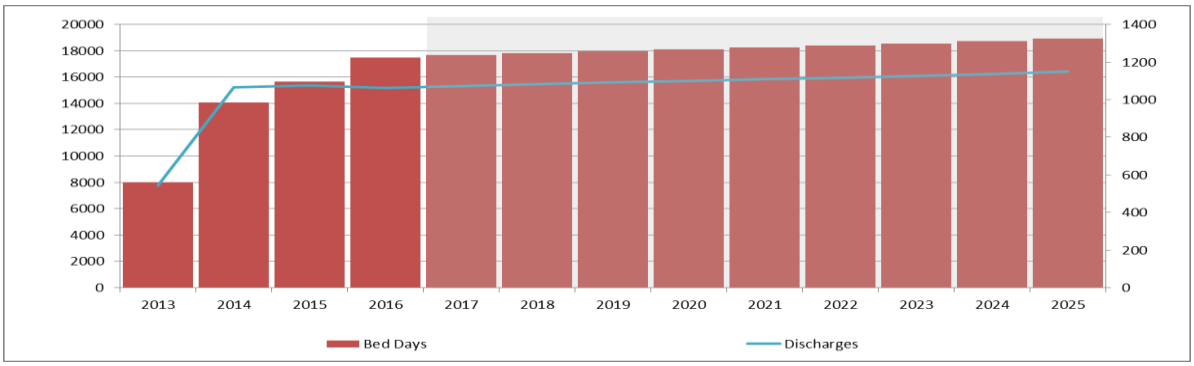
- Stage 5 – identification of the end-to-end option that covers the span of the investment – 4 end-to-end options were develop and assessed for their merits against the Māori Equity Framework; and were workshopped with the Waikato DHB Board.

86. A baseline *do minimum* investment option (i.e., extend/refurbish current facilities) has been assessed. It should be noted that the current acute Henry Rongomau Bennett Centre (HRBC) facility is not fit for purpose and does not meet contemporary stands of privacy, security and safety; and presents challenges to staff providing care to acutely unwell service users. The facility sits on a geographically constrained site and is unable to be extended to provide additional inpatient capacity or the required private and secure outdoor areas for service users, and would require an interim solution during refurbishment.

Service Scope

87. The proposed service scope for this investment is acute and subacute inpatient mental health and addiction services and Midland regional Puawai services to meet district needs to 2045. As outlined in the strategic case, current demand is 13 – 18 beds greater than actual capacity, with demand projected to increase in line with future demographic projections. Add to this, the NZ Corrections Increased Capacity Programme Waikeria Prison *mental health hub* will require increased Puawai capacity to meet the prison muster projections.

Figure 6 Forecast acute inpatient projections to 2025*



Measure	Actual				Projection								
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Discharges	545	1066	1077	1062	1073	1084	1092	1100	1109	1117	1125	1137	1150
Bed Days	8028	14059	15630	17483	17662	17841	17977	18113	18249	18385	18521	18723	18926
A LOS	14.73	13.19	14.51	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46
Beds Req				56.31	56.89	57.47	57.90	58.34	58.78	59.22	59.65	60.31	60.96

* Projections based on assumption that increase in demand is driven by population growth.

88. As summarised below the following are considered in scope:

- Acute and sub-acute mental health inpatient requirements (consideration to outreach areas and specialty services)
- Repatriation of adolescent and youth inpatient services from Auckland DHB's Starship
- Appropriate co-location of High and Complex inpatient services
- Relocation of Electroconvulsive Therapy (ECT) services to medical area or community-based service
- Potential consolidation and co-location of Alcohol and other Drugs (AoD) acute inpatient services [relocation of detoxification beds; and Substance Addiction (Compulsory Assessment and Treatment) Act 2017 (SA(CAT)) legislative requirements]
- Increased Puawai forensic footprint to meet the NZ Corrections increased capacity programme (2021)[15] and reconfiguration of wards
- Possible community localities Home Base Treatment and Respite requirements (to be identified within the Transformational Pathways Project)

89. Further and ongoing discussions with other national and local DHB's and Hauora Waikato are required to support understanding of the in scope inpatient services across the Midland region. In particular, arrangements regarding localities, acuity and specialty and sub-specialty services.[16] Discussions with NZ Corrections in relation to developing and progressing the model of care are also required.

[15] Refer to http://www.corrections.govt.nz/news/prison_capacity_programme_phase_2.html

[16] For example, the repatriation of youth beds from Auckland DHB – implications and arrangements for both MH&AS and Medical Paediatric services.

90. MHSOP is considered to be out of scope for investment options assessment due to the current adequate standard of inpatient facilities. It is noted, that an increasing and aging Waikato population may impact on the service's ability to meet future demand. The intent is to align MHSOP with the new model of care through the Pathway Transformational Project. However, further consideration regarding whether MHSOP is in or out of scope within the Detailed Business Case is required.

91. Electroconvulsive Therapy is in scope as services are currently provided at Henry Rongomau Bennett Centre. However, this service may be better aligned to medical outpatient services or an alternative therapy delivered in the community.

Future Scope

92. The future scope for MH&AS services propose a range of services to provide sufficient capacity and capability to meet future demand (and short term flexibility) - this provisionally includes 70 – 85 acute mental health, 34 specialty inpatient beds, 12 high and complex, and 70 Puawai inpatient beds (dependent of the model of care) and associated model of care and subacute services (including intensive care, sensory modulation, recreational space, tele-medicine services and staff/community education and training facilities. It should be noted that these bed numbers are indicative and are currently based on Blueprint II and forecasted population projections.

Table 8 Indicative MH Acute inpatient bed numbers*

Service	Required Beds	Per 100,000 population	2013	2018	2023	2028	2033	2038	2043
Adult	20-64 Acute inpatient	12.8	48.4	53.1	56.3	58.8	60.9	62.6	64.2
	65+ Acute inpatient	1.3	4.9	5.4	5.7	6	6.2	6.4	6.5
	15-19 Alcohol and drug - detox	0.2	0.8	0.8	0.9	0.9	1	1	1
	20-64 Alcohol and drug - detox	2.8	10.6	11.6	12.3	12.9	13.3	13.7	14
	Total		**64.6**	**71**	**75.3**	**78.5**	**81.3**	**83.7**	**85.8**
Children, youth and their families	0-14 Acute inpatient	1.1	4.2	4.6	4.8	5	5.2	5.4	5.5
	15-19 Acute inpatient	1.8	6.8	7.5	7.9	8.3	8.6	8.8	9
	0-14 Secure inpatient	0.2	0.8	0.8	0.9	0.9	1	1	1
	15-19 Secure inpatient	0.2	0.8	0.8	0.9	0.9	1	1	1
	Total		**12.5**	**13.7**	**14.5**	**15.1**	**15.7**	**16.1**	**16.5**
Older Persons	65+ Older people - assessment / treatment	4	15.1	16.6	17.6	18.4	19	19.6	20.1
	Total		**15.1**	**16.6**	**17.6**	**18.4**	**19**	**19.6**	**20.1**
Specialist	Mothers and babies 15-19	0.1	0.4	0.4	0.4	0.5	0.5	0.5	0.5
	Mothers and babies 20-64	0.4	1.5	1.7	1.8	1.8	1.9	2	2
	Head injury or neurological disorder with behavioural problems 15-19	0.15	0.6	0.6	0.7	0.7	0.7	0.7	0.8
	Head injury or neurological disorder with behavioural problems 20-24	0.6	2.3	2.5	2.6	2.8	2.9	2.9	3
	Eating disorders 15-19	0.3	1.1	1.2	1.3	1.4	1.4	1.5	1.5
	Eating disorders 20-64	1.7	6.4	7.1	7.5	7.8	8.1	8.3	8.5
	Total		**12.3**	**13.5**	**14.3**	**14.9**	**15.5**	**15.9**	**16.3**

* Required bed numbers according to Blueprint report from The Mental Health Commission 1998. Population projections sourced from Statistics New Zealand. *Discrepancy in report on number of inpatient beds required for age group 15-19 - listed as 3 per 100,000 in report, but in appendix IV the numbers only sum to 2. Caution would be that the above table is using 2 per 100,000, but the number could in fact be 3 per 100,000.

Table 9 Indicative Midland Regional Puawai inpatient bed numbers*

Prison	bed numbers	Conversion rate	MH Forensic Beds
Waikeria	3000	0.015	45
Spring Hill	1000	0.015	15
Tongariro	400	0.015	6
Rotorua	100	0.015	1.5
New Plymouth	30	0.015	0.45
Total	**4530**		**67.95**

* Required forensic bed numbers based on regional prison numbers - Conversion rate of 1.5 beds per 100 prison beds (NZ Forensic Advisory Group)

93. The above tables contain information on the number of inpatient beds required for the Waikato DHB MH&AS service. These numbers are not final in any way and merely provide an indication of requirements based on available literature. The population projection information used was for the Waikato DHB area. Any services that would be provided at a regional level would need to be re-calculated using projections on the regional population. The bed number is still being finalised pending the outcome of the model of care work and regional discussions.

94. Due to the complexity of the service requirements, the investment was disaggregated into three specific service areas: acute mental health; specialty services; and, Puawai. The approached was used to ensure the best option could be identified without being biased or constrained by the complex considerations of the end-to-end investment.

95. Overall, 17 scenario options (11 acute mental health; 3 specialty; and, 3 Puawai ideas) were developed by a wide range of stakeholders and were subject to additional engagement process to test that no feasible option had been omitted. These are reported in full in Tables 13 and 14. This work was led by the Project Director and was reviewed for accuracy and completeness by the Programme Board, MH Clinical Governance Forum and Waikato DHB Board before entering into the short list-process.

96. Eleven long list possible investment inpatient options (as summarised below) ideas were considered to meet the service requirements. This includes:

Acute Mental Health

- 1 *Base Case* or status quo (potential refurbishments undertaken) option
- 3 Waiora main Waikato Hospital campus options
- 3 joint ventures with other DHBs (Auckland and Midlands) options
- 2 green fields (including a rebuild of Tokanui) options
- 2 externally provided options

97. Three specialty and three Puawai long list possible investment options (as summarised below) ideas were considered to meet service requirements. These include:

Specialty Services (specifically Alcohol and other Drugs)

- 1 repurpose and refurbishment of existing HRBC (after decanting acute services) option

- 1 new purpose built facility on Waikato Hospital campus option
- 1 new purpose build facility/s in the community option

Puawai Services[17]

- 1 extension of current Puawai footprint option
- 1 repurpose and refurbishment of existing HRBC (after decanting acute services) option
- 1 new build on Waikato Hospital campus option

98. The Investment Logic Map (ILM)[18] panel appraised the 17 scenario options using the ILM benefits (26 June and 03 July 2017). The members were asked to score each of the 17 options against each of the five benefits using a Likert scale range of 0 – 3, where a higher number indicated a stronger performance against the benefit. Panel members recorded their own scores initially, and these were than agreed on to produce a final score. The finale scores were presented back to the panel which who were then invited to discuss any areas of particular divergence in scores.

99. The long list scenarios and their considerations information gathered and the process of assessment was reviewed by the Ministry of Health and NZ Treasury on 30 August 2017.

Long List Scoring

100. The results of the assessment of the long list of options against the Project benefits identified in the ILM are summarised below (refer to the annex for the full assessment). Noting that the assessments were conducted by the stakeholder group, prior to any formal costs information being produced.

Table 10 Acute mental health inpatient – long list options evaluation

Option Number	1 Main campus rebuild (holistic)	2 Main campus rebuild (transi)	3 HRBC and Outreach Builds	4 New Build Green Fields	5 NGO / Private Sector Dev	6 Tokanui Rebuild	7 Retreat Centres	8 Midlands JV Waikato Site	9 Midlands JV new site	10 Midlands JV specialty	11 HRBC Refurb
Score	YES	NO	YES*	YES	YES**	NO	NO***	N0	NO	NO****	NO
Ranking	1	5	1	3	4	7	6	10	8	6	10

* investigate the outreach option only
** investigate procurement within the commercial case
*** investigate the therapeutic programmes
**** investigate joint venture possibilities for specialty services

[17] Puawai options were developed prior to the NZ Corrections announcement of the new Waikeria 100-bed Mental Health Hub facility.

[18] See annex for ILM.

Table 11 Specialty services (AoD) inpatient – long list options evaluation

Option Number	1 Full refurbishment of an existing acute adult HRBC Ward	2 New AoD facility on Waikato Campus.	3 New AoD facility/s community
Score	YES	YES	YES
Ranking	2	1	3

Table 12 Puawai inpatient – long list options evaluation

Option Number	1 Extend Puawai footprint	2 Repurpose Adult HRBC footprint	3 JV Puawai and NZ Corrections
Score	NO	YES	YES
Ranking	3	1	2

Table 13 Acute MH long list assessment options

Acute Inpatient Mental Health Long List Options - initial summary								
Option	**1,2** **Main Campus New Build**	**3** **HRBC and Outreach Builds**	**4** **New Build Green Fields**	**5** **NGO/Private Sector Development**	**6** **Tokanui Rebuild**	**7** **Retreat Centres**	**8, 9, 10** **JV with Regional DHB(s)**	**11** **HRBC Refurbishment**
Location Summary	New fit-for-purpose build/s on Waikato Hospital campus. - Development of a holistic, flexible and modular build on Waikato Hospital campus Ryburn site or other identified site. OR - Development of a step down transitional build within the least restrictive environment.	Refurbishment and repurpose HRBC adult wards and outreach community development builds. - HRBC development of 2 adult wards and 1 prison muster ward within current footprint. AND - Purpose built community facilities in main rural outreach areas (rural north and rural south location).	New build on newly purchased Waikato DHB land; and HRBC repurpose.	Procurement of new MH&AS acute service provider (e.g. NGO or other private sector agency/ies). - New fit-for-purpose build/s on newly purchased land. OR - New fit-for-purpose build/s on Waikato DHB site/s.	New fit for purpose build on Tokanui land.	Respite and therapeutic retreat centres (elimination of acute inpatient services). - Build or refurbish of community facilities (therapeutic retreat centres with specialised programmes). - Health and social sector collaboration and flexible funding models (namely, funded access to retreat centres and programmes).	Development of a new inpatient facility to meet Waikato DHB MH&A service need in co-operation with Midlands DHBs. - Development of new Midlands DHB inpatient facility on existing DHB site. OR - Development of new Midlands DHB inpatient facility on green fields site. OR - Develop of Waikato DHB new inpatient facility and partial Midlands JV for Specialty services	Refurbishment of adult HRBC facilities to meet 3 - 5 year capacity.
Key Consider-ations	- The provision of a purpose built facility that provides sufficient capacity for current and future demand is expected to positively impact on each of the problems described in the ILM. - Option assumes main campus ability to release space for development. - Limited space options on main campus due to soft fill.	- Potential rebuild required as existing HRBC facility is outdated and based on an institutional footprint, low natural light and limited outdoor space. - HRBC space constraints limits expected medium / long term demand. - Community and inpatient proximity a significant integration benefit. - Option assumes outreach land available.	- Significant capital investment. - Clinical considerations for distances and transfer. - Possible community stigma and unknown / existing issues within the community confounding MH&A problems. - Potential lack of proximity to medical and emergency care.	- Significant capital investment. - Unknown preferred supplier / provider/s. - Possible delays in identifying, procuring new site and/or provider/s. - Possible issues with quality of workforce and training. - Possible issues with compliance with the Mental Health Act.	- Possible out-dated institutional model (potential stigma). - Significant capital investment. - Possible oversized build footprint. - Possible time delays in demolishing existing Tokanui infrastructure and rebuild. - Possible lack of proximity to community for outreach areas. - Potential lack of proximity to medical and emergency care.	- Significant investment into longitudinal community / primary health care. - Possible issues on decision programme and funding disputes. - Possible challenges with provision of care across the continuum. - Significant social housing investment. - Possible issues with quality of workforce and training. - Potential lack of proximity to medical and emergency care. - Possible issues with compliance with the Mental Health Act.	- JV would combine expertise in a centre of specialty and excellence - Interface risks around competing DHB needs. - Lack of proximity to community based teams (significant disadvantage to community integration). - Requirement for service user's transfer of significant distances to/from. - No existing regional capacity therefore all require new build.	- Potential rebuild required as existing HRBC facility is outdated and based on an institutional footprint, low natural light and limited outdoor space. - Unresolved practice of locked/secure wards; and seclusion. - Unlikely to effectively address critical risk factors. - Decant costs during construction. - Inability to accommodate need for increased capacity (prison muster and SA(CAT)).

Table 14 Specialty (specifically AoD) and Puawai long list options

Specialty and Puawai Inpatient Mental Health Long List Options - initial summary						
Option	**Specialty Services (specifically AoD)**			**Puawai Services**		
	1 Full refurbishment of an existing acute adult HRBC Ward	**2** New AoD facility on Waikato Campus.	**3** New AoD facility/s community	**1** **Puawai extension**	**2** **Refurbishment of decanted acute HRBC**	**3** **New build on Waikato Hospital campus**
Location Summary	Re-purposing of an acute adult HRBC Ward/s for AoD service delivery. - full refurbishment of existing Wards where space is currently configured on an out-dated institutional OR - full demolition and rebuild on existing HRBC land	New purpose built development on existing Waikato Hospital Campus. - development of new co-located AoD with acute inpatient build OR - development of new standalone AoD build	New purpose built development on community site/s to accommodate AoD inpatient service provision in the community - single main (Hamilton) community build OR - main (Hamilton) and out-reach community (Te Kuiti and Thames) builds	New build expansion of Puawai footprint for future increased prison muster demand. New development on existing HRBC Forensic site.	Full refurbishment of an existing acute adult HRBC Ward for future increased prison muster demand. This option would include the full refurbishment of existing Ward/s where space is currently configured on an out-dated institutional.	New purpose built development on existing HRBC site adjacent to Puawai. Development of a new facility to meet a following service needs: - Forensic services and/or - Drug and Alcohol services and/or - High and Complex services This option would include the demolition of acute adult HRBC Ward/s.

Key Considerations	- Possible potential for forensic service to be located on adult HRBC footprint. Current adult HRBC footprint not fit-for-purpose.
	- Option assumes decant and relocation of existing service/s.
	- Assumes the relocation of 2x detoxification beds located within forensics.
	- Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution).
	- Likely increased resources and ongoing costs required for increased bed numbers.
	- Clinical consideration for co-existing disorders (AoD and MH) service provision; and, the co-location (or not) of specific AoD services.
	- Possible opportunity for joint Midland venture.
	- Assumes future demand for services is known.
		- Significant capital infrastructure costs.
		- Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution).
		- Assumes the relocation of 2x detoxification beds located within forensics.
		- Option assumes availability of land/space (potential impacts on car parking space).
		- Option assumes decant and relocation of existing service/s.
		- Likely increased resources and ongoing costs required for increased bed numbers.
		- Assumes future demand for services is known.
		- Possible opportunity for joint Midland venture.
			- Significant capital infrastructure and ongoing costs (e.g., catering, laundry).
			- Assumes the relocation of 2x detoxification beds located within forensics.
			- Possible need for purchase of new land (potential issues for land locked areas).
			- Potential lack of proximity to medical and emergency care.
			- Possible disconnect between mental health and emergency/medical care.
			- Assumes future demand for services is known.
			- Possible opportunity for joint Midland venture.
				- Potential opportunity to reconfigure current forensic ward model.
				- Possible relocation of current 2x Detoxification beds and 3/4x High and Complex virtual beds within Forensics.
				- Space constraints limit build location options.
				- Possible reduction in land for outdoor and de-escalation space.
				- Minimal interdependencies with MH&AS build programme.
				- Likely increased resources and ongoing costs required for increased bed numbers.
				- Assumes future demand for services is known (conversion of prison muster numbers and specials).
					- Potential opportunity to reconfigure current forensic ward model.
					- Possible relocation of current 2x Detoxification beds and 3/4x High and Complex virtual beds within Forensics.
					- Current HRBC footprint not fit-for-purpose.
					- Considerations for the types of services in the remaining HRBC space:
					  - possible relocation of virtual High and Complex beds within Puawai to a fit-for-purpose environment.
					  - possible relocation of ECT services to medical services.
					  - possible relocation of detoxification services located in Puawai Ward 38 to a fit-for purpose environment
					  - Option assumes decant and relocation of existing service/s.
					- Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution)
					- Likely increased resources and ongoing costs required for increased bed numbers.
					- Assumes future demand for services is known (conversion of prison muster numbers and specials).
						- Potential opportunity to reconfigure current forensic ward model.
						- Possible relocation of current 2x Detoxification beds and 3/4x High and Complex virtual beds within Forensics.
						- Significant capital infrastructure costs.
						- Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution).
						- Option assumes decant and relocation of existing service/s.
						- Likely increased resources and ongoing costs required for increased bed numbers.
						- Assumes future demand for services is known (conversion of prison muster numbers and specials).

101. The assessment of the options did not identify any specific option to take forward for short-list evaluation – for comparing against the Status Quo. Most investment options had aspects that were considered to provide therapeutic function, flexibility and safety. Where some investment options were either unable to provide the full range of requirements to meet the model of care. Based on the outcome of the assessment the panel agreed that the scenarios options be revised based on panel member discussion. The panel members regrouped and reworked the options into eight ideas (presented overleaf).

102. The panel (ILM panel and extended stakeholders) appraised the eight options using the ILM benefits (01 September 2017) using the same Likert scale method previously described. The results of the assessment of the revised long-list of options are summarised below (refer to the annex for the full assessment.

Table 15 Inpatient – long list options evaluation

Option Number	1 Waiora Main Campus New Acute MH Build	2 Waiora Main Campus and Out Reach Sub-Acute New MH Builds	3 New Acute MH Green Fields Build/s	4 Multiple and Variable Needs Colocation with Acute MH in new Build	5 Multiple and Variable Needs Repurpose of HRBC	6 Multiple and Variable Needs Joint Ventures with Midlands Regional DHBs	7 Puawai HRBC Rebuild (Adult)	8 Puawai Joint Venture with NZ Corrections
Score	YES	YES	NO	YES	YES	YES	Yes	Yes
Ranking	2	1	3	1	2	3	1	2

103. As a means of assurance the revised eight scenario options were again reviewed by the ILM group and assessed against the model of care principles (20 October 2017).

104. These long list options and short list options and process were presented and endorsed by the Waikato DHB Board on 25 October 2017.

Table 16 Initial MH&AS long list assessment against investment benefits

Mental Health and Addictions Short List Options - initial summary								
Option	**MH Acute Inpatient**			**Specialty Services Inpatient**			**Puawai (Forensic Increased Prison Muster)**	
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
	Main Campus MH New Build	**Main Campus Acute and Out-Reach Sub-Acute MH Build/s**	**Acute MH Green Fields Build**	**MH Co-Location**	**HRBC Re-Purpose**	**JV with Regional DHB(s)**	**Puawai Rebuild HRBC**	**JV Puawai and NZ Corrections**
Location Summary	New fit-for-purpose holistic build on Waikato Hospital campus. - Purpose built holistic, flexible and modular build on Waikato Hospital campus Ryburn site or other identified site.	New fit-for-purpose Acute build on Waikato Hospital campus and new out-reach Sub-Acute builds - Purpose built holistic, flexible and modular acute facility build on Waikato Hospital campus Ryburn site or other identified site. - Purpose built sub-acute community facilities in Hamilton and main rural north and rural south locations.	Development of a holistic, flexible and modular build on green fields site.	New holistic Main Waikato Hospital (option 1) footprint includes capacity to meet requirements for service provision. - alcohol and other drugs - cognitive impairment - high and complex needs - youth - eating disorders - peri-natal - MH +65 years	Rebuild of existing adult HRBC ward to meet the service needs. - alcohol and other drugs - cognitive impairment - high and complex needs - youth - eating disorders - peri-natal - MH +65 years	Development of new joint venture/s with regional Midlands DHB(s) for specialty services. - alcohol and other drugs - cognitive impairment - high and complex needs - youth - eating disorders - peri-natal - MH +65 years	Rebuild of existing adult HRBC ward to meet the increased prison muster capacity.	Joint venture with co-locating MH&AS service facilities within NZ Corrections prison/s sites.
Key Consider-ations	- The provision of a purpose built facility that provides sufficient capacity for current and future demand is expected to positively impact on each of the problems described in the ILM. - Option assumes main campus ability to release space for development. - Limited space options on main campus due to space size, soft fill and other potential capital infrastructure future builds. - Potential need for relocation of current infrastructure on Ryburn site (including car parks). - Significant timing interdependencies with MH&AS build programme (possible staged decant/build).	- Possible need for purchase of new land. - Possible community stigma and unknown / existing issues within the community confounding MH&A problems. - Community and inpatient proximity a significant integration benefit. - Option assumes outreach land available. - Possible delays in identifying and/or procuring new site (investigate potential NGO/Private provider). - Possible issues with compliance with the Mental Health Act. - Benefit of close proximity to home and community. - Likely to integrate inpatient and community services more seamlessly. - Significant timing interdependencies with MH&AS build programme (possible staged decant/build).	- Significant capital investment. - Possible need for purchase of new land. - Possible community stigma and unknown / existing issues within the community confounding MH&A problems. - Benefit of purchasing appropriately sized land area. - Possible delays in identifying and procuring new site. - Possible lack of proximity to community for outreach areas. - Potential to co-locate all MH&AS services (including JV services). - Possible lack of proximity to community. - Potential lack of proximity to medical and emergency care. - Likely increased support service costs. - Significant timing interdependencies with MH&AS build programme (possible staged decant/build).	- Assumes new acute MH development. - Assumes the appropriate relocation of the 2x detoxification beds from Puawai. - Additional land required. - Clinical considerations of co-location of detoxification and drug induced psychosis service provision. - Assumes future demand for services is known.	- Assumes new acute MH development. - Assumes the appropriate relocation of the 2x detoxification beds from Puawai. - Potential demolishment of existing adult HRBC building due to outdated institutional footprint and space constraint. - Option assumes new acute inpatient developments. - Possible national solution. - Assumes future demand for services is known.	- JV would combine expertise in a centre of specialty and excellence - Interface risks around competing DHB needs. - Lack of proximity to community based teams (significant disadvantage to community integration). - Requirement for service user's transfer of significant distances to/from out-reach DHBs presents patient / staff risk and costs. - No existing regional capacity therefore potential new build/s. - A possible issue on decision on specialised service and facility location/s. - Lack of proximity to community and community based teams. - Possible issues with differing service delivery models, systems and processes across Midlands.	- Significant capital investment. - Assumes an increase in the prison muster cohort in the Waikato. - Assumes the appropriate relocation of x4 high and complex beds and x2 detoxification beds. - Assumes new acute MH development – potential build sequencing issues (decant of current acute inpatient services). - Opportunity to reconfigure flow through Puawai wards. - Likely increased resources and ongoing costs required for increased bed numbers	- JV investment option can be considered within the NZ Corrections plan. - Assumes the appropriate relocation of x4 high and complex beds and x2 detoxification beds. - Possible workforce challenges. - Potential co-location of prison and MH&AS benefits. - Potential PPP - Likely increased resources and ongoing costs required for increased bed numbers. - Reduction in build decant and sequencing risk.

Assessment of Short-listed Options

105. To determine the short list of options, the eight long listed options were subsequently assessed using Critical Success Factors (CSFs) on the 10 April 2018. The workshop was attended by representatives of the COF Advisory group and Programme Board.

106. The Critical Success Factors (CSFs) set out the attributes that are essential for the successful delivery of the MH&AS inpatient facility/s in terms of meeting the investment objectives set out in the Strategic Case. They form the 'evaluation framework' that all possible options are assessed against to ensure the options deliver elements for the Facilities Redevelopment and Relocation Project success. The key point of the CSFs is that they must be crucial, not desirable.

107. Weightings total to 100% were developed for each of the CSFs to reflect the relative importance of each factor. The weights draw on the research into models of care and other similar build developments in order to drive successful delivery of the investment objectives.

108. The identified critical success factors and their respective weightings as set out in the below table.

Table 17 Critical Success Factors (CSFs)

Critical Success Factors	Broad Description
Strategic Fit / Integration with Existing Plans	How well does the option align with DHB strategic plans. How well does the option complement existing and planned model of care changes both locally, regionally and nationally?
Service User and Whānau Experience and Engagement, Outcomes	How well does the option support increased participation and interventions in a way that is responsive and flexible to future demand and needs?
Integration	How well does the option integrate with existing service provision in the region and provide and utilities complementary and services from other facilities? How well does the option support the model of care?
Adaptability and Sustainability	How quickly and efficiently is the option able to be flexible to future demand, values and needs?
Transitional Feasibility	How much disruption is caused to staff and service users as a result of implementing the option?
Workforce Retention and Engagement	How well does the option increase employee engagement (training, collegial, working at top of practice scope) leading to higher levels of workforce retention and performance? How well does the option contribute to attracting staff, and workforce retention, and performance?
Value for Money	How well the option achieves? - Economy (minimising use of resources) - Effectiveness (doing the right thing – considering social, cultural, environmental and economic outcomes) - Efficiency (doing it well – opportunity for partnerships, flexible and ability to adapt to changing needs, values, and trends) - Financially viable and sustainability (on-going maintenance and operational costs)
Maori Equity, Experience and Engagement	How well the option achieves equity for Maori? How well does the option support increased participation and interventions for Māori in a way that is responsive and flexible to future demand and needs?

Assessment against the Critical Success Factors

109. The options that proceed to the critical success factor assessment were assessed against the seven critical success factors that are outlined above.

110. A rating was given to each option, which was either

4	*Excellent – the option is expected to exceed the CSFs*
3	*Good - the option is expected to fully achieved the CSFs*
2	*Average – the option is expected to mostly achieve the CSF*
1	*Poor – the option is expected to partly achieve the CSF*
0	*Very Poor – the option is not expected to achieve the CSF*

111. When assessing the options against each critical success factor, the options were assessed not only on their own, but also in comparison with the other option domains to determine the shortlist. Each option was then ranked in order of preference based on the combined rating score, which informed the preferred list of options.

112. The scoring was not multiplied by the relative weighting, as the workshop group agreed that each of the evaluation criteria were equally important.

Table 18 Short list options CSFs assessment

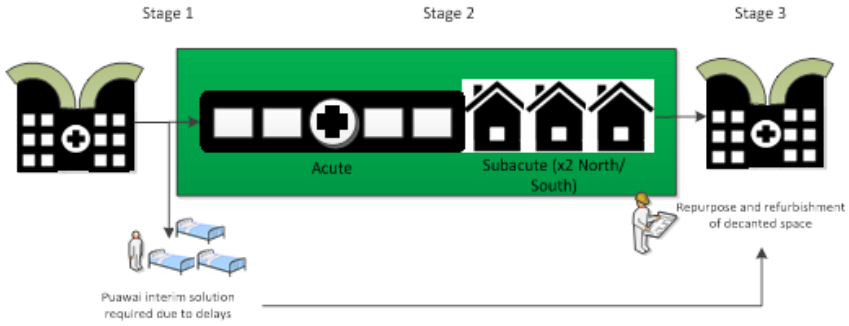
Evaluation criteria	Waiora Main Campus New Acute MH Build	Waiora Main Campus and Out Reach Sub-Acute New MH Build/s	New Acute MH Green Fields Build/s	Specialty Services Colocation with Acute MH in new Build	Specialty Services Repurpose of HRBC	Specialty Services Midlands JV	Puawai HRBC Rebuild (Adult)	Puawai JV with NZ Corrections
Strategic Fit / Integration with Existing Plans	2	4	2	2	2	2	3	2
Service User and Whānau Experience, Engagement	2	4	2	2	2	2	3	1
Integration / complementarity	2	4	2	2	2	2	3	2
Adaptability and Sustainability	2	3	3	3	2	2	3	2
Transitional Feasibility	2	2	2	2	2	1	2	2
Workforce Retention and Engagement	2	3	2	2	2	2	3	0
Value for Money	2	3	2	2	2	2	3	2
Equity focus for Maori	1	3	3	1	2	3	3	1
Unweighted score	14.62	25.87	17.05	17.81	16.31	15.81	21.68	12.87
Unweighted ranking	3	1	2	1	2	3	1	2

The Recommended Preferred Way Forward

113. To determine the Preferred Way Forward, the revised long list options and CSFs assessment findings were presented to stakeholders to develop the range of aggregated variations to determine an end to end investment (06 July 2018).The workshop representation was from MH Clinical Governance, Creating Our Futures Programme Board, Creating Our Futures Advisory Group, Te Puna Oranga, Māori Caucus members, Iwi Māori Council members and other Waikato DHB staff.

114. Four possible end-to-end options were identified (these are described below). The workshop members were asked to consider and assess to these four end-to-end options in relation to the Māori Equity Framework to determine the options to take forward for evaluation in the Detailed Business Case – comparing these to the Status Quo.

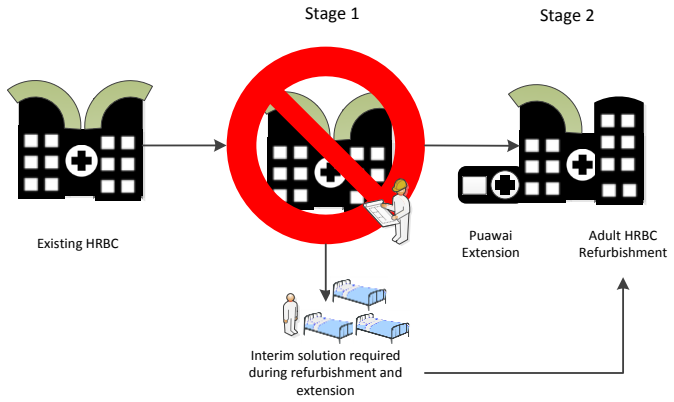
Option A: New Acute / Subacute Build – Green Fields



Key Considerations:

- Significant capital investment costs (approx. $[redacted] incl rural)
- Change in programme risk profile to HIGH – Gateway required (time delay)
- Reduced efficiencies and high operational costs
- Delays in procuring new site:
  - significantly increases NZ Corrections Programme risk
  - land availability
  - ability to gazette
  - consent process
  - agreement on location
- Lack of proximity to medical and emergency services
- Unknown impact of workforce retention
- Not aligned to Model of Care principles or supported transitional model
- Interim solution required to reduce NZ Corrections Programme risk
- Disconnect between Puawai and Adult inpatient services
- Increases stigma and disconnect with community and natural supports

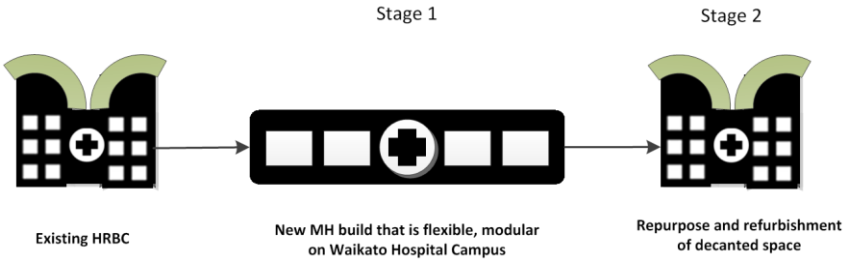
Option B: No Change Option – HRBC Refurbishment (baseline)



Key Considerations:

- Decant and interim solution required during refurbishment
- Limited footprint for ground level build (addition of new level?)
  - restricted therapeutic and clinical space available
  - reduces outdoor, sensory and de-escalation space
  - limits future demand flexibility and Puawai pathway redesign
- Potential requirement to revisit and reinvestment (short-term fix)
- Continued subacute locked ward
- Not aligned to Model of Care principles or supported transition model
- Extensive structural changes required to comply with standards (this may not be achieved)
- Low capital investment costs ($[redacted])

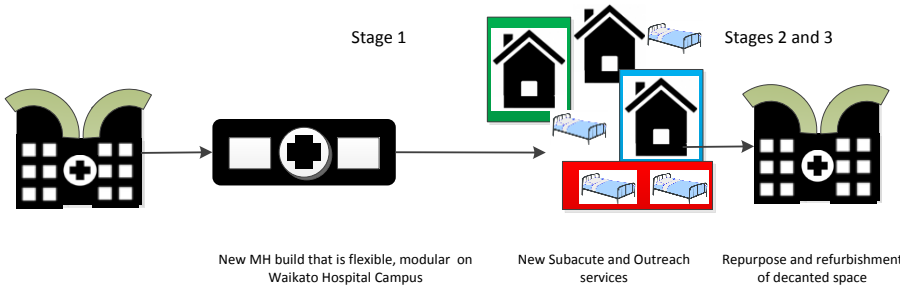
Option C: New Acute MH Build Waikato Hospital



Key Considerations:

- High capital investment costs (approx. $[redacted] – excludes site implications costs)
- Limited available Waikato Hospital campus land, impact on footprint size and therapeutic design
  - inability to build ground level design
  - reduces outdoor, sensory and de-escalation space
- Downstream effects/costs associated with of site location
  - soft-filled land
  - reduced car parking space
  - relocation of current facilities
  - required building demolition
- Not aligned to Model of Care principles or supported transition model
- Reduces NZ Corrections Increased Capacity Programme risk

Option D: New Acute MH Build Waikato Hospital and Subacute / Outreach Services



Key Considerations:

- High capital investment costs (approx. $[redacted])
- Smaller build footprint required (increasing opportunity for greater outdoor and therapeutic space). Outdoor space consumption will relate to campus impacts and costs
- Ability to manage build staging (reduce requirement for interim solution)
- Increased linkage with community and natural supports
- Aligned to Model of Care principles and supported transition model
- Reduces NZ Corrections Increased Capacity Programme risk
- Greater opportunity for subacute PPIP and PPP services
- Requires Strategy and Funding commission framework
- While build footprint may be marginally smaller, campus driving significant costs remain.

115. Information on the indicative capital and lifetime costings of these short-listed options is presented in the appendix. Noting that design to achieve a green star rating can add a 2% – 6% (dependent on the rating to the upfront costs) pay back over the life time of the building due to improvement in building performance, reduction in energy cost and environment impact.

116. These short listed options and were presented to the Waikato DHB Board on the 22 August 2018 and workshopped on the 10 October 2018 to endorse a Preferred Way Forward.

Preferred Way Forward

117. Based on the qualitative and quantitative analysis one option has emerged as preferred – **option D New Acute MH Build Waikato Hospital and Subacute / Outreach Services**. It is proposed that this option (and the baseline) is taken forward to Detailed Business Case.

118. It is noted that additional understanding of the acute option is required to determine the size, location and site implications (a Waikato Hospital Site Strategic Plan will be required). The long list approach to determining and assessing the subacute / outreach services possibilities will need to be undertaken as part of determining the preferred way forward.

119. Any preferred way forward identified will remain cognisant of the specific needs and service settings for Māori; and will use Māori frameworks and models of care that encompass a holistic approach to health and wellbeing (including, concepts of mana, tapu and mauri). Kaupapa elements include:
    - enhance cultural identity
    - equity of access and access to Maori healing pathways
    - support whānau
    - mana enhancing / mana protecting

- reduce stigma and discrimination
- increase trust

120. Culturally healing kaupapa environments that support:
    - a culturally defined healing space: hā a Koro ma a Kui ma
    - a safe escape from un-wellness
    - an opportunity for whanaungatanga
    - an environment supportive of whānau

121. The culturally holistic spaces that support interventions include:
    - whanaungatanga
    - whānau hui
    - cultural assessment
    - cultural therapy, including wairua work
    - waiata, kapa haka, te reo Māori, access to whenua, whānau and whakapapa, and kori kori tinana

122. And ensure a workforce who:
    - operate from holistic Māori models of practice
    - utilise holistic approaches to healing and wellbeing
    - actively promote, practice and facilitate tikanga based practice including pōwhiri, karakia, whānau ora, whanaungatanga taukoka, tuakana / teina and awhi
    - include and value the presence of kaumātua and kuia.

123. MH&AS service is committed to a detailed co-design process approach that up holds the principles of Partnership, Participation and Protection described in the Treaty of Waitangi. It will be a process that tautoko's Māori in their desire to improve their own health and wellbeing.

The Commercial Case

124. The Commercial Case identifies the Recommended Procurement Option to deliver the Project, as described in the Economic Case. This section:

- sets out the key Project characteristics and risks that influence the choice of procurement model
- describes potential procurement options that could be applied to deliver the Project
- assesses potential procurement options relative to the Project characteristics and risk, applying an agreed qualitative evaluation criteria
- identifies the preferred procurement strategies available for the Project, demonstrating alignment with Waikato DHB Procurement Policies and procurement guidelines from the Auditor General.

125. It is expected that this analysis at the Indicative Business Case stage will be high level but sufficient to provide decision-makers an early view of key factors that may affect the commercial viability of the proposal.

126. Procurement processes will comply with the 'Mastering Procurement: A Structured Approach to Strategic Procurement (2011), [19] and the Waikato DHB Procurement and Contracts Policy (0170) that uses the five principles of Government Procurement as a guide to making good procurement decisions. Additionally, any procurement (over $[redacted]) will comply with the Government Rules of Sourcing, Ministry of Business, Innovation & Employment (endorsed by Cabinet CAB Min (13) 10/4A) as set out in the policy.

127. Of importance, prior to confirmation of the requirement to undertake a programme business case, and initial registration of interest (ROI) was undertaken to request information that may be used to identify potential suppliers for concept design. Although a market sounding process has been undertaken to assess potential market participants' views, the scope and specification of the Project was not known at that point, and was not directly tested. This process will be conducted as part of the Detailed Business Case.

Project Characteristics

128. The characteristics of the Project's services and facilities are fundamental determinants of the procurement strategy and delivery options that could be applied. Table 19 overleaf summaries the key characteristics of the recommended option that may impact procurement.

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19 Refer to the Government Rules of Sourcing at the Ministry of Business, Innovation and Employment website at http://www.business.govt.nz/procurement

Table 19 Characteristics of the recommended options that impact procurement

Characteristic	Description	Implication for Procurement
Scope	It is anticipated that the key components in the Projects will be: - Buildings, landscaping, infrastructure - Furniture, fittings and equipment - Technologies This Project will require the construction of purpose build inpatient facilities, on hospital sites, and the refurbishment of existing HRBC facilities. There are also HBT and respite infrastructure required. The current intention is for the main build to be built on Waiora campus, but the final location is to be confirmed in the DBC.	The scope of Projects complexity will impact the procurement approach. In addition to the build component, maintenance and life cycle services for varying durations and standard defect liability periods could be included within contracts for the components detailed. While new build Projects can be successfully procured conventionally, alternative procurement (including PPPs) forms should be considered where scale warrants it. The more costly, technically complex, risky the Project, the more likely that the application of alternative procurements models will be appropriate.
Scale	It is anticipated that the Project will require the following in capex $[redacted] (approximately). The scale of Projects (capital value and on-going services costs) directly impacts the procurement decision making criteria for Project delivery.	Generally PPPs are not attractive for Projects that are worth less than $[redacted] in capital costs, with a significant operational component that can be turned over to private sector consortia, or $[redacted] for a capital build and maintain Project only (note individually the Projects are under a $[redacted]). For small scale Projects, the complexity of a PPP, funding availability and the lack of sufficient competition to drive better value for money from more complex procurement approaches. However, the Waikato DHB should adopt as many of the risk transfer mechanisms as possible in order to enhance value for money. It may also be possible to involve private finance for the Project at a later stage (e.g., respite and HBT options).
Timing	Early completion of the Acute MH facility is desirable and necessary. The need to deliver this solution is required to release HRBC space for two remaining anticipated construction Projects which need to commence prior to 2021. The current assumption is that the new facility will be in service from 2023-2026 to minimise risk to service disruption and requirement for an interim solution.	Procurement timescales (and cost) will normally increase with the complexity of the procurement option applied. If timescale and programming are significant constraints, traditional procurement methods may be more applicable. Timescales are a constraint for the Project. Traditional procurement methods are therefore more applicable.
Services	Hard facilities maintenance provided by public or private sector. Soft facilities maintenance provided by public or private sector. As Waikato DHB will be the *owner* of the facilities, asset management services will be provided by Waikato DHB upon completion. Operational / clinical services will be provided by Waikato DHB (as estimated in the Economic Case)	The scope of service requirements will influence cost and may influence market interest.
Facilities and Equipment	The scope of the Recommended Option within the Business Case includes: - fit for purpose Acute MH facilities - fit for purpose Specialty Services facilities (Alcohol and other Drugs, Cognitive Impairment, High and Complex, Youth, Eating Disorders and Peri-Natal) - increased Puawai footprint Refurbishment of some of the existing HRBC is	The size of the Project affects the procurement decision-making criteria for Project delivery. The costs of establishing the procurement model needs to be recovered from the benefits of the chosen procurement model. The scope and scale of facility requirements influences market interest. -The capital build is anticipated to be easily understood and relatively simple in terms of design and contracting requirements, supporting a more

	required. Related furniture, fittings and equipment. Support services (including, cleaning, laundry, catering, security, grounds and gardens) Lifecycle maintenance services for new facilities ICT service,	traditional procurement model. The simplicity of the facility and collocation with existing Waikato DHB facilities means there is limited opportunity for substantial whole of life risk transfer and consequently more complex procurement approaches are unlikely to be appropriate. The existence of facilities maintenance and infrastructure contracts covering the collocation Waikato DHB facilities presents opportunities for economies of scale through extension of those contracts to the new facilities.

Project procurement risks

129. In addition to the asset and service requirements of the Project, a set of potential risks related to the procurement of the Project were identified for consideration in the evaluation of the procurement options.

Table 20 Potential project risks

Identified Risk	Description
Timetable	Exposure to time delays (impacting works programme in service dates) results in increase operating and capital costs, safety, wellbeing and clinical risk due to: - Cost escalation - Interim solution requirements
Material Change to the Project	Project becomes unaffordable and / or does not represent the best value for money resulting in poor decision making and/or time delay.
Market Capacity	Size and scale of the Project does not allow for sufficient economies of scale, or presents limited opportunities for contract competition, leading to increased Project costs and/or reduced competition. NZ Corrections new builds occurring may impact on market availability.
Site Conditions	Ground conditions have not been thoroughly investigated at Waiora (soft fill). Unanticipated, adverse ground conditions on site result in programme delays and additional costs (e.g., demolition of existing buildings)
Design	Disagreement between designer and contactor may result in delays or the assumption of additional risk by Waikato DHB. Disagreement between MH&AS and SPO may result in delays.
Construction	Design is not buildable or results in material additional cost. Sequencing of construction is not met due to unexpected complexity of the Project or events such as delays in scheduling of materials, trades, and design or buildability issues. Adverse weather conditions delay earthworks programme. The site requires more remediation work than initially anticipated resulting in significant costs overruns.
Operating Risk	Higher than expected operating costs. High than anticipated utilisation of the facility results in capacity constraints. Lower than expected utilisation of facility results in an over build and Opex heavy building.
Asset	The built facility is not fit for purpose. The design does not adequately meet the current needs of clinicians, service users and whānau realities. Scope and scale of the facility is not sufficiently flexible to cater to demand, values and needs now and into the future. - Facility is not able to cater to changing service user demand - Outcomes and benefits targets are not met - Exposure to future costs escalations and costly alterations to facility at a later stage.

Procurement Model Options

130. The Project could be procured in multiple ways, including traditional procurement and delivery through to various collaborative models.

131. The analysis that follows applies Project-level assumptions to support a largely qualitative assessment. A detailed procurement plan for each of the core components of the Project will be developed following the approval of this business case and endorsement of the recommended option.

Procurement Model Options

132. A range of potential delivery and risk transfer approaches can be applied in procuring facilities, equipment and services. The types of procurement models and options that could be applicable comprise three broad categories: traditional models (or conventional), collaborative models and bundled models (PPPs service models).

133. As set out in the table below, various procurement options, each with a range of nuances and different outcomes can be applied to deliver Projects that have different outcomes in respect of risk transfer, contract duration and public sector participation.

Table 21 Types of procurement models

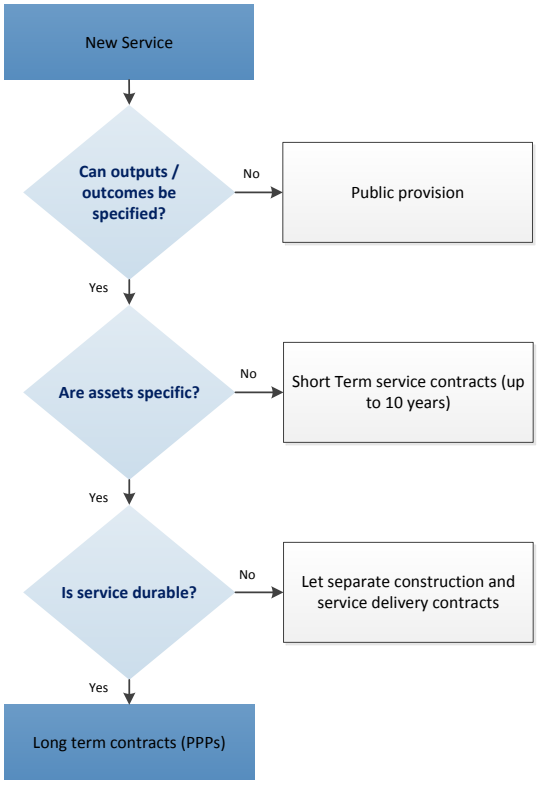
Traditional Models	Collaborative Models	PPP / Bundled Models
Public Sector owns and delivers services Private sector design and constructs	Contestable service delivery	Focus on 'partnering' services Design, build, finance, operate and maintain
Unbundled approaches are centred on construction-based models. - Cost plus - Guaranteed maximum price - Fixed price design and build	The public and private sector work together for shared construction on outcomes and risk sharing: - Managing contracting - Early contractor involvement - Alliance contracting - Resolution of design and site planning early to a very high level of detail. - Up front cost certainty at risk	The PPP/bundled approach may apply a whole of life outcomes based solution. It includes the following procurement models: - Design construct maintain (DCM) - Design construct maintain finance (DCMF) - Build, own, operate (BOO) / build own operate transfer (BOOT) - Full commercialisation In addition, the following framework service delivery models could be applied. - Integrator - Strategic partner and framework contracting (which can incorporate all the procurement models)

Procurement Options Decision Tree

134. Where investment has a significant specific purpose component, a choice is required between conventional procurement and a PPP. This is largely dependent on whether the service is *durable* (i.e., how likely it is that the service requirement will change over time in unpredictable ways, requiring costly contract variations).

135. The decision tree in Diagram 2 below considers the appropriateness of the context of a wider procurement decision framework. It sets out a high level overview of the decision making process which results in the short list of procurement options.

Diagram 2 Procurement decision tree



Assessment Criteria	Business Case Scope	Description
Project size	Estimated capital costs [redacted]	There is large (approximately $1[redacted]) capital investment that requires effective management of risks associated with construction and commissioning The value of the Project is sufficiently large to ensure that the procurement costs of an alternative model are not disproportionately large in comparison to traditional / conventional models
Durability of requirements	The performance of the facility has been specified for a period of at least 25 years	Planning horizons are long ter, with the services and assets intended to be used over long periods into the future. The fundamental requirements for the facility are unlikely to change. Requirements can be clearly specified at the outcome or output level by measurable KPIs
Whole-of-life service need	Contracts must be bundled in order to achieve whole of life incentives	The assets and related services can be defined and are capable of being costed on a whole of life, long term basis. The integration of up-front design and construction with ongoing service delivery, periodic, planned and reactive maintenance can be achieved. A 'non -tradition' (i.e., alternative delivery) model could bring innovation and outcomes focused behaviour, including across the broader site.
Market appetite and competition	Formal market sounding to test the market's interest, including availability of finance	Previous NZ PPPs have been well supported by the market. Opportunities to access economies of scale that may exist as a result of broader market dynamic and procurement option could be achieved. It is expected that a sufficient level of competition can be generated.

136. NZ Treasury's guidance requires an assessment of the Project suitability for PPP procurement against a set of *hurdle* criteria to confirm appropriateness of the procurement model.

137. The first PPP hurdle assessment criterion is Project Size. The estimated capital cost of the Preferred Way Forward is $[redacted]. Based on this capital amount, the Project will not be of sufficient size to ensure that the procurement costs of a PPP are not disproportionately large in comparison to conventional models. Market sounding indicated that a minimum project size of $[redacted] is required.

138. Since the Project does not meet the first PPP hurdle assessment criterion, it has not been assessed against the six additional criteria. As a result, the PPP procurement option is not currently considered a viable option, and is not assessed in this Commercial Case.

139. It should be noted, that the Project subacute options will be assessed against PPP and PPIP (Public Private Iwi Partnership) in the Detailed Business Case due to the nature of the services.

Potential Procurement Options for the Project

140. Following the identification of Project characteristics and risk, a range of potential procurement options has been identified. The range of procurement models identified for the Project was complied with reference to models previously used in the NZ Health Sector and in the context of commonly applied and emerging NZ Procurement models, including the procurement approaches followed by Waikato DHB.

141. The three procurement models identified are:

- Traditional or Conventional
- Design, Build and Maintain (DBM)
- Early Contractor Involvement

142. Table 22 describes the elements of each procurement model, their potential application to the Project, the potential risks to Waikato DHB, and the examples of where similar projects have been procured applying the procurement methods.

Table 22 Potential procurement options for the Project infrastructure[20]

Procurement Approach	Description	Advantages to Waikato DHB	Risks to Waikato DHB
Traditional or Conventional Examples: Meade Clinical Entre building; Older Persons and Rehabilitation (OPR) building, Midland Forensic upgrade.	Waikato DHB enters into contracts for construction based on separately procured design (either concurrently or consecutively). No ongoing obligations for asset maintenance and operations by Contractor as separate in-house or externally procured. operations, maintenance and lifecycle arrangements would be put in place. Funded by public sector	The capital works for the Project will be relatively low scale and uncomplicated. - Fast time to market - Low tendering cost - High level of design and implementation control	Majority of risks retained by public sector. Contractor only models may result in interface risks between designers and contractors. A consecutive competitive tender process for design and build may put the targeted 2021 operational commencement at risk, but this can be mitigated by parallel procurement.

[20] Adapted from CDHB Indicative Business Case.

Design , Build and Maintain (DBM)	Waikato DHB engages a contractor to conduct detailed design and construction of the Project for an agreed fixed sum. No ongoing obligations for asset maintenance and operations by Contractor as separate in-house or externally procured operations, maintenance and lifecycle arrangements would be put in place Funded by public sector Works well where the scope is well defined.	Design and build type contracts provide simpler process for Waikato DHB based on single contracting framework. Shifting design risk to the contractor helps minimise design risk for the public sector and reduces potential "buildability" issues. Potential to reduce the delivery schedule by overlapping the design phase and construction phase of a Project.	Contractual complexity is higher than more traditional forms of contract. Majority of risks retained by public sector, including potentially a share of risk to Project cost meaning that the final cost is often higher than provided for in the contract Whole of life issues may not be adequately addressed as the incentive on the consortia is to control short-term delivery risks and costs.
Early Contractor Involvement (ECI)	ECI is about engaging the contractor during the early phases of a Project to assist in the evolution of the design and to promote a better understanding by the parties of a Project and its potential risks. Suitable for large or complex Projects where an uncertain scope may benefit from the early involvement of a specialist contractor. In complex design, allows the "buildability" of the design to be considered and construction efficiencies to be explored.	The tendering process for ECI is less intensive and less costly. It is aimed at selecting the best team to deliver a Project and does not require the tenderer to prepare detailed cost estimates for the actual construction stage of the works. Other advantages include: - shortened delivery time - a team approach - experience harnessed early - increased opportunity for innovation - quick decision making - better integration of construction methods - earlier procurement of materials - fewer variations during construction	Reliant on good design processes on the Waikato DHB side and involvement of leadership and clinical staff in the early stages for longer periods. Additional costs through 'optioneering' by contractor and designer ideas Contractor is appointed on capability rather than price. Requires open-book pricing and sufficient expertise on behalf of the public sector (or involvement of independent cost estimators) to prevent higher prices resulting from the non-competitive building up of the price. The public sector retains most of the risks. There is little incentive for the contractor to consider life cycle cost minimisation in the design phase. Whilst better understood by the market today, contractual complexity is significantly higher than more traditional form contracts.
Design, Build, Finance and Maintain (DBFM) (examples, Bendigo Hospital AU, UK PPP Projects)	Under a public–private partnership, the public sector typically engages a consortium of parties to design, build, finance and assume responsibility for facilities maintenance and asset replacement for the Project, over a defined period (typically around 25 years). Applicable for Projects where service performance can be measured and where the Project offers scope for private-sector led innovation and efficiencies.	Contract value is known before construction commences. Provides greater opportunity to develop innovative solutions. Transfer of whole-of-life cost risk encourages efficient design and quality construction and finishes.	Relies on well-defined functional and service specifications. While this is often considered an. advantage for very complex Projects with many and diverse stakeholders, it can be a challenge to achieve Potentially higher cost of variations and compensable events (during construction) due to the financing arrangements and risk pricing. Contractual complexity is higher than more traditional forms of contracts Contracts are often costly to put in place.

Project Procurement Option Evaluation

143. By having a broadly consistent set of defined procurement objectives, it is possible to establish what type of procurement and delivery model is most likely to deliver the best outcomes against the procurement objectives. Each key component of the Project will rank and prioritise the procurement objectives, tailored to their individual requirements to support procurement route selection on a case by case basis.

Procurement option evaluation criteria

144. The short list procurement models were subjected to a qualitative assessment workshop in 10 May 2018, facilitated by Waikato DHB procurement. Workshop participants included key stakeholders with lived experience, staff and other professionals across the sector.

Table 23 Criteria Weightings

Score		Description
H	High	Criterion reflects a high relative importance
H-M	High / Medium	Criterion reflects a medium to high relative importance
M	Medium	Criterion reflects a medium relative importance
M-L	Medium / Low	Criterion reflects a low to medium relative importance
L	Low	Criterion reflects a low relative importance

145. The table below summaries the procurement option evaluation criteria applied.

Table 24 Procurement option evaluation criteria

Evaluation criteria	Considerations	H/M/L	Weighting	Rationale
Project Objectives	What is the impact on the delivery of the project objectives & benefits?	H	17%	Vital to the success of the project from a strategic perspective
Price Certainty	What is the impact on price certainty (accuracy) over the life of the project?	H-M	14%	Having certainty around level of capital and operational funding required is essential due to funding constraints
Whole of Life Considerations	What is the impact on whole of life facility costs, in terms of capital build, maintenance and operations?	H-M	14%	Whole of life considerations are essential as the facility has a long estimated useful life and there is a reluctance to reduce upfront CAPEX costs in return for unsustainable lifecycle costs
Value for Money	What is the impact on optimising value for money through competition, innovation, and other means?	H-M	14%	Optimising value for money is an essential criteria in Government funded projects
Flexibility to Change	What flexibility is there for future change, variation and facility expansion across all phases of the project?	H-M	14%	Flexibility should be designed and built into the facility to accommodate different models of care and demand for services as they evolve over time There is limited risk that the demands will change during the project delivery phase, as the project is expected to be well scoped and tested prior to the procurement process irrespective of procurement method
Time to In-Service	What is the impact on achieving project procurement and operational commencement timelines (e.g. time to market, construction start and finish date)?	H	17%	The continued operation of MH&AS presents a number of significant issues and risks, including: inefficiencies, clinical and [patient] and staff safety risk. The interdependencies with the NZ Corrections building programme, potential requirement for interim solution. Small (3-6 months) timing trade-offs are considered palatable if it ensures a more fit-for-purpose solution in the long-term and therefore represents better value for money.
Risk Allocation	To what extent are the risks able to be allocated in an appropriate way relative to the scope and scale of the project?	M	10%	Waikato DHB is comfortable retaining certain risks to ensure a more fit-for-purpose solution.

Indicative overall assessment of procurement options

146. The potential procurement options were assessed against the evaluation criteria using the following scoring method:

Score	Description
4	If the procurement option offers a distinct advantage compared to other options
3	If the procurement option offers some advantages compared to other options
2	If the procurement option does not offer advantages or disadvantages compared to other options
1	If the procurement option offers some disadvantages compared to other options
0	If the procurement option is at a distinct disadvantage compared to other options

147. The scoring was multiple by the relative weighting to each evaluation criteria. The table below details the raw and weighted scores and rankings.

Table 25 Qualitative evaluation of shortlist procurement options

Evaluation criteria	Weighting	Traditional		Design & Construct		ECI		DBFM	
		score	weighted	score	weighted	score	weighted	score	weighted
Project Objectives	17%	2	0.34	3	0.51	4	0.68	3	0.51
Price Certainty	14%	1	0.14	2	0.28	3	0.42	2	0.28
Whole of Life Considerations	14%	1	0.14	2	0.28	2	0.28	3	0.42
Value for Money	14%	1	0.14	1	0.14	3	0.42	1	0.14
Flexibility to Change	14%	2	0.28	2	0.28	4	0.56	1	0.14
Time to In-service	17%	3	0.51	3	0.51	2	0.34	1	0.17
Risk Allocation	10%	2	0.2	2	0.2	3	0.3	1	0.1
Unweighted score		12		15		21		12	
Unweighted ranking		3		2		1		3	
Weighted score			1.75		2.2		3		1.76
Weighted ranking			4		2		1		3
Conclusion						Preferred Option			

Summary of qualitative procurement evaluation analysis

148. Based on the above qualitative evaluation, the Early Contractor Involvement (ECI) approach is the preferred procurement approach for the Project. ECI puts the team (Waikato DHB the client and consultants) together at the start of the planning process, even before the initial design, allowing us to achieve the best value for money out of the build. The early involvement of contractors adds significant value by taking advantage of the contractor's unique perspective and expertise.

149. ECI allows for a more collaborative, innovative and transparent process for delivering construction projects. Prior to start of construction, all members of the team have opportunity to share their objectives, issues and outcomes for the project. This process gives all parties ownership of the Project. Central to the ECI methodology is to start with the Project deliverables of time, cost and scope, and working in reverse to ensure these are met.

- ECI objective is to ensure the finished build will be fit for the purpose for which it was intended
- ECI allows Waikato DHB to benefit from their valuable industry-specific knowledge right from the outset
- ECI focuses on advising Waikato DHB of the most appropriate build methodology, quality materials and equipment to use, which ultimately saves time and money
- By focusing on the ECI procurement model, the team consistently add true value to the construction process and reduce the risk of added cost during the build
- ECI promotes a better understanding of the outcome-driven process, resulting in fewer changes and less risk to the build
- ECI maintain a watchful eye toward the budget, and provide advice as to cost, schedule and constructability.

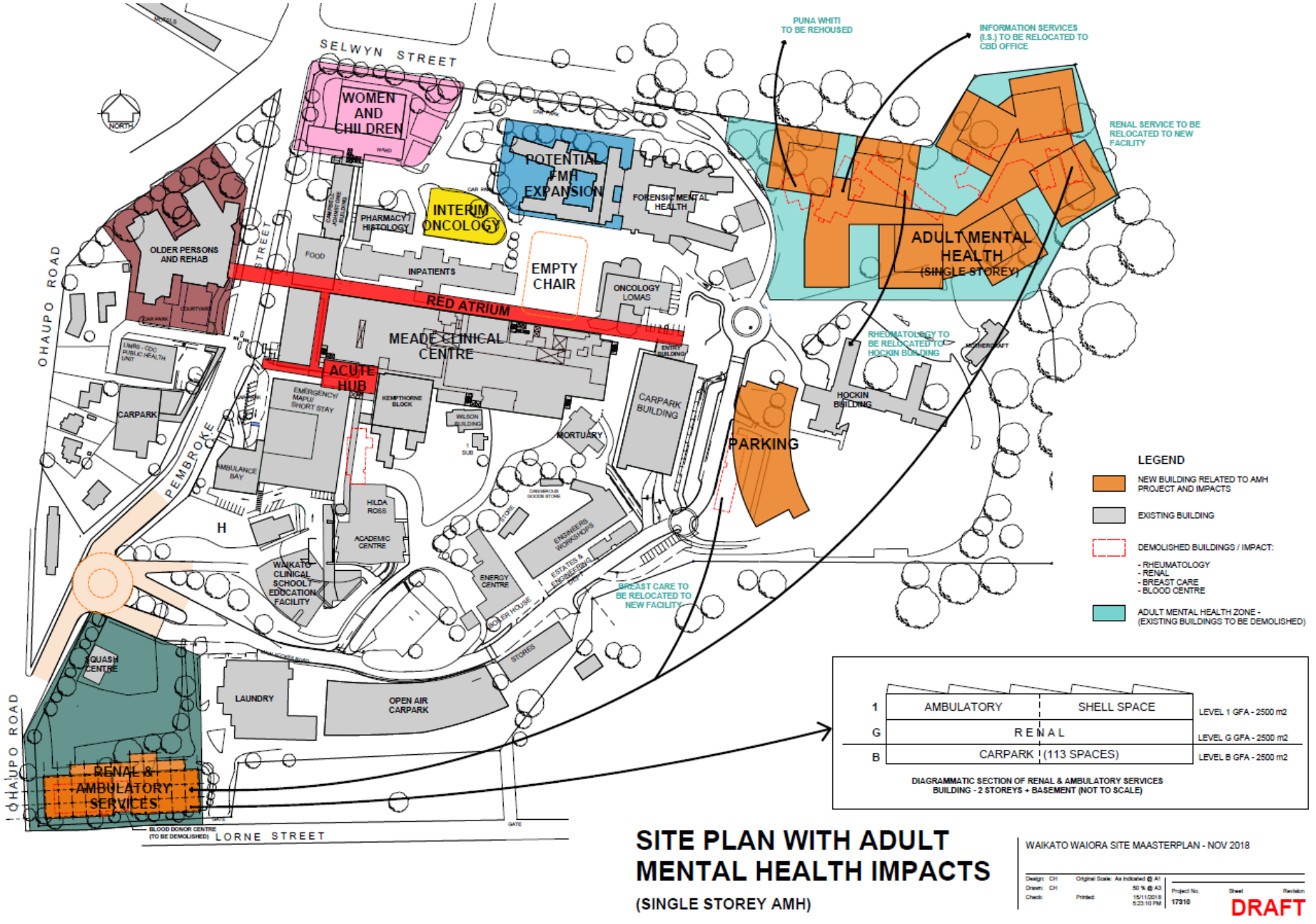
150. ECI includes cost analysis, identification of alternatives, considerations relative to labour and material availability, and effect on the project schedule. The role of ECI is to investigate and advise of viable alternatives that will avoid unnecessary expenses and provide improved value without straying from the original vision.

Implications for Waiora Waikato Hospital campus

151. The Strategic Waiora Waikato Hospital campus site plan is presented overleaf. The site plan shows the proposed location of the single level acute mental health development and its potential impacts requiring mitigation in relation to affected services. It is noted that a multi-storey development was considered and discounted at this stage due to the following:

- A strong clinical preference for single level courtyard design to optimise both operational and therapeutic benefits. A vertical design approach of two or more levels is considered to be pioneering untested configurations in the New Zealand sector and introducing unacceptable operational and service user risk.
- The ability to create multiple internal courtyard gardens in a multi-storey build within a constrained site (i.e. a foot print which would not require expansion into the existing Renal facility site) is more than marginal based on initial concept design for 72 room future capacity.
- The structural requirement to support a multi-storey development on the land with known geotechnical risks remains to be quantified but is likely to be high cost. This is to be quantified at developed concept design and will be tested through detailed geotechnical investigation.

Diagram 3 Waiora Waikato Hospital campus strategic site plan



152. Location of the new acute mental health services on Waikato Hospital site would likely displace current staff parking and the relocation and demolition of existing buildings (e.g., Ryburn building - Rheumatology, Information Services and Regional Renal services). Consideration of the impacts of the displacement will need to be considered within the campus strategic plan and cost/impacts quantified as part of this business case, preliminary costs are likely to be $[redacted] (excludes the Diabetes component $[redacted]).

153. In addition to buildings accommodating Information Services (relocation to CBD building) and Rheumatology for which immediate decant plans are available either off campus or within existing buildings.

Table 26 Waiora Waikato Hospital campus site implication costs

Site Works & Access Roading	[redacted]
Basement Car Park	
Ground	
First - part floor	
First - part floor	
Totals:	
Less Shell Cost	
Net New Build AMH Impact	
Diabetes component	
Overall estimate for both projects	

New Ambulatory Build for Renal and Breast Care with expansion capacity in shell.

154. It is proposed as part of the strategic build programme that Ambulatory service facility and multi-storey staff car park project is delivered (as indicated in the draft site plan) this development would likely displace current Blood Services and the demolition and relocation of Breast Care services into the new Ambulatory development.

155. The current Henry Rongomau Bennett Centre (HRBC) acute inpatient is expected to be demolished / refitted when new facilities are developed for the service. This site is expected to be used for the extension of the Puawai footprint to meet the NZ Corrections capacity programme requirements, and other specialty services identified within the Detailed Business Case (e.g., high and complex services).

The Financial Case

156. The purpose of this section is to set out the indicative financial implications and affordability of the short-listed options and possible funding sources and requirements.

- the current financial situation of the Waikato DHB
- an overview of resources available for implementing the proposal, including an assessment of the ability of the organisation to provide on-going support
- any capital and revenue constraints

157. The Economic Case recommended two options to be taken through to the Detailed Business Cases. For the purpose of the Financial Case, the numbers are based on the individual Projects.

Impact on the financial statements

158. The projected CAPEX cost of the investment is estimated $[redacted] on a non-discounted nominal basis. It includes costs of construction for Acute MH, Specialty services and Puawai specialist mental health and addictions facilities.[21] This figure does not assume any Midlands DHB's joint ventures.

Table 27 Indicative CAPEX costs*

			Wolstencroft 2017			RLB** Jan 2018		
Description	**# Bed**	**Project Cost**	**DHB onsite**	**Greenfield**	**70 beds w High and Complex**	**DHB onsite**	**Greenfield**	**70 beds w High and Complex**
Relocation of Adult MH	64 + 6 in shell	[redacted]	[redacted]			[redacted]		
Relocation of Adult MH plus H & CN	64+6+12	[redacted]			[redacted]			[redacted]
Special Needs:	34 beds	[redacted]	[redacted]			[redacted]		
Special Needs: less 12 beds H & CN	22 beds	[redacted]			[redacted]			[redacted]
Additional Forensic	20 beds	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Community (Rural) Based w Outreach	10 beds each	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Greenfield Site	70 + 34 special	[redacted]		[redacted]			[redacted]	
Additional Campus costs**			[redacted]		[redacted]	[redacted]		[redacted]
			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

* Preliminary estimate subject to detailed design and QS validation

**RLB - Rider Levett Bucknall cost management and quantity surveyors (independent assurance).

*** Waikato Hospital campus implication costs as a result of the development.

[21] Based on a Traditional or Conventional Procurement model.

**** Additional campus implications costs excluded, costing have not been ratified by RLB.

159. The Project requires a range of subacute and outreach developments across the Waikato region. A subacute and outreach services long list process will be undertaken as part of the Detailed Business Case. This process will be undertaken in partnership with Waikato DHB Strategy and Funding to support the determination of required secondary/primary and community closer to home developments involving a wide range of stakeholders. At this stage the implications for any Waikato DHB site is unknown. The estimated CaPEX for subacute services was $[redacted] was based on two 10 bed rural (North and South) based developments. However, as stakeholders moved through the long list evaluation process it became evident that further sectorial discussion into the required development is needed to ensure alignment to the Model of Care (specifically – closer to home).

160. This business case resulted in two options being taken through to the financial case for analysis. Naturally some degree of uncertainty remains over the final costs as the detailed design for the new and refurbished buildings has not been carried out. Therefore, the projected operational costs are based on the population based projected inpatient bed numbers.

161. The operational cost for inpatient are proportional to the number of beds provided in the facility/s, therefore when bed numbers change the overall inpatient costs will change. Total clinical operating costs for inpatient services to 2043 are presented below.

Table 28 Proposed Project inpatient bed costs and FTE to 2043

162. The continued tightening of the fiscal position and the funding forecast means that Waikato DHB has to accelerate the implementation pace of the model of care needed for sustainability.

163. Through a consistent focus on wellbeing and recovery, prudent cost management and good investment performance, MH&AS service aims to improve its financial position. The service has a strong platform from which we can provide best practice services to service users and whānau and meet forecasted financial goals. The provision of health and social outcomes for service user will lead to improved financial performance. A core component of ensuring financial sustainability is the principle of collective impact integration and proactive intervention.

164. MH&AS service wants to work more effectively with its partners across the health and social sector to help deliver its vision. MH&AS service is focused on building effective long term relationships to deliver benefits for its community. The best chance of success relies on designing and testing solutions alongside community providers, agencies, services and other government departments.

165. Successful integration and proactive early intervention requires the effective and efficient purchasing of services for the community. MH&AS service is committed to working with the Waikato DHB Strategy and Funding and other providers in the health and social sector to deliver value for money in terms of both cost and outcomes.

166. Both Waikato DHB and MH&AS service are committed to working closely with the Ministry of Health, NZ Treasury, and Ministry of Business, Innovation and Employment on matters relating to the design and delivery of the Project, including its performance.

Overall affordability

167. As the funding sources for the projected capital expenditure have not yet been fully considered, the critical next step is to discuss the availability and conditions attached to potential funding with identified funding partners. Where there are funding options available, the comparative short, medium and long risks and rewards of those options should be fully considered before making a determination on the sources of funding.

168. Affordability remains a significant issue for Waikato DHB given the current funding outlook. However, the alternative of no investment in these services would have an ongoing significant negative impact on access to services, clinical risk and service user safety and outcomes; as well as the broader Waikato community health system and population health. Given the nature of Mental Health and Addictions services and issues with current facilities, the driver for this investment is clinical need rather than financial return.

169. The Waikato DHB Interim Chief Executive has signalled his agreement to the preferred way forward outlined in this proposal. The commissioner's letter is attached. [to be confirmed]

Funding sources

170. It is expected that further analysis in consultation with the Ministry of Health and NZ Treasury representatives will be undertaken regarding the funding structure of free cash flow and Crown funded debt. At this indicative stage the funding structure is based on a 100% Crown funded debt.

171. The Waikato DHB has no alternative – continuing with the status quo until the DHB has provisioned sufficiently for the asset/s is not feasible due to a combination of [patient] safety issues, legislative SA(CAT) requirements, and NZ Corrections capacity programme. As outlined in the Strategic Case the Henry Rongomau Bennett Centre (HRBC) facilities do not meet contemporary standards of privacy, security and safety, and provide challenges to staff delivering care to acutely unwell service users. The current situation places Waikato DHB in a position of considerable clinical, financial and organisational risk.

The Management Case

172. This section provides an initial assessment of the capacity and capability of the Waikato DHB to implement the preferred Project option. The Waikato DHB will be responsible for the delivery of the Project through procurement, construction, facility maintenance, transition and operation.

173. The Waikato DHB has recent experience in procuring and managing large projects, major refurbishment of facilities and significant changes in the way services are provided. Over the past 10 – 15 years the Waikato DHB has experience in procuring and managing large projects (over $[redacted] of construction), including:

- Meade Clinical Centre building
- Older Persons and Rehabilitation (OPR) building
- Emergency and Acute Care facility
- Midland Regional Forensic upgrade
- Waikato Hospital Carpark and Main Entry building
- Waikato Hospital Delivery Suite refurbishment
- New Born Intensive Care Unit (NICU) extension

174. This Project propose a procurement process that is familiar to the organisation, and will ensure it has available the necessary capacity and capability to manage the Project's process and deliver the Project's benefits and value for money for New Zealand taxpayers.

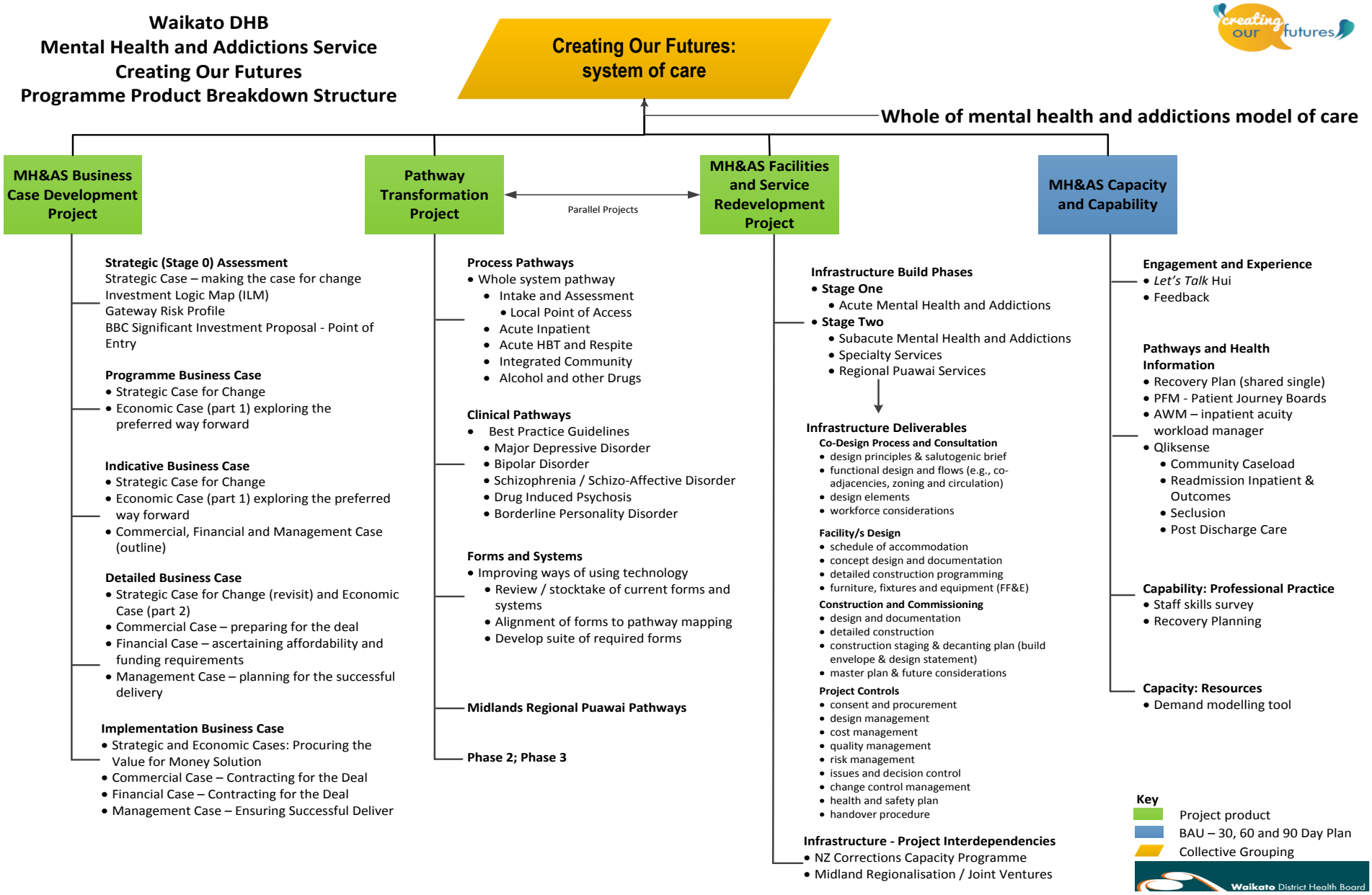
175. Independent Quality Assurance activities will be undertaken throughout the detailed business case and procurement processes. Detailed planning and the development of a Change Management Plan and Benefits Realisation Plan will be developed and presented in the detailed business case.

176. This section includes details on:

- An outline project plan
- Project management structure and governance
- Stakeholder and communication management
- Risk management planning
- Change management

177. Refer to the appendix for the Creating Our Futures Programme Brief and further detail on the Project Initiation Documents (PIDs) and the interdependencies. The Programme Product Breakdown is presented overleaf.

Waikato DHB
Mental Health and Addictions Service
Creating Our Futures
Programme Product Breakdown Structure



Outline Project Plan

178. The anticipated key milestones for the Project are outlined below.

Table 29 Project milestones

Proposed key milestones	Estimated Start
Indicative Business Case submitted to CIC Committee	December 2018
Detailed Business Case submitted to CIC Committee	June 2019
Subacute and Outreach Long List process	January 2019
Implementation Business Case submitted to CIC Committee	March 2020[22]
Stage 1 Acute MH Concept and Functional Design[23]	February 2019
Stage 1 Acute MH Preliminary Design	June 2019
Stage 1 Acute MH Develop	July 2019
Stage 1 Acute MH Design for Construction	October 2019
Expression of Interest (EOI) to Market	January 2020
Request for proposal (REP) to Market	February 2019
Financial Close and Contract Awarded	April 2020
Stage 1 Acute MH Construction and Relocation	June 2024
Stage 2 Specialty Services Concept and Functional Design[24]	December 2022
Stage 2 Specialty Services Construction Design for Construction	April 2023
Stage 2 Specialty Services Construction	July 2023
Stage 2 Specialty Services Relocation	July 2024
Stage 2 Puawai Concept and Design	February 2023
Stage 2 Puawai Construction Design	June 2024
Stage 2 Puawai Relocation	July 2025
Project PIR and Close	February 2026

179. It is important to note that the milestone dates are not aligned to the NZ Corrections Capacity programme's Waikeria Prison *Mental Health Hub* timeline, due to the Waikato Hospital build staging requirements. Therefore, an interim solution will be necessary to support the increased Puawai demand. Ongoing discussions with key stakeholders (including Ministry of Health, NZ Corrections and Hauora Waikato) to determine the most clinically appropriate interim solution to take forward will be undertaken throughout the Detailed Business Case process.

[22] Dates are dependent on BBC process, including MoH and NZ Treasury advice and CIC endorsement.

[23] Functional Design includes: pathways, interventions / rehabilitation, processes, environments, organisation, people, information and technology

[24] As per above footnote, and is inclusive of the Midlands regional pathways and any sub-Specialty joint ventures

Project Management strategy and Framework

Project methodology adopted

180. The Detailed Business Case will be managed according to PRINCE2 methodology; with the Project Governance Board responsible for governing the Project and the Senior Responsible Owner (SRO) who is ultimately accountable for the success of this Project.

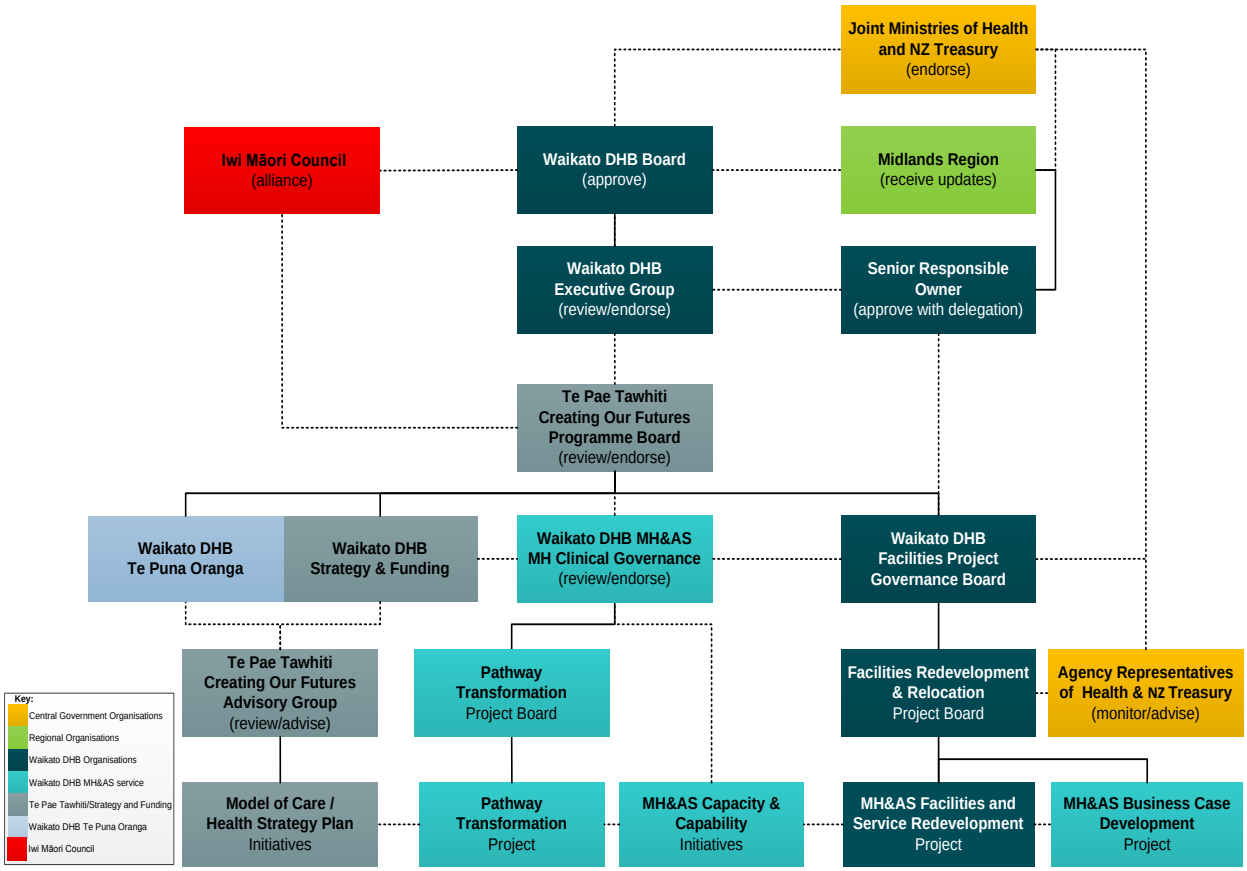
Project structure

181. The Project Governance Board will hold responsibility for Project assurance. Where Project Board members do not have the capacity or specialist knowledge to satisfy themselves that the project is being managed appropriately, independent experts will be consulted.

182. The Project Manager/s will be responsible for updating the project plan and identifying agenda items for discussion, reporting, and managing risk and issue requests for change.

183. The following organisation chart depicts the proposed structure for the governance of the Project, defining the levels of responsibility and approval, communication channels and roles and responsibilities of each party and management tier.

Diagram 4 Governance Framework[25]



184. The MH&AS Facilities and Redevelopment Project scope will be guided by the Creating Our Futures programme and the preparation of the required Project business case/s. The detailed preparation of the business case document/s will be developed using the NZ Treasury

[25] The Te Pae Tawhiti and Creating Our Futures governance structure is in draft until PB approval.

(National Infrastructure Unit) Better Business Case Model, and the New Zealand Government's accepted good practice standard. The Project business case is a living document and will be revised at the end of each tranche, updated to reflect material changes, and used as the basis for seeking confirmation to continue to invest in the change.

185. The Waikato DHB Board will govern the Project, providing strategic direction to the Programme and mix of Projects. The Board is responsible to the Minister of Health for the overall performance and management of the DHB. The Board's core responsibility is to set the strategic direction and policy that is consistent with Government objectives, improves health outcomes and ensures sustainable service provision. The Board also ensures compliance with legal and accountability requirements and maintains relationships with the Minister of Health and the Waikato Community.

Risk management

186. The SRO is responsible for ensuring risks are identified and managed. As risks occur, they will be raised through the Project Governance Group and recorded in the project and programme risk register. If satisfactory resolution or mitigation cannot be found, exception reporting will then be raised to the Project Board and escalated to the Executive Leadership team if required.

187. The project will categorise risks and issues according to the Waikato DHB *Waikato Way* for managing projects and risk management policy. Refer to the appendix for the initial risk and issue registers for the Programme. The MH Clinical Governance Forum, chaired by the Director of Clinical Services, provides management oversight of the risk system. Reports on the status and management of MH&AS service are provided to the Waikato DHB Board.

188. The Creating Our Futures Programme Board reports the programme risk profile monthly to the MH Clinical Governance Forum. Our latest risk profile five critical areas of risk to successful implementation of the programme include:

Table 30 Programme risks

Key areas of risk	Management Actions under way or considered
Risk to programme resourcing – getting the right people at the right time in a challenging Waikato labour market.	Access to appropriate skilled and experienced resources is a constant focus. Programme resourcing is also discussed with other DHBs to identify approaches to resources
Complexity of the underlying business requirements unique to MH&AS could drive up implement timings and costs	MH&AS is engaging with other services to understand and mitigate the likelihood and impact of this occurring A constant focus one ensuring we are developing solutions for the future rather than duplicating current functionality and process is also in place (Change Agent - process mapping).
Future capabilities of MH&AS staff – MH&AS workforce will need to have different capabilities after the transformation	Implementation of the Values and Culture initiatives, Cultural Responsive framework to enable the required essential, discipline and specialist competency and cultural capabilities to put in place is underway. In addition MH&AS is seeking funding to create a Workforce Development role to ensure the smooth alignment and management of resources.
Maintaining business performance during the transformation could at times	The implementation of the operational community and inpatient dashboards to enable monitoring is underway.

be challenging	The implementation of a series of quality initiatives related to improved [patient] is underway (e.g. safer discharge, safewards)
Risk of delays related to clinical risk, BBC processes, affordability and market capacity	A constant focus on ensuring we are monitoring risk and developing mitigating solutions. Consideration is needed for lead time for certain materials and supplies (e.g., any offshore fabrication, precast concrete and structural steelwork). Any construction project and procurement methodology will need to take account of these market conditions.

189. The Creating Our Futures programme acknowledges that this is a complex project that requires tight management over a long period of time. There are significant timeline interdependencies with the NZ Corrections Increased Capacity Programme, and the mix of facility redevelopment carries significant delivery risk that requires specific monitoring.

Project Monitoring and Controls

190. This project will be managed from Waikato DHB MH&AS and Facilities and Business Office (Strategic Building Programme) and Change Team. The Facilities and Business Office and Change Team provide skills, management methodology, processes and the resource foundation, oversight and reporting and follow up to ensure the project delivers on the information required for the detailed business case.

191. Facilities and Business Office and Change Team manages:

- implementation and support for the project management methodology
- leadership and resources to improve and support project management
- training, mentoring and development opportunities and support to projects
- tools and technology to support project management
- measurement and reporting of project performance
- quality management

Document Management

192. The project Waikato Way file format is closely modelled on PRINCE2 sample documents available from the PRINCE2 website. Hard copies of files and other material will be maintained in the MH&AS service shared folder structure. Version control will be applied to all key documentation.

Change Control

193. The purpose of Change Control is to ensure that only clinical safety, cost justified or mandatory changes are implemented. Change requests will be escalated to the MH&AS Facilities and Service Redevelopment Project Board by way of a Project Exception Report complied and submitted by Project Manager.

194. Changes to project deliverables once authorised by the MH&AS Facilities and Service Redevelopment Project Board will be identified in the revised product descriptions.

195. The Project Manager will be responsible for communicating changes to stakeholders.

196. Version control will be applied to all key project documents.

197. Programme filing will be held electronically where available and as paper copies. Project files will be electronically stored on the Mental Health and Addictions service Creating Our Futures shared drive.

Reporting

198. On a monthly basis, the Creating Our Futures Programme Board and MH&AS Facilities and Service Redevelopment Project Board will receive Highlight Reports using the standard PRINCE2 report template:

- progress to date reports (e.g., standard highlight reports, including internal and external dependencies and impacts)
- milestone analysis showing achieved/missed, with a written explanation and contingency plan for any missed milestones
- critical risks and current impact and probability, plus mitigation actions
- identification of issues that may cause the project to be late or not delivered (e.g., external dependency which is slipping, resource issue
- details of costs incurred during the period

199. The Mental Health Clinical Governance Forum will receive Highlight Reports.

Exception Reports

200. Exception Reports will be generated if the Project Manager forecasts that the tolerance agreed for any stage, or the project, will exceed those agreed with the Creating Our Futures Programme Board.

Project Closure

201. An End Project Report will be provided at the completion of the Project or stage.

Project and assurance arrangements

202. The COF programme investment proposal has been assessed as medium risk using the Gateway Risk Profile Assessment tool. On the basis of this risk assessment, the basis for on-going engagement as part of the business case has been agreed. Key aspects of this approach are to engage with Ministry of Health and NZ Treasury at all key phases of the programme. It would be timely for MH&AS to invite representation from these agencies onto the programme board as members.

203. Throughout the delivery phase of the programme, deliverables and outcomes are validated:

- through the Māori Caucus group to ensure and assessment equity for Māori.
- through the Creating Our Futures Advisory Group to ensure delivery is aligned to the model of care and the values and needs of our community
- through the programme benefits, to ensure benefits are realised and programme objectives are met
- through the budget (at this stage this is being set) to ensure actual spend is within budget
- through MH&AS and Creating Our Futures vision and values, to ensure deliverables and outcomes support the desired culture

204. A Treaty of Waitangi Framework will used to assess equity within and throughout the Programme. Waikato DHB Te Puna Oranga has established a Māori Cuscus group who will have responsibility for ensuring this Māori equity lens (this group met for the first time 28 September 2018 to review and provide the indicative business case). The Treaty of Waitangi Framework is presented below.

Partnership (in planning and governance)	With Tangata Whaiora With Whānau With Hapu With Iwi Māori Council With Maata Waka With Te Puna Oranga With Te Roopu Tautoko
Participation (in service delivery and treatment decisions)	Of Tangata Whaiora Of Whānau Of Te Puna Oranga
Protection (of Maori patients, whānau, iwi, and staff)	Te Taha Wairua Whānau involvement and engagement Taiao (environment) such as zero seclusion and healing / healthy spaces Access to and exit from services Workforce, including kaitakawaenga, Māori clinicians, and non-Māori staff being supported to be culturally safe Commissioning / contracting for equity Outcomes, including attention to poverty and homelessness, wellbeing, and system-wide stakeholders

205. Continued co-design and engagement with the people with lived experience, staff and the sector will continue through a series of workshops across the Waikato to discuss *"Let's Talk" what matters hui* to explore the co-design of the Project products.

206. Lessons Learned are taken as work progresses and after completion of the Project and initiatives. Key learnings are recorded and are available to the programme team. In addition, lessons learned are being picked up from other DHBs who have undergone or are undergoing a similar transformational process.

Effective governance arrangements are in place

207. Throughout the business case development and Project, the Senior Responsible Owner *owns* the programme.

208. The Executives for this programme will ultimately be responsible for the programme. The Executive for this Project will be the Project Senior Supplier, who is ultimately responsible for the Project, supported by the Project Senior Users and by the Ministry of Health and NZ Treasury Representatives. The Project Senior Users have responsibility for ensuring the Project delivers on safe, effective and efficient environments. While the Project Executive is the key decision-makers, a consultative and co-design approach will be maintained where possible. The Project Executive delegates the responsibility and authority for some of the assurance responsibilities to the MH&AS service.

Table 31 Facilities Build Project Governance Structure

Role	Position Title	Name
Senior Responsible Owner	Waikato DHB Interim CEO	Derek Wright
Project Executive	Waikato DHB ED Business and Facilities	Christopher Cardwell
Project Executive -Senior Supplier	Waikato DHB Interim ED MH&AS	Vicki Aitken
Project Executive -Senior User	Waikato DHB Director of Clinical Services MH&AS	Dr Rees Tapsell
Independent Advisor	TBD	TBD
Build Program Director	TBD	Proxy Christopher Cardwell
Architects	Chow Hill Architects LTD	Daryl Carey and Anner Chong
Quantity Surveyor	Ryder Levett Bucknall	Bob Buskin and Allan Green
Consultancy Services	Aurecon New Zealand LTD	Neill Raynor and Allen Spring
Indicative Vendor Construction	TBD	TBD
Health and Safety	Waikato DHB P&I Portfolio Manager	Mark Whatnall
Finance – Capital	Waikato DHB Finance Manager	Rory O'Donnell
Finance – Opex	Waikato DHB Finance Manager	Greg Trowen
Property and Infrastructure	Waikato DHB Asset Management	Michael Fitzpatrick
Property and Infrastructure	Waikato DHB maintenance and Facilities Engineer	Stefan van Rooij
Procurement	Waikato DHB Senior Procurement Specialist –	Scott Alder
Probity	Waikato DHB Senior Legal Counsel	Diana Aqulina
Project Manager – Build	Waikato DHB Change Agent	Julie Law

209. The Project Executive will chair the Project Governance Board. The Project Governance Board will approve the Project Plan and authorise any major deviation from agreed stage plan.

210. The monitoring agencies representatives representing the interests of Ministry of Health, NZ Treasury and external consultants, are responsible for the integrity of the Project.

211. To date, governance arrangements have ensured that an appropriate level of oversight and reporting occurs to the Waikato DHB Board, Executive Group and senior programme levels.

212. Measures in place to support effective oversight, monitoring and management of Ministerial interests include:

    a) Quarterly meetings between the project team and the MH Clinical Governance Forum and Te Pae Tawhiti/Creating Our Futures Programme Board; and Iwi Māori Council.

    b) Ministry of Health and NZ Treasury reviews at key points in the programme with the purpose of confirming the need for the programme and the likelihood of it achieving the desired outcomes.

    The measures in place will become more robust once the full scope and size of the transformation becomes known.

213. Engagement with MH&AS programme and mix of Projects is and continues to be transparent. The Project provides effective signalling of where the complexities exist, with the consistent description of progress and key risks across multiple levels from Board to Senior Responsible Owner to Strategy and Funding.

214. Independent Quality Assurance (IQA) activities will be undertaken throughout the Detailed Business Case and Procurement processes.

215. There are cost pressures and issues that are apparent within the programme but these are appropriately flagged for management and governance oversight. Creating Our Futures overall programme rating is AMBER to reflect the issues being managed (slippage in time tolerance).

Service User and Whānau Rights

216. To date, this Project has not raise any issues or inconsistencies with the New Zealand Health and Disability Commissioner Act 1994 and 2003, Code of Health and Disability Services Consumers Right Act 1994, Bill of Rights Act 1990, Human Rights Act 1993 or New Zealand. If progressed well, the Project will result in substantial improvements towards helping our Waikato community to be well.

Next Steps

217. The Waikato DHB MH&AS Facilities Redevelopment and Relocation Indicative Business Case seeks approval for the organisation to commence development of the Detailed Business Case on the preferred way forward and the other short-listed options.

218. It is recommended that:

i. the Waikato DHB continues to fund the programme related work.

ii. the Indicative Business Case is presented for noting by Ministry of Health and NZ Treasury to Investment Ministers, and that this Indicative Business Case is accepted and endorsed to proceed with developing the Detailed Business Case.

Annex

Annex 1: Commissioner's Letter

This template is the basis for developing the letter for a Government department and may be customised and individualised to meet the requirements or to address proposal-specific issues.

[date]

[To whom it may concern]

…….. Indicative Business Case

This Implementation Business Case is a significant deliverable of a strategic Project by …….. to investigate value for money options to meet its future ……. requirements.

I confirm that:

i I have been actively involved in the development of the attached investment proposal through its various stages

ii I accept the strategic aims and investment objectives of the investment proposal, its functional content, size and services

iii the financial costs of the proposal can be contained within the agreed and available budget

iv the organisation has the ability to pay for the services at the specified price level, and

v suitable contingency arrangements are in place to work with suppliers to address any current or unforeseen affordability pressures.

This letter fulfils the requirements of the current Better Business Cases guidance. Should either these requirements or the key assumptions on which this case is based change significantly, revalidation of this letter of support should be sought.

Yours sincerely

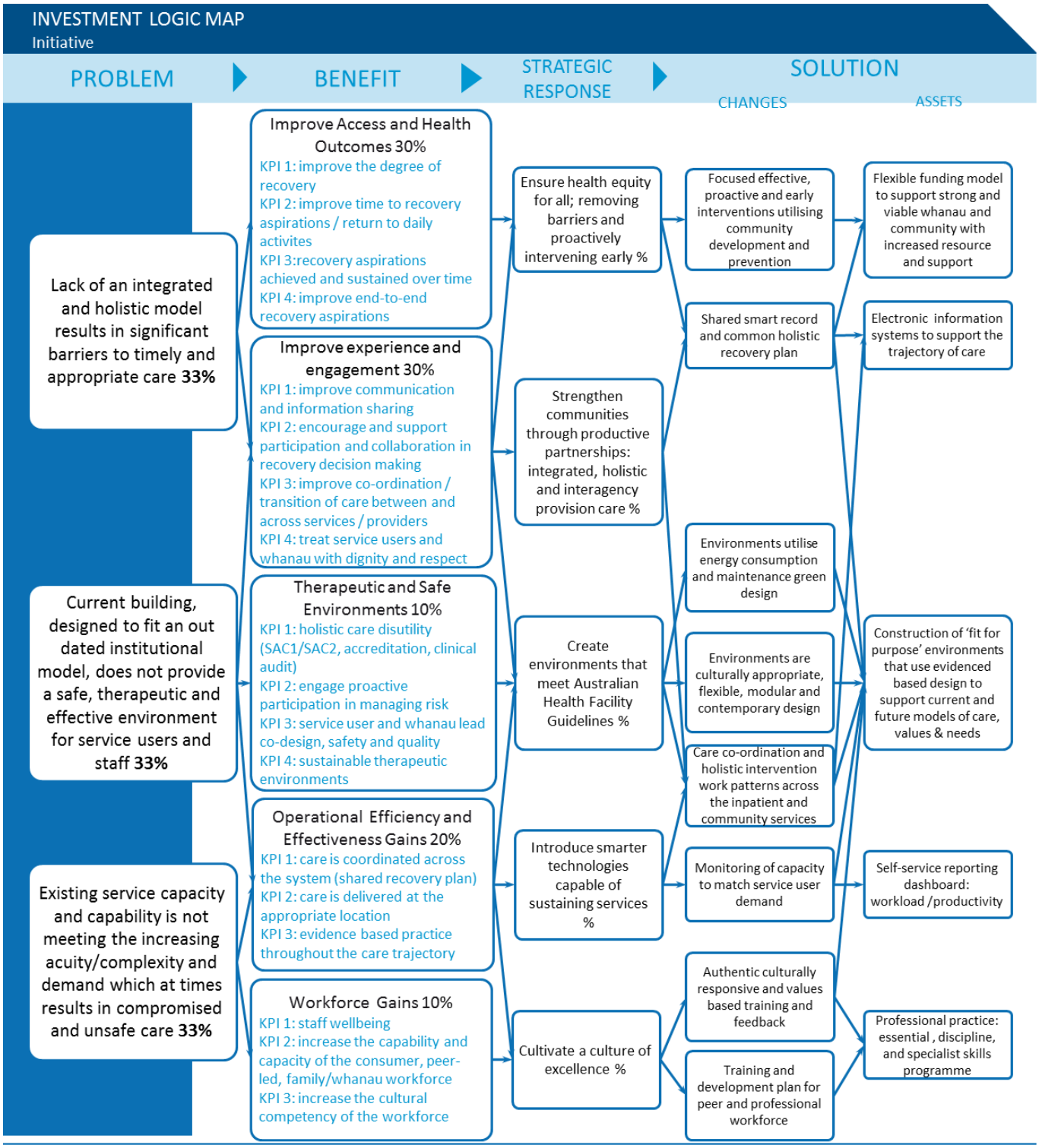
……..

Annex 2: Investment Logic Map

Waikato District Health Board

People at Heart *Te iwi Ngakaunui*: strengthened communities, through trust and partnership

Mental Health and Addictions service



Investor:	Derek Wright, MH&AS Executive Director	Initial Workshop:	18/01/2017
Facilitator:	Andrew McCurdie	Version no:	v 0.7
Accredited:	Yes	Last modified by:	Dr Virginia Endres
		Template version:	-

Annex 3: Summary Acute Mental Health Inpatient Long List Options

Each option was assessed against the investment benefits defined in the Strategic Case. If any option fails against an investment objective, it does not proceed to further evaluation as a long list option. Most of the options partially or moderately met most of the benefits, and no option fully met the all of the benefits to proceed to further evaluation. Workshop held on 26 June and 03 July 2017 (the AoD and Puawai assessment workshop was held on the 12 July 2017).

The following table reflects the subject scoring against each of the benefits.

Indicator	Explanation
0	No benefit
1	Minimum benefit
2	Moderate benefit
3	Significant benefit

Description of Option:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Description of Option:	Waiora Main Campus Build (flexible and modular)	Waiora Main Campus Build (stepdown)	Waiora HRBC Refurbishment and Out Reach Build/s	New Green Fields Build/s	NGO / Private Development	Tokanui Rebuild	Retreat Centre	JV with Regional Midlands DHB Waiora Build	JV with Regional Midlands DHB Green Fields	JV with Regional Midlands DHBs Sub-specialty	HRBC Wairoa Refurbishment
Investment Benefits:											
Improved access and health outcomes	Moderate	Minimum	Minimum	Significant	Significant	No	Minimum	Minimum	No	Moderate	No
Improved experience and engagement	Moderate	No	Minimum	Significant	Significant	No	Moderate	Minimum	No	Significant	No
Therapeutic and safe environment	Minimum	Minimum	No	Significant	Significant	No	Moderate	Significant	Significant	Moderate	No
Operational efficiency and effectiveness	Moderate	Moderate	Minimum	Minimum	Minimum	No	Minimum	Minimum	Minimum	Moderate	No
Workforce gains	Significant	Minimum	Minimum	Minimum	Minimum	No	Moderate	Moderate	No	Moderate	No
Overall Assessment (Model of Care Principles)											
Scoring	YES	NO	YES*	YES	YES**	NO	NO***	NO	NO	NO****	NO
Ranking	1	5	1	3	4	7	6	10	8	6	10

Summary information from series of options development workshops held in 2017

Option Summary	**Acute MH Service**	**Description**	**Key Consideration**
Waiora Main Campus Build (flexible and modular)	Full holistic provision to meet medium/long term demand with short term flexibility (future proofed inpatient bed numbers), within the least restrictive environment.	• New 'fit for purpose' build on Waikato Hospital main campus site: Either Ryburn site OR Other identified campus site • Repurposing of existing acute HRBC facility to meet increased prison muster demand. • Phased building and decant. • Phased and flexible decreased / increased inpatient bed numbers – funded and unfunded beds.	• Significant capital infrastructure costs. • Space constraints limit outdoor/indoor areas - possible need for additional land for outdoor and de-escalation space (no designated seclusion rooms). • Option assumes current staff car parking arrangements can be relocated to release current land for development. • Possible need for underground / air bridge solution required to link with medical services. • Possible phased new construction, refurbishment and decant.
Waiora Main Campus Build (stepdown)	Transitional adult inpatient service provision, within the least restrictive environment.	• Refurbishment and repurposing of existing acute HRBC facility serving adults only: - Intensive Care ward - High and Complex care needs ward - Prison muster ward	• Significant capital infrastructure costs. • Some physical and space constraints within HRBC building. • Potential for an inability to transition chronic long stay patient/s in the high and complex ward.

		• New 'fit for purpose' transitional build on Waikato Hospital Campus site. Either serving adults only OR full service provision to meet demand, need and values.	• Possible need for underground / air bridge solution required to link with medical services. • Possible phased new construction, refurbishment and decant.
Waiora HRBC Refurbishment and Out Reach Build/s	Full holistic acute inpatient service provision – main local and outreach areas.	• Current HRBC adult facility refurbishment and repurposing of existing acute HRBC facility: - 2x inpatient wards serving adults only Either 2x inpatient wards – secure and unsecure OR 1x MH and AOD ward and 1x MH ward **AND** - 1x prison muster ward. • Construction of new 'fit for purpose' facilities: such as Thames DHB site and/or Te Awamutu DHB site and/or Tokoroa DHB site and/or Te Kuiti DHB site and/or Taumarunui DHB site	• Significant infrastructure and ongoing costs. • Some physical and space constraints within HRBC building – potential for only serving adults. • Costs to decant during refurbishment. • Possible need for purchase of new land. • Likely increased workforce and inpatient bed numbers. • Likely to combine inpatient and community services more seamlessly.
New Green Fields Build/s	Full holistic acute inpatient service provision – new land purchase.	• New 'fit for purpose' build (site to be determined). • Repurposing and refurbishment of existing HRBC ward 36, 35 and 34 to accommodate prison muster.	• Significant capital investment. • Possible delays in identifying and procuring new site. • Possible lack of proximity to community for out-reach areas. • Possible community stigma. • Possible unknown / existing issues within the community confounding MH&A problems. • Potential lack of proximity to medical and emergency care.
NGO / Private Development	Full holistic acute inpatient service provision – undetermined location and provider/s.	• New 'fit for purpose' build (site to be determined). • Repurposing and refurbishment of existing HRBC ward 36, 35 and 34 to accommodate prison muster.	• Significant capital investment. • Unknown preferred supplier / provider/s. • Possible delays in identifying, procuring new site and/or provider/s. • Possible issues with quality of workforce and training. • Potential lack of proximity to medical and emergency care. • Possible issues with compliance with the Mental Health Act. • Possible community stigma. • Possible unknown / existing issues within the community confounding MH&A problems.
Tokanui Rebuild	Full holistic acute inpatient service provision – Tokanui land.	• 'Fit for purpose' new build on Tokanui land to accommodation MH&AS inpatient service provision. • Repurposing and refurbishment of existing HRBC ward 36, 35 and 34 to accommodate prison muster. OR • 'Fit for purpose' new build on Tokanui land to accommodate MH&A and prison muster. • Decant and demolition of HRBC.	• Significant capital investment. • Possible oversized build footprint. • Possible time delays in demolishing existing Tokanui infrastructure and rebuild. • Possible lack of proximity to community for out-reach areas. • Disconnect between forensic and adult holistic care for prison muster cohort. • Possible out-dated institutional model. • Possible lack of workforce attraction to location. • Potential lack of proximity to medical and emergency care.
Retreat Centre	Respite and therapeutic retreat centres delivering specialised programmes - reduction and elimination of acute hospital based inpatient services by 20XX.	• Phased repurposing and refurbishment of existing HRBC ward 36, 34 and 35 - prison muster and centre for education and excellence. • Build and rebuild of community facilities (therapeutic retreat centres with specialised programmes). • Health and social sector collaboration and flexible funding models (namely, funded access to retreat centres and programmes).	• Significant investment into longitudinal community / primary health care. • Possible issues on decision programme and funding disputes. • Possible challenges with provision of care across the continuum. • Significant social housing investment. • Investment into research and education required. • Possible issues with quality of workforce and training. • Potential lack of proximity to medical and emergency care. • Disconnect between forensic and adult holistic care for prison muster cohort. • Possible issues with compliance with the Mental Health Act.
JV with Regional Midlands DHB Waiora Build	Full holistic service provision to meet medium/long term demand with short term flexibility across the Midland region – on Waikato DHB site.	• Development of a new inpatient facility to meet Waikato DHB MH&A service needs in cooperation with Midlands regional DHBs • Construction of new 'fit for purpose' environments that use evidenced based design to support current and future models of care, values & needs. • Flexible and modular design to accommodate patient needs, values and level of acuity (single level footprint).	• A possible issue on decision on facilities location. • Possible need for purchase of new land. • Possible issues with differing service delivery models, systems and processes across Midlands. • Possible need for a Midlands DHB model of care. • Possible need for future builds in outreach areas to service DHB district population. Possible out-dated institutional model. • JV would combine expertise in a centre of specialty and excellence. • Requirement for patients transfers of significant distances to/from out-reach DHBs presents patient / staff risk and costs. • Lack of proximity to community and community based teams. • Interface risks around competing DHB needs.

JV with Regional Midlands DHB Green Fields	Full holistic service provision to meet medium/long term demand with short term flexibility across the Midland region – on new DHB site.	• Development of a new inpatient facility to meet Midlands's regional DHBs service needs. Either located on Waikato Hospital campus. OR located on Lakes Hospital campus. OR located on Bay of Plenty Hospital campus. OR located on Tairawhiti Hospital campus. OR located on Taranaki Hospital campus • Construction of new 'fit for purpose' environments that use evidenced based design to support current and future models of care, values and needs. • New site.	• Significant capital investment. • A possible issue on decision on facilities location. • Possible issues with differing service delivery models, systems and processes across Midlands. • Possible unintended disconnect between inpatient and community. • Possible future builds in outreach areas to service DHB district population. Possible out-dated institutional model. • JV would combine expertise in a centre of specialty and excellence. • Requirement for [patient] transfers of significant distances to/from out-reach DHBs presents patient / staff risk and costs. • Lack of proximity to community and community based teams. • Interface risks around competing DHB needs.
JV with Regional Midlands DHBs Sub-specialty	Holistic inpatient service provision to meet medium/long term demand, with Midlands DHB region specialised facilities.	• Development of a new inpatient facility build to meet Waikato DHB inpatient service needs. • Development of new Midlands DHB region Multiple and Variable specialised facility/s: such as: Alcohol and Other Drugs cognitive impairment high and complex needs youth (child and adolescent) eating disorders perinatal	• A possible issue on decision on specialised service and facility location/s. • Possible issues with differing service delivery models, systems and processes across Midlands. • Possible unintended disconnect between inpatient and community. • Partial JV would combine expertise. • Requirement for [patient] transfers of significant distances to/from out-reach DHBs presents patient / staff risk and costs. • Lack of proximity to community and community based teams. • Interface risks around competing DHB needs.
HRBC Waiora Refurbishment	3 – 5 years capacity for MH&AS, serving adult patients only.	• Full refurbishment of existing acute HRBC facilities wards 34, 35, and 36. • Relocation of Electroconvulsive Therapy (ECT) service (and/or implementation of advanced community based stimulation therapies). • The HRBC refurbishment option would require the decanting of current services initially and the sourcing of suitable accommodation for patients during the period of construction (24 months). • Subsequent development of facilities for increased prison muster and SACAT demand would be required. • Current acute patient journey typically follows a step-down acuity model (locked wards).	• Some physical constraints within building. • Unresolved practice of locked/secure wards; and seclusion. • Space constraints limits expected medium/long term demand (possible increased footprint through the addition of a new HRBC level). • Refurbishment unlikely to effectively address critical risk factors. • Costs to decant during construction. • Unlikely to be able to accommodate need for increased service demand over time, prison muster and SACAT. • Potential solution for specific cohorts required, e.g., adolescent and youth; 65+ year old with MH disorders, ID/IDDD.
Overall Assessment:	Continued for VFM	Possible	Preferred / Discount
Short-listed Acute MH options:			
Status Quo option	Waiora HRBC current state		
Do Minimum Option	Refurbishment of Waiora Campus HRBC		
Possible	Waiora Campus New Build	Development of a holistic, flexible and modular build on main Waikato Hospital campus.	
Possible	New Build/s Green Fields	New fit for purpose build/s on Green Field's site (site to be determined).	
Possible	Waiora Campus and Out Reach New Build/s	Development of a holistic, flexible and modular build on Waikato Hospital campus; and, purpose built community facilities in main and rural outreach areas (rural north and rural south locations).	

* investigate the outreach option only
** investigate procurement within the commercial case
*** investigate the therapeutic programmes
**** investigate joint venture possibilities for specialty services

Annex 4: Summary Alcohol and other Drug and Puawai Inpatient Long List Options

Each option was assessed against the investment benefits defined in the Strategic Case. If any option fails against an investment objective, it does not proceed to further evaluation as a long list option. Most of the options partially or moderately met most of the benefits, and no option fully met the all of the benefits to proceed to further evaluation. Workshop held on 12 July 2017.

The following table reflects the subject scoring against each of the benefits.

Indicator	*Explanation*
0	*No benefit*
1	*Minimum benefit*
2	*Moderate benefit*
3	*Significant benefit*

Description of Option:	**1**	**2**	**3**	**4**	**5**	**6**
	Alcohol and other Drug			**Midland Regional Puawai Service**		
Description of Option:	Full refurbishment of an existing acute adult HRBC Ward	New AoD facility on Waikato Campus.	New AoD facility/s community	Puawai extension	Refurbishment of Acute Adult HRBC Ward	Waikato Hospital Campus new Build
Investment Benefits:						
Improved access and health outcomes	Moderate	Moderate	Significant	No	Moderate	No
Improved experience and engagement	No	Significant	Significant	No	Moderate	No
Therapeutic and safe environment	Moderate	Significant	Minimum	No	Moderate	No
Operational efficiency and effectiveness	Moderate	Significant	No	Minimum	Moderate	No
Workforce gains	Moderate	Significant	Minimum	Minimum	Moderate	No
Overall Assessment (Model of Care Principles)						
Scoring	YES*	YES*	YES*	NO	YES**	NO
Ranking	2	1	2	2	1	3

Summary information from series of options development workshops held in May 2017

Option Summary	**Alcohol and other Drug**	**Description**	**Key Consideration**
Full refurbishment of an existing acute adult HRBC Ward	Re-purposing of an acute adult HRBC Ward/s for AoD service delivery. - SACAT legislative services - Detoxification services - Drug / substance related psychosis and other adult AoD services - specialised youth drug and alcohol services (co-	Full refurbishment of an existing acute adult HRBC Ward (xx beds) for Alcohol and other Drug services. Full refurbishment of existing Wards where space is currently configured on an out-	• Possible potential for forensic service to be located on adult HRBC footprint. Current adult HRBC footprint not fit-for-purpose. • Option assumes decant and relocation of existing service/s. • Assumes the relocation of 2x detoxification beds located within forensics. • Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution).

	located / separate)	dated institutional. OR Full demolition and rebuild on existing HRBC land.	• Likely increased resources and ongoing costs required for increased bed numbers. • Clinical consideration for co-existing disorders (AoD and MH) service provision; and, the co-location (or not) of specific AoD services. • Possible opportunity for joint Midland venture. • Assumes future demand for services is known.
New AoD facility on Waikato Campus.	New purpose built development on existing Waikato Hospital Campus	New full AoD service provision build on Waikato Hospital Campus. EITHER o Development of new co-located AoD with acute inpatient build. OR o Development of new standalone AoD build.	• Significant capital infrastructure costs. • Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution). • Assumes the relocation of 2x detoxification beds located within forensics. • Option assumes availability of land/space (potential impacts on car parking space). • Option assumes decant and relocation of existing service/s. • Likely increased resources and ongoing costs required for increased bed numbers. • Assumes future demand for services is known. • Possible opportunity for joint Midland venture.
New AoD facility/s community	New purpose built development on community site/s to accommodate AoD inpatient service provision in the community	New full AoD service provision build/s on Waikato community site/s. EITHER o Single main (Hamilton) community build OR o Main (Hamilton) and out-reach community (Te Kuiti and Thames) builds.	• Significant capital infrastructure and ongoing costs (e.g., catering, laundry). • Assumes the relocation of 2x detoxification beds located within forensics. • Possible need for purchase of new land (potential issues for land locked areas). • Potential lack of proximity to medical and emergency care. • Possible disconnect between mental health and emergency/medical care. • Assumes future demand for services is known. • Possible opportunity for joint Midland venture.
Puawai extension	New build expansion of Puawai footprint for future increased prison muster demand.	New development on existing HRBC Forensic site.	• Potential opportunity to reconfigure current forensic ward model. • Possible relocation of current 2x Detoxification beds and 3/4x High and Complex virtual beds within Forensics. • Space constraints limit build location options. • Possible reduction in land for outdoor and de-escalation space. • Minimal interdependencies with MH&AS build programme. • Likely increased resources and ongoing costs required for increased bed numbers. • Assumes future demand for services is known (conversion of prison muster numbers and specials).

Refurbishment of Acute Adult HRBC Ward	Full refurbishment of an existing acute adult HRBC Ward for future increased prison muster demand.	Re-purposing of an acute adult HRBC Ward/s for forensic service delivery.
		
		This option would include the full refurbishment of existing Ward/s where space is currently configured on an out-dated institutional.
			• Potential opportunity to reconfigure current forensic ward model.
			• Possible relocation of current 2x Detoxification beds and 3/4x High and Complex virtual beds within Forensics.
			• Current HRBC footprint not fit-for-purpose.
			• Considerations for the types of services in the remaining HRBC space
			  - possible relocation of virtual High and Complex beds within Puawai to a fit-for-purpose environment
			  - possible relocation of ECT services to medical services
			  - possible relocation of detoxification services located in Puawai Ward 38 to a fit-for purpose environment
			• Option assumes decant and relocation of existing service/s.
			• Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution)
			• Likely increased resources and ongoing costs required for increased bed numbers.
			• Assumes future demand for services is known (conversion of prison muster numbers and specials).

Waikato Hospital Campus new Build	New build on existing acute adult HRBC footprint for future increased prison muster.	New purpose built development on existing HRBC site adjacent to Puawai. Development of a new facility to meet a following service needs: - Forensic services and/or - Drug and Alcohol services and/or - High and Complex services This option would include the demolition of acute adult HRBC Ward/s.	• Potential opportunity to reconfigure current forensic ward model. • Possible relocation of current 2x Detoxification beds and 3/4x High and Complex virtual beds within Forensics. • Significant capital infrastructure costs. • Significant timing interdependencies with MH&AS build programme (possible delays in acute inpatient solution). • Option assumes decant and relocation of existing service/s. • Likely increased resources and ongoing costs required for increased bed numbers. • Assumes future demand for services is known (conversion of prison muster numbers and specials).

* It was agreed by the panel that the AoD options require rethinking to include the range of specialty services [and further assessment of AoD solutions once the national SA(CAT) Act solution is known].

** It was agreed by the panel that the Puawai options required rethinking to include a NZ Corrections partnership approach to the model of care.

Investment objectives commentary on the long list acute MH options

Option Summary	Commentary Notes from Assessment Workshop
Waiora Main Campus Build (flexible and modular)	Option met the investment objective; however concern was expressed around possible Waiora site restrictions and ability to meet the new Model of Care closer to home goals. The limited site space would significantly impact on contemporary design, further compounding experience and engagement benefits. The addition of upper floors would impact on an ability to meet contemporary design Standards and service users and staff safety. There was a view that sub-specialty and increased HBT solutions would be required.
Waiora Main Campus Build (stepdown)	Option does not meet the invest objective as the design potentially replicates a secure (locked) focus and may not provide adequate contemporary elements. The step down approach was considered vey adult focused, increasing potential for stigma.
Waiora HRBC Refurbishment and Out Reach Build/s	Option was seen to meet the investment objective, as the proposed outreach possibilities are aligned to the model of care and would provide improved experience and engagement. However the refurbishment would not provide adequate natural security / sightlines or meet modern facility standards. This option was considered to provide the most significant integration with community and local services, and provide clinical efficiency, reduce travel times
New Green Fields Build/s	Option was seen to meet the investment objective, Concern was expressed regarding increased stigma (creating separation), impact on flow, access to a potential site, and increased costs and timelines. This option may require more than one Green Field locality, would be resources intensive and less cost effective. Concern was raised regarding the separation from medical and emergency services (risk for service users with compromised physical health issues; would require onsite medical services).
NGO / Private Development	Option partially met the investment objective as outsourcing of services could not be guaranteed – while there was possibility for fit for purpose facilities, the risk of access to services and losing of control over the physical infrastructure. Concern was expressed over the service user mix not being appropriate for outside an inpatient setting (high needs, MHAct – gazetted hospitals).
Tokanui Rebuild	This option did not meet the investment objective for the reasons outlined in the Strategic Case (institutional model of care).
Retreat Centre	This option did not meet the investment objective, there was concern over clinical risk and service user safety, and it does not meet the high needs and MHAct requirements (gazetted hospitals). The option was considered to have therapeutic benefits. Multiple and duplicated services would be required (potential staffing issues and potentially staffed by existing DHB staff members creating flow on effect of staff shortages).
JV with Regional Midlands DHB Waiora Build	This option did not meet the investment objective and would require significant local investment and did not align to the model of care. Any joint ventures would be the provision of sub-specialty services. This option was seen to increase travel time and safety risk.
JV with Regional Midlands DHB Green Fields	This option did not meet the investment objective and would require significant local investment and did not align to the model of care. Any joint ventures were for the provision of sub-specialty services. This option was seen to increase travel time and service user and safe safety risk.
JV with Regional Midlands DHBs Sub-specialty	Option partially meet the investment objective, however the Waikato DHB has not had discussions with other Midlands DHBs for potential (enable sustained specialty capabilities).
HRBC Wairoa Refurbishment	This option did not meet the investment objective for the reasons outlined in the Strategic Case. Without major refurbishment and changes to service user flow this option would need to be revisited within the next 1 – 3 years. This option is limited by the current institutional footprint, concerns were expressed that a refurbishment may not meet best practice and contemporary Standards. This view was driven by an understanding of the existing facility not being fit-for-purpose or having future capacity to meet demand.

Annex 5: Summary of Revised Acute Mental Health Inpatient Long List Options

Each option was assessed against the investment benefits defined in the Strategic Case. If any option fails against an investment objective, it does not proceed to further evaluation as a long list option. Most of the options partially or moderately met most of the benefits, and no option fully met the all of the benefits to proceed to further evaluation. Workshop held on 01 September 2017.

The following table reflects the subject scoring against each of the benefits.

Indicator	Explanation
0	No benefit
1	Minimum benefit
2	Moderate benefit
3	Significant benefit

Description of Option:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Description of Option:	Waiora Main Campus New Acute MH Build	Waiora Main Campus and Out Reach Sub-Acute New MH Builds	New Acute MH Green Fields Build/s	Specialty Services Colocation with Acute MH in new Build	Specialty Services Repurpose of HRBC	Specialty Services Joint Ventures with Midlands Regional DHBs	Puawai HRBC Rebuild (Adult)	Puawai Joint Venture with NZ Corrections
Investment Benefits:								
Improved access and health outcomes	Moderate	Significant	Moderate	Moderate	Moderate	Minimum	Moderate	Moderate
Improved experience and engagement	Significant	Significant	Significant	Significant	Significant	Moderate	Moderate	Minimum
Therapeutic and safe environment	Significant	Significant	Significant	Significant	Significant	Significant	Moderate	Moderate
Operational efficiency and effectiveness	Significant	Significant	Minimum	Significant	Significant	No	Moderate	Moderate
Workforce gains	Significant	Significant	Moderate	Significant	Significant	Moderate / No	Moderate	No
Overall Assessment (MoC Principles)	Acute MH			Multiple and Variable			Puawai	
Scoring	YES	YES	NO	YES	YES	YES	Yes	Yes
Ranking	2	1	3	1	2	3	1	2

Summary information from series of options development workshops held in May 2017

Option Summary	**Description**	**Key Consideration**
Waiora Main Campus New Acute MH Build	New fit-for-purpose holistic build on Waikato Hospital campus. Purpose built holistic, flexible and modular build on Waikato Hospital campus Ryburn site or other identified site.	• The provision of a purpose built facility that provides sufficient capacity for current and future demand is expected to positively impact on each of the problems described in the ILM. • Option assumes main campus ability to release space for development. • Limited space options on main campus due to space size, soft fill and other potential capital infrastructure future builds. • Potential need for relocation of current infrastructure on Ryburn site (including car parks). • Significant timing interdependencies with MH&AS build programme (possible staged decant/build).
Waiora Main Campus and Out Reach Sub-Acute New MH Builds	New fit-for-purpose Acute build on Waikato Hospital campus and new out-reach Sub-Acute builds - Purpose built holistic, flexible and modular acute facility build on Waikato Hospital campus Ryburn site or other	• Possible need for purchase of new land. • Possible community stigma and unknown / existing issues within the community confounding MH&A problems. • Community and inpatient proximity a significant integration benefit.

	identified site. Purpose built sub-acute community facilities in Hamilton and main rural north and rural south locations.	• Option assumes outreach land available. • Possible delays in identifying and/or procuring new site (investigate potential NGO/Private provider). • Possible issues with compliance with the Mental Health Act. • Benefit of close proximity to home and community. • Likely to integrate inpatient and community services more seamlessly. • Significant timing interdependencies with MH&AS build programme (possible staged decant/build).
New Acute MH Green Fields Build/s	Development of a holistic, flexible and modular build on Green Fields site.	• Significant capital investment. • Possible need for purchase of new land. • Possible community stigma and unknown / existing issues within the community confounding MH&A problems. • Benefit of purchasing appropriately sized land area. • Possible delays in identifying and procuring new site. • Possible lack of proximity to community for outreach areas. • Potential to co-locate all MH&AS services (including JV services). • Possible lack of proximity to community. • Potential lack of proximity to medical and emergency care. • Likely increased support service costs. • Significant timing interdependencies with MH&AS build programme (possible staged decant/build).
Specialty Services colocation with Acute MH in new Build	New holistic Main Waikato Hospital (option 1) footprint includes capacity to meet requirements for service provision. - alcohol and other drugs - cognitive impairment - high and complex needs - youth - eating disorders - peri-natal	• Assumes new acute MH development. • Assumes the appropriate relocation of the 2x detoxification beds from Puawai. • Additional land required. • Clinical considerations of co-location of detoxification and drug induced psychosis service provision. • Assumes future demand for services is known.
Specialty Services repurpose of HRBC	Rebuild of existing adult HRBC ward to meet the service needs. - alcohol and other drugs - cognitive impairment - high and complex needs - youth - eating disorders - peri-natal	• Assumes new acute MH development. • Assumes the appropriate relocation of the 2x detoxification beds from Puawai. • Potential demolition of existing adult HRBC building due to outdated institutional footprint and space constraint. • Option assumes new acute inpatient developments. • Possible national solution. • Assumes future demand for services is known.
Specialty Services Joint Ventures with Midlands Regional DHBs	Development of new joint venture/s with regional Midlands DHB(s) for specialty services. - alcohol and other drugs - cognitive impairment - high and complex needs - youth - eating disorders - peri-natal	• JV would combine expertise in a centre of specialty and excellence • Interface risks around competing DHB needs. • Lack of proximity to community based teams (significant disadvantage to community integration). • Requirement for service user's transfer of significant distances to/from out-reach DHBs presents patient / staff risk and costs. • No existing regional capacity therefore potential new build/s. • A possible issue on decision on specialised service and facility location/s. • Lack of proximity to community and community based teams. • Possible issues with differing service delivery models, systems and processes across Midlands.
Puawai HRBC Rebuild (Adult)	Rebuild of existing adult HRBC ward to meet the increased prison muster capacity.	• Significant capital investment. • Assumes an increase in the prison muster cohort in the Waikato. • Assumes the appropriate relocation of x4 high and complex beds and x2 detoxification beds. • Assumes new acute MH development – potential build sequencing issues (decant of current acute inpatient services). • Opportunity to reconfigure flow through Puawai wards. • Likely increased resources and ongoing costs required for increased bed numbers
Puawai Joint Venture with NZ Corrections	Joint venture with co-locating MH&AS service facilities within NZ Corrections prison/s sites.	• JV investment option can be considered within the NZ Corrections plan. • Assumes the appropriate relocation of x4 high and complex beds and x2 detoxification beds. • Possible workforce challenges. • Potential co-location of prison and MH&AS benefits. • Potential PPP • Likely increased resources and ongoing costs required for increased bed numbers. • Reduction in build decant and sequencing risk.

Annex 6: Indicative Business Case Summary

Waikato District Health Board

Papers for Information

Waikato District Health Board

Presentations

Waikato District Health Board

Board Member Items